

9834

Operation Manual

S/N : 900983401 REV:J

9834 Operation Manual Menu

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一、 Introduction

The main functions of the 9834 software are used to measure control, edit test steps and receive test data. The test step can be set to test, and the test can be started or stopped, or when it is stopped, the system will automatically set DC Load to OFF, allowing users to operate with peace of mind to avoid the risk of electric shock

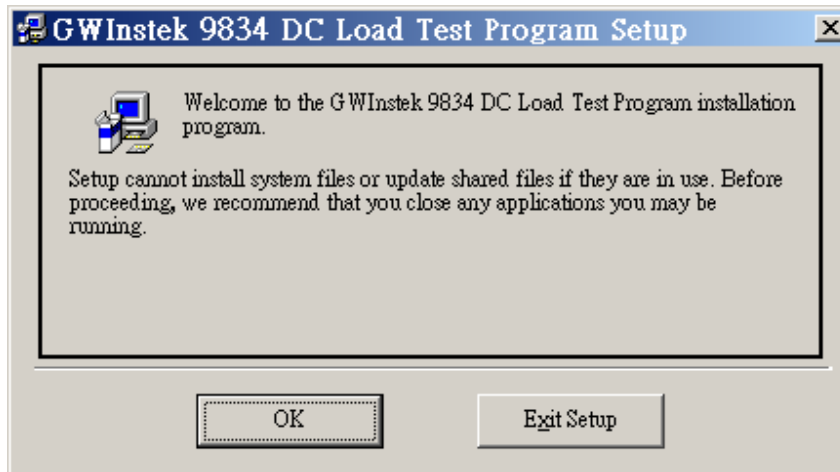
二、 System requirements

1. Personal computer
 - a. Operation System : Windows 7 or above
 - b. Display Card : resolution 1280*800
 - c. Display : 18.5" resolution 1280*800
 - d. Mouse
 - e. Keyboard
 - f. Hard Disk Space : above 500Gbytes
 - g. Memory : above 4Gbytes
2. GWInstek DC Electronics Load , used for function

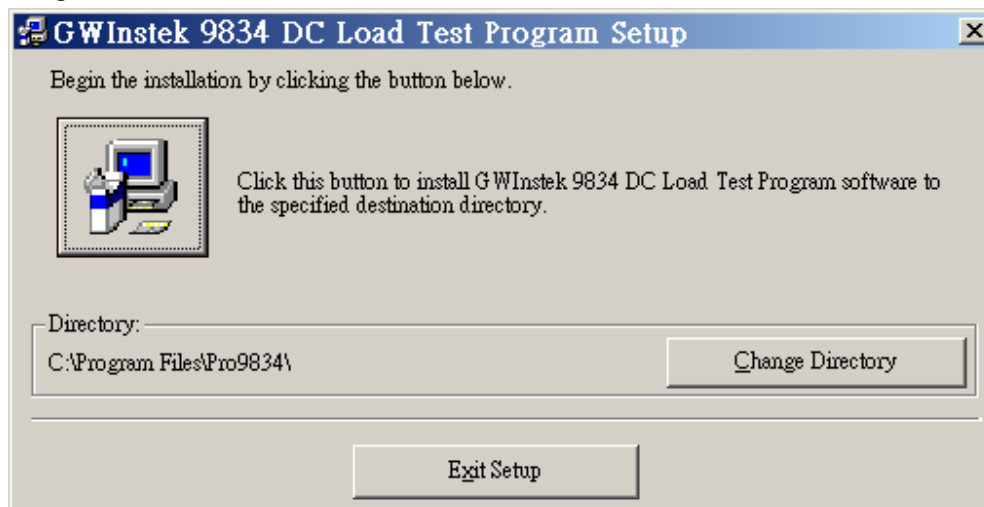
三、 9834 Software Installation

9834 software has a total of 1 CD, the installation steps are as follows

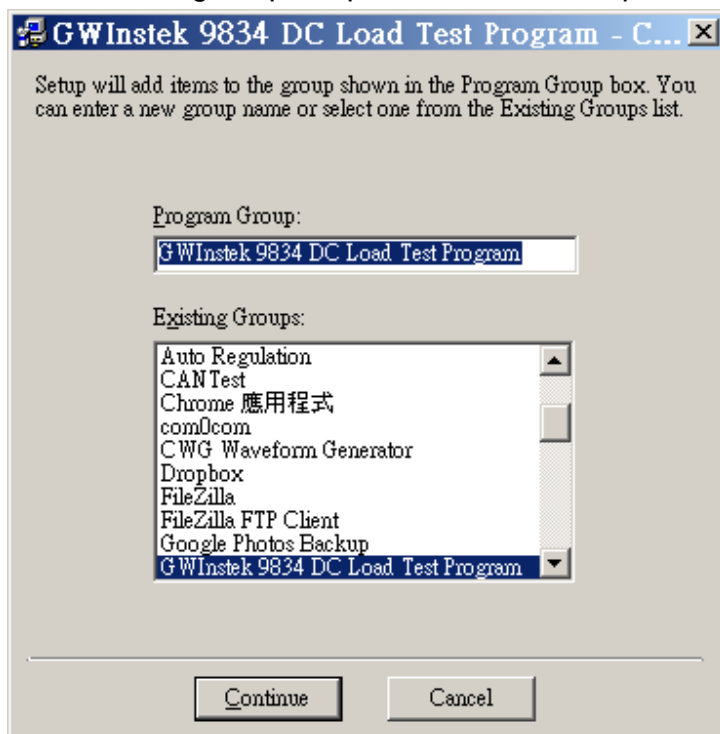
1. Boot the computer to the Windows screen.
2. Insert the CD into the root directory and execute Setup.exe, the following screen will appear.



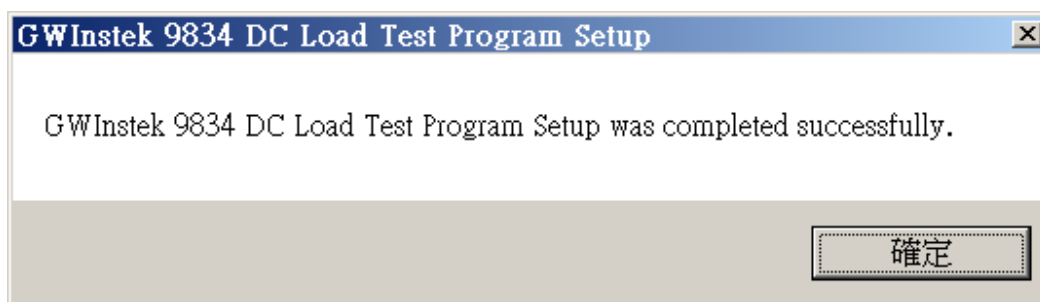
3. It is recommended to change the directory to D:\Pro9834 and follow the installation diagram to install.



4. After selecting the path, press "Continue" to proceed with the installation.



5. After the installation is complete, the following screen will be displayed, please press "OK".



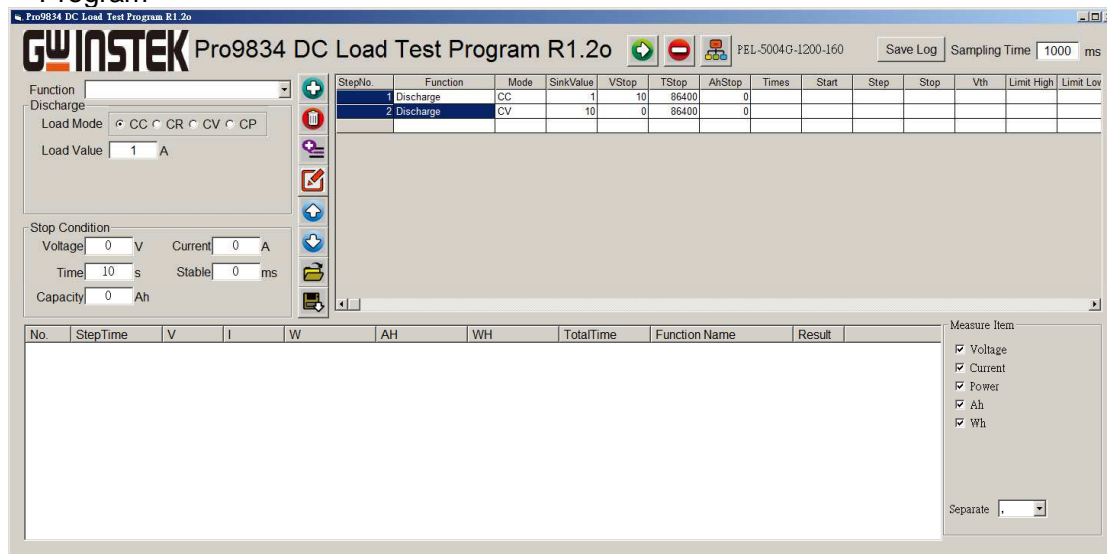
6. Press the start button on the Windows screen → select GWInstek 9834 DC Load Test Program in the program → press GWInstek 9834 DC Load Test Program to execute.










四、9834 operating instructions





1. Main page

- a. Run the assembly\GWInstek 9834 DC Load Test Program\GWInstek 9834 DC Load Test Program

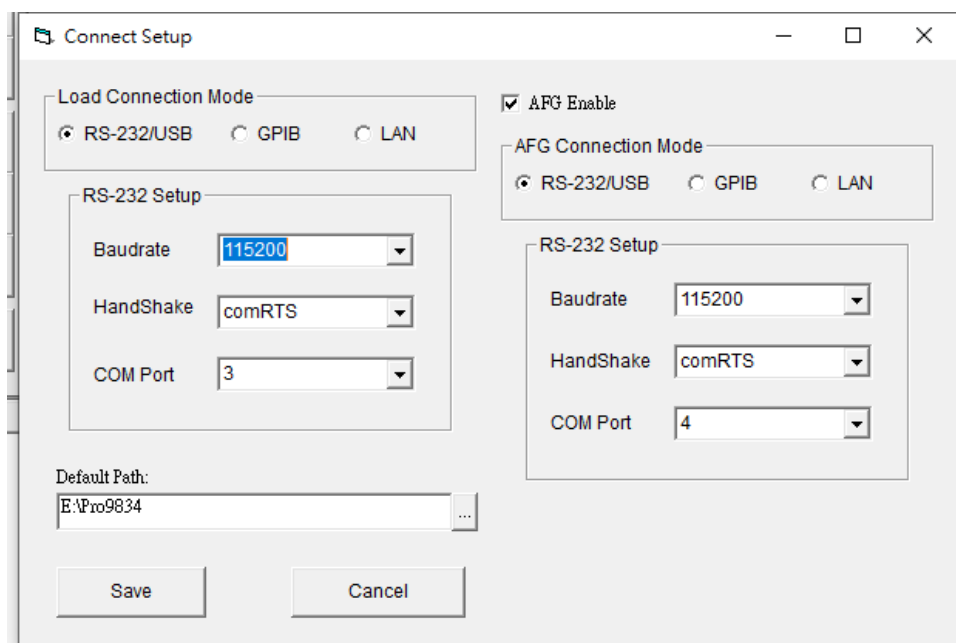


2. Main screen function

- a.  **START** : Start the test, and start recording the test data in the file, the file name is the same as the SN serial number.
- b.  **STOP** : Stop the test, AC/DC Load is OFF. When the test is restarted, it will restart from the beginning.
- c.  **Connect Setup** : Device connection setting, which can be set for AC/DC Load.
- d.  **Addition** : A new test step is added after the last test step, up to 320 test steps.
- e.  **Delete** : Delete a test step.
- f.  **Insert** : Insert a test step after the currently selected test step, up to 320 test steps.
- g.  **Modify**: Modify this test step.

- h.  Move Up Step : Move up the designated Step.
- i.  Move Down Step : Move down the designated Step.
- j.  Open Test Step : Load an existing test step file.
- k.  Save Test Step : Save the test step settings to the specified file.
- l. Save Log : Save the test Log to file
- m. Sampling Time : Sampling Measure Time. unit ms. 100~60000ms.
- n. Measurement Value
 - A. Step Time : NowTime
 - B. V : Output Voltage
 - C. I : Output Current
 - D. W : Power
 - E. Ah : Amp hour
 - F. Wh : Watt hour
 - G. TotalTime: No Time
 - H. Function Name : Work function name
 - I. Result : Test Result. (OCP, OPP)
- o. Measurement Item
 - A. Voltage : Measure Voltage
 - B. Current : Measure Current
 - C. Power : Power
 - D. Ah : Calculate Ah
 - E. Wh : Calculate Wh
 - F. Separate : select separate character, “,” or “;” or “<Tab>”

3.  Connection setting page
- a. Connect Mode
RS-232/USB
GPIB
LAN
A. RS-232 Setup



The 'Connect Setup' dialog box is shown with the 'Load Connection Mode' set to 'RS-232/USB'. The 'AFG Enable' checkbox is checked. The 'AFG Connection Mode' is also set to 'RS-232/USB'. The 'RS-232 Setup' section on the left shows 'Baudrate' as 115200, 'HandShake' as comRTS, and 'COM Port' as 3. The 'Default Path' is E:\Pro9834. The 'Save' and 'Cancel' buttons are at the bottom.

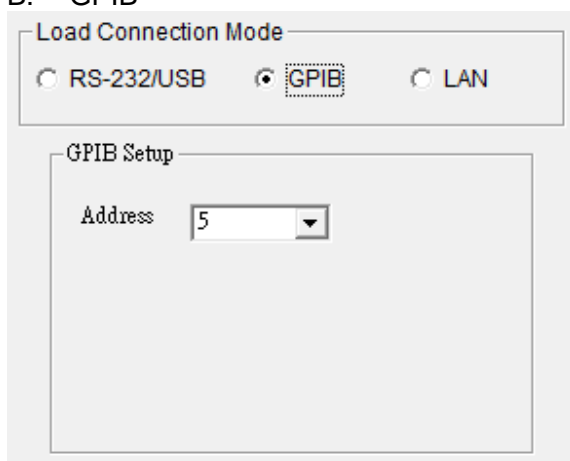
Baud Rate : Communication rate, default is 115200 °

HandShake : comRTS

COM : RS232 communication port, default is 1

AFG Enable : Use Arbitrary Function Generator

B. GPIB



The 'Connect Setup' dialog box is shown with the 'Load Connection Mode' set to 'GPIB'. The 'GPIB Setup' section shows 'Address' as 5.

Address : default is 5

C. LAN

Load Connection Mode

☐ RS-232/USB ☐ GPIB ☒ LAN

LAN Setup

IP Address

Port

IP Address : default is 192.168.16.128

Port : default is 4001

- b. Save : Save the connection settings
- c. Cancel : Cancel the Setting

4. Test Function

a. Discharge

The screenshot shows a software window for configuring a Discharge test. At the top, a dropdown menu is set to 'Discharge'. Below it, the 'Discharge' section contains a 'Load Mode' group box with four radio buttons: 'CC' (selected), 'CR', 'CV', and 'CP'. Below the radio buttons is a 'Load Value' field with the number '1' and the unit 'A'. The 'Stop Condition' section below contains five input fields: 'Voltage' (0) with unit 'V', 'Current' (0) with unit 'A', 'Time' (10) with unit 's', 'Stable' (0) with unit 'ms', and 'Capacity' (0) with unit 'Ah'.

Load Mode : select mode CC,CR,CV,CP

Load Value : set sink value

Stop Condition:

Voltage : stop voltage

Current : stop current

Time : work time

Stable :stable time

Capacity : Adding Capacity Ah

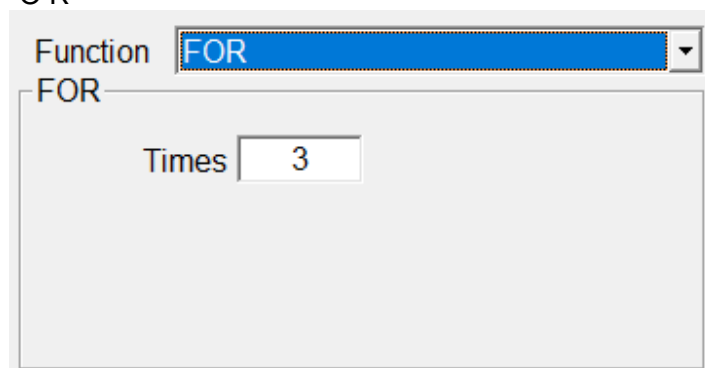
b. Rest

The screenshot shows a software window for configuring a Rest test. At the top, a dropdown menu is set to 'Rest'. Below it, the 'Rest' section is mostly empty. The 'Stop Condition' section below contains a single input field: 'Time' (10) with the unit 'Seconds'.

Stop Condition:

Time : work time

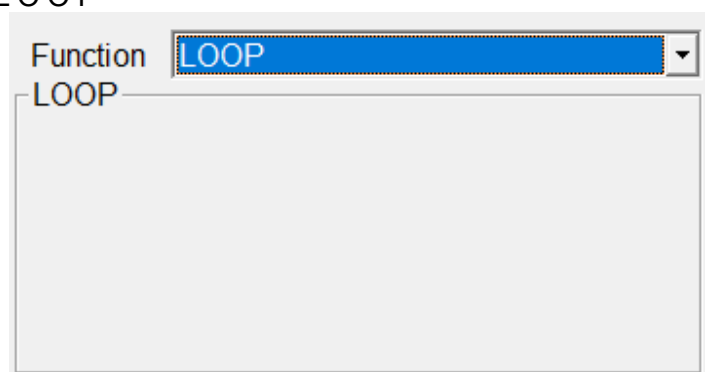
c. FOR



The screenshot shows a dialog box for the 'FOR' function. At the top, there is a label 'Function' followed by a dropdown menu containing the word 'FOR'. Below this, the word 'FOR' is also displayed as a label. Underneath, there is a label 'Times' followed by a text input field containing the number '3'.

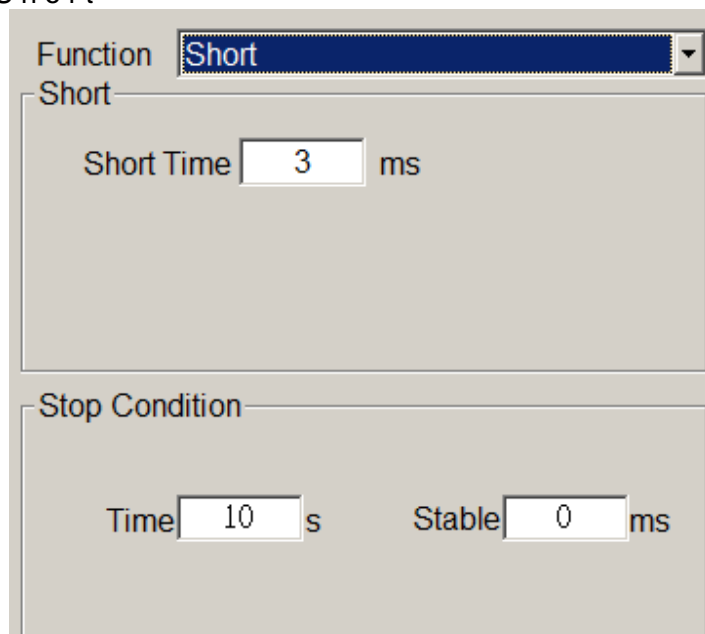
Times : loop times

d. LOOP



The screenshot shows a dialog box for the 'LOOP' function. At the top, there is a label 'Function' followed by a dropdown menu containing the word 'LOOP'. Below this, the word 'LOOP' is also displayed as a label. The rest of the dialog box is empty.

e. Short



The screenshot shows a dialog box for the 'Short' function. At the top, there is a label 'Function' followed by a dropdown menu containing the word 'Short'. Below this, the word 'Short' is also displayed as a label. Underneath, there is a label 'Short Time' followed by a text input field containing the number '3' and the unit 'ms'. Below this, there is a label 'Stop Condition'. Underneath, there are two text input fields: 'Time' containing '10' followed by 's', and 'Stable' containing '0' followed by 'ms'.

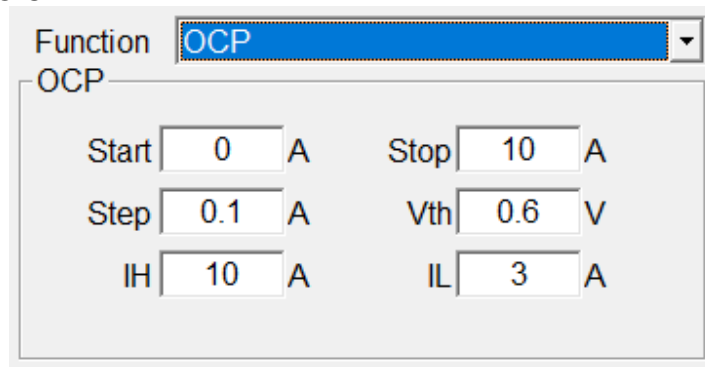
Short Time : short time

Stop Condition:

Time : short time

Stable : stable time

f. OCP



Function: OCP

OCP

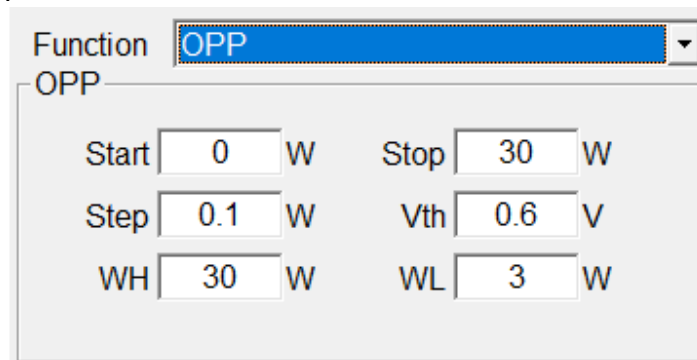
Start: 0 A Stop: 10 A

Step: 0.1 A Vth: 0.6 V

IH: 10 A IL: 3 A

Start : start current value
Stop : stop current
Step : add step current
Vth : voltage threshold
IH : DAM upper limit
IL : DAM lower limit

OPP



Function: OPP

OPP

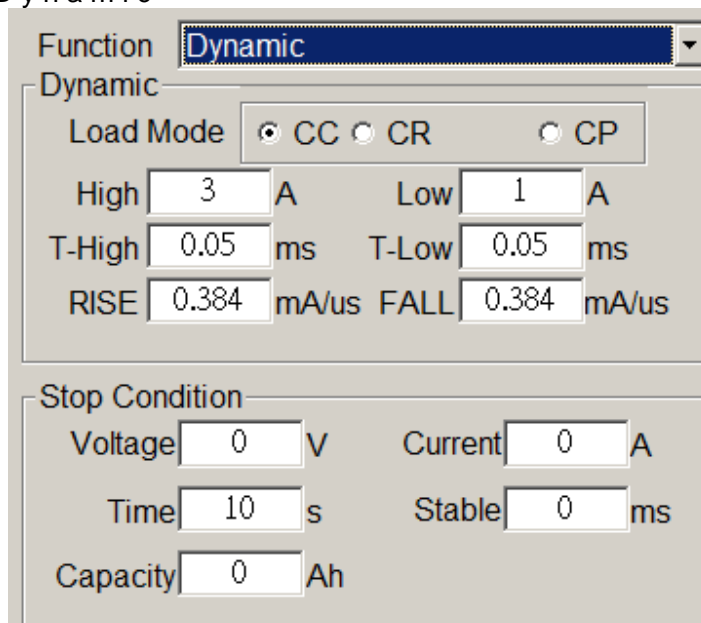
Start: 0 W Stop: 30 W

Step: 0.1 W Vth: 0.6 V

WH: 30 W WL: 3 W

Start : start power value
Stop : stop power
Step : add step power
Vth : voltage threshold
WH : DWM upper limit
WL : DWM lower limit

g. Dynamic



Function: **Dynamic**

Dynamic

Load Mode: ☒ CC ☐ CR ☐ CP

High: A Low: A

T-High: ms T-Low: ms

RISE: mA/us FALL: mA/us

Stop Condition

Voltage: V Current: A

Time: s Stable: ms

Capacity: Ah

Load Mode : select CC,CR,CP

High : high value

Low : low value

T-High : high time

T-Low : low time

RISE : rise value

FALL : fall value

Stop Condition:

Voltage : stop voltage

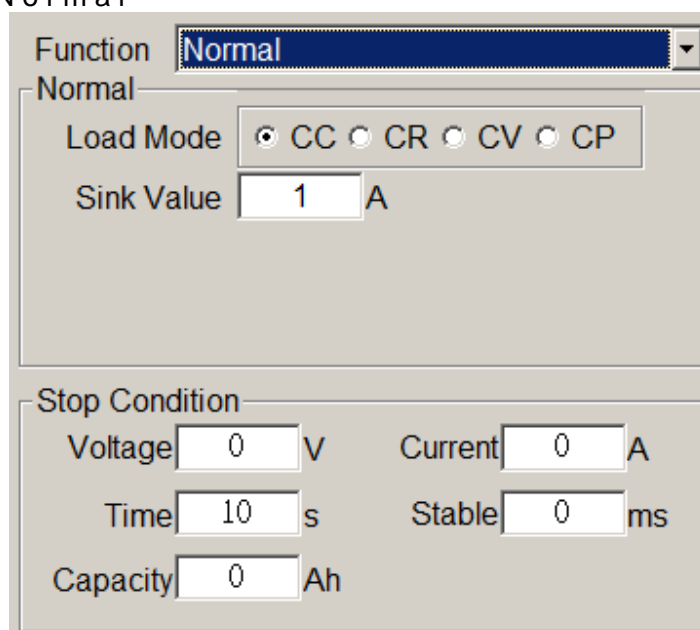
Current : stop current

Time : work time

Stable :stable time

Capacity : Adding Capacity Ah

h. Normal



Function: Normal

Normal

Load Mode: ☒ CC ☐ CR ☐ CV ☐ CP

Sink Value: 1 A

Stop Condition:

Voltage: 0 V Current: 0 A

Time: 10 s Stable: 0 ms

Capacity: 0 Ah

Load Mode : select mode CC,CR,CV,CP

Load Value : set sink value

Stop Condition:

Voltage : stop voltage

Current : stop current

Time : work time

Stable :stable time

Capacity : Adding Capacity Ah

i. Battery RAMP(Available for specific model)

Function **Battery RAMP**

Battery RAMP

Total Step Start A

Step	1	2	3	4	5	6	7	8
CC(A)								
Time(s)								

Load Off Voltage V Repeat

Total Step : total step

Start : start current value

Load Off Voltage : load off voltage value

Repeat : repeat times

j. Battery CC+CV(Available for specific model)

Function **Battery CC+CV**

Battery CC+CV

Sink Value A

Add CV Value V

Stop Condition

Voltage V Current A

Time s Stable ms

Capacity Ah

Sink Value : current value

Add CV Value : add CV value

Stop Condition:

Voltage : stop voltage

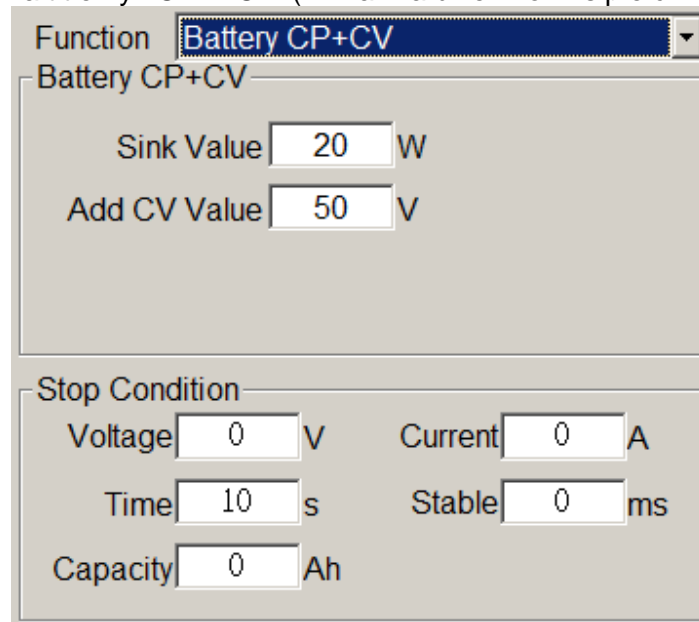
Current : stop current

Time : work time

Stable :stable time

Capacity : Adding Capacity Ah

k. Battery CP+CV(Available for specific model)



Function **Battery CP+CV**

Battery CP+CV

Sink Value W

Add CV Value V

Stop Condition

Voltage V Current A

Time s Stable ms

Capacity Ah

Sink Value : power value

Add CV Value : add CV value

Stop Condition:

Voltage : stop voltage

Current : stop current

Time : work time

Stable :stable time

Capacity : Adding Capacity Ah

I. Battery Discharge CC Available for specific model)

Function **Battery Discharge CC**

Battery Discharge CC

Current Value A

Stop Condition

Voltage V Current A

Time s Stable ms

Capacity Ah

Current Value : set sink value

Stop Condition:

Voltage : stop voltage

Current : stop current

Time : work time

Stable : stable time

Capacity : Adding Capacity Ah

m. Battery Discharge CP(Available for specific model)

Function **Battery Discharge CP**

Battery Discharge CP

Power Value W

Stop Condition

Voltage V Current A

Time s Stable ms

Capacity Ah

Power Value : set sink value

Stop Condition:

Voltage : stop voltage

Current : stop current

Time : work time

Stable :stable time

Capacity : Adding Capacity Ah

n. Battery Cycle Life(Available for specific model)

Function **Battery Cycle Life**

Battery Cycle Life

Step	CCH	CCL	THigh	TLow	Cycle
1					
2					
3					

Load Off Voltage V Repeat

CCH : sink high value

CCL : sink low value

THigh : high time

TLow : low time

Cycle : cycle times

Load Off Voltage : load off voltage value

Repeat : repeat times

o. CV with Current Limit(Available for specific model)

Function: CV with Current Limit

CV with Current Limit

Current Limit: 20 A

CV Value: 50 V

Stop Condition

Time: 10 s Stable: 0 ms

Current Limit : current limit value

CV Value : CV value

Stop Condition:

Time : work time

Stable :stable time

p. CV with Power Limit(Available for specific model)

Function: CV with Power Limit

CV with Power Limit

Power Limit: 20 W

CV Value: 50 V

Stop Condition

Time: 10 s Stable: 0 ms

Power Limit : power limit value

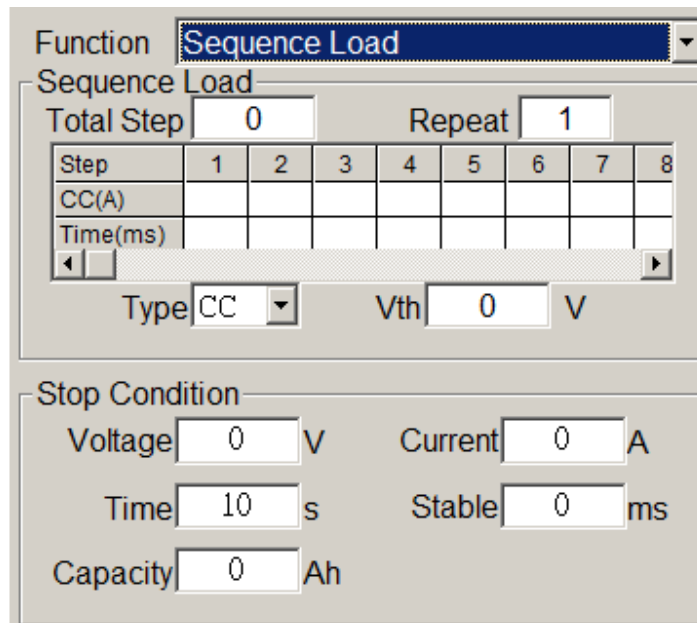
CV Value : CV value

Stop Condition:

Time : work time

Stable :stable time

q. Sequence Load(Available for specific model)



Function: Sequence Load

Sequence Load

Total Step: 0 Repeat: 1

Step	1	2	3	4	5	6	7	8
CC(A)								
Time(ms)								

Type: CC Vth: 0 V

Stop Condition

Voltage: 0 V Current: 0 A

Time: 10 s Stable: 0 ms

Capacity: 0 Ah

Total Step : total step

Repeat : repeat times. 0 ~ 65535

0 is not stop

Default is 1

CC(A) : sink current value

Times(ms) : 2-16 step is 0.02ms ~ 999000ms,
but first step is 2ms ~ 65535ms

Type : CC,CP

Vth : voltage threshold

Stop Condition:

Voltage : stop voltage

Current : stop current

Time : work time

Stable :stable time

Capacity : Adding Capacity Ah

r. Sine Wave Dynamic(Available for specific model)

Function Sine Wave Dynamic

Sine Wave Dynamic

I_DC A

I_AC A

Freq Hz

Stop Condition

Voltage V

Time Seconds

Capacity Ah

I_DC: Offset
I_AC: Amplitude
Freq: Frequency

Stop Condition:
Voltage : stop voltage
Time : work time
Capacity : Adding Capacity Ah

s. CC Dynamic Sweep(Available for specific model)

Function CC Dynamic Sweep

CC Dynamic Sweep

I_DC 8 A DWell 500 us

I_AC 8 A Rise/Fall 100 us

Freq 1000 Hz Duty 50 %

Stop Condition

Voltage 0 V

Time 10 Seconds

Capacity 0 Ah

I_DC: Offset

I_AC: Amplitude

Freq: Frequency

Dwell: Width Time

Rise/Fall: Rise and Fall Time

Duty: Duty Cycle

Stop Condition:

Voltage : stop voltage

Time : work time

Capacity : Adding Capacity Ah

5. Start Test

Pro9834 DC Load Test Program R1.2o

Function

Discharge

Load Mode

CC CR CV CP

Load Value

10 V

Stop Condition

Voltage

0 V

Current

1 A

Time

10 s

Stable

1000 ms

Capacity

0 Ah

StepNo.

Function

Mode

SinkValue

VStop

TStop

AhStop

Times

Start

Step

Stop

Vth

Limit High

Limit Low

1	Discharge	CC	1	10	10	0							
2	Discharge	CV	10	0	10	0							

No.	StepTime	V	I	W	AH	WH	TotalTime	Function Name	Result	Measure Item
1	00:00:00	+11.060	+0.9990	11.04894	0.0002775	0.00306915	2025/04/24 1...	Discharge		<input checked="" type="checkbox"/> Voltage
2	00:00:01	+11.060	+1.0000	11.06	0.00055528	0.00614137	2025/04/24 1...	Discharge		<input checked="" type="checkbox"/> Current
3	00:00:02	+11.060	+0.9990	11.04894	0.00083278	0.00921052	2025/04/24 1...	Discharge		<input checked="" type="checkbox"/> Power
4	00:00:03	+11.060	+1.0000	11.06	0.00111056	0.01228274	2025/04/24 1...	Discharge		<input checked="" type="checkbox"/> Ah
5	00:00:04	+11.060	+0.9990	11.04894	0.00138806	0.01535189	2025/04/24 1...	Discharge		<input checked="" type="checkbox"/> Wh
6	00:00:05	+11.060	+0.9990	11.04894	0.00166556	0.01842104	2025/04/24 1...	Discharge		

Save Log

Sampling Time

1000 ms

Measure Item

☒ Voltage

☒ Current

☒ Power

☒ Ah

☒ Wh

Separate

,