

# BATTERY TESTING SYSTEM 8.0 USER MANUAL



#### Remarks, Note and Warning

	Remarks: Remarks represent the main information that can help you make
	better use of the device.
•	Note: Note represents the indication that could damage the hardware or
$\sim$	result in data loss, and tell you how to avoid such problems.
A	Warning: Warning represents the property damage, personal injury and
<u> </u>	even death.

**Note**: Please read this manual carefully before using the system for better performance. Due to the continuous upgrading of the system, this manual is for reference only, if there is any change there won't be any notice.

© 2019Neware copyright December,2019



# Contents

1. Introduction	5
1.1. Purpose of This Manual	5
1.2. Software Introduction	5
1.3. Software Operation Environment	7
1.4. Software Characteristics	7
1.5. Terms	7
2. Network connection	
3. User Operation	9
3.1. Introduction	9
3.2. Software Installation	9
3.3. BTS Server Installation	
3.4. BTS Server Installation Confirmation	
3.5. Basic Function	
3.6. Quick Start	
3.7. Setting	
3.7.1. Advanced Protection Parameters	
3.7.2. Process Type Settings	
3.7.3. System Setting	
3.8. User Management	
3.8.1. User Login	
3.8.2. Password Modify	
3.8.3. User Log Out	
3.8.4. User Management	
3.9. Language Switch	
3.10. Tool	
3.10.1. Log Download	
3.10.2. Build Test	
3.10.3. BTSDA	
3.10.4. ZWJ List (the Middle Machine)	
3.10.5. Delete Historical Data	
3.11. Help	
3.12. Device List	
3.12.1. Add Server	
3.12.2. Delete Offline Devices	
3.12.3. Modify Remarks Information	47
3.12.4. Update ZWJ (the Middle Machine)	
3.12.5. Restart ZWJ	
3.12.6. Upgrade ZWJ	
3.12.7. Set and Show Device	
3.12.8. Reset Alarm	
3.12.9. Version Information	51
3.13. Channel Interface	



3.13.1. Channel Color Setting	52
3.13.2. Channel Display Setting	53
3.13.3. Interface Display Switch	59
3.14. Right Click Menu of Channel Interface	59
3.14.1. Single Start/Stop	60
3.14.2. DBC Function	63
3.14.3. Unit Start	67
3.14.4. All Stop	69
3.14.5. Schedule Pause	69
3.14.6. Set Chamber	71
3.14.7. Set/Free Parallel	72
3.14.8. Continue	73
3.14.9. Jump	73
3.14.10. Move	74
3.14.11. Reset Step	74
3.14.12. Reset Barcode	75
3.14.13. Channel Locking/Channel Unlock	76
3.14.14. Reset Alarm	77
3.14.15. Reset Map	79
3.14.16. Copy Steps	
3.14.17. Clear Flag	83
3.14.18. Unit Settings	83
3.14.19. View Log	85
3.14.20. View Data	87
3.14.21. Test Data Save As	88
3.14.22. Channel Info	89
3.15. List	90
3.15.1. Right Click Menu	91
3.15.2. Display Parameter Configuration	91
3.15.3. Barcode	92
3.16. Capacity Grading	95
3.16.1. Grading Conditions	95
3.16.2. Grading Result	97
3.17. History Query	97
4. Appendix	99
4.1. Attentions	99
4.2. Maintenance	100
4.3. After sales service	101
4.4. Contact NEWARE	101

## 1. Introduction

## 1. 1. Purpose of This Manual

This document is mainly for guidance for customers and related technical personnel to learn the installation and functions of BTS8.0.

## 1. 2. Software Introduction

BTS8.0 is the client software of BTS battery testing system. BTS battery testing system is a new generation of battery testing system independently developed by Neware through continuous innovation by fulfilling the market demand over the years. This system is an upgraded version which supports the measurement of the voltage and temperature of the single cell in the battery pack, DCIR measurement, pulse working step, SIM working step, constant power charging, etc.

The BTS battery testing system is based on the original office network and the working platform of computer equipment. It is simple to operate. Users can log in the system remotely through the internet to achieve various operations on the equipment.C/S network system structure and database management are adopted to centrally control the connected multiple testing equipment (theoretically with 250 sets and 32000 channels, actually it depends on the user's computer configuration and data record space, generally configured as 800 channels) and to centrally analyze and manage all the data.The following figure shows the network deployment diagram of BTS battery testing equipment.





#### About the configuration above,

1. BTSClient can support users of different levels to operate it. The system supports adding user groups and users, and setting different operation permissions for user groups through the administrator.

2. BTSClient sends the command to the server, and the server sends the relevant command to the BTS middle machine.

3. BTSDA: BTSDA (Battery Testing System Data Analyzer) has powerful data analysis functions, various data analysis methods, export schemes and drawing functions, supporting powerful curve comparison.

4. Server: Responsible for real-time communication between upper and middle machine, real-time transmission of control instructions and feedback data.

5. Database: Store the current test data and save the historical test data.

6. Barcode management: For tests with barcode, the corresponding test data can be inquired through the battery barcode to ensure the traceability of battery test data.

7. Remote customers can access the data in devices and databases under different servers through BTS8.0.

The applicable products for battery testing system of structure of upper computer, middle machine and lower machine are as follows: BTS-4000 series, BTS-8000 series, IGBT series.

**Upper computer**: Edit the test process, send test instructions to the middle machine through the server, display the real-time status and data of the battery, and check and save the test data.

**Middle machine**: achieve network connection, receive the command from upper computer, control lower machine and transmit real-time data.

**Lower machine**: receive the command of the middle machine, control the charging/discharging of the channel, collect the voltage, current and other data of the channel in real time.



## **1. 3. Software Operation Environment**

Equipment	Setting
CPU	At least Pentium dual-core
The host frequency	Min.2G
Memory	Min.8G
Hard disk	Min.200G
File format	NTFS
Operation system	At least Microsoft Windows7,64 bit
Communication	Ethernet

## 1. 4. Software Characteristics

- 1. C/S framework, based on TCP/IP communication protocol.
- 2. Multi-user management.
- 3. Human-computer interface friendly, advanced UI design concept.
- 4. Powerful test process control function.
- 5. Flexible and powerful programming test scheme.
- 6. Perfectly achieve the functions of battery sorting, grading and curve comparison.
- 7. The system can be expanded and upgraded.

#### 1. 5. Terms

1. Series: We have 8000 series, 4000 series, which stands for different products;

2. **Unit**: About the channel in 8.0 BTSClient, a row represents a unit, and the number of channels in a unit is determined by the mapping mode;

3. **Channel**: About the channel in 8.0 BTSclient,1-1means the first channel of the first unit, 2-1 means the first channel of the second unit;

4. Working step: Working step means the testing steps;

5. **Voltage protection:** Refers to the battery charging and discharging voltage reaches the set voltage upper or lower limit protection value;

6. **Current protection:** Refers to the battery charging and discharging current reaches the set current upper or lower limit protection value;

7. Version:

**Software version:** The BTSClient, server, lower machine, auxiliary channel program version can be viewed through the channel information;

**Hardware version:** Refers to the hardware model of the middle machine, lower machine and auxiliary channel in the device, which should be viewed through the white label affixed to the physical hardware or the device.



## 2. Network connection

1. The connection of 1 unit machine is as following,



2. The connection of multi-machine is as following,





## 3. User Operation

## 3.1. Introduction

BTS8.0.0 client software mainly introduces the client software installation and uninstallation, the client and the server network connection, and when the software has been successfully installed, how the user runs the software with all the functions, such as cell sorting, setting auxiliary channel mapping and mapping across different middle machines, etc.

## 3. 2. Software Installation

In order not to affect the efficiency of client operation, each computer is allowed to start only one client software.

**Note:** FAT file system has a high error rate when power is cut off. When installing software, it needs to be installed to NTFS file system.Otherwise, when the power is cut off or the system is shut down illegally, an error may occur in the whole directory, resulting in an error in the work step file, system file or data file.The NTFS system properties is as following.

以前的版本		配额		自定义
常规 二	[具 7]	更件	共享	安全
-	ATA			
型: 4	地磁盘			
件系统: N	TFS			
已用空间:	225,94	2,720,512	字节	210 GB
可用空间:	46,20	9,933,312	字节	43.0 GB
容量:	272,15	2,653,824	字节	253 GB
		D		
	驱	动器 D:		磁盘清理(
]压缩此驱动器[	<b>以节约磁盘空间</b>	(C)		
除了文件属性外	ト, 还允许索引	此驱动器上了	Z件的内容	쟠(I)



The BTSclient is a green version of the compression package, after decompression double-click BTS.exe can be used.

**Note:** .net environment is required to run the BTSClient. Please make sure to install Microsoft.net Framework 4.5.1.exe before using it. If not installed, it will fail to start.

## 3. 3. BTS Server Installation

**Note:** If you have installed another version of BTS server on your computer, be sure to uninstall it before installing the new version.Backup data in other versions of the database before unloading.

1. Enter the "BTSServer" installation wizard and click "Next", as shown below:

🛃 BTSServer Setup	- 🗆 X
Ð	Welcome to the BTSServer Setup Wizard
	The Setup Wizard will install BTSServer on your computer. Click Next to continue or Cancel to exit the Setup Wizard.
	Back Next Cancel

2. Enter the user license agreement, click "Accept", enter the installation file storage path dialog box, and select the server installation path. The default installation path is "D:\Program Files (x86) \Neware\BTSServer".As shown below:



nd-User License Ag	reement			6
Please read the followin	ig license agreement	carefully		
	END-USER LICE	ENSE AGREEM	ENT	^
THIS END-USER I THE LEGAL AGREE NEWARE TECHNOLO NEWARE? ftServe PARTY SOFTWARE AND DOCUMENTATI PRODUCT OR RET	LICENSE AGREE 3MENT BETWEEN DGIES IRELAND P? SOFTWARE PRODUCTS* AN ION ("PRODUCT AINING IT FOR the License Agreement	MENT ("EUL. THE LICEN LIMITED ( PRODUCTS, D RELATED 1 S"). BY IN: MORE THAN	A") CONSTITU SEE ("YOU") "NEWARE") FO CERTAIN THIF MEDIA, MATEF STALLING THE TEN (10) DA	UTES AND OR THE RD RIALS S MYS, ~
	Print	Back	Next	Cancel
estination Folder Click Next to install to t install BTSServer to:	he default folder or d	lick Change to cho	oose another.	C
UNUROGRAM Filor (v96)	NEWARE\BTSServer\			
Change				
Change				
Change				

3. The installation progress bar appears (it is normal for two command windows to appear successively when the progress bar runs to the last half). Click "Finish" button to close the window after installation. As shown below:





## 3. 4. BTS Server Installation Confirmation

After the installation is completed, it is necessary to confirm whether the server is installed successfully and the confirmation is as following:

1. Open "Control Panel"  $\rightarrow$  "System and Security"  $\rightarrow$  "Management Tool" interface, select the "Services" option in the interface to see if "MySQL" and "NEWARE BTS Service" are in the list to the right side, and to see if they started. As shown in the following figure (Win10 screenshot) :

🔍 服务						11 <u>-</u>	×
文件(F) 操作(A) 查	语(V) 帮助(H)						
<b>* *</b>   🖬 🗎 🙆	🔒 🛛 📷 🖡 🕨 💷 🖬 🕨						
🔍 服务(本地)	◎ 服务(本地)	ē					
	NEWARE BTS Service(R3)	名称	描述	状态	启动类型	登录为	^
	7.6.0.363	NewareAuto Report Server XND			自动	.\neware	
		NEWARE BTS Service(R3) 7.6.0.363	NEWARE Battery Test System 7.6.2019.815	正在运行	自动	本地系统	
	停止此服务	Neware 360 Client			自动	本地系统	
	<u>= 1010000000000000000000000000000000000</u>	Network Store Interface Service	此服务向用户模式客户端发送网络通知(例如,	正在运行	自动	本地服务	
		🖏 Network Setup Service	网络安装服务用于管理网络驱动程序的安装,并		手动(触发器启动)	本地系统	
	描述: NEWARE Battery Test System 7.6.2019.815Server(Aug 15 2019 15:25:21)	Network Location Awareness	收集和存储网络的配置信息,并在此信息被修改	正在运行	自动	网络服务	
		Network List Service	识别计算机已连接的网络,收集和存储这些网络	正在运行	手动	本地服务	
7.6.2019.815Se 15:25:31)	7.0.2019.815Server(Aug 15 2019 15:25:31)	Arrow Connectivity Assistant	提供 UI 组件的 DirectAccess 状态通知		手动(触发器启动)	本地系统	
	15.25.51)	Network Connections	管理"网络和拨号连接"文件夹中对象,在其中你	正在运行	手动	本地系统	
		Network Connection Broker	允许 Windows 应用商店应用从 Internet 接收	正在运行	手动(触发器启动)	本地系统	
		Auto-Setup	网络连接设备自动安装服务会监视和安装连接到	正在运行	手动(触发器启动)	本地服务	
		Netlogon	为用户和服务身份验证维护此计算机和域控制器		手动	本地系统	
		Net.Tcp Port Sharing Service	提供通过 net.tcp 协议共享 TCP 端口的功能。		手动	本地服务	
		Net.Tcp Listener Adapter	通过 net.tcp 协议接收激活请求并将其传递给		自动	本地服务	- 11
		Net.Pipe Listener Adapter	通过 net.pipe 协议接收激活请求并将其传递给	正在运行	自动	本地服务	
		🖏 Net.Msmq Listener Adapter	通过 net.msmq 和 msmq.formatname 协议	正在运行	自动	网络服务	
		Nalpeiron Licensing Service	Nalpeiron Licensing Service	正在运行	自动	本地系统	
		🖏 mysqlLims		正在运行	自动	本地系统	
		MySQLCompetence		正在运行	自动	本地系统	
		MySQLBackup		启动	自动	本地系统	
		MySQL		正在运行	自动	本地系统	
		🖏 Mozilla Maintenance Service	Mozilla 维护服务能确保您的计算机上使用的是		手动	本地系统	
		Microsoft Windows SMS 路由器服务。	根据规则将消息路由到相应客户端。		手动(触发器启动)	本地服务	
		Microsoft Store 安装服务	为 Microsoft Store 提供基础结构支持。此服		手动	本地系统	~
L/	↓扩展 < 标准 /						



3. To ensure that both services are in the "started" state, if either of them is not started, please right-click the menu and select "Start" service. As shown in the figure below:

◎ 服务	TTAN TANAN					_	×
又1年(F) 葉作(A)	並右(V) 税則(H)						
服务(本地)	⑧ 服务(本地)	·					
	MySQL	名称	描述	状态	启动类型	登录为	^
		Net.Msmq Listener Adapter	通过 net.msmq 和 msmq.formatname 协议	正在运行	自动	网络服务	
	<u>停止</u> 此服务	Nalpeiron Licensing Service	Nalpeiron Licensing Service	正在运行	自动	本地系统	
<u>智停</u> 此服 第9月3日	<u>智停</u> 此服务	🖏 mysqlLims		正在运行	自动	本地系统	
	<u>当/日//</u> 0.0095	MySQLCompetence		正在运行	自动	本地系统	
		MySQLBackup		启动	自动	本地系统	
		MySQL		正在运行	自动	本地系统	
		Mozilla Maintenance Service	Mozilla 维护服务能确保您的计算机上使用的是		手动	本地系统	
		Microsoft Windows SMS 路由器服务。	根据规则将消息路由到相应客户端。		手动(触发器启动)	本地服务	
		Microsoft Store 安装服务	为 Microsoft Store 提供基础结构支持。此服		手动	本地系统	
		🍓 Microsoft Storage Spaces SMP	Microsoft 存储空间管理提供程序的主机服务。		手动	网络服务	
		🖏 Microsoft Software Shadow Copy Provider	管理卷影复制服务制作的基于软件的卷影副本。		手动	本地系统	
		Alternation Container	管理用于针对标识提供者及 TPM 虚拟智能卡为		手动(触发器启动)	本地服务	
		🖏 Microsoft Passport	为用于对用户关联的标识提供者进行身份验证的		手动(触发器启动)	本地系统	
		Microsoft iSCSI Initiator Service	管理从这台计算机到远程 iSCSI 目标设备的 Int		手动	本地系统	
		Microsoft App-V Client	Manages App-V users and virtual applicati		禁用	本地系统	
		🖏 Microsoft Account Sign-in Assistant	支持用户通过 Microsoft 帐户标识服务登录。		手动(触发器启动)	本地系统	
		〇 Microsoft (R)诊断中心标准收集器服务	诊断中心标准收集器服务。运行时,此服务会收		手动	本地系统	
		MessagingService_b46b9	支持短信及相关功能的服务。		手动(触发器启动)	本地系统	
		🖏 Message Queuing	提供消息结构和开发工具,用于创建基于 Wind	正在运行	自动	网络服务	
		🖏 Local Session Manager	管理本地用户会话的核心 Windows 服务。停	正在运行	自动	本地系统	
		🖏 Link-Layer Topology Discovery Mapper	创建网络映射,它由电脑和设备拓扑(连接)信息		手动	本地服务	
		🆏 KtmRm for Distributed Transaction Coordinator	协调分布式事务处理协调器(MSDTC)和内核事		手动(触发器启动)	网络服务	
		🖏 IPsec Policy Agent	Internet 协议安全(IPsec)支持网络级别的对等	正在运行	手动(触发器启动)	网络服务	
		🖏 IP 转换配置服务	配置和启用从 v4 到 v6 的转换,反之亦然		手动(触发器启动)	本地系统	~

4. If either of the two services "MySQL" and "NEWARE BTS Service" are missing from the list, please uninstall the newly installed server and reinstall it, and confirm with the above steps that the server is installed and started correctly.

5. If you find that the startup type of either of the two services is "manual", please change it to "automatic" according to the following method. For example, if the startup type of NEWARE BTS Service is "manual" (MySQL Service starts the same way as NEWARE BTS Service).

#### Method 1,

Right click "NEWARE BTS Service"→"properties"-"automatic"

<b>* * 1</b>	B B I B II I I		NEWARE BTS Sen	rvice(R3) 7.6.0.363 的雇性(本地计算机)	×				
服务(本地)	① 服务(本地)		常规 登录	恢复 依存关系					
NEWARE BTS Service(R3 7.6.0.363 学业世現著 聖田司此服務 描述: NEWARE Battery Test Sys 7.6.2019.815Server(Aug 15:25:31)	NEWARE BTS Service(R3) 7.6.0.363 学止世最秀 重回効此服务 描述 NEWARE Battery Test System NEWARE Battery Test System NEWARE Battery Test System	名称 ③ Office ④ Office ④ Newar ④ Newar ④ Netwo ④ Netwo	服务名称: 显示名称: 描述: 可执行文件的路4 D:\Program Fil	BitServer         NEWARE BTS Service(R3) 7.6.0.363         NEWARE Battery Test System 7.6.2019.815         Server(Aug 15 2019 15:25:31)         id:         ie:         ie: <td>ervice 下载安 ).815 如, 读, 并</td> <td><ul> <li>状态</li> <li>局动操型</li> <li>手动</li> <li>手动</li> <li>自动</li> <li>正在运行</li> <li>自动</li> <li>直动</li> <li>正在运行</li> <li>自动</li> <li>正在运行</li> <li>自动</li> <li>王在运行</li> <li>自动</li> <li>王本三仁</li> <li>二、二、二、二、二、二、二、二、二、二、二、二、二、二、二、二、二、二、二、</li></ul></td> <td>登录为 网络服务 本地系统 、Ineware 本地系统 本地系统 本地服务 本地服务</td> <td>^</td>	ervice 下载安 ).815 如, 读, 并	<ul> <li>状态</li> <li>局动操型</li> <li>手动</li> <li>手动</li> <li>自动</li> <li>正在运行</li> <li>自动</li> <li>直动</li> <li>正在运行</li> <li>自动</li> <li>正在运行</li> <li>自动</li> <li>王在运行</li> <li>自动</li> <li>王本三仁</li> <li>二、二、二、二、二、二、二、二、二、二、二、二、二、二、二、二、二、二、二、</li></ul>	登录为 网络服务 本地系统 、Ineware 本地系统 本地系统 本地服务 本地服务	^	
	15:25:31)	Netwo     Netwo     Netwo     Netwo     Netwo     Netwo     Netwo	启动类型(E):	自动 、	此四络 些网络 接收 在按到	正在运行 正在运行 正在运行	日初 手动 手动(触发器启动) 手动(触发器启动) 手动(触发器启动)	本地服务 本地系统 本地系统 本地系统	
		Netlog	服务状态: 启动(S)	正在运行 停止(T) 暂停(P) 恢复(R)	空制器 館。 蕭给	ILLEIJ	手动 手动 手动 自动	本地系统 本地服务 本地服务	
		Net.Pip Net.M Nalpei	当从此处启动服务 启动参数(M):	拐时,你可指定所道用的启动 <b>参</b> 数。	i递给 协议	正在运行 正在运行 正在运行 正在运行	自动 自动 自动 自动	本地服务 网络服务 本地系统 本地系统	
		MySQ MySQ MySQ		<b>确定 取消</b> 应用(A)	Bature	正在运行 启动 正在运行	自动 自动 自动 千动	本地系统 本地系统 本地系统	~



#### Method 2:

1. Open "Run..." in the start menu, enter "MSconfig" and press enter;

2. Enter the "System Configuration Utility" window, find the "NEWARE BTS Service", tick it, click the "Apply" button and restart the computer, as shown below:

5/5/6	기국	1005	1 AU	18				
服务					制造商	状态	禁用日期	^
	box Live	网络服务	ş		Microsoft Corporation	已停止		
⊻连	接设备平	<b>产台用户服</b>	段务_4a6f	3	Microsoft Corporation	正在运行		
	evicesFl	ow_4a6f	3		Microsoft Corporation	已停止		
Z M	lessagin	gService	4a6f3		Microsoft Corporation	已停止		
	步主机	4a6f3			Microsoft Corporation	正在运行		
V C	ontact D	ata_4a6	f3		Microsoft Corporation	正在运行		
V Pr	rintWorl	cflow_4a	6f3		Microsoft Corporation	已停止		
V U	ser Data	Storage	e_4a6f3		Microsoft Corporation	正在运行		
VU	ser Data	Access	4a6f3		Microsoft Corporation	正在运行		
∠ w	indows	推送通知	用户服务	4a6f3	Microsoft Corporation	正在运行		
	lySQL				未知	正在运行		÷.,
<b>∠</b> N	EWARE	BTS Sen	vice(R3)	7.6.0.257	NEWARE Technology Lim	it 正在运行		
					2014 a 10			×
请注意,某些 Microsoft 安全服务可能无法			务可能无法	去禁用。	全部启用(E)	全部禁用(D)		
- Pad		licrosoft	肥久(山)					

Note: In the computer management window, close the running service by selecting Stop from the right-click association menu.When you need to upgrade the server manually, you need to do this to shut down the running service.

#### 3. 5. Basic Function

If the BTSclient has no channel display, it needs to reset the mapping. The following figure shows the mapped client interface.



BTS Client 8.0.0.416(20)	20.01.07)(R3) 1										-	o ×	1
File Language Set	User Tool He	lp 2.											
Device List 🛛 🖗	Charge	Discharge	Rest Protec	sted Stopped	Finished	Offline 3.					4.	<u></u>	
▼ 127.0.0.1	✓ 1-1	✓ 1-2	✓ 1-3		0 1-6	✓ 1-6	✓ 1-7	✓ 1-8					
5.	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V					
	Ø₽ <sup>2-1</sup>	Ø₽ <sup>2-2</sup>	Ø₽ <sup>2-3</sup>	Ø₽ <sup>2-4</sup>	Ø <b>₽</b> <sup>2-5</sup>	Ø₽ <sup>2-6</sup>	Ø₽ <sup>2-7</sup>	Ø₽ <sup>2-6</sup>					
	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V					
	<b>⊘</b> <sup>3-1</sup>	S 3−2	S−3	S 3-4	0 3-6	S <sup>3−6</sup>	O 3-7	<b>○</b> 3-8					
	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V					
	Ø₽ <sup>4-1</sup>	Ø₽ <sup>4-2</sup>	Ø₽ <sup>4-3</sup>	Ø₽ <sup>4-4</sup>	Ø₽ <sup>4-6</sup>	♥ 4-6	Ø₽ <sup>4-7</sup>	Ø₽ <sup>4-6</sup>					
	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	6.				
7.										9.			
Litesent Viti q P	Welcome to htt	p://www.neware.o	com.cnl (Tel)800-83	30-8866 Current	login user:admin	0.				🧟 🖉 🛉	_ <b>⊲</b> × (	• ① 100	90

- 1. BTSClient version
- 2. The menu bar
- 3. Channel status color setting
- 4. View switch
- 5. Equipment display area
- 6. Channel display area
- 7. Current setting and history data switch
- 8. Information area
- 9. Shortcut icons

When the software is minimized, the client icon on the taskbar is hidden, and when the client icon is found in the tray list, it is displayed again when clicked. It can also be dragged to the quick launch bar, which is a common feature of popular software. **Note**: It can be set through the system setting and the minimization is displayed in the taskbar.





## 3. 6. Quick Start

1. Register the client. After installing the software, register the client before using it. Please contact Neware after sales for registration code.

BTS Client 8 0 0 416(2020 01 (	17)(R3)					×
Ele Language Set Lleer						~
Device List 4	About PTS			m task		
▼ 127.0.0.1 	Register	Arst Protected a	topyed Alasino of			
BTS Client 8.0.0.416(2020.01.0	07)(R3) Tool Helo				-	×
Device List 🛛 📮 🚺	harge Dizcharge	Rest Protected S	Tinished Of	fline		
Present His 1 > Webro	me to http://www.newar	Registered Registered Registration Code (%) X Registration successful () Registration successful () () () () () () () () () () () () ()	266998C3607E40709010C0	Begister		) 100%

2. User login

The default administrator user password is: User name: Admin Password:neware

#### BTS Client 8.0.0.416(2020.01.07)(R3)





27.0.0.1	Charge	Discharge	Rest Frote	ted Stopped	Charles of the second	Offline		1.0	
1	o 1-1	O 1-2	O 1-0	0 14	0 10	0 10	O 1-7	o 1.0	
	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	
	Ø\$ <sup>2-1</sup>	Ø 🕈 2-2	Ø <b>∲</b> <sup>2-3</sup>	<b>OP</b> <sup>2-4</sup>	<b>⊘</b> ∳ <sup>2-5</sup>	Ø\$ <sup>2-6</sup>	Ø₽ <sup>2-7</sup>	Ø\$ <sup>2-6</sup>	
	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	User Login	ahin		× nished 5000 V	Finished 2.5000 V	
	O 3-1	© 3-2	O 3-3	Passwor	-d #######	Show Pass	3-7	O 3-6	
	Finished 2.5000 V	Finished 2.5000 V	<b>Finished</b> 2.5000 V		OK	Cancel	ni shed 5000 V	Finished 2.5000 V	
	Ø₽ <sup>4-1</sup>	Ø 🕈 4-2	Ø 🕈 4-3	Ø 🖗 4-4	Ø₽ <sup>4-5</sup>	Ø\$ <sup>4-6</sup>	Ø₽ <sup>-4-7</sup>	Ø₽ <sup>4-6</sup>	
	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	

#### 3. Mapping the channels as following:



🚾 Reset	Map																														đ	×
Chal IB	Chnl Type Hain Chnl	^		1	-1			1	-2			1	-3			1	L-4			1	-5			1	-6			1	-7			1-8
<b>i</b> 1	Main Chal			rig	ght cli	ick the	gray	area																								
2	Main Chal						lada (		chal				-																			
3	Main Chal						lear A	JI	e crim				1																			
1	Main Chal						ave N	lappin	a					Ι.																		
6	Main Chal		1	2	3	1	Aain C	hnl De	fault 1	Mappir	10	,	3	4	1	2	3	4	1	2	3	1	1	2	3	1	1	2	3	4		2
6	Main Chal					1	ux Ch	nl Def	ault M	apping	3	•		1×10	6																	
7	Main Chal		5	6	1	8	6	6	[ ^	8		6	T .	1×24	4	-1	1	8	6	6	1	8	5	6	1	8	5	6	7	8	5	6
8	Main Chal		-				_			-		-	1	1×32 Curt	2	- 1	-	-	-		2		-				-				_	
9	Main Chal		9	10	11	12	9	10	11	12	9	10	-	Curt		۲	11	12	9	10	11	12	9	10	11	12	9	10	11	12	9	10
10	Main Chal				-	-				-		-	-	-	-	-	+	-	-	-	-							-				+-+-
11	Main Chal		13	14	15	16	13	14	15	16	13	14	15	16	13	14	15	16	13	14	15	16	13	14	15	16	13	14	15	16	13	14
12	Main Chal					-						I			-		_		-				-								-	
13	Main Chal			2	-1			2	-2			2	-3			2	2-4			2	-5			2	-6			2	-7			2-8
14	Main Chal																															
15	Main Chol																															
16	Wain Chal																															
17	Wain Chal															1	1															
- 1º	Wain Chal	- 1	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2
18	Main Chil				-	-				-		-	-	-	-	-	-	-	-			-					-	-	_			
19	Main Chni		5	6	7	8	5	6	7	8	5	6	7	8	5	6	7	8	5	6	7	8	5	6	7	8	5	6	7	8	5	6
20	Main Chrl	~	<												-																	



#### Aux channel mapping

	wap																																
Chal ID	Chal Type ^					-																											^
۰ 道	Main Chul			1-	-1			1	-2			1-	-3			1	-4			1-	-5			1-	6			1-	-7			1-	.ę
1	Main Chal	riaht		k the	edrav	area																											
2	Main Chal							Und	lo Curr	ent Ch	nl																						
<b>a</b> 3	Main Chul			0	)			Clea	r All								3			4	L.			5				6	<b>,</b>			7	1
	Wain Chal	H	T		i i		-	Save	e Map	ping				-	-			_	_			_	_	- 1				_			-	r 1	÷.
<b>.</b>	Auto chui	1	1	2	3	4		Mai	n Chnl	Defau	lt Map	ping		•	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	
•	Main Uhni	L	_	_				Aux	Chnl D	efault	Mapp	ing		•	Av	erage	Mapp	oing															
6	Main Chal	6	5	6	7	8	5	6	7	8	5	6	7	8	Pri	iority	Mappi	ng		6	7	8	5	6	7	8	5	6	7	8	5	6	
1	Main Chal														Cu	stom	_	_	-11														
ء 🛢	Main Chal			10	11	12	a	10	11	12	0	10	11	12		10		12	a	10	11	12	a	10	.11	12	a	10	11	12	9	10	
9	Main Chal			×	**		Ť				ँ		**		ľ.	10			Č.				Ň.				1					**	
10	Main Chal								1.000		1925	1878	100	125	2.2	10.00	100	1725	205	1956	122.5	1000	222	1000	-	24	222	2006	2222				1
11	Main Chal	1	3	14	15	16	13	14	15	16	13	14	15	16	13	14	15	16	13	14	15	16	13	14	15	16	13	14	15	16	13	14	
12	Main Chnl		-		1			-	1			_	1	-			1				1				1	-			- t	-			1
13	Main Chal			2-	-1			2	-2			2-	-3			2	-4			2-	-5			2-	6			2-	7			2-	£
0	Main Chal																																
0	Wein Chal																																Ľ
16	Main Chnl			8	3				9			1	0			1	1			1	2			13	3			1	4			1	5
16	Main Chnl		_		10		_				_		_					_													_		41
17	Main Chnl	1	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	
18	Main Chnl																																
19	Main Chal	e	5	6	7	8	5	6	7	8	5	6	7	8	5	6	7	8	5	6	7	8	5	6	7	8	5	6	7	8	5	6	
20	Main Chal																																ll y
			_																														-
🚾 Reset	Мар																													-	t	0	×
Chal ID	Map Chal Type	1	_	-	- 1			_	1	-			-1	-		_	- 1				-1				-1	_			1		1	0	×
Chal ID	Map Chal Type			1.	-1			1	-2			1	-3			1	4			1	-5	-		1	-6	_		1	7	-		5	× -8
Chal ID	Map Chnl Type ^ Mein Chnl Mein Chnl			1-	-1		righ	1 nt clic	-2 k the g	gray a	rea	1	-3			1	-4			1	-5			1	-6			1	l-7			5 1	×
Chal ID Chal I 0 1 2 2	Map Chnl Type ^ Mein Chnl Main Chnl Main Chnl			1-	-1		righ	1 it clic	-2 k the g	gray a	iea	1	-3 Un	do Cu	rent Cl	1 hnl	-4			1	-5			1	-6			1	l-7			5	× 1-8
Chal ID Chal I	Map Chul Type A Main Chul Main Chul Main Chul Main Chul			1-	-1 D		righ	1 nt clic	-2 k the <u>c</u> 1	gray a	iea	1	-3	do Cui ear All	rent Cl	1 hnl	4			1	-5 4			1	-6 5			1	L-7 6			5 1	× 1-8
Reset Chal ID Chal ID	Map Chal Type ^ Kain Chal Main Chal Main Chal Main Chal Main Chal		4	1-	-1		righ	1 nt clici	-2 k the g	gray a	iea	1	-3 Un Cle	do Cur tar All ve Map	rrent Cl	1 hnl	4			1	-5			1	-6 5			;	6			- 1	× 1-8 7
Reset Chal ID Chal ID	Map Chal Type ^ Kain Chal Main Chal Main Chal Main Chal Main Chal Main Chal Main Chal	II	V1	1- (	-1 0 3	4	righ TV1 33	1 nt clich 2	-2 k the g 1	gray a	rea TVI 34	1	-3 Un Cle	do Cur tar All ve Map sin Chr	rent Cl	1 hnl	-4			2	-5 4	4	TU1 37	1	-6 5	4	TU1 38	2	6 3	4	TUI	0 ]	× 1-8 7
Reset Chal ID 0 1 2 3 4 5 6	Map Chal Type A Main Chal Main Chal Main Chal Main Chal Main Chal Main Chal	TT 3	V1 32	1- (	-1 0 3	4	righ TU1 33	1 nt click 2	-2 k the g 1	gray a	iea TVI 34	1	-3 Un Cle Sa Au	do Cur tar All ve Map ain Chr x Chnl	pping I Default	1 hnl ult Ma t Map	-4		•	2	-5 4	4	TU1 37	2	-6 5	4	TV1 38	2	6 3	4	TU1 39	]     2	× 1-8 7
Reset Chal ID Chal	Map Chal Type A Kein Chal Nain Chal Nain Chal Nain Chal Nain Chal Nain Chal Nain Chal	TI 3	U1 32 5	1- ( 2 6	-1 0 3 7	4	righ TU1 33 5	1 nt clici	-2 k the g 1 3 7	gray a	100a 1101 34 5	1	-3 Un Cle Sa Ma Au 7	do Cur tar All ve Map ain Chr x Chnl 8	rent Cl pping I Defau Default	1 hnl ult Ma t Map 6	-4 ppping ping 7	8		2	-5 4 3 7	4	TU1 37 5	2 6	-6 5 3 7	4	TV1 38 5	2	6 3 7	4	TU1 39 5	1 1 2 6	× 1-8 7
Reset Chal ID 0 1 2 3 4 5 6 7 7	Map Chal Type Fain Chal Hain Chal Hain Chal Hain Chal Hain Chal Hain Chal Hain Chal Hain Chal	TT 3	V1 32 5	1- ( 2 6	-1 D 3 7	4	righ TV1 33 5	1 nt clici 2 6	-2 k the g 1 7	aray a	100 101 34 5	1	-3 Un Cle Sa Mu Au 7	do Cur tar All ve Map ain Chr x Chnl 8	rent Cl pping I Defau Default 5	1 hnl ult Map 6	-4 opping ping 7	8	•	2 6	-5 4 7	4 8	TU1 37 5	1	-6 5 7	4	TV1 38 5	1	6 3 7	4	TU1 39 5	] 1 2 6	× 7
Reset           Chal ID           0           1           2           3           4           5           6           7           8	Map Chal Type ^ Fein Chal Hein Chal Hein Chal Hein Chal Hein Chal Hein Chal Hein Chal Hein Chal Hein Chal Hein Chal	тт 3	V1 32 5	1- ( 2 6	-1 0 3 7	4 8	righ TU1 33 5	1 nt click 2 6 10	-2 k the g 1 3 7	<b>gray a</b> 4 8 12	rea TVI 34 5 9	1	-3 Un Cle Sa Mi Au 7	do Cur ear All ve Map ain Chr x Chnl 8	rent Cl pping I Defau Default 5	1 hnl ult Ma t Map 6 10	-4 pping ping 7 11	8	, , , 5	1 2 6 10	-5 4 3 7	4 8 12	TU1 37 5 9	1 2 6 10	-6 5 7 11	4 8 8 12	TU1 38 5 9	2 6 10	6 3 7 11	4 8	TU1 39 5 9	1 2 6 10	× 7
Reset           Chal ID           0           1           2           3           4           5           6           7           8           9	Map Chal Type A Kein Chal Rain Chal	т 3	U1 32 5	1- ( 2 6 10	-1 3 7	4 8	righ TU1 33 5	1 nt click 2 6 10	-2 k the g 1 3 7	gray a 4 8 12	<b>TUI</b> 34 9	1	-3 Un Cle Sa Mi Au 7	do Cur ear All sin Chri x Chri 8 12	rrent Cl Default 9	1 hnl ult Ma t Map 6 10	-4 ppping 7 11	8	,	1 2 6 10	-5 4 3 7	4 8 12	TU1 37 5 9	1 2 6 10	-6 5 7 11	4 8 12	TV1 38 5 9	1 2 6 10	6 3 11	4 8	TU1 39 5	1 2 6 10	× 7
Reset           Chal ID           0           1           2           3           4           5           6           7           8           9           10	Map Chal Type Nein Chal Nein Chal N	III 3	V1 32 5 9	1- ( 2 6 10	-1 0 3 7 11	4 8 12 16	righ TVI 33 5 9	1 2 6 10	-2 k the g 1 3 7 11	gray a 4 4 8 12 16	TVI 34 5 9	1	-3 Un Cle Sa Mi Au 11	do Cur ear All ve Map ain Chri x Chri 8 12	rrent Cl Defau Default 5 9	1 hnl ult Ma 6 10	-4 ppping ping 7 11	8	, , , , , , , , , , , , , , , , , , ,	1 2 6 10	-5 4 3 7 11	4 8 12 16	TU1 37 5 9	1 2 6 10	-6 5 7 11	4 8 12 16	TVI 38 5 9	1 2 6 10	6 3 7 11	4 8 12	TU1 39 5 9	1 2 6 6 10 10 10 10 10 10 10 10 10 10 10 10 10	× 7
Reset           Chul ID           0           1           2           3           4           5           6           7           8           9           10           11	Map Chal Type Nin Chal Main Chal	11 3 1	VI 32 5 9 13	1- ( 2 6 10	- <b>1</b> 0 7 11 15	4 8 12	righ TU1 33 5 9	1 2 6 10 14	-2 ( the g 1 3 7 11 15	gray a 4 12 16	ea TUI 34 5 9	1	-3 Un Cle Sa Mi Au 7 11	do Cur ear All sin Chri x Chri 8 12 12	rent Cl pping I Default 5 9 13	1 hnl lt Map 6 10	-4	8 12 16	, , , 9 13	1 2 6 10 14	-5 4 3 7 11 15	4 8 12 16	TU1 37 5 9	1 2 6 10 14	-6 5 7 11 15	4 8 12 16	TUI 38 5 9	1 2 6 10	6 3 7 11 15	4 8 12 16	TU1 39 5 9	1 1 2 6 10	× 7
Reset     Chal ID     O	Map Chal Type A fain Chal Hain Chal	т з !	V1 32 5 9 13	1- ( 2 6 10 14	-1 0 7 11 15	4 8 12	righ TV1 33 5 9 13	1 2 6 10 14	-2 k the g 1 3 7 11 15	gray a 4 12 16	ea TUI 34 5 9	1 6 10	-3 Un Cle Sa Ma Au 11 11	do Cur rar All ve Mag ain Chri x Chri 8 12 12 16	rrent Cl pping I Default 5 9 13	1 hnl ult Ma t Map 10 14	4 pping ping 7 11 15	8 12 16	, , 5 9	1 2 6 10 14	-5 4 3 7 11 15	4 8 12 16	TU1 37 5 9	1 2 6 10 14	-6 5 7 11 15	4 8 12 16	TUI 38 5 9	1 2 6 10 14	<b>6</b> 3 7 11 15	4 8 12 16	TU1 39 5 9	1 1 1 10 11	× 7
Reset     Chal ID     Cha	Map Chal Type A Rein Chal Nain Chal	т 3 1	V1 32 5 9	1- ( 2 6 10 14 2-	-1 3 7 11 15 -1	4 8 12 16	righ TVI 33 5 9 13	1 nt click 2 6 10 14	-2 k the g 1 3 7 11 15 -2	<b>gray a</b> 4 8 12 16	TVI 34 5 9	1 6 10 14	-3	do Cur ear All ve Mag ain Chri x Chri 8 12 12 16	rent Cl pping I Default 5 9 13	1 hnl llt Ma 6 10 14	-4	8	, , , , , , , , , , , , , , , , , , ,	1 2 6 10 14	-5 4 3 7 11 15 -5	4 8 12 16	TUI 37 5 9	1 2 6 10 14 2	-6 5 3 7 11 15 -6	4 8 12 16	TUI 38 5 9	1 2 6 10 14	6 3 7 11 15 7	4 8 12 16	TUI 39 5 9	1 1 1 1 1 1 1 1 1 1	× 7 + + !-8
E Reset Chal ID Chal ID Cha	Map Chal Type A Kin Chal Kain Chal	T1 3	V1 32 5 13	1- ( 2 6 10 14 2-	-1 3 7 11 15 -1	4 8 12 16	righ TVI 33 5 9 13	1 nt click 2 6 10 14 2	-2 k the s 1 3 7 11 15 -2	gray a 4 12 16	<b>T</b> UI 34 5 9	1 6 10 14	-3 Un Cle Sa Mi Au 11 15 -3	do Cur ar All ve Mag ain Chri x Chri 8 12 16	rrent Cl pping I Default 5 9 13	1 hnl Jlt Map 6 10 14	-4	8 12 16	, , 9 13	1 2 6 10 14 2	-5 4 3 7 11 15 -5	4 8 12 16	TU1 37 5 9 13	1 2 6 10 14 2	-6 5 7 11 15 -6	4 8 12 16	TUI 38 5 9	2 6 10 14	6 3 7 11 15	4 8 12 16	TU1 39 5 9	1 1 1 1 1 1 1 1 1 1 1 1 1	× 7 + + !-8
Reset of the second sec	Map Chal Type Nin Chal Hain Chal	т 3 1	99 13	1- ( 2 6 10 14 2-	-1 3 7 11 15 -1	4 8 12 16	righ TU1 33 5 9 13	1 2 6 10 14	-2 k the c 1 3 7 11 15 -2	gray a 4 12 16	TVI 34 5 9 13	1 6 10 14	-3 Un Cle Sa Mi Au 11 15 -3	do Cui ear All we Mag ain Chri x Chri 8 12 16	rent Cl pping I Default 5 9 13	1 hnl ult Map 6 10 14	-4 pping 7 11 15 -4	8 12 16	, , , , , , , , , , , , , , , , , , ,	1 2 6 10 14 2	-5 4 3 7 11 15 -5	4 8 12 16	TU1 37 5 9	1 2 6 10 14 2	-6 5 3 7 11 15 -6	4 8 12 16	TU1 38 5 9	2 6 10 14	6 3 7 11 15 7	4 8 12 16	TU1 39 5 9	1 1 6 10 14	× 7 + + !-8
Reset     Chal ID     Cha	Map Chal Type Win Chal Main Chal	1 1	V1 32 5 13	1- ( 2 6 10 14 2- 5	-1 3 7 11 15 -1	4 8 12 16	righ TVI 33 5 9 13	1 2 6 10 14	-2 k the c 1 3 7 11 15 -2 9	gray a 4 12 16	TVI 34 5 9	1 6 10 14	-3 Un Cle Sa Ma Au 7 11 15 -3	do Cur ear All we Mag ain Chri x Chri 12 16	rent Cl pping I Default 5 9 13	1 hnl ult Ma t Mapp 10 14	-4 ppping 7 11 15 2-4 11	8 12 16	, , , , , , , , , , , , , , , , , , ,	1 2 6 10 14 2	-5 4 3 7 11 15 -5	4 8 112 16	TU1 37 5 9 13	1 2 6 10 14 2	-6 5 7 11 15 -6	4 8 12 16	TUI 38 5 9	1 2 6 10 14	6 3 7 11 15 -7	4 8 12 16	TU1 39 5 9	5 1 1 10 14	× 7 + !-8
Reset           Chal. ID           ID <tr< td=""><td>Map Chal Type Rein Chal Main Chal</td><td>тт 3 1</td><td>V1 22 5 9 13</td><td>1- 2 6 10 14 2-</td><td>-1 3 7 11 15 -1</td><td>4 8 12 16</td><td>righ TU1 33 5 9 13</td><td>1 2 6 10 14</td><td>-2 t the g 1 3 7 11 15 -2 9</td><td><b>4</b> 12 16</td><td>TUI 34 5 9 13</td><td>1 6 10 14 2</td><td>-3 Un Cle Sa Ma Au 7 11 11 15 -3</td><td>do Cur ear All we Mag ain Chri x Chri 12 16</td><td>rent Cl pping I Default 5 9 13</td><td>1 hnl ult Ma t Map 6 10 14</td><td>4</td><td>8 12 16</td><td>5 9 13</td><td>1 2 6 10 14</td><td>-5 4 3 7 11 15 -5</td><td>4 8 112 16</td><td>TU1 37 5 9 13</td><td>1 2 6 10 14 2 1</td><td>-6 5 7 11 15 -6</td><td>4 8 12 16</td><td>TU1 38 5 9 13</td><td>1 2 6 10 14</td><td>6 3 7 11 15 -7 14</td><td>4 8 12 16</td><td>TU1 39 5 9</td><td>5 1 1 10 14</td><td>× 7 + !-8</td></tr<>	Map Chal Type Rein Chal Main Chal	тт 3 1	V1 22 5 9 13	1- 2 6 10 14 2-	-1 3 7 11 15 -1	4 8 12 16	righ TU1 33 5 9 13	1 2 6 10 14	-2 t the g 1 3 7 11 15 -2 9	<b>4</b> 12 16	TUI 34 5 9 13	1 6 10 14 2	-3 Un Cle Sa Ma Au 7 11 11 15 -3	do Cur ear All we Mag ain Chri x Chri 12 16	rent Cl pping I Default 5 9 13	1 hnl ult Ma t Map 6 10 14	4	8 12 16	5 9 13	1 2 6 10 14	-5 4 3 7 11 15 -5	4 8 112 16	TU1 37 5 9 13	1 2 6 10 14 2 1	-6 5 7 11 15 -6	4 8 12 16	TU1 38 5 9 13	1 2 6 10 14	6 3 7 11 15 -7 14	4 8 12 16	TU1 39 5 9	5 1 1 10 14	× 7 + !-8
Reset Chall 10 (Chall 10 (	Map Chal Type A fain Chal Main Chal	11 3 1	9 9 13	1- ( 2 6 10 14 2- 8 2	-1 3 7 11 15 -1 8	4 8 12 16 4	righ TVI 33 5 9 13 TVI	1 1t click 6 10 14 2 2	-2 t the g 1 3 7 11 15 -2 9 3	gray a 4 12 16	ea TVI 34 5 9 13 TVI	1 6 10 14 2	-3 Un Cle Sa Au Au 11 15 -3	do Cun ear All we Mag ain Chri x Chri 12 16	rent Cl Default 5 9 13 TUI	1 hnl alt Ma t Map 6 10 14 14	-4 pping 7 11 15 2-4 11 3	8 12 16 4	, , , , , , , , , , , , , , , , , , ,	1 2 6 10 14 2	-5 4 3 7 11 15 -5	4 8 12 16 4	TU1 37 5 9 13 TU1	1 2 6 10 14 2 1 1 2	-6 5 7 11 15 -6	4 8 12 16 4	TUI 38 5 5 9 9 13	2 6 10 14	6 3 7 11 15 7 14	4 8 12 16 4	1 1 39 5 9 13	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	× 7 + !-8
Reset Chal. 10 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	Map Chal Type Rin Chal Hain Chal	11 1 1 1 1	VI 32 5 9 13 13	1- ( 2 6 10 14 2- 8 2	-1 3 7 11 15 -1 8	4 8 12 16 4	righ TU1 33 5 9 13 TU1 41	1 10 10 14 2 2	-2 k the g 1 3 7 11 15 -2 9 3	gray a 4 12 16	ea TVI 34 5 9 13 TVI 42	1 6 10 14 2	-3 Un Cle Sa Ma Au Au 11 15 -3	do Cur ear All we Mag ain Chri x Chri 12 16	rent Cl Default 5 9 13 TUI 43	1 hnl ult Map 6 10 14 2	4	8 12 16 4	9 13 TUI 44	1 2 6 10 14 2 2	-5 4 3 7 11 15 -5	4 8 12 16 4	TU1 37 5 9 13 TU1 45	1 2 6 10 14 2 1	-6 5 7 11 15 -6	4 8 12 16 4	TU1 38 5 9 13 13	2 6 10 14 2	6 3 7 111 15 2-7 14	4 8 12 16 4	TU1 39 5 9 13 TU1 47	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	× 7 + 2-8
Reset Chal 10 Chal	Map Chal Type Asin Chal Kain Chal	11 1 1 1 1	V1 32 5 9 13 13 V1 160 5	1- ( 2 6 10 14 2 2 6	-1 3 7 11 15 -1 8 3 7	4 8 12 16 4 8	righ TU1 33 5 9 9 13 13 7 141 41 5	1 2 6 10 14 2 2 2 6	-2 k the g 1 3 7 11 15 -2 9 3 7 7	4 8 12 16 4 8	TUI 34 5 9 13 13 TUI 42 5	1 6 10 14 2 1 2 6	-3 Un Cle Sa Mi Au 7 11 15 -3	do Cur ar All sin Chri x Chri 12 16 4 8 4 8	rent Cl pping I Default 5 9 13 13 TUI 43 5	1 hnl lit Map 6 10 14 2	4	8 12 16 4 8	9 13 TUI 44 5	1 2 6 10 14 2 2 6	-5 4 3 7 11 15 -5 12	4 8 12 16 4 8	TUI 37 5 9 13 13 TUI 45 5	1 2 6 10 14 2 1 1 2 6	-6 5 7 11 15 -6	4 8 12 16 4 8	TUI 30 5 9 13 TUI 46 5	1 2 6 10 14 2 6	6 3 7 111 15 2-7 14	4 8 12 16 4 8	ТИЛ 39 5 9 13 13 ТИЛ 47 5	1 2 6 6 10 10 10 10 10 10 10 10 10 10 10 10 10	× 7 + 2-8

#### 4. Select the channel to be tested, right-click and select "single start" as following,





5.For example, set rest, and CC charge mode with 30s data record time, set the upper and lower limit of the voltage to start the test.

🚾 Start	Test *								=		×
DB	6 6										
Barcode	e Management	ą	Step ID	Step Name	Step Time(hh:mm:ss:ms)	Voltage(V)	Cu: ^	Main Chnl			ą
Select	Chal		1	Rest	00:02:00.000			Record			
	1-1-1		2	CC Chg	00:02:00.000			Tier	30	i	
	1-1-2		3	Rest	00:02:00.000			11me		s 	
	1-1-3		4	CC DChg	00:02:00.000			Voltage		v	
	1-1-4		5	CCCV Chg	00:02:00.000			Current		Å	
			6	Rest	00:02:00.000			Protection sett	ings		
			7	CCCV DChg	00:02:00.000			Volt.Lower	2.1	۷	
			8	Cycle	Start Step ID:1			Volt. Upper	4.1	۷	
			9	End				Curr. Lower		Å	
				Or	nly an example,not real test!	!!		Curr. Upper		Å	
								Cap. Upper		Ah	
								Delay Time		5	
										-	
<	Let the	>					~	land I have been	Le	1	
St Be	Ba I	BC	<				>	Main Aux Aux	" Temperat"	Otł	ler
Creator			P/N		Active Material	mg	🗹 A	utomatic backup Ste	art Step ID 1		-
Remark									St	tart	

6.Right-click channel information or double-click the channel to open the channel test process and version information, etc. As shown in the figure below:

BTS Client 8.0.0.416(202	0.01.07)(R3)								-	Ø	$\times$
File Language Set U	Jser Tool He	lp	_								
Device List 4	Charge	Single Start(S)	Protec	ted Stopped	Finished	Offline					•
▼ 127.0.0.1 □ □ 1	0 1-1	All Start(Q)	1-3	O 1-4	<ul> <li>1-5</li> </ul>	✓ <sup>1-6</sup>	O 1-7	✓ <sup>1-6</sup>			
right click the channel	Finishe	Unit Start	nished	Finished	Finished	Finished	Finished	Finished			
or double click	2.5000 V	All Stop	000 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V			
		Schedule pause	9		a 4			4	4		
	2-1	Set Parallel	2-3	2-4	2-5	2-6	2-7	2-6			
		Free Parallel		01	•	<b>U</b>					
	Finishe	Chamber is set	nished	Finished	Finished	Finished	Finished	Finished			
	2.5000 V	Remove Chamber	000 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V			
		Continue(O)									
	3-1	Jump(J)	8-3	3-4	· · · · ·	3-6	3-7	3-8	<u> </u>		
	•	Move(K)		•	0	0	0	0			
		Reset Step									
	2.5000 V	Copy Steps(M)	DOO V	2.5000 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V			
		Chal Locking									
		Channel unlock	4	·	¢ 4			*	<del>a</del>		
	<b>OP</b> <sup>4-1</sup>	Denot Alarmy(D)	4-3	Ø₽ <sup>4-4</sup>	♥ 4 <sup>-6</sup>	♥ 4 <sup>-6</sup>		♥ 4-8			
		Keset Alarm( <u>R</u> )									
	Finishe 2 5000 V	Reset Map( <u>M</u> )	ni shed	Finished 2 5000 V	Finished 2 5000 V	Finished 2 5000 V	Finished 2 5000 V	Finished 2 5000 V			
	2.0000	Chnl Info()		2.0000 /	2.0000 /	2.0000 7	2.0000 /	2			
		Clear Flag(L)	9	( <u> </u>	9 9		( <u> </u>	×	a a a a a a a a a a a a a a a a a a a		
		Save As									
		Unit Settings (U)									
		View Log									
🎦 Present 🎺 Hi: 👌 🕨	Current log	View Data(D)	nnel(s)						e 💁 🛧 🗘		1009



ile Language Set	User	E Chnl I	Info											- D	$\times$	
vice List 5		Chal Att	tributes		Value	Chnl At	tributes		Value		Chal Attri	ibutes		Value		
▼ 127.0.0.1		Dev-Unit	t-Chal		#1-1-1	Range o	f Volt		5V		Aux Chal V	/olt		5V		
L D 1	0	Start Ti	ine	202	0-07-11 02:41:50	Curr Ra	nge		+3/-3A		Aux Chal 1	[emp		100°C		
		Start St	tep ID		1	P/N		2	020-07-11 02-41-	49	Active Mat	terial				
	F	Creator				Remark					Nominal Co	ар				
	2.	Step Tim	ne		00:00:00	Barcode					Step File					
		Step Cap	P		0.0000 Ah	Server	Version	BTSS	erver (R3)-7.6.0.	363	Formation	Name				
		Cycle			1	Client	Version	BTS	Client 8.0.0.56(	202	Main Chal	XWJ	BTS24-	Main-XWJ_VER20190730		
	09	ZWJ/XWJ	Version	Double	click for more i	ZWJ Ver	sion	4S_	1.2.26.BTS24-201	90730	Aux Versio	on	BTS24-	Aux-XWJ_VER20190730		
		Step ID	Step N	ane	Step Time(hh:mm:s:	s:ms)	Voltage	(V)	Current(A)	Cut-o	ff Curr(A)	Capaci	ty(Ah)	Other	^	
	F 2.	1	Rest		00:00	:05.000								1 record conditi		
		2	End													
										_						
	•															
	F															
	0¥															
	F															
	2.															
										-						
										-						
															~	
														Save Steps		

#### 7.View/save test data

Right click -View channel data (select only one channel to open) as shown in the figure below:





evice List 4	Charge	Discharge	Rest Protected	Stopped	Finished	Offline						
▼ 127.0.0.1 ▶ 1	Finished 2.5000 V	I-2 BTSDA 7. Eile View	1-3 5.0.373(2020.01.03) (R3) Window Help Window Yelp Tre-case	- [240001-1-1-5.n	1-6 da]	201 D Cap, Chy(m4h) Cap	DChg(mAh)/DChg Efficiency	Enzy_Cha(mith) toy_DCha(mith)	1	-	- 6 ×	
	<ul> <li>              € 2-1 Finished             2.5000 V      </li> <li>             Finished             2.5000 V         </li> </ul>	V2 252		V3Current(nA)	Y3 10 10 10 10	t Re	est 0 00.45 000	0.0 0.0 25	2500	0.8030	0.000 0.0	
	Finished 2.5000 V	245 244 243 X	80841360 0.0002.165 8.000 Tirechimics.ms)		90 90 90 80					_	,	×

Data (NDA,Excel format) can be saved together for multiple channels, as shown in the figure below:

BTS Client 8.0.0.416(202	20.01.07)(R3)									- 6	ı ×
File Language Set	User Tool Hel	p		_		_					
Device List 🛛 🛱	Charge	Di scharge I	Rest Protec	ted	Single Start(S)	line					•
▼ 127.0.0.1	✓ 1-1	0 1-2	0 1-3	0	All Start(Q)	1-6	✓ <sup>1-7</sup>	S 1-8			
	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Fir 2.50	Unit Start All Stop	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V			
	9	4			Schedule pause +		. a	4			
	♥ 2-1	⊘₽ 2-2	<b>⊘</b> ♥ <sup>2−3</sup>	<b>⊘</b> ₽ <sup>−2</sup>	Set Parallel Free Parallel	<b>P</b> <sup>2-6</sup>	Ø₽ <sup>2-7</sup>	Ø₽ <sup>2-6</sup>			
	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Fir 2.50	Chamber is set Remove Chamber	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V			
	- 3-1	4	- 3-3		Continue(O) Jump(J)	9 	3-7	÷ 3-8			
	•	•	•	•	Reset Step		•	0			
	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Fir 2.50	Reset barcode Copy Steps( <u>W</u> )	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V			
	ų	ą			Chnl Locking	ą	, a	ą			
	<b>⊘</b> ♀ <sup>4−1</sup>	<b>⊘</b> ♀ <sup>4−2</sup>	<b>⊘</b> ♀ <sup>4-3</sup>	<b>•</b>	Reset Alarm(R)	<b>9</b> <sup>4-6</sup>	<b>⊘</b> ♀ <sup>4−7</sup>	<b>⊘</b> ♀ <sup>4-8</sup>			
	Finished	Finished	Finished	Fir	Reset Map( <u>M</u> )	Finished	Finished	Finished			
	2.5000 V	2.5000 V	2.5000 V	2.50	Chnl Info(])	2.5000 V	2.5000 V	2.5000 V			
	9	7		•	Clear Flag(L)	9	9	<b>4</b>			
					Save As	Nda(Y)					
					Unit Settings (U)	Excel(X)					
					View Log						
Present 🎺 His d 🕨	Current login u	ser:admin Selec	ct 4 channel(s)		View Data(D)				e 💿 🛧	4× 💿	€ 1009

## 3.7. Setting

## 3. 7. 1. Advanced Protection Parameters

When issuing the work step, in addition to the protection parameters in the work step file, advanced protection parameters can also be set. The work step file can be edited on other computers and then merged with advanced protection parameters when copied to the local use.



#### Operation method

## 1. "Set"-->"Protection parameters settings", click to edit

le Language Sel	User Tool Help	5									
evice List	Protection Parameter	Settings	Rest Protec	oted Stopped	Finished	Offline					
▼ 127.0.0.1	Process Type Settings System Settings	s	<ul> <li>1-3</li> </ul>	0 1-4	0 1-5	✓ 1-6	<ul> <li>✓ 1-7</li> </ul>	✓ 1-8			
	Finished	Finished	Finished	Finished	Finished	Finished	Finished	Finished			
	2.5000 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V			
	4		a	a a		ф	<u>م</u>				
	<b>OP</b> <sup>2-1</sup>	<b>⊘</b> ♥ <sup>2−2</sup>	Ø₽ <sup>2-3</sup>	Ø₽ <sup>2-4</sup>	Ø₽ <sup>2-6</sup>	Ø₽ <sup>2−6</sup>	Ø₽ <sup>2-7</sup>	<b>⊘</b> ♥ <sup>2−8</sup>			
	Finished	Finished	Finished	Finished	Finished	Finished	Finished	Finished			
	2.5000 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V			
	- 3-1	3-2	•	4 4 4	3-6	4 · · · ·	· 3-7	3-8			
	0	e l	e la	e la	0	0	e l	0			
	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V			
	4		a a	a a		a .	a a	. a			
	♥ 4-1	Ø 🖗 🖅	Ø₽ <sup>4-3</sup>	Ø₽ <sup>4-4</sup>	Ø\$ <sup>4-5</sup>	Ø₽ <sup>4-6</sup>	Ø₽ <sup>4-7</sup>	Ø₽ <sup>4-6</sup>			
	Finished	Finished	Finished	Finished	Finished	Finished	Finished	Finished			
	2.5000 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V			
			4	¢ 0		ф	4 4	. a			
Present 🎺 Hi 1 d	Welcome to http:	://www.neware.o	:om.an! (Tel)800-83	30-8866 Current	login user:admin					e 💿 🛧	⊄× 💿 ⊙
Present 🦪 His d TS Client 8.0.0.416( : Language Set vice List	Welcome to http: (2020.01.07)(R3) t User Tool	://www.neware.c	tion Cap Protection	30-8866 Current	login user:admin				×	P 🕢 🛨	<b>⊄× ⊕ ⊙</b>
Present Vii 4 IS Client 8.0.0.416( Language Set ice List	Welcome to http: (2020.01.07)(R3) t User Tool Charge Fore 1-1	://www.neware.c	tion Cap Protection	30-8866 Current   n   10	login user:admin			_	×	<b>e o</b> 7	<b>↓ @ €</b>
resent → Hi: 4 IS Client 8.0.0.416( Language Set ice List ▼ 127.0.0.1 ▶ 1	Welcome to http: (2020.01.07)(R3) t User Tool Charge Torn Total Charge Torn Control	c//www.neware.u Advanced Protection ation Protection PC IC	tion Cap Protection TA F -Charge (beyond)	30-8866 Current   n   70 set voltage within	login user:admin	-Curr Tolerance H	Protection		×	<b>€ 3</b> ⊼ -	<b>⊄× ⊕</b> € ⊡
resent ♥ His 4 IS Client 8.0.0.416( Language Set ice List ▼ 127.0.0.1 ▶ 1	Velcome to http: (2020.01.07)(R3) t User Tool Charge Finishe 2,5000 V	<pre>://www.neware.u Advanced Protect action Protecti Pro IC Chg ( Chg ( Chg )</pre>	tion Cap Protection IA Free Devoid Charge (beyond) Charge (beyond) Charge (beyond) Charge (beyond)	a   p set voltage within inized and a set of the set	n the specific av	-Curr Tolerance H Abz Value Setti	Protection	nA %	×	- •	⊄ 😦 €
resent ♥ His 4 IS Client 8.0.0416( Language Set ice List ♥ 127.0.0.1 ↓ ▶ 1	Velcome to http: (2020.01.07)(R3) User Tool Charge Finishe 2,8000 V C	<pre>://www.neware.d Advanced Protect action Protection FC IC Chg f Chg YV ch-</pre>	tion an Cap Protection TA F Charge (beyond) Chg Time Valt. Upper >= Valt. Lower <=	a)-8866 Current   n   70 Set voltage within	n the speci <sup>***</sup>	-Curr Tolerance 1 Abz Value Setti Percentage Sett	Protection	A	×	<b>€ </b>	
Present ♥ His 4 IS Client 8.0.0416( Language Set ise List ▼ 127.0.0.1 ▶ 1	Velcome to http: (2020.01.07)(R3) User Tool Charge Finishe 2,5000 V CV CV CV	Advanced Protect	tion an Cap Protection Charge (beyond) Charge (beyond)	a)-8866 Current   a) 7D Set voltage within te 	a the speci <sup>***</sup> a the speci <sup>***</sup> aV aV t Unaw(av) Tio	-Curr Tolerance 1 Abs Value Setti Percentage Sett	Protection	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	× _	<b>6 3 7</b> 1	₫
rresent ♥ Hin q IS Client 8.0.0416( Language Set ise List ▼ 127.0.0.1  p 1	Velcome to http: (2020.01.07)(R3) User Tool Gharge Finishs 2.5000 V V V V V V V V V V V V V V	Advanced Protect ation Protection PC IIC Chg Chg CV Chg DChg	tion Cap Protection TA P Charge (beyond) Chg Time Valt. Upper >= Valt. Lower <= Chg Valt Rise Rat Segment ID Vo I	a Current l	n the speci <sup>***</sup> a z nV nV t. Upper (nv) Tim	-Curr Telerance Abs Value Setti Percentage Sett s Interval(ms)	<pre>frotection</pre>		×	<b>► 3</b> 7 1	<b>4 © €</b>
rresent ♥ Hi: 4 IS Client 8.0.0416( Language Set ise List ▼ 127.0.0.1 ▶ 1	Velcome to http: (2020.01.07)(R3) User Tool Gharge Finishe 2.5000 V CV Finishe 2.5000 V CV Finishe 2.5000 V Ke	Advanced Protect Advanced Protecti PC II C Chg / Chg 2CV Chg II DChg Ist	comori (Tel)800-83 tion Ta Protection Ta Protection Charge (beyond) Charge (beyond) C	a) -8866 Current   p p set voltage within te te lt. Lover (nV) Volt	a the specific and a	-Curr Telerance I Abs Value Setti Percentage Sett • Interval(ms)	frotection	■A % ∆¥(#¥)	×	<b>€ 3</b> 7	<b>↔ @</b> €
rresent ♥ Hii 4 IS Client 8.0.04164 Language Set ice List ▼ 127.0.0.1 ▶ 1	Welcome to http:           (2020.01.07)(R3)           User Tool           Charge           Finishe           2.6000           Ver           Finishe           2.5000           Finishe           2.5000	s//www.neware.r Advanced Protect atiaBrotecti r Chg r Chg : DChg : DChg : st : obl	comori (Tel)800-83 tion Tak Protection Charge (beyond) Chs Time Volt. Upper >= Volt. Lower <= Chg Volt Rise Ret Segment ID Vo 1 2 3 	a) -8866 Current   n   rp set voltage vithin te - lt. Lover (nV) Volt	Iogin useradmin	-Curr Telerance I Abs Value Setti Percentage Sett e Interval(ms)	<pre>frotection</pre>	% % 	×	<b>P</b> @ ¥	
Fresent ♥ Hii ↓ IS Client 8.0.04164 i Language Set ice List ♥ 127.0.0.1 □ 1	Velcome to http: (2020.01.07)(R3) User Tool Charge Form Charge Form Finishe 2.5000 V V Finishe 2.5000 V Composition Composit	s//www.neware.r Advanced Protect ation Protection r Chg r Chg 2 DChg ist ist isbal	comori (Tel)800-83 tion TA P Charge (beyond) Chg Tise Volt. Usper >= Volt. Lower <= Chg Volt. Rise Rat Segment ID Vo 3 	n Current l	login useradmin  h the speci**  N  LUpper(av)  LUpper(ak)  Abs	-Curr Tolerance I Abs Value Setti Percentage Setti e Interval(ms) Value (mV) Rumbe	frotection	% % ∠V(nY)	×	<b>6</b> 9 7	<b>☆ @ ©</b> □ ₩
rresent ♥ Hii q IS Client 8.0.04160 Language Set ice List ♥ 127.0.0.1  p 1	Velcome to http: (2020.01.07)(R3) User Tool Charge Form Finishe 2.5000 V Ver Finishe 2.5000 V Re Finishe 2.5000 V	s//www.neware.r Advanced Protect ation Protection r Chg r Chg z Chg z DChg s BChg s BChg s St iobal	commari (Tel)800-83 tion TA Protection Charge (beyond) Chg Tae Valt Lower <= Valt Lower <= Chg Valt Rise Rat Segment ID Vo Segment ID Ce I Valtage drop abno Segment ID Ce	n Current l	login useradmin  n the specific state of the	-Curr Tolerance 1 Abs Value Setti Percentage Setti e Interval(ms) Value (mV) Bumbe	frotection	% % ∠V(nV)	×	<b>6</b> 9 7 1	<b>☆ © ©</b> ⊡
Fresent ♥ Hii ↓ IS Client 8.0.04166 Language Set ice List ♥ 127.0.0.1 □ 1	Velcome to http: (2020.01.07)(R3) User Tool Finishe 2.6000 V Ver Finishe 2.5000 V Finishe 2.5000 V Finishe 2.5000 V	s//www.neware.r Advanced Protect ationFrotection r Chg r Chg z DChg s DChg s DChg s St iobal	comori (Tel)800-83 tion TA P Charge (beyond) Chg Tine Volt Niper >= Volt Niper >= Volt Niper >= Volt Niper >= Volt Segment ID Ce I 2 3 Voltage drop abno Segment ID Ce I 2 3	n Current l	login useradmin  h the speci**  N  LUpper(ov)  Tin  Upper(oAb)  Abs	-Curr Tolerance I Abs Value Setti Percentage Setti e Interval(ms) Value (mV) Rumbe	frotection	% % ∠V(nY)	×	<b>P a k</b>	
Fresent ♥ Hii q IS Client 8.0.04166 i Language Set ice List ♥ 127.0.0.1 □ 1	Welcome to http:           (2020.01.07)(R3)           User Tool           Charge           Finishe           2.5000 V           CV           Pinishe           2.5000 V           CV           Pinishe           2.5000 V           CC           Pinishe           2.5000 V           CC           Solo V	s//www.neware.r Advanced Protect astien Protecti r Chg r Chg z DChg s DChg s St Lobal	comori (Tel)800-83 tion sp Protection TA P Charge (beyond) Chg Time Volt. Upper >= Volt. Lower <= Chg Volt Rise Rat Segment ID Vo Segment ID Ce 1 2 3 Voltage drop abno Segment ID Ce 1 2 3 Voltage drop abno Voltage drop (Voltage drop	n Current l	login useradmin  h the specific  aV by	-Curr Tolerance I Abs Value Setti Percentage Setti • Interval(ms) Value (mV) Number -Volt Drop (Whol	frotection	% % ∠V(nV)	×		
TS Client 8.0.04166 E Language Set ice List V 127.0.0.1 D 1	Velcome to http: (2020.01.07)(R3) User Tool Charge Form Finishe 2.5000 V Ver Finishe 2.5000 V Re Finishe 2.5000 V Re Charge Form Charge Form Charg	s//www.neware.r Advanced Protect ation Protecti r Chg chg t Chg 2 DChg stt Lobal	commari (Tel)800-83 tion TA P Protection Charge (beyond) Charge (beyond) Charge (beyond) Volt Lower <= Chg Volt Rise Rat Segment ID Vo 2 3 Voltage drop abno Segment ID Ce 1 2 3 Voltage drop abno Segment ID Ce 1 2 3 2 3 2 2 3 3 2 3 3 3 3 3 3 3 3 3 3 3 3 3	a) -8866 Current   p p set voltage within te te consuly point(V2) - ap Lover(nAh) Cap	login useradmin	-Curr Tolerance I Abs Value Setti Percentage Setti e Interval(ms) Value (mV) Number -Volt Drop (Whol Abs Value >=	Protection				
TS Client 8.0.04166 E Language Set tice List 9 127.0.0.1 10 1	Velcome to http: (2020.01.07)(R3) User Tool Finishe 2.5000 V Finishe 2.5000 V Finishe 2.5000 V Finishe 2.5000 V Finishe 2.5000 V	s//www.neware.r Advanced Protect ation Protecti r Chg chg 2 DChg 2 DChg 2 DChg 2 DChg 2 DChg 4 DChg 2 DChg 4 DChg	commari (Tel)800-83 tion TA © Protection Charge (beyond) Charge (beyond) Charge (beyond) Valt. Upper >= Valt. Lower <= 'Chg Yalt. Rise Rat Segment ID Vo 1 2 3 -Voltage drop abnc Segment ID Ca 1 2 3 -Voltage drop abnc Segment ID Ca 1 Ca Ca Ca Ca Ca Ca Ca Ca Ca Ca	a   a   p set voltage within te lt. Lower (nV) Volt onaly point (V3) - up. Lower (nAh) Cap. an rise while work se >>	login useradmin  n. the specific  s s sV sVper(sN) Abs nV svper(sN) Abs nv svper(sN) Abs svver(sN) Abs svper(sN) A	-Curr Tolerance 1 Abs Value Setti Percentage Setti e Interval(ms) Value (mV) Runbe -Volt Drop (Whole Abs Value >= -Vacuum sudden rise >=	Protection				
TS Client 8.0.0416( Language Set tice List 9 127.0.0.1 0 10 1	Velcome to http: (2020.01.07)(R3) User Tool Finishe 2.5000 V Finishe 2.5000 V Finishe 2.5000 V Finishe 2.5000 V Finishe 2.5000 V	s//www.neware.r Advanced Protect ation Protecti r Chg chg zw Chg z DChg st Lobal	commari (Tel)800-83 tion IA F Charge (bayend) Chg Tiae Valt. Upper >= Valt. Lower <= 'Chg Yalt. Rise Rat Segment ID Vo I Chg Tiae Segment ID Ce I Charge drop abno Segment ID Ce I Segment I Segment I	a   a   b set voltage within te blt Lower (mV) Volt onaly point (V3) - up, Lower (nAh) Cap. ap, Lower (nAh) Cap. protection (nAl) Cap. protection (nAl) Cap.	login useradmin  n the specific  aV aV aV byper(ak) Abs aV aV byper(ak) Abs byper(ak) Ab	-Curr Tolerance I Abs Value Setti Percentage Sett e Interval(ms) Value (mV) Number -Volt Drop (Whol Abs Value >= -Vacuum sudden ris -Vacuum sis >= otection State and	frotaction	nA           %           ▲V(nV)           Impa           Impa           iilure)	×		
rresent ♥ Hii q IS Client 8.0.0416( Language Set ice List ♥ 127.0.0.1 ♥ 127.0.0	Velcome to http: (2020.01.07)(R3) User Tool Finishe 2.5000 V Finishe 2.5000 V Finishe 2.5000 V Finishe 2.5000 V Finishe 2.5000 V Finishe 2.5000 V	s//www.neware.r Advanced Protect ation Protecti r Chg chg 2 DChg 2 DChg est Lobal	commari (Tel)800-83 tion TA = Protection Charge (exyend) Charge (exyend) Charge (exyend) Valt Upper >= Valt Lower <= 'Chg Valt Rise Rat Segment ID C 1 2 3 Voltage drop abno Segment ID C 1 1 1 1 1 1 1 1 1 1 1 1 1	a   a   b set voltage within te blt Lower (mV) Volt onaly point (V3) - up, Lower (mAh) Cap. ap, Lower (mAh) Cap. protection (math work te >>>   protection (math work) te >>>   te	login useradmin  n the specific system av av byper(system)	-Curr Tolerance I Abs Value Setti Percentage Sett e Interval(ms) Value (mV) Number -Volt Drop (Whol Abs Value >= -Vacuum sudden ris >= otection state an	frotaction				
TS Client 8.0.04166 E Language Set tice List 9 127.0.0.1 D 1	Velcome to http: (2020.01.07)(R3) User Tool Finishe 2.5000 V Finishe 2.5000 V Finishe 2.5000 V Finishe 2.5000 V Finishe 2.5000 V V V V V V V V V V V V V V	<pre>s//www.neware.r Advanced Protect atios Protecti r Chg Chg Chg 2 DChg 2 DCh</pre>	commari (Tel)800-83 tion TA P Protection Charge (beyond) Charge (beyond) Charge (beyond) Valt. Upper >= Valt. Lower <= 'Chg Valt. Rise Rat Segment ID Vo 1 2 3 -Voltage drop abno Segment ID Ca 1 2 3 -Voltage drop abno Segment ID Ca 1 -Voltage drop abno Notage drop abno	a   a   p set voltage within te lt. Lower (nV) Volt onaly point (V3) - up. Lower (nAh) Cap. protection (all c protection (all c	login useradmin  n. the speciff aV aV aV bupper(aN) Tin Upper(aN) Abs aV aV bunnels enter pr	Curr Tolerance 1 Abs Value Setti Percentage Setti Parcentage Setti Interval(ms) Value (mV) Number Value (mV) Number Value >> Value value >> Value sudan ris Vacuum rise >> otection state an	Protection	nA       %       △V(nV)       av       © Open Pres       P2)       bpa       iilure)			

2. The System Settings can set "single start" to load advanced protection parameters. After setting, single start will automatically merge advanced protection parameters into the work step file, as shown in the figure below:

BTS Client 8.0.0.	416(2	2020.01.07)(R3)	
File Language	Set	User Tool Help	
Device List		Protection Parameter Settings	Rest
▼ 127.0.0.1		Process Type Settings	
L D 1		System Settings	<b>•</b>
	-		_





**Note:** For the specific meaning of advanced protection parameters, see the detailed documentation related to advanced Protection Parameters.

## 3. 7. 2. Process Type Settings

As shown in the figure below, input the type of process to be used on the left. Click '>' and '>>' in the middle to move the type of process on the left to the right. Click '<', '<<' to move the process type on the right to the left.The process type on the right can be chosen as formation type or grading type.







Process Type Settings		×
		• Formation © Cap Grading
Process Type		Process Type
	>	FC
		IA
		FD
	<	
	<<	
OK		Cancel

# 3. 7. 3. System Setting

The system configuration interface will pop up when the software is used for the first time. At other times, the system configuration can also be called up by clicking the menu bar.

BTS Client 8.0.0.416(20)	20.01.07)(R3)										o x
File Language Set	User Tool Help	2									
Device List P	rotection Parameter	Settings	Rest Protect	ed Stopped	Finished	Offline					•
▼ 127.0.0.1 ▶ 1	ystem Settings	5	• 1-3	0 1-4	O 1-6	✓ <sup>1-6</sup>	✓ 1-7	• 1-8			
	Finished 2.5000 V #	Finished 2.5000 V	Finished 2.5000 V 4	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V 4 4			
	Ø 🖗 2-1	Visiahad	<b>2</b> -3	€ e <sup>2-4</sup>	Ø P <sup>2-5</sup>	Visialad	Ø₽ <sup>2-7</sup>	<b>OP</b> <sup>2-8</sup>			
	2.5000 V	2. 5000 V	2. 5000 V	2. 5000 V	2. 5000 V	2.5000 V	2.5000 V	2. 5000 V			
	<b>○</b> 3-1	S 3−2	<b>○</b> 3-3	0 3-4	<b>3</b> −6	<b>3</b> −6	● <sup>3-7</sup>	<b>3</b> −8			
	2.5000 V	2.5000 V	2.5000 V	2. 5000 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V			
	<b>OP</b> <sup>4-1</sup>	<b>⊘</b> ♥ <sup>4−2</sup>	<b>⊘</b> ♥ <sup>4-3</sup>	Ø₽ <sup>4-4</sup>	Ø <b>₽</b> <sup>4-5</sup>	<b>⊘</b> ♥ <sup>4−6</sup>	⊘∲ 4-7	Ø₽ <sup>4-8</sup>			
	Finished 2.5000 V #	Finished 2.5000 V	Finished 2.5000 V #	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V			
											1
🎦 Present 🎺 His d 🕨	Welcome to http	://www.neware.c	om.cn! (Tel)800-830	-8866 Current	ogin user:admin				e a	<u>→</u> ↓ ↓	① ① 1009





#### 1. Start mode

After the registration, the registered mode will be displayed in the start mode, as shown in the figure below.

BTS Client 8.0.0.416(2020.01.07)(R3)

File Language	Set	User Tool Help	
Device List		Protection Parameter Settings	Rest
▼ 127.0.0.1		Process Type Settings	
		System Settings	
	_		-





#### 2. barcode

In the Barcode menu, those conditions can be set: Barcode format, number of channels per unit, length of barcode, save path of formation by default, whether barcode is allowed to input lowercase letters, whether the single start step can start if there is no barcode or if the barcode is wrong. It needs to be saved to take effect after it is configured. As shown in the figure below:

System Settings		×
System Settings Start Mode Barcode Data Download Fool-proofing Step editor Display Settings Upgrade settings	Barcode File Format Valid when all starting or starting at layer DBF CSV TXT Number of Chnls Per Unit: 16 Valid when loading the barcode file under all start or automatically start modes Barcode Length: 12	× *
	Valid when scaning barcode manually, 0 indicates unlimited barcode length Default Formation Path: D:\Cycler_FHB\ Valid under whole cabinet startup or automated line modes Enable lowercase letters in barcodes Valid when scaning barcode manually If there is no barcode or barcode error at single start: No hint Prompt but allow to start the test Notify and do not allow to start	
	Data Download	
	Save As File Naming Format O DevID-UnitID-ChnlID-TestID	
	Named hu harcode or DevID-UnitID-CholID-TestID	~
	Import Export Save Exit	



## 3. Data Download

The file format, export mode, export type and other functions can be set and be saved .As shown in the figure below:

🚾 System Settings		×
Start Mode	Data Download	^
Barcode	Save As File Naming Format	
Data Download	DevID-UnitID-ChalID-TestID	_
Fool-proofing	Named by barcode or DevID-UnitID-ChalID-TestID	
Step editor	🔘 Named by Remark - Device Number - Unit Number - Channel Number	
Display Settings Vpgrade settings	Data Export Mode	
	Sexport Aux Chrl Data	
	<ul> <li>Do not export aux chnl data</li> </ul>	
	If the file exists	
	Rename (+ Time Format)	
	💿 Overri de	
	Export Excel	
	• Without Excel Installed	
	() With Excel Installed	
	Save As File Naming Node	
	• Default	
	© Custom	
	Excel Export Report Type	
	Layer Report	
	Custom Report	
	Chnl Info Circulating layer Step layer	
	Recording layer Aux Chnl Curve	
	Parameter	~
	Import Export Save Exit	



## 4. Fool proofing

When the test starts, if the channel is in protection mode, whether this is a reminder window or not; whether the password is required for starting test; whether advanced protection parameters are loaded for single start step; whether the password verification is required for exit software, and whether the current user is logged out or switched within a set time. After the fool proofing setting is configured, it needs to be saved to take effect. The setting interface is shown below:

System Settings		×
Start Mode Barcode Data Download Fool-proofing Step editor Display Settings Upgrade settings	<pre>Fool-proofing If there is ohal protection when starting the test</pre>	
	Import Export Save Exit	

防呆设置界面



## 5. Step Editor

Work step parameters setting, work step type setting, work step parameters must set conditions, such as whether to set the creator, batch number, remarks, the default value of voltage current upper and lower limits protection, the default value of work step interval minimum value, whether to set the cut-off current, whether to allow single work step editing with advanced protection parameters and other functions. After the configuration, click save to take effect.The interface is shown as follows:

System Settings							×
Start Mode	Step editor						^
Barcode		Step Para	meters Settings				
Data Download			Show		Hi da	0	
Fool-proofing		Step ID	SHOW	``	Ratio		
Step editor	]	Step Name		- /	Energy		
Display Settings		Step Time		>>	-ΔV		
Upgrade settings		Voltage			Power	-	
		Current		Ť	Load	- 1	
		Cut-off C	urr	¥	Cut-off ratio		
		Capacity			SOC		
				<	Max Vi	_	
				11	Min Vi		
						÷	
		Step Type	Settings				
		Select	Front Color	r	Background color	^	
			CC Chg	(	CC Chg		
			CV Chg		CV Chg		
			CP Chg		CP Chg		
			CCCV Chg	(	CCCV Chg		
			PCCCV Chg	1	PCCCV Chg		
			CC DChg	(	CC DChg		
			CV DChg	(	CV DChg		
			CP DChg	(	CP DChg		
			CCCV DChg		CCCV DChg		
			CR DChe	(	TR DFbg		~
	Import	Export	Save		Exit		

Start Mode         Barcode         Data Download         Pool-proofing         CCCV Chg         Bisplay Settings         Upgrade settings         CCCV Dchg            © Cut-off curr must be set         © Cut-off curr cun be set         The parameters of steps are lower than 0.2% of the range         © Mo processing         © Tip	🚾 System Settings		$\times$
Data Download       The absolute value of current tolerance protection defaults to the range         Fool-proofing       CCCV Chg         Step editor       © Cut-off curr must be set         Display Settings       © Cut-off curr and be set         Upgrade settings       CCCV DChg         © Cut-off curr must be set       © Cut-off curr can be set         CV DChg       © Cut-off curr must be set         © Cut-off curr and be set       CV Chg         © Cut-off curr must be set       © Cut-off curr and be set         CV DChg       © Cut-off curr must be set         © Cut-off curr must be set       © Cut-off curr and be set         CV DChg       © Cut-off curr must be set         © Cut-off curr must be set       © Cut-off curr must be set         © Cut-off curr must be set       © Cut-off curr must be set         © Cut-off curr must be set       © Cut-off curr must be set         © Cut-off curr must be set       © Cut-off curr must be set         © Cut-off curr must be set       © Cut-off curr must be set         © Cut-off curr must be set       © Cut-off curr cun be set         The parameters of steps are lower than 0.2% of the range       © No processing         © Tip       Tip	Start Mode Barcode	Max percentage of range for protection is 100 %	^
Foolproting         Step editor         Display Settings         Upgrade settings         CCCV Dfs         @ Cut-off our oan be set         @ Cut-off our aust be set         @ Cut-off our aust be set         @ Cut-off our oan be set         CV Chg         @ Cut-off our aust be set         @ Cut-off our oan be set         CV Chg         @ Cut-off our aust be set         @ Cut-off our oan be set         CV Dfg         @ Cut-off our aust be set         @ Out-off our aust be set         @ Dut-off our aust be set <td>Data Download</td> <td>The absolute value of current tolerance \$\$</td> <td></td>	Data Download	The absolute value of current tolerance \$\$	
Display Settings Upgrade settings CCCV DChg © Cut-off ourr oan be set CCV Chg © Cut-off ourr oan be set CV Chg © Cut-off ourr must be set CV DChg © Cut-off ourr must be set CV DChg © Cut-off ourr oan be set PCCCV Chg © Cut-off ourr must be set Cut-off ourr oan be set PCCCV Chg © Cut-off ourr must be set Cut-off ourr oan be set The parameters of steps are lower than 0.2% of the range © No processing © Tip	Fool-proofing Step editor	CCCV Chg © Cut-off curr must be set	
CCCV DChg © Cut-off ourr must be set © Cut-off ourr oan be set CV Chg © Cut-off ourr must be set © Cut-off ourr must be set © Cut-off ourr must be set © Cut-off ourr must be set PCCCV Chg © Cut-off ourr must be set Cut-off ourr oan be set The parameters of steps are lower than 0.2% of the range © No processing © Tip	Display Settings Vpgrade settings	© Cut-off ourr can be set	
CV Chg Cut-off curr must be set Cut-off curr can be set CV DChg Cut-off curr must be set Cut-off curr can be set PCCCV Chg Cut-off curr must be set Cut-off curr can be set The parameters of steps are lower than 0.2% of the range No processing Tip		CCCV DChg ● Cut-off ourr must be set ◎ Cut-off ourr can be set	
CV DChg CU-off ourr must be set Cut-off ourr oan be set PCCCV Chg Cut-off ourr must be set Cut-off ourr can be set The parameters of steps are lower than 0.2% of the range No processing Tip		CV Chg © Cut-off curr must be set © Cut-off curr can be set	
<ul> <li>Cut-off curr can be set</li> <li>PCCCV Chg</li> <li>Cut-off curr must be set</li> <li>Cut-off curr can be set</li> <li>The parameters of steps are lower than 0.2% of the range</li> <li>No processing</li> <li>Tip</li> </ul>		CV DChg © Cut-off ourr must be set	
<ul> <li>© Cut-off ourr must be set</li> <li>© Cut-off ourr can be set</li> <li>The parameters of steps are lower than 0.2% of the range</li> <li>No processing</li> <li>Tip</li> </ul>		© Cut-off ourr can be set	- 1
The parameters of steps are lower than 0.2% of the range () No processing () Tip		<ul> <li>Cut-off curr must be set</li> <li>Cut-off curr can be set</li> </ul>	
(a) n 1 1 1		The parameters of steps are lower than 0.2% of the range No processing Tip	
○ Foroia Record is lower than 0.2% of the range		© forbia Record is lower than 0.2% of the range	~



#### 6. Display Settings

There are main functions such as whether to display device type, view setting, whether to display list and sorting settings, number of rows to display, right-click menu function display, channel color setting, etc. When the configuration is completed, click "save" to take effect. The interface is shown as follows:

System Settings		×
Start Mode	Display Settings	^
Barcode	Display Device Type(BTS80 BTS81 BTSV)	
Data Download	🔲 Hide real devices (only display super map)	
Fool-proofing	Display all chuls under the selected server	
Step editor	Displayed in the taskbar when minimized	
Display Settings		
Vpgrade settings	View Settings	
	Select Type	
	Large Icon	
	Small Icon	
	☑ List	
	Grading	
	Match Match	
	Number of Chuls Per Row: 16 Display use when clicking jigs	
	Display a split line every chnis	
	Right Click Menu Function	
	Select Type Shortcut Key	~
	Import Export Save Exit	



## 3.8. User Management

## 3.8.1. User Login

Users must log in to the client software to do operations.

1. Click "User"  $\rightarrow$  "User Login", as shown below



用户登录操作界面

2. User name: admin Password: neware

🚾 User Login			×
User Name	admin		
Password	****	Show Pa	ssword
	OK	Cancel	

3. System Settings  $\rightarrow$  Fool-proofing $\rightarrow$  Allow remembering the last login password. As shown in the figure below.



🪾 System Settings		×
Start Mode Barcode Data Download Fool-proofing Step editor Display Settings	<ul> <li>Reset successful, whether to continue testing</li> <li>Successful migration, whether to continue testing</li> <li>Password Verification Required If Exit The Software?(With Administrator's Permission)</li> <li>Schedule time to log off automatically</li> <li>Min</li> </ul>	^
Upgrade settings	Log off     Switch the user User Hame:     Password:     Show Password     The production line stops scheduling, no prompt box     Switching production line status mode does not require a password     Allow remembering the last login password	
	Step Parameters Settings Show Kety in Step Name Energy	~

## 3. 8. 2. Password Modify

The user can change the current device password,

User  $\rightarrow$  Password Modify, then the window will pop up, please input the original password and set a new password, as shown in the figure below:





X
admin
Show Password
Cancel

## 3.8.3. User Log Out

Users can log out as showed as following,

Click User -> User logout. If you want to continue operating this system, you need to login again.

BTS Client 8.0.0.416(2020.01.07)(R3)



## 3. 8. 4. User Management

If the current login user is the administrator, then he/she can add, delete, set permission configuration to other users.

Click "user" -> "user management" to enter the user management interface, as shown below:



User Group Add User Group(s)	Add User Group(s)
Edit User Group Delete User Gro… Jser	User Group:
Add User(s) Edit User Delete User(s)	<ul> <li>Select All</li> <li>Step Edit</li> <li>Edit single step parameters</li> <li>Save Steps</li> <li>Load Step</li> <li>Single Start</li> <li>Loop start</li> <li>All Start</li> </ul>
	Unit Start  Path Settings of Unit Start

1. Add a new user group: configure the permissions of the new user group by checking the required permissions to submit. As shown in the figure below:

User Group Add User Group(s)	Add User Group(s)	
Edit User Group Delete User Gro… User	User Group:	
Add User(s) Edit User Delete User(s)	<ul> <li>Select All</li> <li>Step Edit</li> <li>Edit single step parameters</li> <li>Save Steps</li> <li>Load Step</li> <li>Single Start</li> <li>Loop start</li> <li>All Start</li> <li>Unit Start</li> <li>Path Settings of Unit Start</li> </ul>	•



2. Modify user group: select the user group name to modify, check or cancel unwanted permissions and click submit. As the diagram showed below:

User Group Add User Group(s) Edit User Group	Edit User Group
Delete User Gro	User Group: neware 🗸
User Add User(s) Edit User Delete User(s)	<ul> <li>Select All</li> <li>Step Edit</li> <li>Edit single step parameters</li> <li>Save Steps</li> <li>Load Step</li> <li>Single Start</li> <li>Loop start</li> <li>All Start</li> <li>Unit Start</li> <li>Path Settings of Unit Start</li> </ul>

3. Delete user group: Click the drop-down box to select the user group to be deleted, and click submit to delete successfully. As shown in the figure below:

User Management			
Vser Group Add User Group(s) Edit User Group	Delete User Gro	up(s)	
Delete User Gro…	User Group:	neware	~
Vser Add Vser(s) Edit Vser Delete Vser(s)			
3	Submit	Close	



4.Add user: click the drop-down box to select the new user group, enter the new user name and password, and click submit. As shown in the figure below:

🚾 User Management			Х
User Group Add User Group(s) Edit User Group	Add User(s)		
Delete User Gro… User	User Group:	neware $\vee$	
	User Name:		
···· Defete Ofer(2)	Password:		
	New Password:	Show	Passwo
2	Submit	Close	

5. Edit user: You can modify the password of any user, select the user group, enter the new password and click submit. As shown in the figure below:

User Group Add User Group(s)	Edit User		
Edit User Group Delete User Gro… Nser	User Group:	admin	~
- Add User(s) - Edit User	User Name:	admin	~
·… Delete User(s)	Password:	****	Show P


6.Delete user: select the user group, select the user to be deleted, click submit and delete successfully. As shown in the figure below:

🚾 User Management		×
User Group — Add User Group(s) — Edit User Group — Delete User Gro User — Add User(s) — Edit User — Delete User(s)	Delete User(s) User Group: new User Name: new	are v are v
] [	Submit	lose

# 3. 9. Language Switch

The software supports multi-language switching, currently support simplified Chinese, traditional Chinese, English, Korean.

Menu-->language-->choose language,as shown below,

BTS 🔤	Client 8.0.0	.416(202	20.01.07)(R	(3)	
File	Language	Set U	Jser Too	H H	elp
Devi	() 中文( 第)文中	൭ഁ体) 紧體)	Char	ge	Discharge
L.	Englisl				
	한국어				



## 3.10. Tool

Through the menu bar "tools" option, you can call out other BTS series software. It includes BTSDA software, offline workstep editor, and log download software, as shown in the figure below:

File Language Set Us	er Tool Help
Device List 4	Package Log st
▼ 127.0.0.1	Build Test
L D 1	BTSDA
	List of ZWJ
	Delete Historical Data

## 3. 10. 1. Log Download

Open the client and select the download log function from the menu bar.Open the log download interface, you can choose the server IP to download the log, the time range to download the log, and the path to save the log download.The log downloads include both client and server logs, as shown in the figure below.

🚾 Download Log		1 <u></u>		$\times$
IP: 127 . 0 . 0 .	1			
✓ Time Range From 2020/ 7/ 3 ∨ To	2020/ 7/10	~		
Path: D:\Program Files\NEWARE\B	TSClient80\B	TS_LOG.	7z	
Progress				
Download server log				
Compress Client log				
Finish				
<			>	
Download	Cancel			



# 3. 10. 2. Build Test

As shown in the figure, open the client and select the Build Test under the tool from the menu bar to open the offline workstep editing function.You can also run the Build Test yourself by double-clicking the Build Test.exe icon.

BTS Client 8.0.0.416(2020.01.07)(R3)



I步号	工步名称	工步时间(hh:mm:ss:ms)	电压(V)	电流(A)	截止电流(A)	容里(Ah)	其他	^	主通道	B	打开
									记录条件		保存 另存为
							Switch language first		中文(简体) 中文(繁體)	*	语言 设置
				_					English 한국어 电压 NR		注册 v
									电压上限		v v
									电流上限 [		A
									延迟时间		s
									主通道   辅助通道1   新	制通道	2 温箱



	uild Test 8.0.0.315(2020.01.07)(R3)									= -		×
Step Management DBC 6	Step Hunagement	11:ne:ss:es)	Voltage(V) 4.	Current(Å)	Cut-off Curr(A)	Capaci ty(Ak)	Other		Main Chal 5. Record Time Valtage Current Protection sett Velt.Lever Valt.Upper Curr.Lover Curr.Upper Cap.Upper Delay Time	9     		4
Cre	ator P/N		ive Material	ns				*	8. <u>Main''</u> Aus.'' Aus.'' 9. Ste	"   Temperat urt Step ID	0th	er
Rem	ark			7.								1

- 1.Offline working step editor;
- 2.New, open, save, save as, set menu bar;
- 3.Work step management interface;
- 4.Working step editing area;
- 5.Parameter setting interface;
- 6.DBC management interface;
- 7.Basic details input box;
- 8. Parameter setting interface switch button;
- 9.Start working step input.

**Note:** See the BuildTest user manual for instructions on how to use the workstep editor.



# 3.10.3. **BTSDA**

1. The client can open the BTSDA interface by right-clicking the channel data, as shown in the figure below,



- 1. Version
- 2. Data name (normally tester No.-unit NO.-channel No.-test ID, eg.

24001-1-1-2818577304.nda)

- 3. Menu bar
- 4. Menu icon
- 5. Curve name
- 6. Curve area
- 7. Data area menu
- 8. Step layer data
- 9. Record layer data
- 10. Cycle layer data
- 11. Right click menu



## 2.Data export interface:

🔄 BTSDA 7.6.0.373(2020.01.03) (R3) - [TEST.Nda] 💼 Eile ¥iew ₩indow Help	-	- 0 ×
	<u>s</u>	
TimeVoltage&Current CapacityVoltage TimeCapacity&Capacity Density 👷 + 🏟	Record ID Time(htmin.s.ms) Voltage(V) Current(nA) Capacity(mAh) Energy(mWh) Reatime	
1/2:Voltage(V)	Y3.Current(mA) = 1 Rest 0.02/0.000 0.0 0.0 4.1232 4.1232	0.0000 0.0000
Y2 42- 41-	- 1900 V3 ⊟ 2 2002/2016 42222 1938 83182/2017117 - 1900 V3 ⊟ 2 2002/2018 8515300 85138 85138 451530 ⊡ 20 2002/2018 8515300 8503 8513 85138 1120 2018 ⊡ 20 2018 00 4122 1120 851300 1120 1120 1120 1120 1120 1120 1120	4.1998 0.0000
	Export X 42007 41900	0.0000 0.0000
3.6	xport Type 4164 23997 80/32/2001 12	0.0000 3.7344
3.7	Ovisible Report     OFormation Report     OFormation Report     State     Office Report     Offic	0.0000 0.0000
35		
34E	xport File 9945 4122/2011 17 9945 4122/2011 12	0,000 0,000
	0.012/21/2011 22	
3.2	Path C:\ 010221001122 010221001122	0.0000 3.7344
	Bills Name         V         3 11/3 3 32/9 8 012022011 83	0.0000 0.0000
29-		
28	File Format (1A) EXCEL ()PDF (CSV 33364 4.1998 0.012222011 03	3.8678 0.0000
27	Export Way  Without EXCEL Installed With EXCEL Installed 9951.012222011 09 4 2007 4 1996	0.000 0.0000
26	Export setting Export Aux data Merge Main and Aux ( 0.012/22/2011 09	
25	4 1654 2 3997	0.0000 3.7344
23	Export Cancel 3.1119 3.2209 0.012222011 14 0.012222011 14	0.0000 0.0000
22-	14 000/ 0m 53838.000 24653 90877 33311 41998	3.8625 0.0020
21	200 E 96808 0.01:00.000 3.3311 500.0 0.0 0.012/22/2011 14	
20		0.000 0.000
19	-400 117247 0.02:00.000 4.1998 0.9 0.0 0.001222201119	0.0000 3.7348
	134575 4.48.47.000 2.9985 -500.1 2407.0 9603.012232011 0	
0 60.00.00 120.00.000 120.00.000 180.00.000 240.00.00	E 17 Rest 0.0210.000 0.0 0.0 3.1110 3.2626 ⊞ 134576 0.00:00.000 3.1110 0.0 0.0 0.012/23/2011 00	0.000 0.000
x line(hmn.a.ma)		
	10 20	20

导出报表设置界面

- 1. Open Excel export setting window
- 2.Export report type
- 3.Path,file can be user named
- 4.Format and export type





3. Customized report parameter settings, as shown in the figure below,

EISDA 7.6.0.373(2020.01.03) (R3) - [TEST.Nda]	- a ×
	ize Perpert setting
Time-Votage&Current Capacity-Votage Time-Capacity&Capacity Density 👷 + 🏟	al Information Orde Laure Descend Laure Comp. And Channel
Y2/Vetage(V) Y3Current(mA)	iner Information Cycle Layer Step Layer Record Layer Curve Aux Channel
12 43	
39 Vicible Penort O I zwar Report O Formation Report	
	List
37- General Report O Custom Report Atl Sim Report	
35 Export File	: data has unit
3.4	
33Path C:\	
32	
31	
30 IIIIIIII File Format TXT   Excel Setting CSV Excel Setting	,
Export Way  Without EXCEL Installed  With EXCEL Installed	Unit sheet Label
2.7- Export setting Export Aux data Merge Main and Aux	Infomation test sheet Label
26	ayer cycle sheet Label
25 Step La	yer step sheet Label
24 Export Cancel	Layer record sheet Label
23	curve sheet Label
21	annel aux sheet Label
20	
19- 400 H17127 0.02.10	1.000 4.2007 0.0 0.0 0.012/22/2011 19: 1.000 4.1998 0.0 0.0 0.012/22/2011 19:
18 19 19 19 19 19 19 19 19 19 19 19 19 19	448.47.000 2467.0 9003.0 4.1657 2.9888 0.0000 3.7348 0.000 4.1657 -500.1 0.6 0.012222011 19
e 60.00:00.000 120:00.000 180:00.000 240:00:00.000 300:00.000 ⊟ 177 Rest	000 3.1110 0.0 0.0 0.0 0.0 0.000 0.0000 0.0000
X International C	20 25 VK/s 1 2%

- 1. Click the "custom report"
- 2. Set the parameters to be exported
- 3. Click the "Export" button, and the default settings of this configuration will be used for the next export

# 3. 10. 4. ZWJ List (the Middle Machine)

Open the ZWJ list to automatically search the online middle machines under the same router, and modify the IP and server addresses of the middle machines, as shown in the figure below:



BIS	8.0.0 User Manual
BTS Client 8.0.0416(2020.03.05)(R3)	✓ 最近保存: 202
文件 语言 设置 用户 工具 帮助	
设备列表         平         下载日志         搁置         保护         停止         完成         高线	
▼ 127.0.0.1 ▼ 127.0.0.1 ▼ 127.0.0.1 ○ 1-3 ○ 1-4 ○ 1-5 ○ 1-6 ○ 1-7 ○ 1-6	凸 分享又档
● 63 ● 70 ● 70 ●	-
▶ 192.168.10.201 15:03:51 15:03:51 区中位机P修改 - □ ×	
▶ 192, 168, 10, 202 ▶ 192, 168, 10, 204	
+ 0.0 11360 / 0.0 m → 192.168.10.53 1. → 192.168.10.55 2.	
→ 19 12 168 10 90 中位初MAC地址 00-62-68-18-30-00	
▶ 192.168.10.39 申位机服务器IP 192.168.10.231 3.	
→ 192.166.10.133	
→ 192.168.10.31	
→ 192.168.10.37 → 192.169.10.120	
- \$ 192.168.10.11	
P 162, 100, 10, 124	
→ 192.168.10.102 → 192.193.10.132	
Set	
重新搜索         4. search         5. 设置	
	1
Image: Second Second Second Second (Tel)800-830-8866 当前登录用户:admin	💁 👱 🕼 💿 😧 100%

- 1. In the same network segment
- 2. Double-click to modify the IP of the middle machine
- 3. Double-click to modify the middle machine server IP
- 4. Click to research
- 5. Click "set" after modification

# 3. 10. 5. Delete Historical Data

Delete data through time range settings. As shown in the figure below:





BTS Client 8.0.0.416(2020.01.07)(	(R3)				- 0 ×
File Language Set User To	ool Help				
Device List 4 Cha	arge Discharge Ro	est Protected Stopped	Finished Offline		
▼ 127.0.0.1 ▶ 1 Fini 2.500	-1	Pinished         Pinished           2.5000 V         2.5000 V	Finished         Finished           2.5000 V         2.5000 V	Finished         Finished           2.5000 V         2.5000 V	
	a a	a a	a a	a a	
<b>OP</b> <sup>-2</sup>	-1 OP 2-2	♥ <sup>2-3</sup> ♥ <sup>2-4</sup>	Istorical Data	● <sup>2-7</sup> ● <sup>2-6</sup>	
Fini 2.50	ished Finished 00 V 2.5000 V 9 9	Finished 1 2.5000 V 2 9 Fro	m 2010 / 7 / 11 💌	Finished Finished 2.5000 V 2.5000 V 9 9	
<b>ہ</b> ا	-1 0 3-2	о <sup>3-3</sup> О т	2020 / 1 / 11	9 <sup>3-7</sup> 0 <sup>3-8</sup>	
Fini 2.50	ished Finished 00 V 2.5000 V 4 4	Finished 1 2.5000 V 2 4	0K Cancel	Finished Finished 2.5000 V 2.5000 V 4 4	
<b>⊘</b> ∳ <sup>4</sup>	-1	<b>⊘</b> ♥ <sup>4-3</sup> <b>⊘</b> ♥ <sup>4-4</sup>	Ø₽ <sup>4-6</sup> Ø₽ <sup>4-6</sup>	Ø₽ <sup>4-7</sup> Ø₽ <sup>4-6</sup>	
Fini 2.50	ished Finished 00 V 2.5000 V	Finished Finished 2.5000 V 2.5000 V	Finished Finished 2.5000 V 2.5000 V	Finished Finished 2.5000 V 2.5000 V	
	•,	<u> </u>	•	······*	
Present 🕖 Hi: 4 🕨 Welcome	e to http://www.neware.co	<u>m.cnl (Tel)800-830-8866</u> Current lo	gin user:admin		c ⊘ ± 0K/s 71%

# 3.11. Help

#### 1. About BTS

The BTS window contains the official website address of our company. Click it and you can directly enter the official website of Neware. There is also version information, contact number and complaint email.

2. Register (Registration needed when installing the software)

Registration function: for different automation projects, it needs to register the corresponding mode. As shown in the figure below:





### 3.12. Device List

### 3. 12. 1. Add Server

The default configuration of the software is "127.0.0.1" local service. If you need to access other services, select any service IP and right click "add server" to add modification remarks, as shown in the figure below:

BTS Client 8.0.0	).416(2020.01.07)(R3)									
File Language	Set User Tool Help									
Device List	Protected         Stopped         Finished         Offline									
127.0.0.1     1 ↑     right click	Add Server Delete Server(s) Modifying remarks information Asset Management									
Madd Serv	Add Server ×									
s	Server IP:									
I	Aemark:									
	OK Cancel									
Solution Note: Solution	erver cannot be added in auto - production mode.									

Stop the mouse over the server IP, and the software will display the server version information, as shown in the figure below:

BTS	Client 8.0.0	.416(2020.01	1.07)(R3)						
File	Language	Set User	Tool	Help					
Devi	ce List	<b>4</b>	Charge	Discharge	Rest	Protected	Stopped	Finished	Offline
5	7 127.0.0.1								
l	→ ▶ 1 IP:: Serv	127.0.0.1 ver Version:	7.6.0.363	3 (2019.08.15)					



## 3. 12. 2. Delete Offline Devices

The device is displayed as this when it is offline 🛤

if you do not want to display too many offline devices, you can remove the offline device.

1. Device list-->select offline devices

2. Right click-->"delete" (Deletes the currently selected device) or "delete all offline devices"

Device List	4 Charge Discharge	Re	st Protected	1 Stopped	Finished	Offline
▼ 127.0.1			1-3	1-4	1-5	1-6
right click	Delete All Offline Devices Modifying remarks information		Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V
	Upgrade ZWJ	4	ą	ą	ą.	
	Restart ZWJ		2-3	2-4	2-5	2-6
	Upgrade XWJ Set And Show Device Reset Alarm Version		Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V
_	4	4	4	<b>4</b>	ą	

## 3. 12. 3. Modify Remarks Information

Note: Devices that are online will not be deleted.

Select the middle machine, right click and modify the remarks; The operation is as shown in the figure:



The Langu	age det oser roor rielp		-
Device List	4 Charge Disc	harge Rest Protected Stopped	
	0.1	1-2 0 1-3 0 1-4	
	Delete		
right click	Delete All Offline Devices	d Finished Finished	
	Modifying remarks information	2.000 7	
	Upgrade ZWJ	a a	ą
	Restart ZWJ	2-3 2-4	
	Upgrade XWJ	04 04	
	Set And Show Device	d Finished Finished	
	Reset Alarm	2.5000 V 2.5000 V	
	Version		
	T 1		ц.

Modif	ying remarks	informat	ion	×
	Remark:			
	OK		Cancel	

# 3. 12. 4. Update ZWJ (the Middle Machine)

There is a risk to upgrade the software, please contact after sales

# 3. 12. 5. Restart ZWJ

The middle machine can send restart commands through the client 1.Device list, select device

2.Right click-->"restart ZWJ"



# 3. 12. 6. Upgrade ZWJ

There is a risk to upgrade the software, please contact after sales

## 3. 12. 7. Set and Show Device

The client software can view the middle and lower machine versions, and it can also modify the middle machine device number.

- 1. Device list, select middle machine
- 2. Right click-->"Set and show device"
- 3. Fill in the new equipment number-->click "set"



User Name admin	
Password *****	how Password
OK Cancel	

NEWARE			BTS 8.0.0 User Manual
Set And Show Device		 X	
ZWJ Info ZWJ ID: 1 Set ZWJ IP: 127.0.0.1 ZWJ SN: BTS - DEV1-SN-VER20190730 ZWJ Version: 4S_1.2.26.BTS24-20190730	XWJ Info XWJ Version: 01: BTS24-Main-XWJ_VER20190730 02: BTS24-Main-XWJ_VER20190730 03: BTS24-Main-XWJ_VER20190730 04: BTS24-Aux-XWJ_VER20190730 06: BTS24-Aux-XWJ_VER20190730 07: BTS24-Aux-XWJ_VER20190730 08: BTS24-Aux-XWJ_VER20190730		

# 3.12.8. Reset Alarm

If the device is connected with a buzzer, the buzzer will send an alarm when the channel is protected. At this time, the alarm can be reset by reset alarm function.

1. Select the protected channel in the channel area or the protected device in the device list area

2. Right click -->"Reset Alarm"

BTS Client 8.0.0.416(20	20.01.07)(R3)									-	٥	×
File Language Set	User Tool He	lp										
Device List 4	Charge	Discharge Rest	Protec	sted Stopped	Finished	Offline						•
▼ 127.0.0.1	right click th	o 1-2 o	1-3	✓ 1-4	✓ 1-6	✓ <sup>1-6</sup>	✓ 1-7	✓ <sup>1-8</sup>				
	Finished 0.0000 V	Finished Single Start( <u>S</u> )	Finished 0000 V	Finished 0.0000 V	Finished 0.0000 V	Finished 0.0000 V	Finished 0.0000 V	Finished 0.0000 V				
		All Stop	2-3	Ø <b>9</b> 2-4	⊘∳ 2-6	2 <sup>−6</sup>		2 <sup>-6</sup> − −				
	Finishe 0.0000 V	Continue(Q) Jump(J) Move(K)	finished 0000 V	Finished 0.0000 V	Finished 0.0000 V	Finished 0.0000 V	Finished 0.0000 V	Finished 0.0000 V				
	3-1	Reset Step Copy Steps( <u>W</u> )	3-3	3-4	3-5	3-6	3-7	3-6				
	Finishe	Reset Alarm( <u>R</u> ) Reset Map( <u>M</u> )	Finished	Finished	Finished	Finished	Finished 0.0000 V	Finished				
	0.00007	Chnl Info() Clear Flag()		0.0000 7	0.0000 7	0.0000 7	0.0000 7	0.0000 4				
	♥♥ 4-1	Save As Vinit Settings (U)	4-3	<b>⊘</b> ♀ <sup>4-4</sup>	<b>⊘</b> ♀ <sup>4-6</sup>	♥♥ 4-6	♥♥ 4-7	Ø₽ <sup>4-6</sup>				
	Finishe 0.0000 V	View Log View Data( <u>D</u> )	finished .0000 V	Finished 0.0000 V	Finished 0.0000 V	Finished 0.0000 V	Finished 0.0000 V	Finished 0.0000 V				
Present 🍯 Kis 4 b	Genetic		-	J	J	J	]		A			



# 3. 12. 9. Version Information

Check the middle and lower machine's versions of all channels on a same middle machine

- 1. Device list -->select the middle machine
- 2. Right click-->"Version information"

BTS Client 8.0.0.416(2020.01.0	07)(R3)								-	٥	×
File Language Set User	Tool Help	Post Protos	ad Stand	Tinishad	Offline						
127. 0. 0. 1 127. 0. 0. 1 1 right click	1-1 0 1-2	0 1-3	0 1-4	✓ 1-6	0 1-6	• 1-7	✓ 1-8				
Delete All Offlin Modifying rema Upgrade ZWJ	ne Devices arks information	Finished 0.0000 V	Finished 0.0000 V	Finished 0.0000 V	Finished 0.0000 V	Finished 0.0000 V	Finished 0.0000 V				
Restart ZWJ Upgrade XWJ		Ø₽ <sup>2-3</sup>	Ø₽ <sup>2-4</sup>	♥ 2-5	⊘∲ 2-6	Ø₽ <sup>2-7</sup>	Ø₽ <sup>2-6</sup>				
Set And Show E Reset Alarm	Device	Finished 0.0000 V	Finished 0.0000 V	Finished 0.0000 V	Finished 0.0000 V	Finished 0.0000 V	Finished 0.0000 V				
Version	3-1 - 3-2 -	- <del>3-3</del>	<u>→</u> 3-4	<b>⊘</b> 3-6	3-6	3-7	3-8				
0	Finished Finished 0.0000 V 0.0000 V	Finished 0.0000 V	Finished 0.0000 V	Finished 0.0000 V	Finished 0.0000 V	Finished 0.0000 V	Finished 0.0000 V				
09	4-1 <b>OP</b> 4-2	Ø <b>₽</b> 4-3	<b>⊘</b> ∳ <sup>4-4</sup>	Ø\$ <sup>4-5</sup>	Ø₽ <sup>4-6</sup>	Ø₽ <sup>4-7</sup>	♥ 4-8				
0	Finished Finished 0.0000 V 0.0000 V	Finished 0.0000 V	Finished 0.0000 V	<b>Finished</b> 0.0000 V	Finished 0.0000 V	Finished 0.0000 V	Finished 0.0000 V				
Present 🎺 His 4 🕨 Cur	rent login user:admin Sele	ect 1 channel(s)						e	中。。	) 🖂 🐣	* 1

Device Type	Device ID	Unit ID	Main Chn	Aux Chal ID	ZWJ Version	Client Version	Server Version	Main Chnl XWJ Version	Aux Ver
BTS82	1	1	1	0	4S_1.2.26.BTS24-20190730	BTS Client 8.0.0.416(2020.01	BTSServer(R3)-7.6.0.363 (2019.08.15)	BTS24-Main-XWJ_VER20190730	
	1	1	2	0				BTS24-Main-XWJ_VER20190730	
	1	1	3	0				BTS24-Main-XWJ_VER20190730	
	1	1	4	0				BTS24-Main-XWJ_VER20190730	
	1	1	5	0				BTS24-Main-XWI VER20190730	
	1	1	6	0				BTS24-Main-XWJ VER20190730	
	1	1	7	0				BTS24-Main-XWJ VER20190730	
	1	1	8	0				BTS24-Main-XWJ VER20190730	
	1	2	1	0				BTS24-Main-XWT VER20190730	
	1	2	2	0				BTS24-Main-XWI VER20190730	
	1	2	3	0				BTS24-Main-XWI VER20190730	
	1	2	4	0				BTS24-Main-XWI VER20190730	
	1	2	5	0				BTS24-Main-XWI VER20190730	
	1	2	6	0				BTS24-Main-XWT VER20190730	
	1	2	7	0				BTS24-Main-XWT VER20190730	
	1	2	8	0				BTS24-Main-XWT VER20190730	
	1	3	1	0				BTS24-Main-XWI VER20190730	
	1	3	2	0				BTS24-Main-XWI VER20190730	
	1	3	3	0				BTS24-Main-XWI VER20190730	
	1	3	4	0				BTS24-Main-XWI VER20190730	
	1	3	5	0				BTS24-Main-XWJ VER20190730	
	1	3	6	0				BTS24-Main-XWJ VER20190730	
	1	3	7	0				BTS24-Main-XWJ VER20190730	
	1	3	8	0				BTS24-Main-XWT VER20190730	
	1	4	1	0				BTS24-Main-XWI VER20190730	
	1	4	2	0				BTS24-Main-XWI VER20190730	
	1	4	3	0				BTS24-Main-XWI VER20190730	
	1	4	4	0				BTS24-Main-XWI VER20190730	
	1	4	5	0				BTS24-Main-XWJ VER20190730	
	1	4	6	0				BTS24-Main-XWT VER20190730	
	1	4	7	0				BTS24-Main-XWT VER20190730	
	1	4	8	0				BTS24-Main-XWI VER20190730	
									_



# **3. 13. Channel Interface**

### 3. 13. 1. Channel Color Setting

The channel color is divided into the background color and the foreground color (font color). We can change the display color according to our preference.

### 1. Channel background color Settings

To change the background color of the channel, left-click the color box on the state. For example, click the rectangle on "charge" to pop up the color box. Select the color through the color selector, and right click -> "undo" to restore the color to default, as shown in the figure below:



BTS Client 8.0.0	.416(2020	.01.07)(R3)								
File Language	Set Us	ser Tool	Help							
Device List	<b></b>	Charge	Discharge	Rest	Protected	Stopped	Finished	Offline	Undo	

### 2.Font Color Setting

The font color needs to be modified in the system setting display setting. The channel interface can be set in the system setting to prohibit the modification of the channel color, so as to facilitate unified color management within a company and prevent front-line operators from changing the color on multiple computers to inconsistent. System Settings can also configure the channel display interface to display the background color, and mask the infrequently used state.



BTS Client 8.0.0.	416(2	2020.01.07)(R3)	
File Language	Set	User Tool Help	
Device List		Protection Parameter Settings	Rest
7 127.0.0.1		Process Type Settings	
L D 1		System Settings	
	_		

BTS Client 8.0.0.416(20)	20.01.07)(R3)						- 8 ×
File Language Set	User Tool Help	p System Settings				×	
Device List 4	Charge	Start Mode		Reset Step	~	^	
▼ 127.0.0.1	1-1	Barcode	Sat In The Chal	Calar			
	0	Data Download	Set of the chu				
	Finished	Fool-proofing	M Enable	the background color to be	changed on the chal interf	ace	
	2.5000 V	Step editor	🖾 List di	splay changes background c	olor		
		Display Settings	Show	Front Color	Background color ^	1	
	2-1	Upgrade settings		Charge	Char ge		
	09			Discharge	Discharge		
				Rest	Rest		
	Finished 2.5000 V			Protected	Protected		
				Stopped	Stopped		
	à			Fesse	Paras		
	3-1	1		Finished	Finished		
				Sync Ctrl	Sync Ctrl		
	Finished			Light	Light		
	2.6000 v			Vecuum	Vacuum		
	9			Release	Release		
	4-1			Leskage	Leakage		
				Nozzle Block Test	Nozzle Block Test		
	Finished			Bon't Continue	Bon't Continue		
	2.6000 V			Offline	Offline		
	a						
	1						
		Uş	pgrade settings		10- 10-	~	
		Import	Export	Save	Exit		
Present 👎 His d 🕨	Welcome to http	://www.neware.com.cnl (Tel)800-830-i	8866 Current login use	er:admin			🕈 💁 👱 🗗 💿 💮 100%

前景色设置

# 3. 13. 2. Channel Display Setting

### **1.Channel Protection or Warnings**

How to view messages:

In the lower right corner of the client channel display interface, click **c** to pop up the message display interface, as shown in the figure below



🔤 BTS Client 8.0.0.416(202	20.01.07)(R3)										- 6	i ×
File Language Set	User Tool He	lp										
Device List 🛛 🛱	Charge	Discharge Rest	Protected	Stopped	Finished	Offline					1	
▼ 127.0.0.1 ▶ 1	Finished 2.5000 V	<b>F</b> inished <b>F</b> 2.5000 V 2.1	1-3 inished 5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V				
		a a		ą	g							
	<b>⊘</b> ♥ <sup>2−1</sup>	Ø₽ <sup>2-2</sup> Ø₽	2-3	<b>₽</b> <sup>2-4</sup>	Ø₽ <sup>2-5</sup>	<b>⊘</b> ♥ <sup>2−6</sup>	Ø <b>₽</b> <sup>2-7</sup>	Ø₽ <sup>2-8</sup>				
	Finished 2.5000 V	Finished F. 2.5000 V 2.1	in Index	Time	Serv	er IP Ch	Inl	Event				
	3-1	3-2										
	Finished	Finished F.	ir									
	4	a a	_									
	Ø₽ <sup>4−1</sup>	09 4-2 09	4									
	Finished 2.5000 V	Finished F 2.5000 V 2.1	ir 50									
		a a										
			-							_		
🎦 Present 🎺 Hi: 👌 🕨	Welcome to http	p://www.neware.com.cnl (	Tel)800-830-8	8866 Current lo	gin user:admin				<b>~</b>	<u>₀ ↓</u>	<b>⊲</b> × 💿	€ 100%

#### **2.**Automatic Backup

The current and historical backup data can be viewed, and added, modified and deleted after starting the test.





Device List									
• 127.0.0.1       ■ Automatic backup       - □ ×         Present       Kistery       Task side time       Last excertion       Last excertion       Rest schedule       status         1       127.0.0.1=0TS82-1-1-1-7       Add       Backup directory       Task side time       Last excertion       Last excertion       Rest schedule       status         0:04:03       0:04:03       0:04:03       -       Wait       Modify       Delete       View task information       Open Folder       Sh.	Device List 4 Charge Di	scharge Rest Protected	Stopped Finished Offline						•
Image: Section of the section of th	▼ 127.0.0.1	Automatic backup					1		×
Numming channel     0.0000 Å, 0.0000 Å, 0.00000 Å, 0.0000 Å, 0.0000 Å, 0.0000 Å, 0.0000 Å, 0.0000 Å, 0.0000 Å,	- P 1 Rest 2 5000 V	Present History							
running channel     0.0000 %     1     127.0.0.1-87582-1-1-7     D.1800-00 & 212-0.1000 & 212-0	0.0000 Å	Index Chnl	Backup directory	Task add time	Last execution time	Last execution result	Next scheduled backup time	status	
right click Fisished 2.5000 V ■ Fisished 2.5000 V ■ Fisished Fisish	running channel 0.0000 wh	1 127.0.0.1-BTS82-1-1-1-7	D. D	2020-07-11 11:43:59			-	Wait	
	9 7 2-1 Finished 2.5000 V 9 7 3-1 Finished 2.5000 V	right click	Modify Delete View task information Open Folder 导入 导出						

### **3.Data Download View**

In the lower right corner of the client display interface, click the icon to pop up the download task interface, as shown in the figure below:

BTS Client 8.0.0.416(202	20.01.07)(R3)									٥	×
File Language Set	User Tool Help		_								
Device List 4	Charge	Single Start(S)	Protect	ed Stopped	Finished	Offline					•
▼ 127.0.0.1	1-1	Single Stop(P)	-3	1-4	1-5	1-6	1-7	1-6			
L. 🕨 1	Rest	All Start(Q)		0	e	•	0	0			
	2.5000 V	Unit Start		winited a	Winterland.	Winterball	Visional	Windowski a			
	0.0000 Ah	All Stop(T)	DO V	2. 5000 V	2.5000 V	2.5000 V	2. 5000 V	2.5000 V			
right click	0.0000 Wh 00:06:26	Schedule pause	a		a a						
	2-1	Set Parallel		2-4	2-5	2-6	2-7	2-8			
	0 <b>6</b>	Free Parallel		09	<b>0°</b>	09	09	09			
		Chamber is set									
	2.5000 V	Remove Chamber	shed 00 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V			
		Continue(O)									
		Jump(J)	7		di di	۱ q	4	7 7			
	3-1	Move(K)	-3	3-4	3-5	3-6	3-7	3-8			
		Reset Step									
	Finished	Reset barcode	shed	Finished	Finished	Finished	Finished	Finished			
	2.5000 V	Copy Steps(W)	10 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V			
		Chnl Locking			a a						
	4-1	Channel unlock		4-4	4-5	4-6	4-7	4-8			
	09	Reset Alarm(R)		0911	09 **	09 1	09 11	<b>••</b>			
	Finished	Reset Map(M)	shed	Finished	Finished	Finished	Finished	Finished			
	2.5000 V	Chnl Info(I)	10 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V			
		Clear Flag(L)			a a						
		Cours As	-		· · · ·	· · · · ·		·)			
		Save AS	-								
		Unit Settings (U)									
		View Log									
🎦 Present 🎺 His 🖇 🕨	Current logi	View Data(D)	nel(s)						😪 💁 🛧 🗘	•	€ 1009



ETS Client 8.0.0.416(2020.01.07)(R3)	- 0 ×
Derice List 4 Charge Discharge Rest Protected Stopped Finithed Offline	1.1 8.0 v
V 127.0.0.1 Finished Finished	
Present 🥑 Xi: 4 > Current login user:admin Select 1 channel(s)	💼 💁 👱 🕼 💿 💮 1009

#### 4.Sound Alarm

In the lower right corner of the client channel display interface, click the icon to turn on or off the sound alarm. In the case as shown in the figure, the computer will have the alarm sound when the chose protection of the channel appears.

e Language Set	User Tool He	lp							
ice List 4	Charge	Discharge	Rest Prote	oted Stopped	Fini	shed	Offline		
▼ 127.0.0.1	1-1 / 1- Rest 2.5000 V 0.0000 A 0.0000 Ah 0.0000 Wh 00:09:01	1 1-2 Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Fin 2.50	ished 000 V	♥ 1-6 Finishe 2.5000 V	d Finished 2.5000 V 2.5000 V 3	
	<b>OP</b> <sup>2-1</sup>	⊘∲ 2-2	Ø <b>₽</b> <sup>2-3</sup>	⊘∲ 2~4	•	Select	Protection code	describe	^
	Finished 2 5000 V	Finished 2 5000 V	Finished 2 5000 V	Finished 2 5000 V	Fi:		0X	Select All	
							001	Finish	
		φ	φ	2	ф		002	Stop	None
	3-1	3-2	3-3	3-4		$\square$	003	Exit	
							004	Jump	⊖ SoundLight
	Finished	Finished	Finished	Finished	Fin		005	Protect	⊖ Light
	2.5000 v	2.5000 v	2.5000 V	2.6000 V	2.5		006	Continue	○ Sound
		ф .	ф —	<b>4</b>	<b>4</b>		007	Reset step	
	4-1	4-2	4-3	4-4	00		008	Start	
							009	Query	
	Finished	Finished	Finished	Finished	Fiz		00A	COM error	
	2.5000 V	2.5000 V	2.5000 V	2.5000 V	2.5		00B	Power off	
		a.	a.	4	a		00C	Power on	
	1		.0		·)		00D	Step store error	
							00E	Step read error	
							00F	Step checksum error	~

### **5.**Channel Display Settings

Operation method of large icon parameter display

In the large icon interface, click the icon in the lower right corner to pop up the parameter configuration interface, as shown in the figure below:



BTS Client 8.0.0.416(202	20.01.07)(R3)								-	٥	×
File Language Set	User Tool Hel	p									
Device List 🛛 👎	Charge	Discharge	Rest Protect	ed Stopped	Finished	Offline					•
▼ 127.0.0.1	1-1 Rest 2.5000 V 0.0000 Å 0.0000 Åh 0.0000 Wh 00:10:19	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V			
	Ø₽ <sup>2-1</sup>	♥ 2-2	<b>⊘?</b> <sup>-3</sup>	♥ 2-4	⊘∲ 2-5	Ø₽ <sup>2-6</sup>	Ø₽ <sup>2-7</sup>	<b>OP</b> <sup>2-6</sup>			
	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V 4 4	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V 9 9			
	S 3−1	S 3−2	S 3-3	O 3-4	S→6	S 3−6	S 3−7	S 3−8			
	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Main C	ihnl:	Main channel completion status:	Aux Chnl: I Hide	_	
	Ø 🖗 4-1	Ø\$ <sup>4-2</sup>	<b>⊘</b> ♥ <sup>4−3</sup>	Ø₽ <sup>4-4</sup>	Ø₽ <sup>4-6</sup>	♥ Volt	tage rent pacity	☑ Voltage □ Finish Time	⊻ V1 ⊻ T1		
	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V 4 4	Finished 2.5000 V	Finished 2.5000 V	i Ene i	rgy p Time al Time				
											Ι,
🎦 Present 🎺 His d 🕨	Welcome to http	p://www.neware.c	:om.cn! (Tel)800-83	0-8866 Current	login user:admin				e 🛛 🛧 🕫	•	1009

Operation method of small icon parameter display

In the small icon interface, click the icon in the lower right corner to pop up the parameter configuration interface, as shown in the figure below:



### 6.Font and Battery Box Size Setting Method



Click the icon lower right corner to pop up the zoom configuration interface, as shown below:

BTS Client 8.0.0.416(202	20.01.07)(R3)	- 0	×
File Language Set U	User Tool Help		
Device List 4	Charge Discharge Rest Protected Stopped Sinches Offline		•
▼ 127.0.0.1	I-1         I-2         I-3         I-4         I-6         I-7         I-8           8est         2.5000 V         Finished         Finishe         Finishe		
	ΟΦ <sup>'2-1</sup> ΟΦ <sup>'2-2</sup> ΟΦ <sup>'2-3</sup> ΟΦ <sup>'2-4</sup> ΟΦ <sup>'2-6</sup> ΟΦ <sup>'2-6</sup> ΟΦ <sup>'2-6</sup>		
	Finished		
	0 <sup>-3-1</sup> 0 <sup>-3-2</sup> 0 <sup>-3-4</sup> 0 <sup>-3-6</sup> 0 <sup>-3-6</sup> 0 <sup>-3-7</sup> 0 <sup>-3-6</sup>		
	Fini shed         Fini shed <t< td=""><td></td><td></td></t<>		
	0 \$ 4-1 0 \$ 4-2 0 \$ 4-3 0 \$ 4-4 0 \$ 4-5 0 \$ 4-5 0 \$ 4-7 1		
	Finished		ю
	a a a a font Size a a		nt
🎦 Present 🎺 His d 🕨	Welcome to http://www.neware.com.cni (Tel)800-830-8866 Current login user:admin 🤛 🚳 🚽	⊴ 💿 🕢	100%

Software defaults to click on the device on the right side of the display corresponds to the equipment in the list of equipment all the channel, click on other nodes does not display the channel, for the user who wants to start multiple devices at the same time, it can be set in the system setting "display all channels under the selected server" ,click the server after set, click the server node, on the right shows all the channels under the same server , as shown in the figure below:

System Settings		Х
Start Mode Barcode Data Download Fool-proofing Step editor Display Settings Upgrade settings	<ul> <li>INFOIRMENT LAP</li> <li>Enable advanced protection parameters for single step</li> <li>Control step hidden step ID</li> <li>Display last step in single start</li> <li>The step parameter must be correct when saving the step</li> <li>Step management allows modification of PTN path</li> <li>PTN: D:\Program Files\NEWARE\BTSClient80\StepManager</li> </ul>	Â
	Display Settings Display Device Type(BTS80 BTS81 BTSV) Hide real devices (only display super map) Display all chnls under the selected server Displayed in the taskbar when minimized	





# 3. 13. 3. Interface Display Switch

As shown in the picture, you can switch to the interface of large icon, small icon, list, sorting and so on through the upper-right button.

🔤 BTS Client 8.0.0.416(202	0.01.07)(R3)	- 0 ×
File Language Set U Device List	ser Tool Help Churge Bischurge Rest Protected Stepped Zittith Offline	
▼ 127.0.0.1	I-1         I-2         I-3         I-6         I-6 <td>Large Icon Small Icon List Grading Match</td>	Large Icon Small Icon List Grading Match

# 3. 14. Right Click Menu of Channel Interface

In the channel display area, right click. If the right click window displays in gray, the user needs to log in first and operate the corresponding Settings

If the channel is offline, the corresponding position will be displayed as the offline background color and default to gray, as shown in the figure below:

指列法 4     「読売」 「税配」 税配 税配 (税) (税配 (税) (税配 (税) (税配 (税)	TS Client 8.0.0.41 语言 设置	6(202 用户	20.03.05)(R3) <sup>コ</sup> 工具	) 帮助								
• 127.0.0.1       1-1       1-2       1-3       1-4       1-5       1-6       1-7       1-6         • 14980368       0.0012       0.0015       0.0015       0.0015       0.0012       0.0000       0.0000       0.0000         • 128.168.10.201       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         • 129.168.10.201       0.0003       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         • 122.168.10.201       0.0003       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         • 122.168.10.201       0.0003       0.0000       0.0	列表	<b>4</b>	充电	放电	搁置	5 <b>係</b>	护	停止	完成	离线		1
1       0.0012       0.0015       0.0015       -0.0022       -0.0012       -0.0002       -0.0009         1 92: 168: 10.201       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         1 92: 168: 10.201       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         1 92: 168: 10.201       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         1 92: 168: 10.201       0.0000       0.00	127.0.0.1		1-1	1-2	1-3	1-4	1-6	1-6	1-7	1-8 -		ľ
•         •	🕨 1		0.0012	0.0015	0.0015	-0.0012	-0.0003	-0.0012	-0.0012	-0.0009		
•         •	- 🕨 小明的设备		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
192         183         10.000         0.0000         0.0000         0.0000         0.0000           192         183         10.0201         00.0000         0.0000         0.0000         0.0000         0.0000           192         183         10.202         0.0000         0.0000         0.0000         0.0000         0.0000         0.0000           192         183         10.202         2.23         2.24         2.26         2.24         2.26         1.0001           0.0000         0.0000         0.0000         0.0000         0.0000         0.0000         0.0000         0.0000           0.0000         0.0000         0.0000         0.0000         0.0000         0.0000         0.0000         0.0000           0.0000         <	63		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
192: 168: 10.202       00:00:00       00:00:00       00:00:00       00:00:00       00:00:00         192: 168: 10.204       2-1       2-2       2-3       2-1       2-5       2-6       2-6         192: 168: 10.204       0.000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000	192.168.10.201	L	0,0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
192: 183: 10.224       2-1       2-2       2-3       2-4       2-5       2-6       2-7       2-6         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000	192.168.10.202	2	00:00:00	00:00:00	00:00:00	00:00:00	00:00:00	00:00:00	00:00:00	00:00:00		
0.0003       0.0000       0.0003       0.0000       -0.0024       -0.0034       -0.0027         0.0003       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000 <td< td=""><td>192. 168. 10. 204</td><td>1</td><td>2-1</td><td>2-2 -</td><td>2-3 -</td><td>2-4 -</td><td>2-6 -</td><td>2-6 -</td><td>2-7</td><td>2-8 -</td><td></td><td></td></td<>	192. 168. 10. 204	1	2-1	2-2 -	2-3 -	2-4 -	2-6 -	2-6 -	2-7	2-8 -		
0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.			0,0002	0.0000	0.0002	0.0000	-0.0024	-0.0042	-0.0024	-0.0027		
0.0       0.0       0.0       0.0       0.0       0.0         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.00			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
00.00.00       00.00.00       00.00.00       00.00.00       00.00.00       00.00.00       00.00.00         3-1       3-2       3-3       3-4       3-6       3-6       3-6         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000 <td></td> <td></td> <td>0.0000</td> <td>0.0000</td> <td>0.0000</td> <td>0.0000</td> <td>0.0000</td> <td>0.0000</td> <td>0.0000</td> <td>0.0000</td> <td></td> <td></td>			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			00:00:00	00:00:00	00:00:00	00:00:00	00:00:00	00:00:00	00:00:00	00:00:00		
9-1       9-2       9-3       9-4       9-5       9-6       9-7       9-6         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.000												
0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.		1	3-1 -	3-2 -	3-3	3-4	3-6 -	3-6 -	3-7	- 3 <del>-</del> 8 -		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$			0.0009	0.0009	0.0006	-0.0006	0.0006	0.0006	-0.0009	-0.0006		
0.00       0.000       0.000       0.000       0.000       0.000       0.000         00.000       00.000       00.000       00.000       00.000       00.000       00.000         00.000       00.000       00.000       00.000       00.000       00.000       00.000         00.000       00.000       00.000       00.000       00.000       00.000       00.000         00.000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         00.000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000 <td></td> <td></td> <td>0.0000</td> <td>0.0000</td> <td>0.0000</td> <td>0.0000</td> <td>0.0000</td> <td>0.0000</td> <td>0.0000</td> <td>0.0000</td> <td></td> <td></td>			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0:0:0:0:0       0:0:0:0       0:0:0:0       0:0:0:0       0:0:0:0       0:0:0:0       0:0:0:0         0:0:0:0:0       0:0:0:0       0:0:0:0       0:0:0:0       0:0:0:0       0:0:0:0       0:0:0:0       0:0:0:0         4:1       4:2       4:3       4:4       4:5       4:6       -       4:6       -         -0.0015       0.0000       0.0000       0.0000       0.0000       0.0000       0.0001       0.0001         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000			0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.00		
00.00.00       00.00.00       00.00.00       00.00.00       00.00.00       00.00.00       00.00.00         4-1       4-2       4-3       4-5       4-6       4-6       4-6         -0.0015       0.0006       0.0000       0.0000       0.0003       0.0003       0.0003         0.0005       0.0006       0.0000       0.0000       0.0000       0.0003       0.0003         0.0005       0.0000       0.0000       0.0000       0.0000       0.0000       0.0003         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000			00:00:00	00:00:00	00:00:00	00:00:00	00:00:00	00:00:00	00:00:00	00:00:00		
4-1       4-2       4-3       4-5       4-6       4-7       4-6         -0.0015       0.0006       0.0002       0.0009       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0001       -0.0021       -0.0027       0.0003       -0.0003       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       <			00:00:00	00:00:00	00:00:00	00:00:00	00:00:00	00:00:00	00:00:00	00:00:00		
-0.0015       0.0006       0.0112       0.0009       0.0009       -0.0037       -0.0031         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0001       0.0001       0.0001       0.0000       0.0000       0.0000       0.0000         0.0001       -0.0018       -0.0021       -0.0023       -0.0003       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000			4-1	4-2	4-3	- 4-4 -	4-5	4-6	4-7	4-8 -		
0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0			-0.0015	0.0006	0.0012	0.0009	0.0009	-0.0018	-0.0037	-0.0031		
0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0         0.0       0.000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000       0.0000         0.0000       0.0000       00.0000       00.0000       00.0000       00.0000       00.0000       00.0000         0.0001       00.0000       00.0000       00.0000       00.0000       00.0000       00.0000         -5-1       -5-3       -5-4       -5-6       -5-6       -5-6       -         -0.0011       -0.0021       -0.0027       0.0003       -0.0003       0.0000       -0.0003         0.0000       0.0000       0.0000       0.0000       0.0000       -0.0003       -0.0003			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0:0000     0:0000     0:0000     0:0000     0:0000     0:0000     0:0000       0:00000     00:00000     00:00000     00:00000     00:00000     00:00000     00:00000       0:00000     00:00000     00:00000     00:00000     00:00000     00:00000     00:00000       -5-1     -5-3     -5-4     -5-6     -5-7     -5-6       -0.0021     -0.0021     -0.0027     0.0003     0.0000     0.0000       0.0000     0.0000     0.0000     0.0000     0.0000			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
00:00:00 <b>5-7</b> <b>-6</b> 00:021 <b>-0</b> 00:00 <b>-0</b> 00:00 <b>-0</b> 00:00 <b>-0</b> 00:00 <b>-0</b> 00:00 <b>-0</b> 00:00 <b>-0</b> <b>-0</b> 00:00 <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b> <b>-0</b>			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
-5-7 - 5-8 - -0.0021 -0.0021 -0.0027 0.0003 -0.0003 0.0000 -0.0003 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000			00:00:00	00:00:00	00:00:00	00:00:00	00:00:00	00:00:00	00:00:00	00:00:00		
-0.0021 -0.0018 -0.0021 -0.0027 0.0003 -0.0003 0.0000 -0.0003 0.0000 -0.0003			5-1	6-2	6-3	6-4	6-6	5-6	6-7	5-8		
0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000			-0.0021	-0.0018	-0.0021	-0.0027	0.0003	-0.0003	0.0000	-0.0003		
			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		



For functions that cannot be operated in the right-click menu, if the mouse stops in the corresponding position, the corresponding reason prompt will pop up.

Right click menu can be set on the system configuration interface to display, and users can screen unused functions according to the actual situation, as shown in the figure below:

e Language Set	User Tool Help	jystem settings		^
rice List ♥ ♥ 127.0.0.1 ▶ 1	Charge 1 1-1 1-1 Rest 2.5000 V 0.0000 Å 0.0000 Å 0	Start Mode Barcode Jata Download Feal-proofing Step editor Display Settings Upgrade settings	Display Settings Display Device Type(STSSO BTS81 BTSV) Kide real devices (saly display unger sap) Display all chals under the selected server Displayed in the taxbber when minimized View Settings	^¥
	Finished 2.5000 V ¥		Salest     Type       Image: Large Icon     Image: Saall Icon       Image: List     Image: Saall Icon       Image: Grading     Image: Saall Icon	
	Finished 2.5000 V		Z Matek	
	Ø 🤊 <sup>4-1</sup>		Number of Chals Per Row: 16 Display use when clicking jigs	
	2.5000 V		Display a split line every chals Right Click Mean Function	
			Select Type Shortout Key A	~

# 3. 14. 1. Single Start/Stop

Select the channel to be operated  $\rightarrow$  right-click  $\rightarrow$  "Single start";

Under the "Start" interface (as shown in the figure below), work steps, recording conditions, security protection and other information can be set.



BTS Client 8.0.0.416(202	0.01.0	I7)(R3)									= 1	5 X
File Language Set U	Jser	Tool Help Start Test								_		
Device List 🛛 🛱					4.				2.			•
	0	Step Management 4	Step ID	Step Name	Step Time(hh:nm:ss:ms)	Voltage(V)	Cu ^	Main Chnl	4	L.		
1.choose the channel		D:\Program Files 🚔						Record				
3.single start	2	test v + × ۞						Time	30 s			
		Step File List						Voltage	v			
	09							Current	A			
		З.						Protection settings Volt.Lower	v			
	2							Volt. Upper	v			
								Curr. Lower	A			
	•							Curr. Upper	A			
								Cap. Upper	Ah			
	2				-			Delay Time	s			
	QA											
	2	6.					~	7		7		
		St Bar.   Ba.   DBC	۲				>	Main Max Aux T	emperat…   Other	9		
		Creator	P/N		Active Material	ng	✓ A <sup>1</sup>	utomatic backup Start S	tep ID 1 🌻			
		Remark				8.		9. 10.	Start			
Present His 4 h												
	Cur	rent login user:admin S	elect 1 chai	nnel(s)						e 💿 🛧	Line 🖪	⊕ 1009

- 1.New,open up,save,save as
- 2. New, open up, save, save as
- 3. Working step management interface
- 4.Working step editing area
- 5.Conditions setting area

6.working step management, code bar management, back-up managementDBC switch

- 7.Switch to the condition setting interface
- 8.Basic information
- 9.Automatic back-up
- 10. The initial work step input for operation

The barcode management interface loads the barcode as follows:

Select the channel requiring input of barcode to start  $\rightarrow$  right click  $\rightarrow$  "Single Start" Click the barcode management interface to input the barcode, as shown in the figure below:



BTS Client 8.0.0.416(202	20.01.	07)(R3)									ð X
File Language Set U Device List 4	User	Tool Help Start Test						Ξ			•
▼ 127.0.0.1	0	Barcode Management 4 Select Chnl	Step ID	Step Name	Step Time(hh:nm:ss:ms)	Voltage(V)	Cua ^	Main Chnl Record	4		
"single start"	1	1-1-1						Tine 30	1		
	04							Voltage Current	A N		
								Volt. Lower	v		
								Volt. Upper Curr. Lower	A		
	0							Curr. Upper Cap. Upper	A Ah		
	1							Delay Time	5		
	0						_				
	3	< > > St	¢					Main*** Aux***   Aux***   Temperat***	Other		
		Creator Remark	P/N		Active Material	ng	<b>⊠</b> A,	utomatic backup – Start Step ID 1 – Str	÷ art		
🎦 Present 🍠 His 4 🕨	Cu	rent login user:admin S	elect 1 cha	nnel(s)					0	<u>+</u> ()	① 1009     ③     ①      ①

条码管理界面

Back up setting interface

Operation method:

Select the channel to be tested  $\rightarrow$  right click  $\rightarrow$  "single start"  $\rightarrow$  "automatic backup" Check the box of automatic backup to start directly, as shown in the figure below:

🖂 Start Test							=		×
Backup settings 4	Step ID	Step Name	Step Time(hh:mm:ss:ms)	Voltage(V)	Cu ^	Main Chnl			đ
Backup dir D:\Pr						Record			
Remote Dir						Time	30	s	
File Name	-		<u>-</u>			Voltage		٧	
Default						Current		A	
🔿 Barcode 🔿 Bato						Protection settings			
O Custom						Volt. Lower		v	
If there is a dupl						Volt. Upper		۷	
automatically add						Curr. Lower		A	
🗌 Is Create Folder B						Curr. Upper		A	
File Format		- 				Cap. Upper		Ah	
INDA						Delay Time		s	
○ EXCEL									
Backup Type	-				-				
Scheduled backup,			-						
🗹 Idle backup			-						
🗹 All steps complete									
St   Bar Ba DBC	<				> v	Main   Aux   Aux   Te	mperat***	0th	er
Creator	P/N		Active Material	mg	- A:	utomatic backup Start S	tep ID 1	}	÷
Remark							St	art	



When we want to reset the work steps of one or several channels, we will stop the running of the channel. The operation is as follows:

Select a single or several channels  $\rightarrow$  right-click  $\rightarrow$  "single Stop".

At this point, the corresponding channel is to stop the work step manually and enter the stop state.

🔤 BTS Client 8.0.0.416(202	0.01.07)(R3)								-	- 0	×
File Language Set U	lser Tool	Help									
Device List 9	Che	Single Start(S)	Protec	ted Stopped	Finished	Offline					•
▼ 127.0.0.1 ► 1	0 1	Single Stop(P) All Start(Q) Cannot stop	1-3	♥ 1-4	✓ <sup>1-6</sup>	Ø <sup>1-6</sup>	O 1-7	• 1-6			
right click	Fin 2.50	Unit Start All Stop(T)	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Fini shed 2. 5000 V	Finished 2.5000 V			
		Schedule pause				a a	· ·				
	<b>⊘</b> ₽ <sup>2</sup>	Free Parallel	<b>9</b> <sup>2-3</sup>	Ø₽ <sup>2-4</sup>	Ø₽ <sup>2-6</sup>	Ø₽ <sup>2-6</sup>	Ø₽ <sup>2-7</sup>	Ø₽ <sup>2-8</sup>			
	Fin 2.50	Chamber is set Remove Chamber Continue(Q)	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V			
	3	Jump(J) Move(K)	- 3-3	3-4	3-5	a a	3-7	3-8			
	Fin	Reset Step	Finished	Finished	Finished	Finished	Finished	Finished			
	2.50	Copy Steps(W)	2.5000 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V			
		Channel unlock	4-3 •	• • • • • • • • • • • • • • • • • • •	Ø <b>9</b> 4-6	• • • ⊘∲ <sup>4-6</sup>		¥ ¥ €∳ <sup>4-6</sup>			
	Fin	Reset Alarm(R) Reset Map(M)	Finished	Finished	Finished	Finished	Finished	Finished			
	2.50	Chnl Info(I) Clear Flag(L)	1 2.5000 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V			
		Save As			,						
		Unit Settings (U)									
		View Log									
🎦 Present 🎺 His d 🕨	Currer	View Data(D)	channel(s)						👱 🗠 🧟	۵ 🕲	€ 100%

# 3. 14. 2. DBC Function

1.Get the original data through CAN module

2.The DBC file can be loaded/saved/echoed/executed/edited.

BTS Client 8.0.0.416(20	20.03.05)(R3) -		×
	- 上兵 帝朝 - <b>方电</b>		•
<ul> <li>▼ 127.0.0.1</li> <li>▶ 1</li> <li>▶ 小明的设备</li> <li>▶ 63</li> <li>▶ 192.168.10.201</li> <li>▶ 192.168.10.202</li> <li>▶ 192.168.10.204</li> </ul>	1-1         1-2         1-3         1-3         1-4         1-4         1-5         1-1         1-6         1-1         1-7         1-1         1-6         1-1           検査 0.0173         協査 0.0074         株式 0.0000 Å         1-0         1-1         1-6         1-1         1-6         1-1         1-7         1-1         1-6         1-1           検査 0.0074         0.0000 Å         0.000 Å         0.000 Å		
1.	VI-0.0         T1355.         VI-0.0         T1355.         VI-0.0         T1355.         VI-0.0         T1355.           Defrag         06         EDTam         00         EDTam		
📄 当前 🥑 历史	Welcome to http://www.neware.com.nd/Te/1800-830-8866 当前等录用户:admin	<b>•</b> •	100%

Here you can see the DBC signal data carried in the boot channel.



康	自动测试	t single	start		#87單 /04的 /26/14	名中	2006 B			= □ >	<
127.0.0.1	000		🔤 DBC§	開器	C:\Users\neware\Desktop\MSRS_C	AN_EL_BBG_MESSAGE	LIST_V6_OFFICIAL_04.07.2018_LNRC.	dbc		-	
▶ 小明的设	DBC		DB	6	72						
<b>b</b> 63	日录	C:\llsars\navar	席号	选择	消息列表	消息 ID	信号名	帧类型	帧格式	变化比例	偏移星 ^
192.168.10.	口水	c. (oser s (neve	0		BCB_R01	1067	BCBT emp	标准帧	数据帧	1.000000	0.0000
192.168.10.	文件名	MSRS_CAN_EL_BE	1		BCB_R01	1067	DomesticNetworkState	标准帧	数据帧	1.000000	0.0000(
1.	<b>DBC</b> 编	辑	2		BCB_RO1	1067	BCBPowerMains	标准帧	数据帧	100.000000	0.0000(
	消息列	実 消息	3		BCB_RO1	1067	BCBLoadState	标准帧	数据帧	1.000000	0.0000(
	BCB RC	1067	4		BCB_R01	1067	BCB_RefuseToSleep	标准帧	数据帧	1.000000	0.0000(
	BCB RC	01 1067	5		BCB_R01 3.	1067	BCBWaterTenp	标准帧	数据帧	1.000000	0.0000(
	BCB RC	01 1067	6	$\square$	BCB_R01	1067	ChargingPlugs_Status	标准帧	数据帧	1.000000	0.00000
	BCB BC	1067	7	$\checkmark$	BCB_R01	1067	JB2AvailableChargingPower	标准帧	数据帧	0.100000	0.0000(
	BCB BC	1067	8	$\checkmark$	BCB_R01	1067	ChargerFault_Type	标准帧	数据帧	1.000000	0.0000(
	BCB BC	1 1067	9		BCB RO1	1067	AC InstantLineCurrent	标准帧	数据帧	0.100000	0.0000(
	BCB RC	1067	10		BCB_R02	1091	DCCHG_relaysStatus	标准帧	数据帧	1.000000	0.0000(
	DCD_NC	1067	11		BCB_R02	1091	DCCHG_relaysStatus_CRC	标准帧	数据帧	1.000000	0.00000
	DCD_NC	1067	12		BCB_RO2	1091	DCCHG_relaysStatus_Clock	标准帧	数据帧	1.000000	0.0000(
	DCD_NC	1067	13		BCB_R02	1091	CC2_State	标准帧	数据帧	1.000000	0.00000
	DCD_N	1067	14		BCB_RO2	1091	ChargerFault_TypeDC	标准帧	数据帧	1.000000	0.0000
			15		BCM_VERLOG	1280	SLockValueControl	标:准帧	数据响	1.000000	0.00000
			16		BCM_VERLOG	1280	SoftwareLockValue	标准帧	数据帧	1.000000	0.00000
	<		17		BMS_R11	1408	HVB_CellO1Voltage	标:准帧	数据响	0.001000	2.0000( 🗸
	工步管理	条码管理   备(	<								>
	eize 🐇		2. 日录	C:\Use	rs\neware\Desktop\MSRS CAN EL B	BG MESSAGE LIST V	5 OFFICIAL 04.07.	4.	CANNER 1		确定
		余崎官堆   省1	2.	: \llse	rs\neware\Deskton\WSBS_CAN_EL_B	BG MESSAGE LIST V	S OFFETCTAL 04 07	4.	CANTER 1	1	确定

- 1. Click "DBC editor" to enter the DBC editor interface
- 2. Load the DBC file
- 3. Check the needed signal
- 4. Enter the CNA interface and click OK

- 12 
 # :mn:ss:ms)
 电压(V)
 电流(A)
 截止电流(A)
 容量(mAh)
 2.
 其他
 ^ │主通道 ņ 1个记录条件 × 30 s y A y BCB\_R01 1067 4. ν BCB R01 1, 1067 A BCB\_R01 1067 Å BCB\_R01 1067 nAh BCB\_R01 1067 BCB\_R01 1067 5 BCB R01 1067 BCB\_R01 1067 BCB\_R01 1067 < 工步管理|条码管理|备份设置 通2 | 温箱 | 其他 | 1 创建者 电 启动 备注 应用到所有搁置工步 • 确定取消 📄 当前 🥑 历史 当前登录用户:admin 选择8个通道 r 🙆 址 🕼 💿 🕢 100%

Set the DBC conditional expression

1. Select the DBC signal through DBC editing



2. Double-click "other" to enter the condition setting

3. Select DBC

4. Select the DBC information name and signal name to compare and set the symbol and comparison values

5. Click OK

### **DBC Editing Function**



Message list	Message ID	Signal name	Type	Format	Factor	Offset
right click	. Weizrige Th	⇒tgas. name	: 20be	2 OTTAL	140107	UTISET



						Add	-
Message ID	0						
Туре	Stan	dard frame 🗸		Format	Date	a frame	~
DLC :	0						
sender	Vecto	or_XXX					~
Comment							0
Message	Name	Message ID	Туре	Format	DLC	sender	

- 1. Click the DBC editor when editing the work step
- 2. Right-click to add the DBC editor interface
- 3.DBC editing interface

Message editing

Enter the message name and click the Add button for the information ID Note: The message name, information ID must be filled, and cannot exist the same, others according to the protocol to edit.

The following is the message editing interface:

					Add •
Message ID	0				
Туре	Standard f	rame 🗸	Format	Data fran	ie v
DLC:	0				
sender	Vector_XX	X			~
Comment					~
					~
Message	Name Mess	age ID Ty	/pe Format	DLC se	nder



#### Signal editing

The edit signal must have a message otherwise it cannot be edited (a message carries multiple signals)

Note: If the signal name is blank, it must be filled in. Others are edited according to the protocol.

Layout

The interface layout is determined by the signal starting bit and bit width. As shown in the figure below, the signal starting bit is 1 and the bit width is 4.



# 3.14.3. Unit Start

When we want to start all the channels available on a certain layer, the operation is as follows:



rcode	Right Click M	lenu Function			
ta Download					
ol-proofing	Select	Туре	Shortcut Key	^	
ep editor		Mes start			
splay Settings		Single Start	Ctrl+S		
grade settings		Loop start			
		Single Stop	Ctrl+P		
		All Start	Ctrl+Q		
		MB boot			
		Unit Start			
		All Stop	Ctrl+T		
		Schedule pause			
		Set appointment pause			
		Cancel appointment sus			
		Set Parallel			
		Free Parallel			
		Chamber is set			
		Remove Chamber			
		Continue	Ctrl+0		
		Vacuum resume			
		յատթ	Ctrl+J		
		Jump to the next step			
		Move	Ctrl+K		
		Reset Step		_	

Note: if right click cannot find "unit start", please go to system setting to add it.

1) Click the right mouse button  $\rightarrow$  "Unit start";

2) After setting work steps, recording conditions, security protection and other information, click "OK".

🚾 Unit Start				×
File Update Time:	3 Min			
Start Path:		Br	owse	
Fourth Layer Start Pa…		Star L	t Forth ayer	
Third Layer Start Path:		Star L	t Third ayer	
Second Layer Start Pa…		Start L	: Second ayer	
First Layer Start Path:		Star L	t First ayer	
		Ca	ancel	



### 3. 14. 4. All Stop

To stop all channels in a certain equipment, the operation is as follows: In the channel state display area, click the right mouse button  $\rightarrow$  "All stop". Then all the channels on the interface that are being tested will enter the "stop" state.

# 3. 14. 5. Schedule Pause

When the user wants to stop the channel operation after the completion of a work step or a loop run, the user can set schedule pause to achieve the function.



![](_page_68_Picture_7.jpeg)

![](_page_69_Picture_0.jpeg)

BTS Client 8.0.0.416(2020.03	3.05)(R3)		×
文件 语言 设置 用户	工具 帮助		
设备列表 🛛 🗘	<b>充电 搬置 保护 停止</b> 完成 高线		•
▼ 127.0.0.1         ▶ 1         ▶ 04990368         ▶ 63         ▶ 192.168.10.201         ▶ 192.168.10.202         ▶ 192.168.10.204	1         1		
📄 当前 🦪 历史 🛛 👘	前登录用户:admin 选择8个通道	C 📣 🛧 🗘	100%

After setting, the upper left corner of the channel displays P1 as shown below:

When the reservation is suspended, the channel is suspended, and the timeout prompt is shown in the figure below:

と留列表 早	充	ŧ	放电	搁置	保护	停止 完成 密线	
▼ 127.0.0.1 ▶ 1 ▶ 小明的设备 ▶ 63 ▶ 192.168.10.201 ▶ 192.168.0.202		1 1-2 5 V 9 A 9 mAh 8 Wh 10	1-2 1 1 1122 V 1 1122 V 1 1122 V 1 1124 V 1 1124 M 1 1124 M		19 Be V Di A Di Ah Di Wh Di Vh	14         0         16         0         16         0         17         16         17           0.016         2/0         3/0         2/0         2/0         1/0         2/0         1/0         2/0         1/0         2/0         1/0         2/0         1/0         2/0         1/0         2/0         1/0         2/0         1/0         2/0         1/0         2/0         1/0         2/0         1/0         2/0         1/0         2/0         1/0 <t< th=""><th></th></t<>	
192. 166. 10. 204		🚾 预约	1暫停			– – ×	
	V1 =0.(0)	序号	设备号	单元号	通道号	事件	
		1	1	1	1	暫停时间:2020:03:12 17:22:31,预约暫停超時时间:00:00:25,已暫停时间:00:00:38	
		2	1	1	2	暫停时间:2020:03:12 17:22:31,预约暫停超时时间:00:00:25,已暫停时间:00:00:38	
		3	1	1	3	暂停时间:2020:03:12 17:22:31,预约暂停超时时间:00:00:25,已暂停时间:00:00:38	
		4	1	1	4	暂停时间:2020:03:12 17:22:31,预约暂停超时时间:00:00:25,已暂停时间:00:00:38	
		5	1	1	5	暂得时间:2020:03:12 17:22:31,预约暂得超时时间:00:00:25,已暂得时间:00:00:38	
		6	1	1	6	暂得时间:2020:03:12 17:22:31,预行暂得超时时间:00:00:25,已暂得时间:00:00:38	
		7	1	1	7	智信时间:2020:03:12 17:22:31,预约智得超时时间:00:00:25,已智得时间:00:00:38	
		8	1	1	8	智得时间:2020:03:12 17:22:31,预约智得超时时间:00:00:25,已智得时间:00:00:38	

The operation is:

1. Select the channel that needs to be scheduled pause (the selected channel has a yellow box), as shown in the figure;

2. Right click  $\rightarrow$  "Set appointment pause"

3. Right click  $\rightarrow$  "Schedule pause"

![](_page_70_Picture_0.jpeg)

When the appointment pause is set, the corresponding channel will display the

pause flage, indicating that the current cycle is suspended after completion or the

designated cycle is suspended after completion; When a number appears in the lower right corner of the pause sign, it means that the current work step is suspended after completion or the specified work step is suspended after completion. The number represents the work step sequence number. When it is necessary to cancel the suspension setting, select the right menu to cancel the corresponding appointment pause, and the appointment pause sign on the channel will disappear; When the current step or loop is completed, the "pause" message will appear in the channel. The message will be yellow in color.

**Note:** This feature only supports BTS82 and above device types

## 3. 14. 6. Set Chamber

Function: The right button function can be used to set the chamber binding Operation method:

1. Select the channel to connect the chamber, right click and set the chamber as shown in the figure below:

![](_page_70_Picture_9.jpeg)

🚾 Chamber is set	×
Chamber number	
Layer number	
yes	cancel
确定	取消

![](_page_71_Picture_1.jpeg)

1. Remove chamber, as shown below,

![](_page_71_Figure_3.jpeg)

### 3. 14. 7. Set/Free Parallel

### 1. Set Parallel

To operate parallel function, operate as follows:

Press Ctrl and select the channel to be parallel  $\rightarrow$  right click  $\rightarrow$  "Set parallel". Click "Set Parallel" on the popup window to confirm and the channel can be parallel. The following figure shows the interface diagram of channel 2 and Channel 3 in parallel.

Recommendation: The parallel device is more than 50A, and the parallel operation is not recommended below 50A.

1	<b>1</b> -1 1-2	<ul> <li>✓</li> <li>1-3</li> </ul>	<ul> <li>✓ 1-4</li> </ul>	<ul> <li>✓ 1-5</li> </ul>	<ul> <li>✓</li> <li>1-6</li> </ul>	<ul> <li>✓ 1-7</li> </ul>	<ul> <li>✓</li> <li>1-8</li> </ul>
	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V
	ą	7	<b>4</b>		Ţ.	4	ą

2	Note: The current range can be expanded by setting the channels in parallel,
	and the maximum of four channels can be parallel. The current after parallel
	is the sum of the current of each channel. The parallel channel number will
	be displayed above the parallel channel for the user to check, and the test
	data of the parallel channel will be stored in the minimum channel number.
	Only support BTS76 and above equipment type for channels in parallel, only


support the channels in parallel in a same device.All positive poles and negative poles of the parallel channel connect together, which are used as the positive and negative poles of the parallel channel.

### 2. Free parallel

To cancel the parallel operation, select the channel to cancel the parallel operation  $\rightarrow$  right click  $\rightarrow$  "free parallel". In the pop-up window, click OK to cancel the parallel operation.

# 3. 14. 8. Continue

The user can connect the "stop" state and the "protection" state channel in the case of power failure of the upper computer to the original unfinished test step, effectively preventing the loss of measurement data.

Operation: Right-click  $\rightarrow$  "Continue", the corresponding channel can be restored to perform work step.

**Note :** "Stop" and "Continue" work together to enable the pause and restore function of channel test work. The channel where the test is completed will not be able to "continue". After the program exits forcibly or power off, restart the program and the system will automatically connect.

# 3.14.9. Jump

1

When the channel is executing work step, it can jump to the target work step, which can keep the normal continuation of test data.

Jump method:

1. Double-click the work step to jump, and it will be selected if the work step turns yellow



2. Under the "Jump" interface, fill in the required step number, as shown below:



1 搁置				100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100	7113
- 1017	5	10			1个工步参数,1个记录条件
2 恒济	<b>帝充电</b>	100	20		<u>1个记录条件</u>
3 恒济	<b>流充电</b>	100	20		1个记录条件
4 搁置	5	10			<u>1个记录条件</u>
5 恒济	流放电	10	20		<u>1个记录条件</u>
6 搁置	5	10			<u>1个记录条件</u>
7 结束	₹				
		14 17			

### 3.14.10. Move

Function: The work step parameters and test data of an unfinished test channel are moved to another completed test channel to continue the test. The purpose is to prevent the test from being interrupted due to channel damage and affecting the test.

Note: Only one channel can be moved at a time. The migration channel must be in the working state and the migrated channel is in the completed state.

Operation method:

- 1. Select two channels (test channel, target channel of migration) at the same time;
- 2. Right click  $\rightarrow$  "move"; The migrated channel will be in a stopped state.

Note: This feature only supports BTS80 and above device types.

#### 3.14.11. Reset Step

Reset workstep can only select one channel to reset. When resetting, the current workstep is reset by default without entering the workstep number.

Operation method:

1. Select the channel to be modified (the check mark indicates that the channel has a yellow box);

2. Right click  $\rightarrow$  "Reset step", enter the step editing interface and make corresponding modifications, as shown in the figure below:



Step ID	Step Name	Step Time(hh:mm:ss:ms)	Voltage(V)	Current(A)	Cut-off Cu ^	Main Chnl	
1	Rest	00:05:00.000				Record	
2	End					Tipe	
						Vilter -	*
						Voltage	
						Current	A
						Protection settings	
						Volt.Lower	
						Volt. Upper	v
						Curr. Lower	A
						Curr. Upper	A
		-				Cap. Upper	Ah
				-		Delay Time	z
<	1				> *	Main Mux Aux T	emperat  O

# 3. 14. 12. Reset Barcode

Function: When the user starts to issue the test and finds the barcode is wrong, it can be modified by resetting the barcode.

Operation steps:

Select the channel to modify the barcode, right click "Reset barcode", and the modify box will appear, as shown below:

e Language Set I	Jser Tool He	slp								
wice List 9	Charge .	Dischar	Single Start(S)	Stepped	Tinished	Offline			12	*
▼ 127.0.0.1	0 1-1	0	Single Stop(P)	1-4	0 1-5	0 1-6	0 1-7	0 1-8		
- p 1			All Start(Q)							
and the second	Finished 2.5000 V	Fi1 2.5	All Stop(T)	Finished 2.5000 V						
right click			Schedule pause	•						
	2-1	00	Set Parallel	0 2-4	2-5	2-6	2-7	2-6		
			Free Parallel	1						
	Finished	Fin	Chamber is set	Finished	Finished	Finished	Finished	Finished		
	2.0000 7		Continue(O)		2.000 1	2.0000.1	2.000 /	2,000 1		
		4	Jump(J)	1	a 1	1	•			
	0 3-1	0	Move(K)	3-4	0 3-6	0 3-6	0 3-7	0 3-6		
	Finished	Tie	Reset barcode	Finished	Finished	Finished	Finished	Finished		
	2.5000 V	2.5	Copy Steps(W)	2.5000 V						
		4	Chnl Locking		a i					
	09 4-1	00	Channel unlock	9 4-4	09 4-5	09 4-6	09 4-7	Ø . 4-8		
			Reset Alarm(R)							
	Finished 2.5000 V	Fi1 2.5	Reset Map(M)	Finished 2.5000 V						
			Chnl Info(I)							
	1	*)	Save Ar		*)	<u></u>	<u> </u>	1		
			Unit Settings (L)							
			View Log	-						
			view Log							



# 3. 14. 13. Channel Locking/Channel Unlock

- 1.Select the channel to be locked. Right click and select "channel locking".
- 2. Channel locking requires channel unlocking to perform relevant functions.

BTS Client 8.0.0.416(20)	20.01.07)(R3)							
Device List 4	Charge	Discharge	Rest Protect	ted Stopped	Finished	Offline	Single Start(S)	
▼ 127.0.0.1	1-1	1-2	1-3	1-4	1-5	1-6	Single Stop(P)	
L. D 1	Ŭ	°	Ŭ	~	Ĭ	<b>°</b>	All Start(Q)	
	Finished	Finished	Finished	Finished	Finished	Finished	Unit Start	
	2.5000 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V	All Stop(T)	
right click	9	9			<b>.</b>	a a	Schedule pause	
	2-1	2-2	2-3	2-4	2-5	2-6	Set Parallel	
	O.A.	O.	OY.	O.	O Y	OV O	Free Parallel	
	Finished	Finished	Finished	Finished	Finished	Finished	Chamber is set	
	2.5000 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V	Remove Chamber	
							Continue(O)	
	4	- 2-2	4		*	*  *	Jump(J)	
	S 21	0 22	o	0 34	0 30	0 00	Move(K)	
							Reset Step	
	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Reset barcode	
							Copy Steps(W)	
	4	4	4 <del>4</del>		*	4   4	Channel unlock	
	♥ <sup>4-1</sup>	♥ 4-2	♥ 4-3	<b>OP</b> <sup>4-4</sup>	♥ 4-5	Ø 🕈 <sup>4-6</sup> 🛛 Ø		
							Reset Alarm(R)	
	Finished	Finished	Finished	Finished	Finished	Finished	Reset Map(M)	
	2.0000 4	2.5000 4	2.5000 4	2.5000 4	2.0000 4	2.5000 4	Chnl Info(I)	
	ą	4	ı		a .	a a	Clear Flag(L)	
							Save As	
							Unit Settings (U)	
							View Log	
Present 🎺 His 4 🕨	Current login u	ser:admin Sele	ct 7 channel(s)				View Data(D)	

#### Click the channel lock flag to pop up a prompt

BTS Client 8.0.0.416(202	0.01.07)(R3)				– 6 ×
File Language Set U	ser Tool Help				
Device List 4	Charge Discharge	Rest Protected Stopped	Finished Offline		10 ×
▼ 127.0.0.1	Finished 2.500 V 9	Finished 2.5000 V 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Fipitched 2.5000 V	Finished 2.500 V 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
	Ø₽ <sup>2-1</sup> Ø₽ <sup>2-2</sup>	Ø₽ <sup>2-3</sup> Ø₽ <sup>2-4</sup>	Ø₽ <sup>2-5</sup> Ø₽ <sup>2-6</sup>	Ø₽ <sup>2-7</sup> Ø₽ <sup>2-6</sup>	
	Finished Finished 2.5000 V 2.5000 V	Finished Finished 2.5000 V 2.5000 V	Finished Finished 2.5000 V 2.5000 V	Finished Finished 2.5000 V 2.5000 V	
	0 3-1 0 3-2 0	0 <sup>3-3</sup> 0 <sup>3-4</sup>	0 35 0 36		
	Finished Finished 2.5000 V 2.5000 V	Finished Finished 2.5000 V 2.5000 V	Finished         Finished           2.5000 V         2.5000 V	Finished Finished 2.5000 V 2.5000 V	
	♥ <sup>4−1</sup> ♥ <sup>4−2</sup>	• • • • • • • • • • • • • • • • • • •	♥ <sup>4-5</sup> ♥ <sup>4-6</sup>	• • • • • • •	
	Finished Finished 2.5000 V 2.5000 V	Finished Finished 2.5000 V 2.5000 V	Finished Finished 2.5000 V 2.5000 V	Finished Finished 2.5000 V 2.5000 V	
	a a	¢ 4	a a	a a a	
🎦 Present 🎺 His d 🕨	Current login user:admin Sele	ct 7 channel(s)			🗭 🙆 👱 🕼 🌚 🕘 100%



BTS Client 8.0.0.416(202	20.01.07)(R3)								-	٥	×
File Language Set	User Tool Help		_								
Device List 🛛 🖗	Charge Dische	Single Start(S)	d Stopped	Finished	Offline						•
▼ 127.0.0.1	1-1 Finished 2.5000 V 2.	Single Stop(P) All Start(Q) Unit Start All Stop(T) Schedule pause	7 1-4 Finished 2.5000 V	1-5 Finished 2.5000 V	1-6 Finished 2.5000 V	1-7 Finished 2.5000 V	Finished 2.5000 V				
	Ø₽ <sup>2-1</sup> Ø₽	Set Parallel Free Parallel	♥ 2-4	Ø₽ <sup>2-5</sup>	Ø₽ <sup>2-6</sup>	Ø₽ <sup>2-7</sup>	Ø₽ <sup>2-6</sup>				
	Finished F. 2.5000 V 2.	Chamber is set Remove Chamber Continue(O)	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V				
	0 3-1 0	Jump(J) Move(K) Reset Step	0 3-4	O 3-6	O 3-6	Ø <sup>3−7</sup>	S 3−6				
	Finished F 2.5000 V 2.	Reset barcode Copy Steps(W) Chnl Locking	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V				
	Ø₽ <sup>4-1</sup> Ø₽	Channel unlock Reset Alarm(R)	<b>09</b> 4-4	ØØ 4-5	Ø₽ <sup>4-6</sup>	Ø\$ <sup>4-7</sup>	Ø₽ <sup>4-6</sup>				
	Finished F 2.5000 V 2.	Reset Map(M) Chnl Info(I) Clear Flag(L)	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V				
	,¥)	Save As		, ÷	,	, · · · ·	*				
		Unit Settings (U)									
		View Log									
Present 🎺 His d 🕨	Current login user:adr	View Data(D)						e 🖉	<u>↓</u> ↓	• •	2 1009

Select the channel you want to unlock for channel unlocking.

# 3.14.14. Reset Alarm

#### **Channel protection**

For example, the voltage upper limit protection is set when starting the test, and the channel protection is provided when the battery voltage exceeds the voltage upper limit, as shown in the figure below:





Reset alarm:

1 Select the protected channel, right click to select reset alarm, which can only reset the selected channel.

2 Select the device with a protective channel and right click on the device number to reset the alarm. This way is to reset the entire device.



le Language Set L	lser Tool	Help										
evice List 4	Che	Single Start( <u>S</u> ) Single Stop(P)	Protec	ted Stopped	Finished	Offline					•	
	<b>o</b> 1	All Start(Q)	1-3	0 14	° 1-	0 1-0	● 1- <i>r</i>					
	Fin 2.50	Unit Start All Stop	Finished 2.5000 V	Finished 2.5000 V								
right click the protect	ed channel	Schedule pause			4	a .		a a				
	<b>⊘</b> ₽ <sup>2</sup>	Set Parallel Free Parallel	· 2-3	Ø₽ <sup>2-4</sup>	Ø₽ <sup>2-5</sup>	Ø₽ <sup>2-6</sup>	<b>⊘</b> ♥ <sup>2−7</sup>	Ø <b>9</b> <sup>2-6</sup>				
	Fin. 2.50	Chamber is set Remove Chamber	Finished 2.5000 V	Finished 2.5000 V								
		Continue( <u>O</u> ) Jump( <u>J</u> )	9		,	a c		a a				
	<ul> <li>✓ <sup>3</sup></li> </ul>	Move( <u>K</u> ) Reset Step	3-3	O 3-4	S 3-5	S 3−6	S 3−7	Ø <del>3-6</del>				
	Fin 2.50	Reset barcode Copy Steps( <u>W</u> )	Finished 2.5000 V	Finished 2.5000 V								
	4	Chnl Locking Channel unlock	4-3	4-4	4-5	4 4-6	4-7	a a				
		Reset Alarm( <u>R</u> )		<b>₩</b>	O.A.	C.A.	C Y	<b>v</b> ▼				
	Fin 2.50	Reset Map( <u>M</u> ) Chnl Info( <u>1</u> )	t reset alarm in	this current wor	king status hed	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V				
		Clear Flag( <u>L</u> )	÷			a .		a a				
		Save As	-									
		View Log										
resent ợ His d 🕨	Curren	View Data(D)	channel(s)						6 0	¥ D 6	• •	



### 3.14.15. Reset Map

To set the mapping for the middle machine that has never been set, select the middle machine to be mapped (select from the device list, as shown in the figure below), and click the right mouse button in the blank area on the right side of the interface  $\rightarrow$  "Reset mapping"



#### Main Channel Mapping:

The mapping of the main channel and the channel on the interface can be arbitrary, and the location of the mapping of the main channel is the location of the large box on the mapping interface.

Select a channel and select "Default mapping for main channel". There are five Settings: 1\*8, 1\*16, 1\*24, 1\*32 and custom.Select one of the mapping modes, and the system will complete all the main channel mapping, as shown in the figure below.To cancel a mapping channel, right-click on the channel and select "Undo current Channel". To cancel all mapping relationships, select "Clear all".





🚾 Reset I	Мар																														٥	×
Chal ID	Chal Type	^																														^
0	Main Chnl			1	-1			1	-2			1	-3			1	-4			1	-5			1.	-6			1	-7			1-8
1	Main Chnl					Undo	Curre	ent Chr	h			- 11																				
2	Main Chnl					Clear	All																									
3	Main Chnl				0	Save	Mapp	ing					2				3				4			;	5			1	6			7
4	Main Chnl				T	Main	Chnl (	Default	Map	ping		•	1×	8			<u> </u>															
<b>.</b>			TU1	2		Aux (	Chnl D	efault	Mappi	ing	1	<u> </u>	1×	16		2	3	4	TU1	2	3	4	TU1	2	3	4	TU1	2	3	4	TU1	2
<b>U</b> •	Main Chnl		32				33				34		1×	24					36				37				38				39	
۰ 🐻	Main Chnl	Ш	5	6	7	8	5	6	7	8	5	6	1×	32 stom		6	7	8	5	6	7	8	5	6	7	8	5	6	7	8	5	6
<b>i</b> 7	Main Chnl											-																				
ە 🛢	Main Chnl		9	10	11	12	9	10	11	12	9	10	11	12	9	10	11	12	9	10	11	12	9	10	11	12	9	10	11	12	9	10
۹ 👅	Main Chnl							10										1.														
10	Main Chnl		10		15	10	10			10	10		15	10	10		15	10	10		15	10	10		15	10	12		15	10	12	
11	Main Chnl		15	14	15	10	1.5	14	15	10	15	14	15	10	1.5	14	15	10	15	14	15	10	15	14	15	10	15	14	15	10	15	14
12	Main Chnl		_	_	-				-				-			-	-							_	(				_			
13	Main Chnl			2	-1			2	-2			2	-3			2	-4			2	-5			2.	-6			2	-7			2-8
14	Main Chnl																															
15	Main Chnl				0				D				0			1	1			1	9			1	2			1	4			15
16	Main Chnl				•				5				.0							-	2			-	3			-	4			15
17	Main Chnl		TUI	2	3	4	TUI	2	3	4	TIII	2	3	4	T1/1	2	3	4	TUI	2	3	4	T1/1	2	3	4	T1/1	2	3	4	TIII	2
18	Main Chnl		40				41				42				43				44				45				46				47	
19	Main Chnl		5	6	7	8	5	6	7	8	5	6	7	8	5	6	7	8	5	6	7	8	5	6	7	8	5	6	7	8	5	6
20	Main Chnl	, I	<																													

The default mapping for the main channel 1x8 means that the main interface channel shows 8 channels on one row, and 1x16 means that the main channel shows 16 channels on one row,

1x24 represents a row with 24 channels and 1x32 represents a row with 32 channels. The following 1x8 interface.

Customize mapping for the main channel. Enter 20 to show the number of channels on a row on the main interface. The maximum number of channels on the main interface is 32.

🚾 Reset	Мар																														Ø	$\times$
Chal ID	Chnl Type Main Chnl	Î		1	-1			1	-2			1	-3		Γ	1	-4			1	-5			1.	-6			1.	-7			1-8
<b>U</b> 1	Main Chnl											_																				
<b>a</b> 2	Main Chnl				~	Un	do Cu	rrent (	Chnl								~								-							
3	Main Chnl				U	Cle	ar All						2				3				4				5				b			(
<b>A</b> 4	Main Chnl				T	Sa	ve Ma	pping									<u> </u>															
5	Main Chnl		TU1 32	2		M	ain Chr	l Defa	ault Ma	apping		•		1×8		2	3	4	TU1 36	2	3	4	TU1 37	2	3	4	TU1 38	2	3	4	TU1 39	2
	Main Chal				۲.	Au	x Chnl	Defau	lt Map	ping	_	•		1×16			-								<u> </u>							-
<b>.</b>	marn ciuli	1	5	6	7	8	5	6	7	8	5	6		1×24		6	7	8	5	6	7	8	5	6	7	8	5	6	7	8	5	6
	Main Chnl													LX 32 Custor	n																	
<b>3</b> °	Main Chnl		9	10	11	12	9	10	11	12	9	10	11	12	9	10	11	12	9	10	11	12	9	10	11	12	9	10	11	12	9	10
۰ 👅	Main Chnl																															
10	Main Chnl		10		45				45		40		15				45	1.0	10			4.0			45	40						
11	Main Chnl		13	14	15	16	13	14	15	16	13	14	15	16	13	14	15	16	13	14	15	16	13	14	15	16	13	14	15	16	13	14
12	Main Chnl				1	-		_	1				1	-		_	-	-		-	-				1				1			
13	Main Chnl			2	-1			2	-2			2	-3			2	-4			2	-5			2.	-6			2	-7			2-8
14	Main Chnl																															
15	Main Chnl																															
16	Main Chnl				8				9			3	0			1	1			1	2			1	.3			1	4			15
17	Main Chnl		THE				7111				7315				710				7115		2		7111				73/1	_	_		710	
18	Main Chnl		40	2	1	1	41	2	3	4	42	2	3	4	43	2		4	44	2	3	1	45	2		1	46	2	3	1	47	2
19	Main Chnl		5	6	7		Б	6	7		5	6	7		5	6	7		Б	6	7		E	6	7	8	5	6	7		5	6
20	Main Chnl	~	<	ľ																												



×

Auxiliary channel mapping: select a channel and select "Aux Channel Default Mapping" with the right mouse button to select "average mapping". After the mapping is completed, right-click  $\rightarrow$  "Save mapping".

As shown below:

1

1

🔤 Reset	Мар				1-1 1-2 1																										þ	×	<
Chal ID	Chnl Type Main Chnl Main Chnl	^		1	-1			1	-2			1	-3			1	-4			1	-5			1.	-6			1	-7			1-3	٤
2	Main Chnl				~		Undo	Curre	nt Chr	h															_								
<b>3</b> 3	Main Chnl				0		Clear	All					-11				3				4				>				5			· · ·	
4	Main Chnl		1		2	I	Save	Mapp	ing						1		1		1				1	2	2		1		2		1	2	1
5	Main Chnl			1	<sup>°</sup>		Main	Chnl [	Default	Map	oing		•	1		1		1	1	-		1	1	-		1	·	-		1	1	-	
<b>8</b> 6	Main Chnl		E		7	I.	Aux C	hnl De	efault I	Mappi	ng	1 0	•	Av	erage	Mapp	ing		E		7		-		7		-		7		E		I.
7	Main Chnl		0	ľ		l°		Ů	( <sup>*</sup>	Ů	Ů	Ů		Pri	ority N	Aappir	ng	°	0	0		l°	0	0	1	l°	0	0	<u> </u>	l	0	°	
۰ 🛢	Main Chnl			10		10		10		10		10	Γ	10		10				10		10		10		10		10		10		10	I.
۰ 🛢	Main Chnl		3	10	11	12		10	10 11 12 9 10 11 1				12		10	11	12	3	10	11	12	3	10	11	12	3	10	11	12	3	10		
10	Main Chnl				45	4.0	1.0		14 15 16 13 14 15 1					1.0	1.0		45	1.0	1.0			1.0				40							1
11	Main Chnl		13	14	15	16	13	14 15 16 13 14 15 1				16	13	14	15	16	13	14	15	16	13	14	15	16	13	14	15	16	13	14			
12	Main Chnl			-	Ľ.				1	-		-	Ľ.			-	- C	-			1			_	1			_	1				i.
13	Main Chnl			2	-1			2	-2			2	-3			2	-4			2	-5			2.	-6			2	-7			2-	٤
14	Main Chnl																																
15	Main Chnl				0				D			1	0			1	1			1	2			1	2			1	4			15	
16	Main Chnl								5				.0											1	3			-				13	1
17	Main Chnl		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	
18	Main Chnl																																
19	Main Chnl		5	6	7	8	5	6	7	8	5	6	7	8	5	6	7	8	5	6	7	8	5	6	7	8	5	6	7	8	5	6	
20	Main Chnl	Ļ	<																														×

Note: The yellow icon represents the unmapped main channel, the purple icon represents the unmapped aux channel, whether it is the main channel or the aux channel, the gray icon of the battery indicates that it has been mapped and cannot be mapped again.

Note: The battery icon of mapped main channel changes from yellow to gray, that meanss it is not remapped; To cancel the current mapping channel, click the right mouse button on the channel and select "undo current channel". If you select "clear



all", all mapping channels will be canceled.	
Note: To unmap an aux channel, right-click on that aux channel and select "Undo	
Current Channel". To unmap all, select "Clear All", then all mappings of main and aux	
channels are cleared.	

# 3.14.16. Copy Steps

Function: copy the working step parameters of one channel to another or more channels with the same channel range.

System configuration: channel replication settings through system settings - fool-proofing

BTS Client 8.0.0.416(2020.01.07)(R3)

File Language	Set	User Tool Help	
Device List		Protection Parameter Settings	Rest
▼ 127.0.0.1		Process Type Settings	
		System Settings	<b>v</b>
		Cystem Cetangs	

🚾 System Settings	X
Start Mode	Need/yes/requirement
Barcode	
Data Download	
Fool-proofing	
Step editor	Enable advanced protection parameters for single start ?
Display Settings	No
Upgrade settings	Apply Formation Protection Parameters
	Apply Cap Protection Parameters
	Channel protection pop-up prompt
	🕼 Bar code is automatically saved
	Single channel memo information is automatically saved
	Channel copy allows check protection channel
	Channel copy allows you to check the stop channel
	🗷 Channel copy allows check pause channel
	Reset successful, whether to continue testing
	Successful migration, whether to continue testing
	<ul> <li>Password Verification Required If Exit The Software?(With Administrator's Permission)</li> <li>Schedule time to log off automatically</li> </ul>
	1 Min
	() Log off
	Switch the user User Name:
	Parsword Show Porceword



Operation method:

1. Select the target channel;

2. Right click  $\rightarrow$  "Copy steps" to enter the channel replication interface, as shown in the figure below;

3. Click "Select Channel" in the lower right corner of the interface to enter the channel selection interface;

4. Select the channel number to be copied.

Copy Steps										1		×
Step Management	<b>џ</b>	Step ID	Step Name	St	ep Time(hł	(mm:ss:ms)	Volt	^ Mais	n Chnl			<b></b> д
D. D		1	Rest			00:05:00.00	00		Record			
D. (Frogram Files (MEMARE (DISCI	.1e	2	End						Time		30 -	
test V +	X O	Chpl(c)							×			
Step File List	iargei	Crim(s)							^			
	1-1	1-2	1-3	1-4	1-5	1-6	1-7	1-8			n	
	2-1	2-2	2-3	2-4	2-5	2-6	2-7	2-8		er	v	
	3-1	3-2	3-3	3-4	3-5	3-6	3-7	3-8				
	4-1	4-2	4-3	4-4	4-5	4-6	4-7	4-8			= :	
										/er	^	
										)er	A	
										er 📃 📃	Al	L
										me	s	
			01	K		Cancel						
Ston Managament Baghun nothin	are DBC							v Neis	••• ] ••••	••   duv•••   Torress	c	ther
Step management backup settin	rgs   DDC	<					>	Main	Adx	Aux   Iempera	ree j u	ther
Creator P/	/N		Active Mat	erial		ng		Automat	ic back	up Start Step ID	1	-
Remark										Select ch	Star	t

# 3.14.17. Clear Flag

Some functions need to operate when the channel is complete. For protected or stopped channels, the clear flag is used to change the channel state to complete. Operation method:

- 1. Select the target channel in the channel area
- 2. Right click "Clear flag"

### 3. 14. 18. Unit Settings

According to the different purposes of user testing to set the corresponding unit parameters, BTSClient provides a flexible and simple setting platform.



Operation method:

Right-click on the channel --> "Unit Settings", select the unit to be set-->"Ok". As shown in the figure below,

Add decimal number to set channel interface display parameters;

BTS Client 8.0.0.416(202	20.01.07)(R3)								-	Ø	×
File Language Set U	Jser Tool H	Help									
Device List 4	Char ge	Single Start(S)	Prote	oted Stopped	Finished.	Offline					•
▼ 127.0.0.1 ↓ 1	0 1-1	All Start(Q)	1-3	✓ 1-4	<ul> <li>1-5</li> </ul>	<ul> <li>1-6</li> </ul>	✓ <sup>1-7</sup>	<ul> <li>1-8</li> </ul>			
	Finish	Unit Start	ini shed	Finished	Finished	Finished	Finished	Finished			
	2.5000 1	All Stop(1)	5000 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V			
		Schedule pause	•								
	♥ 2-1	Set Parallel Free Parallel	2-3	Ø₽ <sup>2-4</sup>	Ø <b>₽</b> <sup>2-5</sup>	Ø₽ <sup>2-6</sup>	Ø₽ <sup>2-7</sup>	Ø₽ <sup>2-8</sup>			
	Finish 2.5000	Chamber is set Remove Chamber	inished 5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V			
		Continue( <u>O</u> ) Jump(J)									
	S 3−1	Move( <u>K</u> ) Reset Step	3-3	S 3-4	S 3−6	S 3−6	S 3−7	S→8			
	Finish 2.5000	Reset barcode	inished 5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2,5000 V	Finished 2,5000 V	Finished 2.5000 V			
		Copy Steps( <u>W</u> ) Chnl Locking									
	4-1	Channel unlock	4-3	4-4	4-5	4-6	4-7	4-6			
	O.A.	Reset Alarm( <u>R</u> )		O.A.	O.A.	C Y	C Y	O Y	-		
	Finish	Reset Map(M)	inished	Finished	Finished	Finished	Finished	Finished	<b>9</b> 🕁 🙃	Y 🖂 🗧	• * #
	2.5000	Chnl Info()	5000 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V			
		Clear Flag( <u>L</u> )									
		Save As	•								
		Unit Settings (U)									
		View Log									
Present 💛 Hi: 4 🕨	Current lo	View Data(D)	annel(s)						🧟 💁 🛨 🕻	)× 💿 (	100%

|--|

	Unit	Decimal Places
Time	s	~
Voltage	v .	~
Current	A	~
Capacity	Ah	~
Energy	Wh	~
Power	W	~
IR	mΩ	~
Temperature	°C .	
Weight	mg	~
Capacitance	F	~
Air Pressure	kPa	~
Pressure	kg	~
Step editing time	hh:mm:ss:ms	~
Display Time	hh:mm:ss	~

### 3.14.19. View Log

The log can be divided into local log and device log. The local log is the user's various operations recorded by the client, while the device log is the channel test state change recorded by the middle machine as well as the exceptions and prompt information during the test.

Operation method:

Select the channel and right click --->"View log", the log list will open as shown in the figure below:



p	C1	Single Start(S)	Puete	Land Charles		0661:					
	Charg	Single Stop(P)	rrote	oted Stopped		UTTLINE	1-7	1-0			
	O 1-1	All Start(O)	1-5	0	O 10	۰ <sup>۰</sup> ک	O 1-7	• ·•			
		Unit Start									
	Finis. 2.5000	All Stop(T)	5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V			
		Schedule pause									
			· ·	¢ .	*	å	4	¢ 0			
	<b>OP</b> <sup>2-1</sup>	Set Parallel	2-3	<b>OP</b> <sup>2-4</sup>	Ø₽ <sup>2-5</sup>	Ø₽ <sup>2-6</sup>	Ø 🕈 2-7	♥ 2-8			
		Free Parallel									
	Finis	Chamber is set	Finished	Finished	Finished	Finished	Finished	Finished			
	2.5000	Continue(O)	, 5000 V	2.5000 V	2.5000 v	2.5000 v	2.5000 v	2.5000 v			
		Continue(O)		a .		ą	4	a a			
	3-1	Move(K)	3-3	3-4	3-5	3-6	3-7	3-8			
	<b>v</b>	Reset Step			<b>V</b>	U U	U I	U I			
	Finis	Reset barcode	Finished	Finished	Finished	Finished	Finished	Finished			
	2.5000	Copy Steps(W)	5000 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V	2.5000 V			
		Chnl Locking									
	4-1	Channel unlock	4-3	4-4	4-5	4-6	4-7	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4			
	<b>OP 4</b> -1	Reset Alarm(R)	4-3	09 **	09 **	<u>o</u>	09 **	09 **			
			-								
	Finis. 2.5000	Reset Map(M)	Finished 5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V	Finished 2.5000 V			
		Chnl Info(I)									
		Clear Flag(L)	1	¢ .	*	4	4	¢ 4			
		Save As	•								
		Unit Settings (U)									
		10.1									
✓ His 4 ► 8.0.0.416(20 acce Set	Current I	View Log View Data(D)	annel(s)							e 💿 🛧	<b>⊈</b> ) (
✓ His 4 ▶ 8.0.0.416(20) nage Set ₽	Current I 20.01.07)(R3) User Tool Charge	View Log View Data(D) Help Discharge Res	annel(s)	oted Stopped	PIRITAL	Offline				s 💿 🛧	<b>d</b> »
✓ His 4 ▶ 8.0.0.416(20) nage Set p 0.0.1	Current I 20.01.07)(R3) User Tool Charge	View Log View Data(D) Help Discharge Res	annel(s)	oted Stopped	Finiched	Offline	1-7	1-6		<b>€ ⊙</b> ⊼	
✓ Kis 4 ▶ 8.0.0.416(20) sage Set .0.1	Current I 20.01.07)(R3) User Tool Charge	View Log View Data(D) Bischarge Res log	annel(s)	oted Stopped	7151 shef	Offline	1-7		1 ×	¢ @ ¥	
✓ Kis 4 ▶ 8.0.0.416(20) set 9 0.0.1	Current I 20.01.07)(R3) User Tool Charge Pinishes 2 5000 V	View Log View Data(D) Bischarge Ress Log Local Log Device Lo	annel(s)	oted Stopped	7 m 3.ed	Offline	0 1-7	- <u> </u>	ı ×	697	
✓ His 4 ▶ 8.0.0.416(20) age Set 9 0.0.1	Current I 20.01.07)(R3) User Tool Charge I -1 Finisher 2.5000 V	View Log View Data(D) Bitcharge Res log Log Local Log Device Lo, Index Peric W	annel(s)	eted Stopped	1-5 Event	Offline	. 13	- [		<b>₽ 0 ±</b>	
✓ Hi: 4 ► 8.0.0.416(20 age Set 9 0.0.1	Current I 20.01.07)(R3) User Tool Charge I -1 Finisher 2, 5000 V	View Log View Data(D) Bisokarge Res Log Log Device Lo Index Device Vi 1 1	annel(s)	etted <b>Stopped</b> <b>1-4</b> ID Time 2020/7/11 12	1-5 1-5 2:38:36 Start	offlins	(Ø. <sup>117</sup>	- C	. ×	<b>€ ®</b> ∓	
His 4 > 8.0.0.416(20) age Set 30.0.1	Current I	Help Bischarge Res log Local Log Device Lo Index Peric Ur 1 2 1	s s s s s s s s s s s s s s s s s s s	eted <b>Stepped</b> <b>1-4</b> ID Time 2020/7/11 12 2020/7/11 12	25002000 1-5 2:30:36 Start 2:43:36 Finish	Offlins	- <u>1-7</u>	- [	1 X	<b>€ ⊙</b> ∓	
Hi: 4 > 8.0.0.416(20) age Set 9 0.0.1	Current [ 20.01.07)(R3) User Tool Charge 2.5000 V	View Log View Data(D) Bischarge Res log Local Log Device Lo Index Device. Up 1 1 2 1	annel(s)	eted Stypped 1-4 ID Time 2020/7/11 12 2020/7/11 12	<b>1-6</b> <b>1-6</b> 2:39:36 Start 1:43:38 Finish	Offlins	-1-7	- C		€ @ ¥	
✓ Ki: 4 ↓ 8.0.0.416(20) age Set 9 0.0.1	Current 20.01.07/(R3) User Tool Charge Finisher 2.5000 V	View Log View Data(D) Bischarge Less Local Log Berice. Jr 1 1 2 1	annel(s)	eted Stopped 14 ID Time 2020/7/11 12 2020/7/11 12	2:38:36 Finish	offline	e <sup>-1-7</sup>	- C	1 X	€ @ ¥	
✓ Ki: 4 ↓ 8.0.0.416(20) age Set 9 0.0.1	Current 20.01.07)(R3) User Tool Charge 2.5000 V V Pinishes 2.5000 V	View Log View Data(D) Bischarge Les Log Log Berie Lo Index Devie Vs 1 1 2 1	annel(s)	eted Stopped T-4 ID Time 2020/7/11 12 2020/7/11 12	1-6 1-6 2:38:36 Start 1:43:36 Finish	offline	(e <sup>-1-7-</sup>	- 1		<b>€</b> ∞ ∓	
Ki; 4 ▶ 8.0.0.416(20)  age Set  3.0.1	Current	Help Bischarge Res Local Log Perice Lo Index Peric Wr 1 1 2 1	annel(s)	eted Stepped 1-4 ID Time 2020/7/11 12 2020/7/11 12	1-5 1-5 2:38:36 Start 2:43:36 Finish	0fflins	- [P]	- [		<b>€</b> ∞ ∓	
₩i: 4 ► 8.0.0.416(20 age Set ₽ 0.0.1	Current 20.01.07)(R3) User Tool Charge 1-1 Finishes 2.5000 V	View Log View Data(D) Bischarge Res log Local Log Device Lo Index Pevic Vr 1 1 2 1	annel(s)	cted <b>Stepped</b> -1-4 ID Time 2020/7/11 12	1-5 1-5 2:39:36 2:43:36 2:43:36 2:43:36	Offlins	( <b>*</b> <sup>*17*</sup>	- C		€ @ ¥	
₩ii 4 ► 8.0.0.416(20) age Set 9 0.0.1	Current 20.01.07)(R3) User Tool Charge 0 1-1 Finisher 2.5000 V 0 2-1 Finisher 2.5000 V 0 3-1 -	View Log View Data(D) Bitcharge Res Local Log Berice Lo, Index Perice. Up 1 2 1	annel(s)	eted <b>Stoped</b> <b>T</b> <b>T</b> <b>T</b> <b>T</b> <b>T</b> <b>T</b> <b>T</b> <b>T</b>	Event :39:36 Start :43:36 Finish	Offline	P 1-7	- 16		<b>€</b> @ ¥	
₩i: 4 ►	Current 2 20.01.07/(R3) User Tool Charge 2.5000 V C 2-1 Finishes 2.5000 V C 3-1 Finishes	View Log View Data(D) Bicoharge Res Local Log Berice Lo I Tabas Derice Vs 1 1 2 1	annel(s)	eted Stopped T-4 ID Time 2020/7/11 12 2020/7/11 12	2:38:36 Start 1:43:36 Finish	offline	- [e - 1-7 -	- 1		<b>€ 3</b> ¥	<b>(</b> )
₩i: 4 ≯ 8.0.0.416(20 age Set	Current 20.01.07)(R3) User Tool Charce 2.5000 V 2.5000 V 0 2-1 Pinishes 2.5000 V 0 3-1 Pinishes 2.5000 V	View Log View Data(D) Bischarge Res Cog Local Log Perice Los Index Peric Wr 1 1 2 1	annel(s)	eted Stopped 1-4 ID Time 2020/7/11 12 2020/7/11 12	2:39:36 Start ::43:36 Finish	Offlins	- (p_ 1-7	- <mark></mark>			<b>(</b> )
✓ Ki: 4 → 8.0.0.416(20 age Set 9 4.0.1	Current 20.01.07)(R3) User Tool Charge 1-1 Finishes 2.5000 V 7-1-1 Finishes 2.5000 V 7-1-1 Finishes 2.5000 V	View Log View Data(D) Bischarge Res log Local Log Device Lo I dat Pevic Vr 1 1 2 1	annel(s)	cted Stepped -1-4 II Tiee 2020/7/11 12 2020/7/11 12	Event 2:39:36 Start 2:43:36 Finish	Offlins	( <b>6</b>	- [			
✓ Kii 4 → 8.0.0.416(20 age Set 9 0.0.1	Current 2001.07)(R3) User Tool Charge 7 1-1 Finisher 2.5000 V 7 2-1 Finisher 2.5000 V 7 3-1 Finisher 2.5000 V 7 3-1 Finisher 2.5000 V	View Log View Data(D) Bischarge Res Log Log Berie Lo Index Perie. Vg 1 1 2 1	sannel(s)	eted Stopped T	2000 2000 7 1-5 2:39:36 Start 2:43:36 Finish	Offlins	e 17	- 18		<b>€ ⊙ ⊼</b>	
₩i1 4 ) 8.0.0.416(20) age Set 1 30 30.0.1	Current 20.01.07/(R3) User Tool Charge 2.5000 V 0 2-1- Finishes 2.5000 V 0 7-2- Finishes 2.5000 V 0 7-3-1- Finishes 2.5000 V 0 7-1- 0	View Log View Data(D) Bisokarge Res Log Log Device Lo Index Device Vr 1 1 2 1	annel(s)	eted Stopped T-4 ID Time 2020/7/11 12 2020/7/11 12	2:38:36 Start :43:36 Finish	offlina	- [p <sup>-1-7</sup>	- 1			
₩i: 4 )	Current 20.01.07)(R3) User Tool Charce 2 food V 2 f	View Log View Data(D) Pischarge Res Cog Local Log Perice Los Index Peric W 1 1 2 1	annel(s)	eted Stopped 14 19 Tiee 2020/7/11 12 2020/7/11 12	2:30:36 Event ::30:36 Start :43:36 Finish	Offlins	- (p_ 1-7	- <mark></mark>			
✓ Hi: 4 → 8.0.0.416(20 age Set 9 0.0.1	Current 20.01.07)(R3) User Tool Charge 1-1 Finishes 2.5000 V 0 0 2-1 Finishes 2.5000 V 0 0 4-1 Finishes 2.5000 V	View Log View Data(D) Bischarge Res log Local Log Device Lo Index Peric Ur 1 2 1	annel(s)	eted <b>Stepped</b> 1-4 II Time 2020/7/11 12 2020/7/11 12	Event 2:39:36 Start 2:43:36 Finish	offlins	(Ø. <sup>127</sup>	- [			
₩i: 4 → 8.0.0.416(20 sgc Set 9 0.0.1	Current 2001.07)(R3) User Tool Charge 7 1-1 Finishes 2.5000 V 7 2-1 Finishes 2.5000 V 7 3-1 Finishes 2.5000 V 7 4-1 Finishes 2.5000 V	View Log View Data(D) Bixcharge Res Local Log Berice Lo Index Perice. Vg 1 1 2 1 Berice Type ETS82	annel(s)	eted <b>Stoped</b> <b>I</b> Tiee 2020/7/11 12 2020/7/11 12 2020/7/11 12 Perice II	Event :39:36 Start :43:36 Finish	Offline T-6	Chal ID 1	- 10	J X	<ul> <li>• • • •</li> </ul>	
Hi 4 8.0.0.416(20 age Set 9 0.0.1	Current 2 20.01.07/(R3) User Tool User Tool Pinishes 2.5000 V 0 0 2-1 Pinishes 2.5000 V 0 3-1 Pinishes 2.5000 V Pinishes 2.5000 V	View Log View Data(D) Bischarge Res Local Log Berice Lo Index Derice Vs 1 1 1 2 1 Derice Type BTSB22	sannel(s)	eted Stopped T-4 ID Time 2020/7/11 12 2020/7/11 12 Perice ID	2:39:36 Start 1:43:36 Finish	0ffline 1-6	Chal 10 1	- T-6 - T-7 - T-6 - T-6 - T-7			
₩i1 4 ) 8.0.0.416(20) age Set 9 0.0.1	Current 20.01.07)(R3) User Tool Charee 2.5000 V Caree 2.5000 V Caree 2.5000 V Caree 2.5000 V Caree 2.5000 V Caree 2.5000 V	View Log View Data(D) Bischarge Res Log Log Device Lo Index Perice Vr 1 1 1 2 1 Device Type ITS82	annel(s)	eted Steppet	2:38:36 Frank : 33:36 Finish Unit ID	0fflins	Chal ID 1	- 1-6 - C	ary		

For local logs, some can double-click to see further information, such as reset mappings to see the mapping information before and after the mapping, as shown in the figure below:



													BIS	<u>8.0.0</u>	User r	vianuai
🔤 BTS Cli	ent 8.0.0.416(2020.03.05	5)(R3)													-3	
文件 语	言 设置 用户 工具	1. 帮助														
设备列表	4 <b>7</b>	新申.	伸 相告		保护	停止	完成	恶线								-
- 103	0.0.1							_		_	10.02	-				
		1-4	1-2 1-4	1-3	1-4	1-4 1-4	1-0	1-4	1-0 1-4		1-0 1-0	1.00	1-4			
	「加速的」	地 恒	流放电 「	🔤 通道	首信息											×
	(14)1111反面 -0.00	007 A -	0.0011 A	<b>应</b> 是	单元号	通道是	補助通道	直实通道是	通道类刑 ^		底是	单元号	通道是	補助通道	百实通道是	通道杰刑
	0.0	D. O nAh	0.0 mAh	1	+/45	1	41144302223022	949/102/02/9	1		11-3	+705	10.00	ALC: NO.	9427022/02 -5	ALL
192	0.00	000 %h	0.0000 %h	1	1	1	0	240	1							
🔤 日志				2	1	1	1	0	6							
+400+	20.4 m+			3	1	1	2	1	6							
4地口志	反省口志			4	1	1	3	2	6							
序号	时间	测试员	事件	5	1	1	4	3	6							
19	2020.03.12 17:03:28	admin	单点启动				-	-	-							
20	2020.03.12 16:51:25	admin	单点停止	6	1	1	5	4	6							
21	2020.03.12 16:49:43	admin	接续	7	1	1	6	5	6							
22	2020.03.12 16:46:40	admin	接续	8	1	1	7	6	6							
23	2020.03.12 16:43:25	admin	後狭	a	1	1	8	7	6	-	=>					
29	2020.03.12 16.34.56	admin	半点后初 毀姑工生	-		2		12								
26	2020.03.12 16:25:32	admin	単占自动	10	1	1	9	8	6							
27	2020.03.12 16:03:11	admin	单占自动	11	1	1	10	9	6							
28	2020.03.12 15:46:54	admin	重置映射	12	1	1	11	10	6							
29	2020.03.12 15:14:17	admin	重置映射	13	1	1	12	11	6							
30	2020.03.12 15:05:38	admin	用户: adm	10	•		16		•							
31	2020.03.12 15:04:38	admin	用户: adm 舌甲oh 8+	14	1	1	13	12	6							
33	2020.03.12.15:04:31	admin	里口候切	15	1	1	14	13	6							
34	2020.03.12 15:04:11	admin	用户: adm	16	1	1	15	14	6							
35	2020.03.12 15:03:56	admin	跳转工步	17			16	16	0							
36	2020.03.12 14:50:17	admin	单点启动	-	1	1	10	15	0 V							
37	2020.03.12 14:39:51	admin	重置映射	18	1	11	17	16	8							
38	2020.03.12 14:38:07	admin	修改系统管	L												
<				设备约	と型:BTS82	设	备号:5									
								-								
						会出		亚小一周内日	- 201							
					_	_	_									
📄 当前 🤇	の 「「「」 「」 「」 「」 「」 「」 「」 「」 「」 「」 」 「」	录用户:admin	选择8个通道											00	1 10	① 100%     ③     ①     ③     ③     ③     ③     ③     ③     ③     ⑤
															and the second	and a second second

. . . . . .

### 3.14.20. View Data

Right-click  $\rightarrow$  "View data" to open the test data for the selected channel.The corresponding channel test data can be analyzed. The interface is as shown in the

figure below. Click and the interface of curve setting will appear. The default

parameter setting is: X stands for "time", Y1 stands for "empty", Y2 stands for "empty", Y3 stands for "empty", Y4 stands for "empty". Then click the color under the label property to set the color of the curve displayed in the graph

area III. The menu bar also includes shortcut keys, curve comparison,

🝞 data filtering, 🧮 data expansion of cycle layer, 🗮 data expansion of work

step layer, 🗯 data expansion of record layer, 🔎 export Excel report,

🗄 calculation of DCIR, 💶 switching between data area and graph area, etc.



BTSDA 7.6.0.373(2020.01.03) (R3) - [TEST.Nda]		J									-	0 ×
< TimeVoltage&Current / CapacityVoltage / TimeCapacity&Capacity Density 👷 + 🚱		Cycle ID Cap_C	hg(mAh) Cap_DC	tg(mAh)/DCtgEff	iciencytngy_Chg	(mWh) ngy_OCh	g(mWh					
V216Ease(/) V2 Currentind)		1	150.6	2407.6 15	98.329	631.8	9002.7					^
(a. competer)		1	COCCL Cha	0.02.00.000	450.5	0.0	9.1232	9.1232	0.0000	0.0000		
	1000	-	CCCV_Cing	0.55:15.000	150.6	631.6	4,1000	4,1990	4,1990	0.0000		
Y2 42 11 11 11 11 11 11 11 11 11 11 11 11 11	Y3		CC DCho	4:49-51 000	2467.0	9010 7	4 1044	2,0007	0.0000	3 7344		
	- 1500		Reat	0.02:00.000	0.0	0.0	3 1110	3 2626	0.0000	0.0000		
	(61	2	2402.2	2404.9 1	02.113	9345.4	8993 7					
	- 1400	- 6	CCCV Cho	5:39:15.000	2402.2	8345.4	3 3361	4 1995	3,8678	0 0000		
		1 7	Rest	0:02:00.000	0.0	0.0	4,2007	4,1998	0.0000	0.0000		
39-1100000000000000000000000000000000000	- 1300	8	CC_DChg	4:48:32.000	2404.9	8993.7	4.1654	2.9997	0.0000	3.7344		
110000000000000000000000000000000000000		F 9	Rest	0:02:00.000	0.0	0.0	3.1113	3 2629	0.0000	0.0000		
3.8	1010	3	2403.7	2407.8 1	00.172	9351.0	9005.5					
	- 1200 E	+ 10	CCCV_Chg	5:38:29.000	2403.7	9351.0	3.3364	4.1998	3.8678	0.0000		
	6	E 11	Rest	0:02:00.000	0.0	0.0	4.2007	4.1998	0.0000	0.0000		
	- 1100 E	E 12	CC_DChg	4:48:53.000	2407.8	9005.5	4.1654	2.9997	0.0000	3.7344		
	E Contraction of the Contraction	+ 13	Rest	0:02:00.000	0.0	0.0	3.1110	3.2589	0.0000	0.0000		
	- 1000	4	2405.3	2407.0 1	00.028	9357.7	9003.0					
		+ 14	CCCV_Chg	5:38:38.000	2406.3	9357.7	3.3311	4.1998	3.8665	0.0000		
34- when it is a second s	- 900	15	Rest	0.02.00.000	0.0	0.0	4.2007	4.1996	0.0000	0.0000		
		10	CC_Dung	4:40:47.000	2407.0	8003.0	4.1007	5.9900	0.0000	3.7340		
3.3	- 800		2404.3	2402.4	0.0	0.0	5.1110	3.2020	0.0000	0.0000		
		10	0003/ 084	E-22-49-050	2454.2	9252.7	2 2162	4 1000	2 9679	0.0030		
32	- 700	10	Pest	0.02:00.000	0.0	0.0	4 2007	4 1995	0.0000	0.0000		
		20	CC DCha	4:45:14 000	2402.4	8982.0	4 1651	2 9994	0.0000	3,7335		
	- 603	- 21	Rest	0.02.00.000	0.0	0.0	3,1132	3,2710	0.0000	0.0000		
30		6	2401.8	2400.5	99.944	9346.3	8974.8					
	- 605 E	1 22	CCCV_Chg	5:39:50.000	2401.8	9346.3	3.3457	4.1995	3.8687	0.0000		
29-	- <b></b> E	÷ 23	Rest	0:02:00.000	0.0	0.0	4.2007	4,1998	0.0000	0.0000		
	E	± 24	CC_DChg	4:45:00.000	2400.5	8974.8	4.1648	2.9991	0.0000	3.7335		
28	+02	± 25	Rest	0:02:00.000	0.0	0.0	3.1141	3.2750	0.0000	0.0000		
		7	2398.6	2394.0	99.810	9337.5	8945.6					
2/-	- 309	- 26	CCCV_Chg	5:39:48.000	2398.6	9337.5	3.3506	4,1995	3.8699	0.0000		
28-		- 2/	Hest	0.02.00.000	2224.0	0.0	4.2004	4,1909	0.0000	0.0000		
	- 200	1 20	Dest	6.07-50.050	2054.0	0.0	3 1172	2 2874	0.0000	0.0000		
25		. 29	2392.7	2393.4 1	00.030	9321.1	8942.4	0.2014	0.0000	0.0000		
	- 100	F 30	CCCV Cha	5:40:54:000	2392.7	9321.1	3 3658	4 1989	3 8733	0.0000		
		- 31	Rest	0.02.00.000	0.0	0.0	4 2001	4,1909	0.0000	0.0000		
	- 0	+ 32	CC_DChg	4:47:10.000	2393.4	8942.4	4.1632	2.9997	0.0000	3.7320		
23-	8	8 33	Rest	0.02:00.000	0.0	0.0	3.1181	3.2883	0.0000	0.0000		
22-	100	9	2391.1	2385.7	99.773 !	9318.4	8908.4					
		± 34	CCCV_Chg	5:41:57.000	2391.1	9316.4	3.3668	4,1989	3.8733	0.0000		
2.1-	200	÷ 35	Rest	0:02:00.000	0.0	0.0	4.2001	4.1989	0.0000	0.0000		
		+ 36	CC_DChg	4:46:16.000	2385.7	8908.4	4.1623	2.9997	0.0000	3.7301		
2.0-		1 37	Rest	0.02.00.000	0.0	0.0	3.1212	3.3026	0.0000	0.0000		
		10 10	2302.9	2307.2 1	2212.0	4242.0	2 2 2 4 7	4.4000	1 4 7 7 7	0.0000		
	- 400	1 38	Dect Long	0.41.05.000	2082.9	0.0	4 2001	4 1909	0.0000	0.0000		
18-		40	CC DCM	4:46:27.000	2387.2	8914.1	4 1620	2 9991	0.0000	3,7304		
	600	40	Reat	0.02.00.000	0.0	0.0	3.1197	3 2983	0.0000	0.0000		
17-		11	2385.2	2384.6	99.953	9298.0	1904 /	0.2800		0,1000		
		+ 42	CCCV Cho	5:40:33.000	2385.2	9298.0	3.3789	4,1985	3.8752	0.0000		
		43	Rest	0:02:00.000	0.0	0.0	4.2001	4.1985	0.0000	0.0000		
x Time(h:min.s.ms)	<											>
al 1 5	10				15			20			25	20

# 3. 14. 21. Test Data Save As

Data "saved as" operation method:

Right-click menu -->"Save as", select "Nda file" or "Excel file" and then select the export path, as shown in the figure below:

BTS Client 8.0.0.416(20)	20.01.07)(R3)			 ٥	×
File Language Set	User Tool	Help			
Device List 4	Charge	Single Start(S)	Protected Stopped Finished Offline		-
▼ 127.0.0.1	1-1	Single Stop(P)	1-3 1-4 1-5 1-6 1-7 1-6		
L. 🔉 1	Ŭ.	All Start(Q)			
	Finish	Unit Start	inished Finished Finished Finished Finished		
	2.5000 \	All Stop(T)	5000 V 2.5000 V 2.5000 V 2.5000 V 2.5000 V 2.5000 V		
		Schedule pause	a a a a a		
	2-1	Set Parallel	2-3		
	O Y	Free Parallel			
	Finish	Chamber is set	inished Finished Finished Finished Finished		
	2,5000 \	Remove Chamber	5000 V 2.5000 V 2.5000 V 2.5000 V 2.5000 V 2.5000 V		
		Continue(O)			
	3-1	Jump(J)			
	0	Move(K)			
		Reset Step	الوردية وودية وودية وودية وودية		
	2.5000	Comu Stone(M)	Inished         Finished         Finished		
		Chol Locking			
		Channel unlock			
	<b>O?</b> 4-1	D			
		Reset Alarm(R)			
	Finish 2 5000 V	Reset Map(M)	nished Finished Finished Finished Finished Finished		
	2.0000	Chnl Info(I)			
		Clear Flag(L)	a a a a a		
		Save As	Nda(Y)		
		Unit Settings (U)	Excel(X)		
		View Log			
📄 Present 🦪 Hi: 👌 🕨	Current lo	View Data(D)	innel(s)		) 100%



The naming format of data storage file can be configured through system settings, as shown in the figure below:



数据另存为设置

# 3.14.22. Channel Info

By inquiring channel information, you can know the details of the selected channel. For example, you can view the current channel range, channel number, execution work step, software version and other details. indicates the currently executed work step.

Operation method:

1. Select the channel to view (the selected channel has a yellow box);

2. Double-click or right-click "Channel Info".

3. The range information of the dual-range device can be viewed through the "current range information" of the channel information interface.



hnl Atta	ributes		Value	Chol A+	tributes		Value		Chol Attr	ibutes		Value	
av-linit	-Chal		#1-1-1	Range of	f Vol+		FV 5V		Aur Chal	Vol+		5V	
Start Ti	me	202	#1 1 1 0-07-11 12:38:36	Curr Be	nge		+3/-34		Aux Chol	Temp		100°C	
Start St	ep ID	202	1	P/N		2	020-07-11 12-38	-36	Active Ma	terial		100 0	
reator				Remark					Nominal C	ар			
tep Tim	e		00:00:00	Barcode					Step File				
tep Cap			0.0000 Ah	Server	Version	BTSS	erver(R3)-7.6.0.	363	Formation	Name			
Cycle			1	Client	Version	BTS (	Client 8.0.0.56(	(202	Main Chnl	XWJ	BTS24-	Main-XWJ_VER20190730	
ZWJ/XWJ	Version	Double	click for more i	ZWJ Ver	sion	4S_	1.2.26.BTS24-201	90730	Aux Versi	on	BTS24-	Aux-XWJ_VER20190730	
tep ID	Step	Name	Step Time(hh:mm:s:	s:ms)	Voltage	(V)	Current(A)	Cut-o	ff Curr(A)	Capaci	ty(Ah)	Other	^
1	Rest		00:05	5:00.000								1 record conditi	
2	End												
								-					
													1
								-					
								-					
								-					
	-												
								_					
													1
								-					-

In the "Channel Information" interface, double-click the item "ZWJ/XWJ Version" to view more detailed information, as shown in the figure below:

		lantanna sa	
XWJ Property	Value	ZWJ Property	Value
XWJ ID	1	ZWJ GUID	06060FDC0A0D77060AAC040BB6010D1C
XWJ GUID	F4040890040CA70B03B0040689030036	GUID Build Date	2000-00-00 00:00:00
GVID Build Date	2000-00-00 00:00:00	Product SN	201907300001
Product SN	201907300001	Manufacturing Date	2000-00-00 00:00:00
Manufacturing Date	2000-00-00 00:00:00	ZWJ Program	1
Expiry Date	2000-00-00 00:00:00	CNP Date	2000-00-00 00:00:00
XWJ Function	FFFFFFF	CNP Language	1
KB value modificatio	1	The compatibility of	1
The First Calibratio	2000-00-00 00:00:00		
Latest Calibration Time	2000-00-00 00:00:00		
Latest Calibration S	1		
Latest Calibration T	1		
Latest Calibration T	neware		
Copy of XWJ Program	1		
CNP Date	2000-00-00 00:00:00		
XWT TD	5		
<			>

Click "save" to save the current working step

# 3.15. List

Channel status parameters are displayed in the form of list, and the list display interface has the same functions as the channel graphical display interface, such as starting test, stopping test, viewing data, etc.



le Language Set Us	ser	Tool	Help											
wice List 🛛 🕈		Charge	Discharge	Rest	Protecte	ed	Stopped	ished Off	ine					33
▼ 127.0.0.1	1	index	Chal ID	Barcode	Cycle	Step	Work Status	Voltage(V)	Current(A)	Time	Total Time	Chg Cap(Ah)	DChg 🔡	Large Icon
L. D 1		1	1-1		0	0	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000		Small Icon
		2	1-2		0	0	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	88	List
		3	1-3		0	0	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000		Grading
		4	1-4		0	0	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	3	Match
		5	1-5		0	0	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.	. 0000
		6	1-6		0	0	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.	0000
		7	1-7		0	0	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.	0000
		8	1-8		0	0	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.	. 0000
		9	2-1		0	0	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.	. 0000
		10	2-2		0	0	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0	0000
		11	2-3		0	0	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.	0000
		12	2-4		0	0	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.	0000
		13	2-5		0	0	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.	. 0000
		14	2-6		0	0	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.	. 0000
		15	2-7		0	0	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.	. 0000
		16	2-8		0	0	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.	. 0000
		17	3-1		0	0	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.	0000
		18	3-2		0	0	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.	. 0000
		19	3-3		0	0	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.	. 0000
		20	3-4		0	0	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.	. 0000
		21	35		0	0	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.	. 0000
		22	3-6		0	0	S Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.	0000
		23	3-7		0	0	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.	0000
		24	3-6		0	0	G Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	• 中 • • ④	) 🍨 📟 🐁

# 3. 15. 1. Right Click Menu

The list interface has the same right-click menu function as the channel graphical interface, as shown in the figure below:

le Language	Set Us	er Tool	Help									
evice List	4	Charge	Discharge	Rest Protected	Stopped	i shed Off	ine					\$\$ •
<b>7</b> 127. 0. 0. 1		Index	Chal ID	Single Start( <u>S</u> )	Work Status	Voltage(V)	Current(A)	Time	Total Time	Chg Cap(Ah)	DChg Cap(Ah)	
L. D 1		1	1-1	Single Stop(P)	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		2	1-2	All Start(Q)	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		3	1-3	Unit Start	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		4	1-4	All Stop()	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		5	1-6	Schedule pause	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		6	1-6	Set Parallel	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		7	1-7	Free Parallel	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		8	1-8	Continue(O)	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		9	2-1	Jump(J)	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		10	2-2	Move(K)	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		11	2-3	Reset Step	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		12	2-4	Reset barcode	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		13	2-5	Copy Steps(W)	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		14	2-6	Chnl Locking	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		15	2-7	Channel unlock	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		16	2-6	Reset Alarm(R)	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		17	3-1	Reset Man(M)	S Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		18	3-2		S Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		19	3-3	Chnl Into()	S Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		20	3-4	Clear ridg(L)	S Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		21	3-6	Save As >	S Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		22	3-6	Unit Settings (U)	S Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		23	3-7	View Log	S Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		24	3-6	View Data(D)	🔮 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	🔰 中 , 🙂 🍨	📟 🐁 '
Present 🥑 Hi	5 4 Þ W	/elcome to	http://www.new	Сору	Current login us	er:admin					9	a v

# 3. 15. 2. Display Parameter Configuration

The list shows that you can set the column parameters to display. Operation method:

- 1. Put the mouse over the head of the table;
- 2. Right click -->Check the parameters to display.



ile Language	Set User	Tool	Help	-	Chal ID								
evice List	4	Charge .	Discharge		Input Barcode	Zin	ished Off	ine					- 88
▼ 127.0.0.1 r	ight click	Index	Chal ID	84 🗸	Barcode	tatus	Voltage(V)	Current(A)	Time	Total Time	Chg Cap(Ah)	DChg Cap(Ah)	
		1	1-1	~	Cycle	shed	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		2	1-2	~	Step	shed	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		3	1-3		Start Time	shed	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		4	1-4		End Time	shed	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		5	1-5		End time	shed	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		6	1-6		P/N	shed	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		7	1-7		Step File	shed	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		8	1-8	~	Work Status	shed	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		9	2-1	~	Voltage	shed	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		10	2-2	~	Current	shed	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		11	2-3		Current current range Time	shed	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		12	2-4	~		shed	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		13	2-6	~	Total Time	shed	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		14	2-6	~	Chg Cap	shed	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		15	2-7	~	DChg Cap	shed	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		16	2-8		Capacity	shed	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		17	3-1		Specific Capacity	shed	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		18	3-2		Chg Eng	shed	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		19	3-3		Energy	shed	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		20	3-4		Active Material	shed	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		21	3-5		Remark	shed	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		22	3-6		OCV	shed	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		23	3-7		Plateau Time1	shed	2.5000	0.0000	00:00:00	00:00:00	0.0000	0.0000	
		24	3-8		Plateau Can1	shed	2 5000	0.0000	00.00.00	00.00.00	0.000	👌 中 🤊 🙂 🍨	📾 🐁 1

# 3.15.3. Barcode

List display has barcode input function, right click barcode input column : delete barcode, clear barcode, batch barcode generation, import barcode, copy/export barcode and other functions.

Device List I		N1 1					0.0001						
Device List +	Uharge	Discharge	Kest	Protected Stopped	110	1 Shed	Uffline						33 <b>*</b>
▼ 127.0.0.1	Index	Chal ID	Input Barcode	Barcode	Cycle S	Step	Work Status	Voltage(V)	Current(A)	Time	Total Time	Chg Cap(Ah)	DChg C
	1	1-1	right click	Delete Barcode	0	1	S Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	2	1-2		Clear Barcode		- 1	Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	3	1-3		Batch Barcodes Gene	ration	- 1	S Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	4	1-4		Import Barcode(s)		- 1	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	5	1-5		Export Barcode(s)			Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	6	1-6		Copy			Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	7	1-7		粘贴			Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	8	1-6			U	-	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	9	2-1			0	0	🔮 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	10	2-2			0	0	Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	11	2-3			0	0	S Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
-	12	2-4			0	0	Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	13	2-6			0	0	Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	14	2-6			0	0	Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	15	2-7			0	0	Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	16	2-6			0	0	Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	17	3-1			0	0	Pinished	2 5000	0.0000	00.00.00	00:00:00	0.0000	
	18	3-2			0	0	Finished	2 5000	0.0000	00:00:00	00:00:00	0.0000	
	19	3-3			0	0	Einishad	2 5000	0.0000	00:00:00	00:00:00	0.0000	
	20	3-4			0	-	Rinishad	2 5000	0.0000	00:00:00	00:00:00	0.0000	
	20	2.5			0	0	R Finished	2.5000	0.0000	00.00.00	00:00:00	0.0000	
	21	3-0			0	0	visiol.	2.5000	0.0000	00.00.00	00.00.00	0.0000	
	22	370			0	0	Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	23	3-1			U	U	Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	

#### **Barcode input**

After manual input or scanning barcode input, start test by"single start", and bound the barcode to the the corresponding channel.



Device List 7	Charge	Discharge	Rest Pr	rotected Stopped	76	nished	Offline						# ·
▼ 127.0.0.1	Index	Chal ID	Input Barcode	Barcode	Cycle	Step	Work Status	Voltage(V)	Current(A)	Time	Total Time	Chg Cap(Ah)	DChg C
L. D 1	1	1-1			0	0 (	Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	2	1-2			0	0 (	Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	3	1-3			0	0 (	J Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	4	1-4			0	0 (	Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	5	1-5			0	0 (	J Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	6	1-6			0	0 (	J Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	7	1-7			0	0 (	Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	8	1-8			0	0 (	J Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	9	2-1			0	0 (	J Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	10	2-2			0	0 (	J Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	11	2-3			0	0 (	J Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	12	2-4			0	0 (	J Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	13	2-5			0	0 (	J Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	14	2-6			0	0 (	J Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	15	2-7			0	0 (	J Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	16	2-8			0	0 (	J Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	17	3-1			0	0 (	🗲 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	18	3-2			0	0 (	Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	19	3-3			0	0 (	J Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	20	3-4			0	0 (	J Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	21	3-6			0	0 (	J Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	22	3-6			0	0 (	Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	23	3-7			0	0 (	Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	24	3-8			0	n (	Finishad	2 5000	0.0000	00.00.00	00.00.00	0.0000	

Operation method:

(1) Check "input barcode" (new input barcode for next test) and "barcode" (currently testing barcode);

(2) Input the barcode manually and press "enter" or scan the barcode with a barcode gun;

(3)The edit box will automatically skip to the next selected channel and continue scanning the barcode;

(4)"Single start" the corresponding channel after scanning is completed.

#### Note:

1. Barcode scanning will be automatically saved. As long as the test is not started, the scanned barcode will still exist after switching back to other devices or software restart.

2. When selecting "input barcode" menu, the display box of other columns cannot be selected, otherwise the corresponding right-click menu will not be displayed.

3. The channel that does not select "input barcode" cannot scan the barcode. If the channel that selects input barcode is discontinuous, after scanning the current channel, it will jump to the next input channel instead of the serial number of the next channel.

4. The "input barcode" column can be imported and exported, and the "barcode" column can be exported.

#### **Delete the Barcide**

In the input barcode column, select the channel and right click to delete the barcode.



#### **Clear Barcode**

In the input barcode column, right-click and select "clear barcode", it will clear all barcodes in the input barcode column.

#### **Batch barcode generation**

Software can batch generate continuous barcodes for easy testing Operation method:

- 1. Select "input barcode";
- 2. Right click -> "batch barcode generation";
- 3. Fill in the first barcode -> click "Yes"

Device List 🛛 📮	Charge	Discharge	Rest	rotected Stopp	ed B	inishe	Offline					1	¥ •
▼ 127.0.0.1	Index	Chal ID	Input Barcode	Barcode	Cycle	Step	Work Status	Voltage(V)	Current(A)	Tine	Total Time	Chg Cap(Ah)	DChg C
L D 1	1	1-1			0	0	📀 Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	2	1-2		Delete Ba	rcode		shed	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	3	1-3		Clear Ban	code		shed	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	4	1-4		Batch Bar	codes Ge	eneratio	on shed	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	5	1-6		Import Ba	arcode(s)		shed	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	6	1-6		Export Ba	rcode(s)		shed	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	7	1-7		Сору			shed	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	8	1-8		和自知自			shed	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	9	2-1			0	0	S Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	10	2-2			0	0	S Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	11	2-3			0	0	S Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	12	2-4			0	0	S Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	13	2-5			0	0	S Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	14	2-6			0	0	S Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	15	2-7			0	0	S Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	16	2-8			0	0	S Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	17	3-1			0	0	S Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	18	3-2			0	0	S Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	19	3-3			0	0	S Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	20	3-4			0	0	S Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	21	35			0	0	S Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	22	3-6			0	0	S Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	23	3-7			0	0	S Finished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
	24	3-8			0	0	R Finished	2 5000	0.0000	00.00.00	00.00.00	0.0000	

		-						_		_							
Device	List	4	Charge	Discharge	Rest	Protected	Stopped	1	inished	1	Offline					1	ss •
	127.0.0.1		Index	Chal ID	Input Barcode	Ba	rcode	Cycle	Step	¥o	rk Status	Voltage(V)	Current(A)	Time	Total Time	Chg Cap(Ah)	DChg C
L	▶ 1		1	1-1				0	0	🕑 F	inished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
			2	1-2				0	0	🕑 P	inished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
			3	1-3				0	0	🕑 P	inished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
			4	1-4				0	0	🕑 F	inished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
			5	1-6	₩ 世生	成条码							×	00:00:00	00:00:00	0.0000	
			6	1-6										00:00:00	00:00:00	0.0000	
			7	1-7		Start NO				En	idina No.			00:00:00	00:00:00	0.0000	
			8	1-8	4	2.始底是:	1			终日	- 库是:	32		00:00:00	00:00:00	0.0000	
			9	2-1	~	244717-51				~1				00:00:00	00:00:00	0.0000	
			10	2-2									_	00:00:00	00:00:00	0.0000	
			11	2-3	đ	起始条码:									00:00:00	0.0000	
			12	2-4		The first barcode 00:00:00 00:00:00											
			13	2-5	00:00:00 00:00:00												
			14	2-6			7/2				Terit			00:00:00	00:00:00	0.0000	
			15	2-7			第五				- 単以 月			00:00:00	00:00:00	0.0000	
			16	2-6			Yes				Cance	I		00:00:00	00:00:00	0.0000	
			17	3-1										00:00:00	00:00:00	0.0000	
			18	3-2				0	0	🕑 F	inished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
			19	3-3				0	0	🕑 P	inished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
			20	3-4				0	0	• F	inished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
			21	3-6				0	0	Ø 1	inished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
			22	3-6				0	0	Ø 1	/inished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
			23	3-7				0	0	0 F	/inished	2.5000	0.0000	00:00:00	00:00:00	0.0000	
			24	3-8				0	0		linished	2 5000	0.0000	00.00.00	00.00.00	0.0000	



#### Import barcode

Select the barcode input column, select the channel to import the barcode for the first one, right-click to import the barcode file

	-	- ·	
⊖	Note:	Barcode import starts with the selected channel.	

#### **Export Barcode**

Select input barcode or barcode column, right click to select export barcode, the whole column of barcode will be exported and saved as TXT file.

#### Сору

Select the barcode to be copied, right click to copy.

### 3. 16. Capacity Grading

During capacity grading, the battery is graded according to its performance conditions. The software can set the grading conditions and view the grading results.

# 3. 16. 1. Grading Conditions

Grading is calculated using the test data of the last cycle.

#### Description of grading conditions:

Discharge capacity: The discharge capacity of the last step in the last cycle;

**Discharge time:** The discharge time of the last step in the last cycle;

**Plateau time :** In the last cycle, the time when the last step reaches the specified plateau voltage;

**Plateau capacity:** In the last cycle, the capacity of the last discharge step when the specified plateau voltage is reached;

**Open-circuit voltage:** In the last cycle, the voltage of the first recorded data;

**Median discharge voltage:** In the last cycle, the voltage corresponding to half of the discharge capacity of the last discharge step;

**CC charge time**: In the last cycle, the time taken by the last constant current charging step;

**Charge discharge efficiency:** In the last cycle, charging working capacity/discharging working capacity;

**Recovery voltage:** In the last cycle, the termination voltage of the last rest step;



Final voltage: In the last cycle, the last voltage of the discharging step.

Grading interval setting:

Method 1: Double-click the edit box to enter the edit state and input each interval in the format of XX-XX (minimum-maximum)

Method 2: right-click --> "add sorting interval"

You can either save the sorting criteria to a file or load the saved sorting criteria from a file.

Sorting can operate on multiple devices at the same time. The default is to operate only on the current device. To operate on multiple devices, check the corresponding device in the device list on the left.

Language Set Use	Tool	Help												
eList 4	Charge	Discharge	Rest	Protected	Stopped	Fit	nished	Offline						53
127.0.0.1	Index	Chal ID	Input Barcode	Baro	rode C	ycle	Step	Work Status	Voltage(V)	Current(A)	Time	Total Time	Cł 🔡	Large Icon
▶ 1	1	1-1				0	0 (	Finished	2.5000	0.0000	00:00:00	00:00:00	***	Small Icon
	2	1-2				0	0 (	J Finished	2.5000	0.0000	00:00:00	00:00:00	33	List
	3	1-3				0	0 (	🗲 Finished	2.5000	0.0000	00:00:00	00:00:00		Grading
	4	1-4				0	0 (	🗲 Finished	2.5000	0.0000	00:00:00	00:00:00	3	Match
	5	1-5				0	0 (	Finished	2.5000	0.0000	00:00:00	00:00:00		0.0000
	6	1-6				0	0 (	🗿 Finished	2.5000	0.0000	00:00:00	00:00:00		0.0000
	7	1-7				0	0 (	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00		0.0000
	8	1-8				0	0 (	🕑 Finished	2.5000	0.0000	00:00:00	00:00:00		0.0000
	9	2-1				0	0 (	🔊 Finished	2.5000	0.0000	00:00:00	00:00:00		0.0000
	10	2-2				0	0 (	🗲 Finished	2.5000	0.0000	00:00:00	00:00:00		0.0000
	11	2-3				0	0 (	J Finished	2.5000	0.0000	00:00:00	00:00:00		0.0000
	12	2-4				0	0 (	Finished	2.5000	0.0000	00:00:00	00:00:00		0.0000
	13	2-6				0	0 (	🗲 Finished	2.5000	0.0000	00:00:00	00:00:00		0.0000
	14	2-6				0	0 (	🗲 Finished	2.5000	0.0000	00:00:00	00:00:00		0.0000
	15	2-7				0	0 (	🗲 Finished	2.5000	0.0000	00:00:00	00:00:00		0.0000
	16	2-8				0	0 (	🗿 Finished	2.5000	0.0000	00:00:00	00:00:00		0.0000
	17	3-1				0	0 (	🗿 Finished	2.5000	0.0000	00:00:00	00:00:00		0.0000
	18	3-2				0	0 (	🗿 Finished	2.5000	0.0000	00:00:00	00:00:00		0.0000
	19	3-3				0	0 (	9 Finished	2.5000	0.0000	00:00:00	00:00:00		0.0000
	20	3-4				0	0 (	🗿 Finished	2.5000	0.0000	00:00:00	00:00:00		0.0000
	21	3-6				0	0 (	J Finished	2.5000	0.0000	00:00:00	00:00:00		0.0000
	22	3-6				0	0 (	Finished	2.5000	0.0000	00:00:00	00:00:00		0.0000
	23	3-7				0	0 (	Finished	2.5000	0.0000	00:00:00	00:00:00		0.0000
	24	3-8				0	0 1	Finished	2 5000	0.0000	00.00.00	00.00.00		0.0000

and a set of the set o	User Iool Help									
wice List	<b>4</b>								8	F •
▼ 127.0.0.1	GradingSetting Grad	ing Result								
	🖃 🖉 🤝 BTS82	Class	DChg Cap (Ah)	DChg Time(min)	Plateau Cap1(Ah)	Plateau Cap2(Ah)	Plateau Cap3(Ah)	Plateau Timel(min)	Plateau Time2(min)	Platea
	🗄- 🗷 🕨 🤳	A	right click	Add Certics Isternal						
		B		Add Sorting Interval						
		С		Delete Selected						
		D		Delete All						
		E		Save Template						
		F		Apply Template						
		Ģ								
		н								
		I								
		J								
		K								
		L								
		M								
		N								
		0								



# 3. 16. 2. Grading Result

After setting the sorting conditions, click the "sorting" button, and the software will sort according to the set conditions. After completing the sorting, the software will automatically jump to the sorting results interface. In the sorting results interface, the channel can be lit to facilitate users to take away the battery according to the sorting results, as shown in the figure below:



分选结果

# 3.17. History Query

The history interface provides functions such as searching historical data, viewing historical data and exporting historical data

Click "history" of the device list interface to enter the history interface, as shown in the figure below:



BTS Client 8.0.0.416(	2020.01.07)(	(R3)									- 0 ×
File Language Set	User To	ol Help	1 M 1.	c1 1							
Device List	4 Index	ID	ID	ID	Start Time	End Time	Count	P/N	Barcode	Creator	Remark
Tuna											
Dunian TD											
Neite TD											
Chal ID											
_Start Time											
Uncertain											
O Recent 1 🗘 Day	/5										
○ From 2018年10月 9E	4										
To 2020年 7月12日	-										
_P/N											
Creator	2										
Remark	-										
	1										
Barcode											
	9										
An A											
40	ᅫ										
Search											
esent 🦪 Mistory 4	Welcom	e to http://w	ww.neware.	.com.cnl (Tel)	800-830-8866 Curre	nt login user:admir	1				

Specific search operations are as follows:

1. Setting query condition, such as type selection: BTS82, device number input: 01, unit number input: 1, click "search", the corresponding search results will be displayed in the list.

2. Settings query condition, such as input startup time, battery batch number, creator, remarks and other conditions, each text box can also input fuzzy conditions, click "search", the corresponding search results will be displayed in the list, pay attention to the search conditions is the logical "and" relationship.



# 4. Appendix

### 4.1. Attentions

Before using Neware products, please note the following:

- Please select the type of power cord according to the power of the equipment and check the rating voltage before connecting the equipment to the power socket to ensure that the required voltage and frequency match the actual power supply.
- Do not mix new and old batteries or batteries of different models.
- When working with multiple devices, do not bring the devices too close together, which may easily lead to air backflow or air preheating and is not convenient for equipment maintenance.
- Do not disassemble and install the circuit board without authorization to avoid communication errors or damage to the equipment.
- Please electrify the device before use to check whether the device is normal and whether the probe of the battery clamp is damaged. If it is damaged, please do not use it and paste labels for comments and timely maintenance.
- When the battery is installed on the device, please pay attention to the correct connection between the positive and negative poles of the battery and the positive and negative poles of the device.
- When the battery is put in, the space between the upper and lower jig should be adjusted, and the lower jig should be pressed down by at least half to ensure good contact.
- Easy to scratch batteries if the space between upper and lower jig is too small;The accuracy of test data would be affected if the space is too large.
- During the test, please set the working step correctly, otherwise the battery will be damaged or even cause a safety accident.
- When the internal temperature of the device exceeds 50°C, please check whether the fan is working normally.
- If abnormal voltage and current data of a channel are found during the use, the channel shall be stopped immediately, labeled, and the after-sales department of Neware shall be contacted for maintenance.



### 4. 2. Maintenance

The equipment you are using is of excellent design and workmanship and should be used with care. The following Suggestions will help you effectively use the warranty service.

- In order to ensure the best performance and accurate test accuracy of the equipment, it is recommended to conduct calibration operation every year.
- When upgrading or reinstalling the new version of the software, please uninstall the previous version, and make sure the test data is well saved.
- Please use the equipment according to the instructions in this manual. Do not try other methods unless following Neware engineers' professional guidance.
- Keep the equipment dry. Rain, moisture, and various liquids or moisture may corrode electrical circuits.
- Equipment should be kept clean and should not be used or stored in dusty or dirty places, where can damage its removable parts and electronics.
- Do not store the equipment in an overheated place, as the high temperature will shorten the life of the electronic equipment.
- Do not store the device in a place that is too cold. Otherwise, when the temperature of the device rises to room temperature, moisture will form inside the device, which will destroy the circuit board.
- Do not knock or vibrate the equipment. Rough handling of the equipment can damage the internal circuit boards and delicate structures.
- Do not clean equipment with strong chemicals, detergents or strong detergents.
- When replacing parts, only matching or approved parts shall be used. Unauthorized parts, modifications or accessories can affect the performance of the equipment and even damage the equipment.
- Make a backup of the data that needs to be retained (such as test data, grading data).
- Proper use and maintenance of equipment will help you to better play the product performance. Our long-term customer investigation and after-sales service practice have shown that the equipment failure in many cases is caused by improper operation or careless maintenance methods. If the equipment cannot work normally, we suggest you to read the user manual of this product carefully or contact Neware customer service for consultation.



#### 4. 3. After sales service

- Free technical training: the company provides free technical training before and after sales, and specialized technical engineers are at your service at any time. We sincerely welcome you to visit and investigate.
- Neware Telephone support: When using Neware products, users can call the service hotline of the company for consultation if they encounter difficulties. The consultation time will be based on the work time of Neware company.
- Troubleshooting support: After receiving the customer's notice about the fault or abnormal operation of Neware products, if the fault cannot be corrected by Neware telephone support, Neware will solve the problem as soon as possible within the service time, restore to the normal operation, and correct, repair or adjust or replace the problem parts of the products.
- Response time: Neware shall make reasonable efforts to solve customer's problem at the first priority. The company has set up an 800 free service hotline: 800-830-8866.

### 4. 4. Contact NEWARE

Thank you very much for trusting Neware products. We hope that Neware products can become your right-hand man in the future.We provide you with a variety of self-service, to help you more quickly solve the problem that equipment encounters in the operation.In order to solve the problem quickly and effectively, we suggest that you contact us in the following ways in time when you encounter problems.

Company Service Hotline: 800-830-8866 Visit NEWARE Website: https://newarebattery.com/ Business Hotline: 0755-83108866, 83108867,83108868 After-sales Service Hotline: 0755-83128100, 83128600,83128900 Contact person's email: lulu@newarebattery.com