

9834 Operation Manual	檔 案 名 稱 : 9834-501
	文 件 料 號 : 900983401
	頁 數 : 18

修 訂 管 制						
版次	修訂日期	修訂內容	修訂頁次	修訂者	審核	核准
C	2015/09/23	New Release	ALL	Curt		
D	2023/8/18	Add Sequence Load	ALL	Curt		
E	2024/3/20	Modify	ALL	Curt		
F	2024/05/22	Modify	ALL	Curt		
G	2024/09/23	Modify	ALL	Curt		
H	2025/01/21	Modify	ALL	Curt		
I	2025/02/05	Modify	ALL	Curt		

表 單 編 號 : 160-68 rev:1.0

# 9834

## Operation Manual

S/N : 900983401 REV:I

## 9834 Operation Manual Menu

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一 、	<b>I n t r o d u c t i o n</b> .....	<b>1</b>
二 、	<b>S y s t e m   r e q u i r e m e n t s</b> .....	<b>1</b>
三 、	<b>9 8 3 4   S o f t w a r e   I n s t a l l a t i o n</b> .....	<b>2</b>
四 、	<b>9 8 3 4   o p e r a t i n g   i n s t r u c t i o n s</b> .....	<b>4</b>

## 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

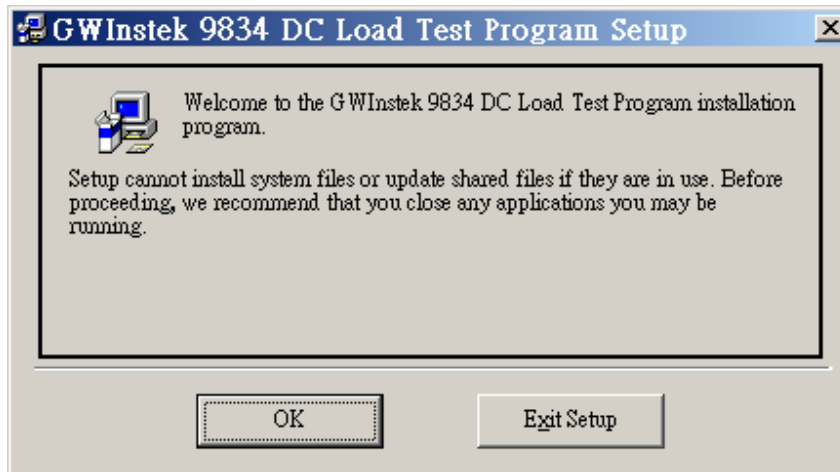
## 二、 System requirements

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

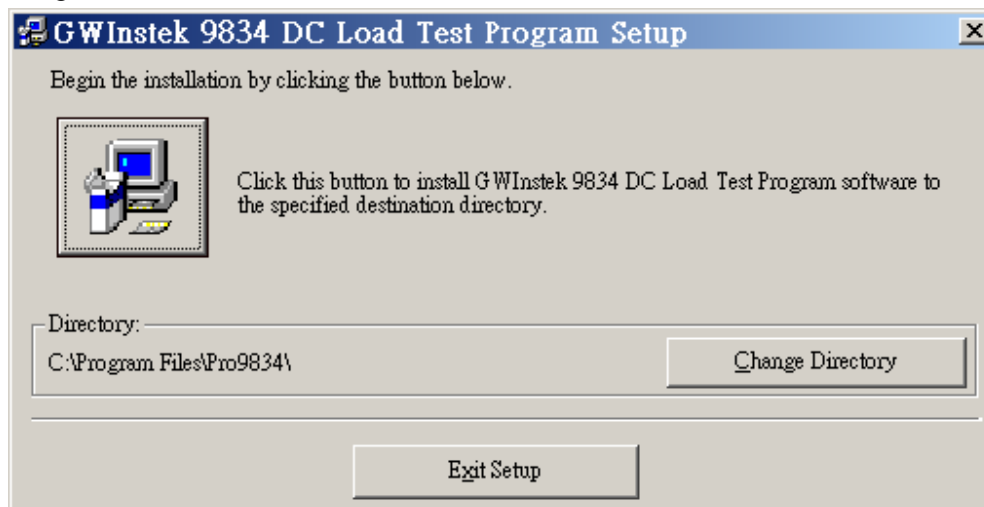
### 三、 9834 Software Installation

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

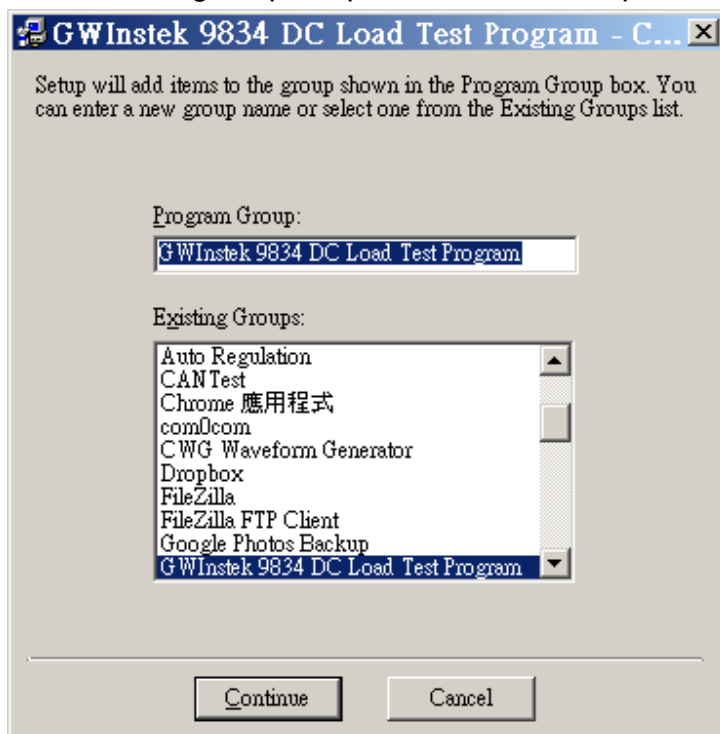
1. Boot the computer to the Windows screen.
2. Insert the CD into the root directory and execute Setup.exe, the following screen will appear.



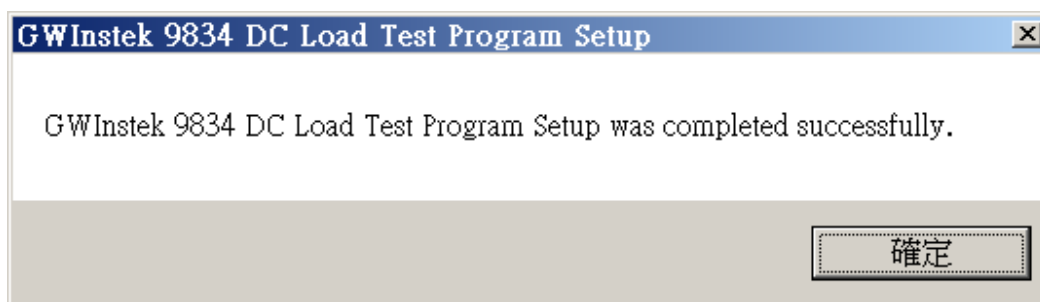
3. It is recommended to change the directory to D:\Pro9834 and follow the installation diagram to install.



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".



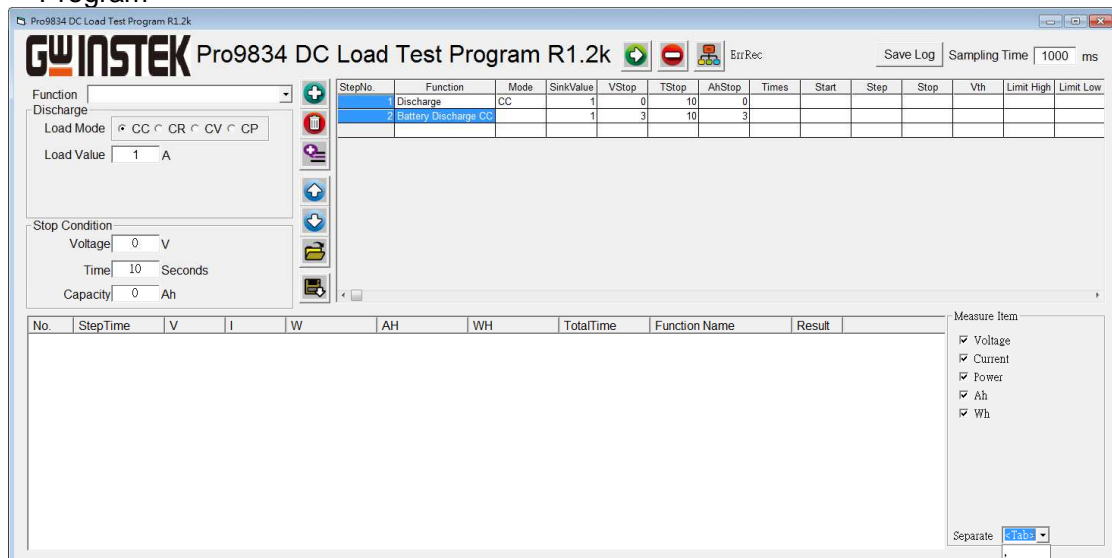
6. Press the start button on the Windows screen → select GWInstek 9834 DC Load Test Program in the program → press GWInstek 9834 DC Load Test Program to execute.










## 四、9834 operating instructions




### 1. Main page

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

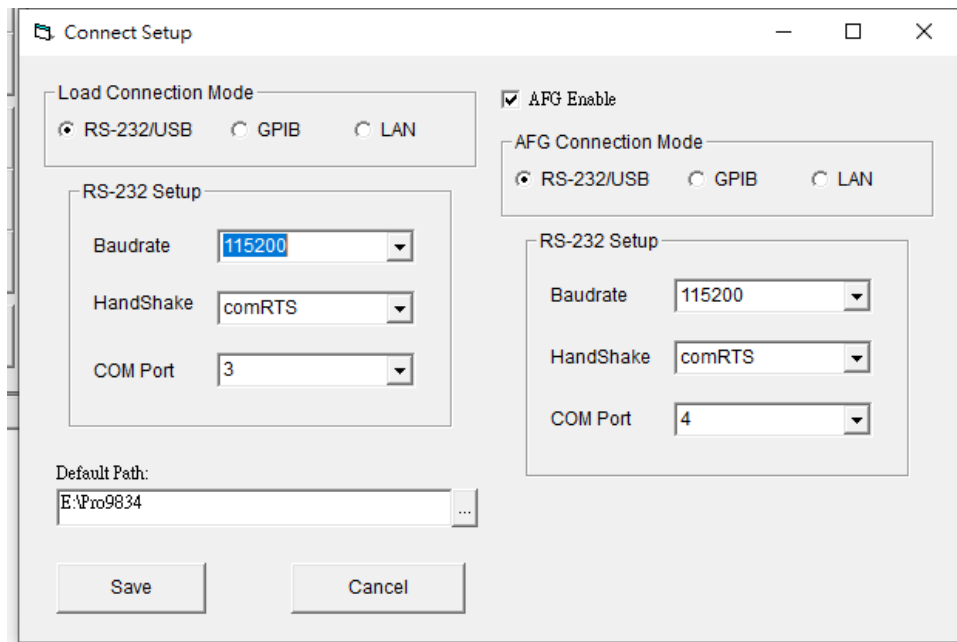


### 2. Main screen function

- 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.  **Move Up Step** : Move up the designated Step.

- h.  Move Down Step : Move down the designated Step.
- i.  Open Test Step : Load an existing test step file.
- j.  Save Test Step : Save the test step settings to the specified file.
- k. Save Log : Save the test Log to file
- l. Sampling Time : Sampling Measure Time. unit ms. 100~60000ms.
- m. 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)
- n. 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' section set to 'RS-232/USB'. The 'AFG Enable' checkbox is checked. The 'AFG Connection Mode' section is also set to 'RS-232/USB'. The 'RS-232 Setup' section on the left has 'Baudrate' set to 115200, 'HandShake' set to 'comRTS', and 'COM Port' set to 3. The 'Default Path' is 'E:\Pro9834'. The 'RS-232 Setup' section on the right has 'Baudrate' set to 115200, 'HandShake' set to 'comRTS', and 'COM Port' set to 4. 'Save' and 'Cancel' buttons are at the bottom.

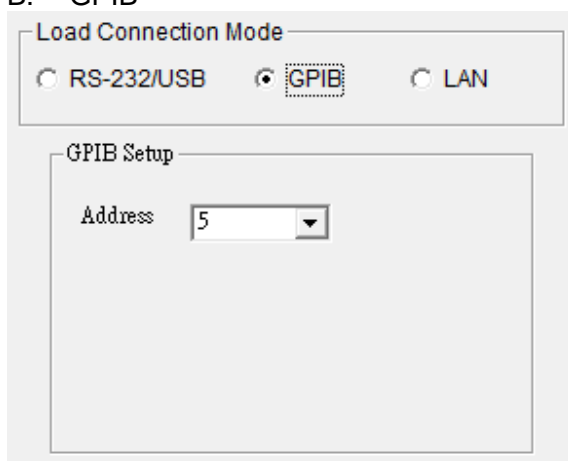
Baud Rate : Communication rate, default is 115200 °

HandShake : comRTS

COM : RS232 communication port, default is 1

AFG Enable : Use Arbitrary Function Generator

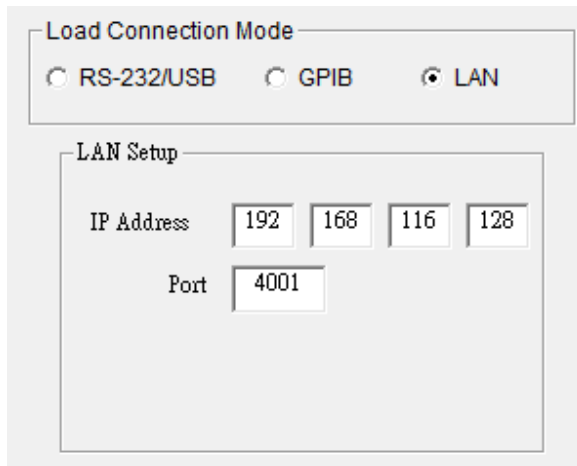
B. GPIB



The 'Connect Setup' dialog box is shown with the 'Load Connection Mode' section set to 'GPIB'. The 'GPIB Setup' section has 'Address' set to 5. 'Save' and 'Cancel' buttons are at the bottom.

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 labeled 'Function' is set to 'Discharge'. Below it, the 'Discharge' section contains a 'Load Mode' row with four radio buttons: 'CC' (selected), 'CR', 'CV', and 'CP'. The 'Load Value' is set to '1' with the unit 'A'. The 'Stop Condition' section below has three rows: 'Voltage' set to '0' with unit 'V', 'Time' set to '10' with unit 'Seconds', and 'Capacity' set to '0' with unit 'Ah'.

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

Load Value : set sink value

Stop Condition:

Voltage : stop voltage

Time : work time

Capacity : Adding Capacity Ah

## b. Rest

The screenshot shows a software window for configuring a Rest test. At the top, a dropdown menu labeled 'Function' is set to 'Rest'. Below it, the 'Rest' section is mostly empty. The 'Stop Condition' section at the bottom has one row: 'Time' set to '10' with unit 'Seconds'.

Stop Condition:

Time : work time

## c. F O R

The screenshot shows a configuration window for the 'FOR' function. At the top, a dropdown menu labeled 'Function' has 'FOR' selected. Below this, the text 'FOR' is displayed. A label 'Times' is followed by a text input field containing the number '3'.

Times : loop times

## d. L O O P

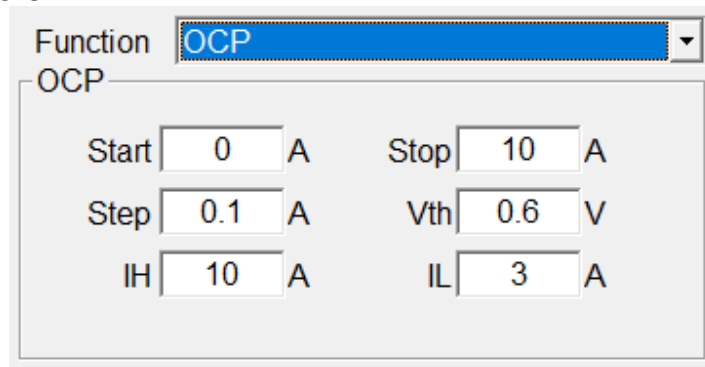
The screenshot shows a configuration window for the 'LOOP' function. At the top, a dropdown menu labeled 'Function' has 'LOOP' selected. Below this, the text 'LOOP' is displayed. The rest of the dialog box is empty.

## e. S h o r t

The screenshot shows a configuration window for the 'Short' function. At the top, a dropdown menu labeled 'Function' has 'Short' selected. Below this, the text 'Short' is displayed. There are two sections: the first is labeled 'Short Time' and contains a text input field with '3' followed by the text 'Seconds'; the second is labeled 'Stop Condition' and contains a text input field with '10' followed by the text 'Seconds'.

Stop Condition:  
Time : short time

## f. OCP



Function: OCP

OCP

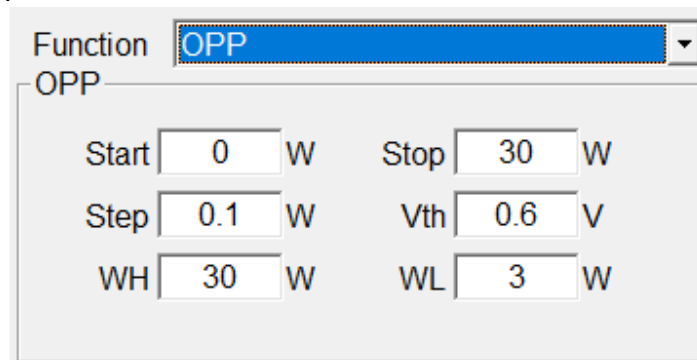
Start: 0 A      Stop: 10 A

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

Time:  Seconds

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

## h. Normal

Function: **Normal**

Normal

Load Mode: ☒ CC ☐ CR ☐ CV ☐ CP

Sink Value:  A

Stop Condition

Voltage:  V

Time:  Seconds

Capacity:  Ah

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

Load Value : set sink value

Stop Condition:

Voltage : stop voltage

Time : work 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

Time  Seconds

Capacity  Ah

Sink Value : current value

Add CV Value : add CV value

Time : work time

## 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

Time  Seconds

Capacity  Ah

Sink Value : power value  
Add CV Value : add CV value  
Time : work time

## l. Battery Discharge CC Available for specific model)

Function **Battery Discharge CC**

Battery Discharge CC

Current Value  A

Stop Condition

Voltage  V

Time  Seconds

Capacity  Ah

Current Value : set sink value  
Stop Condition:  
Voltage : stop voltage  
Time : work 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

Time  Seconds

Capacity  Ah

Power Value : set sink value

Stop Condition:

Voltage : stop voltage

Time : work 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  A

CV Value  V

Stop Condition

Time  Seconds

Current Limit : current limit value

CV Value : CV value

Time : work time

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

Function **CV with Power Limit**

CV with Power Limit

Power Limit  W

CV Value  V

Stop Condition

Time  Seconds

Power Limit : power limit value

CV Value : CV value

Time : work time

## q. Sequence Load(Available for specific model)

Function: Sequence Load

Sequence Load

Total Step: 0 Repeat: 0

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

Type: CC Vth: 0 V

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

## r. Sine Wave Dynamic(Available for specific model)

Function: Sine Wave Dynamic

Sine Wave Dynamic

I\_DC: 8 A

I\_AC: 8 A

Freq: 1000 Hz

Stop Condition

Voltage: 0 V

Time: 10 Seconds

Capacity: 0 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

I\_DC  A DWell  us

I\_AC  A Rise/Fall  us

Freq  Hz Duty  %

Stop Condition

Voltage  V

Time  Seconds

Capacity  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 R1.2g

# GW INSTEK Pro9834 DC Load Test Program R1.2h

3316G

Save Log

Function: Discharge

Load Mode: ☒ CC ☐ CR ☐ CV ☐ CP

Load Value: 1 A

Stop Condition:

Voltage: 0 V

Time: 10 Seconds

Capacity: 0 Ah

StepNo.	Function	Mode	SinkValue	VStop	TStop	AhStop	Times	Start	Step	Stop	Vth	Limit High	Limit Low
1	Discharge	CC	1	0	10	0							

No.	StepTime	V	I	W	AH	WH	TotalTime	Function Name	Result
1	10:50:12	+0.0000	+0.0000	0	0	0	2024/09/23 1...	Discharge	
2	10:50:13	+0.0000	+0.0000	0	0	0	2024/09/23 1...	Discharge	
3	10:50:14	+0.0000	+0.0000	0	0	0	2024/09/23 1...	Discharge	
4	10:50:15	+0.0000	+0.0000	0	0	0	2024/09/23 1...	Discharge	