APS-7000 Series

Setting the Voltage Range

Range

Range setting

Soft-key settings

RANGE	155 V	AUTO — F1
ACV	45.00 V	600V — F2
FREQ	60.00 Hz	310V — F3
IRMS	4.20 A	155V — F4
ON PHS	0°	
OFF PHS	0°	

1. Press Range to access the Range menu.

2. Set the voltage range with the scroll wheel or with the F1 ~ F4 soft-keys.
   Range AUTO, 600V(option), 310V, 155V
   Soft-keys AUTO, 600V(option), 310V, 155V

3. Press Enter to confirm the Range setting.

Setting the Voltage

V

Voltage setting

Preset voltage settings

RANGE	155 V	DEF1 0.00 — F1
ACV	110.0	DEF2 0.00 — F2
FREQ	60.00 Hz	MAX — F3
IRMS	1.05 A	MIN — F4
ON PHS	0°	
OFF PHS	0°	

1. Press the V key. The ACV parameter will be editable.

2. Set the voltage with the scroll wheel/keypad or with the F1 ~ F4 soft-keys.
   Range 0 volts ~ full range
   Soft-keys DEF1, DEF2, MAX, MIN

3. Press Enter to confirm the voltage setting.

Setting the Current

I rms

Irms

Min/Max settings

RANGE	155 V	GC Fold Off
ACV	0.00 V	DELAY 1 sec
FREQ	60.00 Hz	MAX — F3
IRMS	4.20	MIN — F4
ON PHS	0°	
OFF PHS	0°	

1. Press I rms to access the I rms menu.

2. Set the I rms level with the scroll wheel/keypad or with the F3 ~ F4 soft-keys. The MAX and MIN soft-keys set the I rms level to the maximum and minimum, respectively.
   Range 0.00 ~ full scale A (dependant on the voltage range)
   Soft-keys MAX, MIN

3. Press Enter to confirm the current setting.

## Setting the Frequency

I rms

Frequency setting

Preset frequency settings

|		
RANGE	155 V	DEF1 60.00 — F1
ACV	5.00	DEF2 60.00 — F2
FREQ	60.00	MAX — F3
IRMS	4.20 A	MIN — F4
ON PHS	0°	
OFF PHS	0°	

1. Press Shift + F to access the Freq Limit menu.

2. Set the frequency limit with the scroll wheel/keypad or with the F3 ~ F4 soft-keys. The MAX and MIN soft-keys set the frequency limit to the maximum and minimum, respectively.
   Range 45.00 ~ 500.0Hz (999.9Hz option)
   Soft-keys MAX, MIN

3. Press Enter to confirm the limit setting.

Display Modes

The APS-7000 power supply has two display modes. The standard display mode shows the power supply setup on the left and the 3 configurable measurements on the right. The simple display mode shows all measurement items available on the APS-7000.
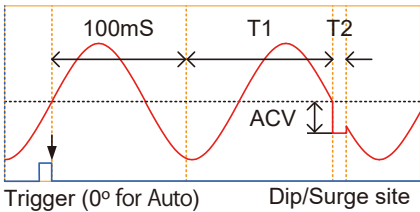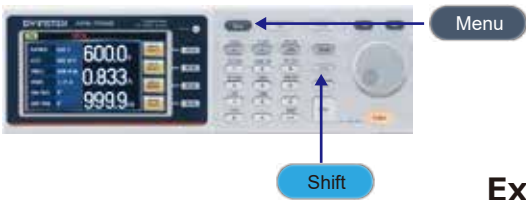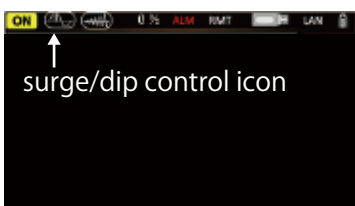
Display

Settings   Measurements

Measurement Items

Configurable measurements

Hold measurement

Standard Mode

Hold measurement
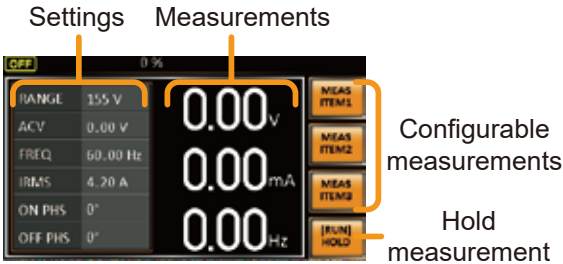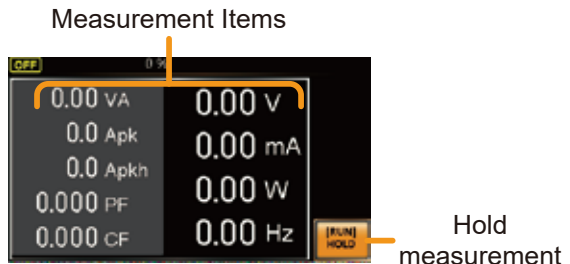
Simple Mode

Menu

Menu

Shift
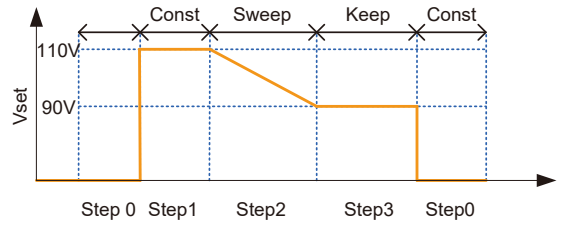
Example: Select Sruge/Dip

1. Press the Menu key.
   The Menu setting will appear on the display.

2. Use the scroll wheel to go to item 2,
   Surge/Dip Control and press Enter.
   Alternatively, use the short-cut key shift+8.   Shift   8

100mS   T1   T2

ACV

Trigger (0º for Auto)   Dip/Surge site

3. Go to the Mode setting using the scroll wheel and press Enter.
   Select the desired mode and press Enter again to confirm.
   The Manual mode will allow you to manually trigger the surge/dip site.
   The Automatic setting will automatically trigger the surge/dip site.
   Mode Manual, Auto, OFF

4. Set the remaining parameters.
   Note: these parameters are not visible when MODE is set to OFF.
   Remaining parameters ACV, T1, T2

Status Bar

5. Press Exit[F4] to exit from the Surge/Dip Control settings.

EXIT

surge/dip control icon

6. After exiting the menu, the surge/dip control icon will appear
   in the status bar.

Sequence setting:

Range: LO(155V), MID(310V), HI(600V)

Select Sequence

Range → Voltage range

1 Test

2 F 1 → Mode

Scroll wheel → Sequence

3 Enter → Step setting

Sequence Mode → Voltage range

F1 MODE
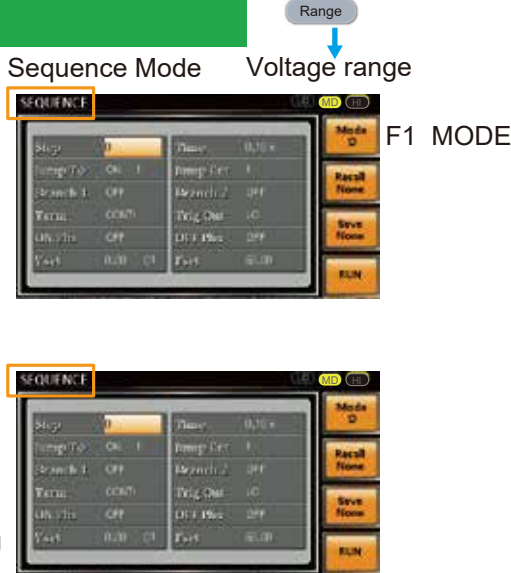
The example above shows how the secondary voltage settings affect how the voltage is output in each step.

Step no.	0	1	2	3
Vset (V) 0	110	90	N/A	
2nd Setting	CT	CT	SP	KP

Vset	0 ~ 310V (range dependent) (600V optional)
Secondary settings	CT (Constant), KP (Keep), SP (Sweep) Note: Step 0 can only be set to CT or SP.
Fset	45.00 ~ 500.0Hz(999.9Hz optional)

Step:	0 ~ 255
Time:	0.01 ~ 999.99s
Jumpt to:	Step ON, OFF, 0 ~ 255
Jump Cnt:	1 ~ 255, 0 ※1
Branch 1, 2:	ON, OFF, 0 ~ 255
Time:	0.01 ~ 999.99s
Jump Cnt:	1 ~ 255, 0 ※1
Term:	CONTI, END, HOLD
Trig Out:	HI, LO
ON Phase:	ON, OFF
ON Phase:	0~ 359º
OFF Phase:	ON, OFF

※1 Note: A setting of 0 will set the number of jumps to infinite.

Example: 25Vrms -> 35V -> 45V -> 70V -> 140V -> 200 -> 25 -> 35Vrms

Range 300V
TEST key
Mode(F1)
Scroll wheel => Sequence
Enter
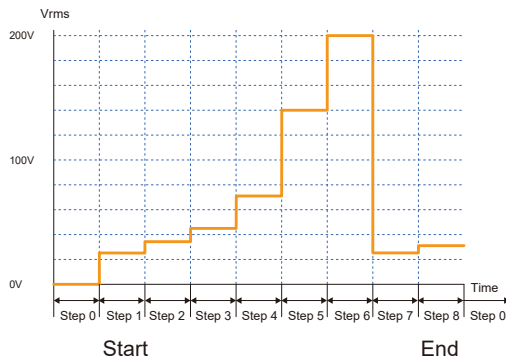
Step 1
Jump Cnt 0
Term CONTI
Vser 0.00 => 25.00

Step 2
Jump Cnt 0
Term CONTI
Vser 0.00 => 35.00

Step 3
Jump Cnt 0
Term CONTI
Vset 0.00 => 45.00

Step 4
Jump Cnt 0
Term CONTI
Vset 0.00 => 70.00

Step 5
Jump Cnt 0
Term CONTI
Vset 0.00 => 140.00
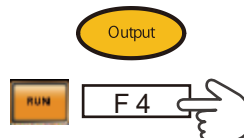
Step 6
Jump Cnt 0
Term CONTI
Vset 0.00 => 200.00

Step 7
Jump cnt 0
Term CONTI
Vset 0.00 => 25.00

Step 8
Jump cnt 1
Vset 0.00 => 35.00
Term CONT=>END

cycle=junp cnt-1

Start → End

Output RUN

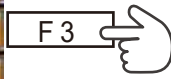## Running a Sequence.
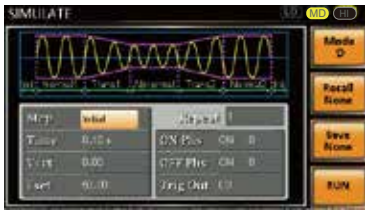
Output

RUN F 4

Settings

Current step / Total Step
Branch 1
Branch 2
Hold/Con
Stop/Run

Save a Simulation or Sequence to Local Memory

Simulation settings can be saved to one of 10 memory slots (SIM0 ~ SIM9).

Sequence settings can be saved to one of 10 memory slots (SEQ0 ~ SEQ9).

Save a Simulation to Local Memory

Simulation settings can be saved to one of 10 memory slots (SIM0 ~ SIM9).

Press Save[F3] and then long press a number key when prompted.

> **Long Push
> Number Key**

Long press a number key when prompted.

A message will appear when the save is successful.

Recall a Simulation to Local Memory

Simulation settings can be recalled from one of 10 memory slots (SIM0 ~ SIM9).

Press Recall[F2] and then press a number key when prompted.

> **Prss Number Key**

A message will appear when the settings are recalled successfully.

Save a Sequence to Local Memory

Simulation settings can be saved to one of 10 memory slots (SIM0 ~ SIM9).

Press Save[F3] and then long press a number key when prompted.
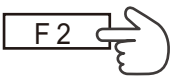
> **Long Push
> Number Key**

Long press a number key when prompted.

Recall a Sequence to Local Memory

Simulation settings can be recalled from one of 10 memory slots (SIM0 ~ SIM9).
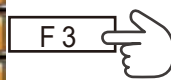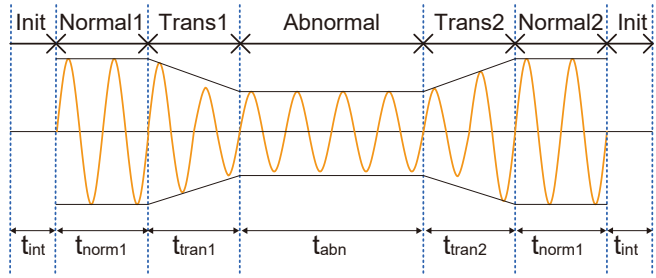
Press Recall[F2] and then press a number key when prompted.

> **Prss Number Key**

A message will appear when the settings are recalled successfully.

GW INSTEK

Simply Reliable

Simulate setting:

Init	Normal1	Trans1	Abnormal	Trans2	Normal2	Init

t_{int} t_{norm1} t_{tran1} t_{abn} t_{tran2} t_{norm1} t_{int}

Time: 0.01 ~ 999.99s, 0(Trans 1 and Trans2)

Note: For Trans1 and Trans2, it supports a value of 0, which will skip the step.

Range: LO(155V), MID(310V), HI(600V)

t_{int}	=0.01s~999.99s
t_{norm1}	=0.01s~999.99s
t_{tran1}	=0.01s~999.99s, 0(Skip)
t_{abn}	=0.01s~999.99s
t_{tran2}	=0.01s~999.99s, 0(Skip)
t_{norm1}	=0.01s~999.99s
t_{int}	=0.01s~999.99s

Select Simulate

1 Test

Simulate Mode   Voltage setting   Range

F1 Mode

2 F 1

Mode

Simulate

3 Enter
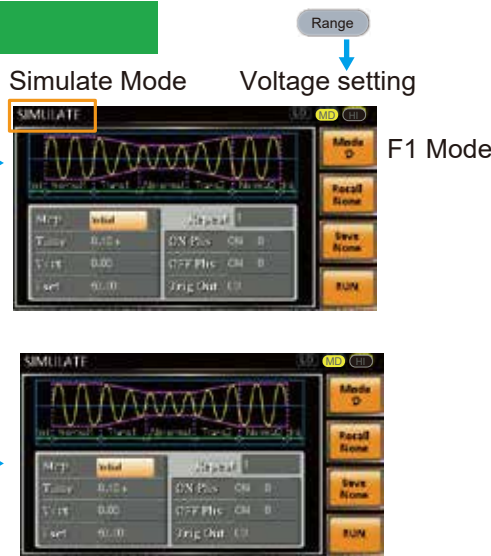
Step setting

Example: 200V to 0V setting

Step Internal => Normal 1
Repeat 1=> OFF ———— OFF / 0 / 1~9999
Time 0.10s
Vset 0.00 => 200.0

Step Internal => Trans 1
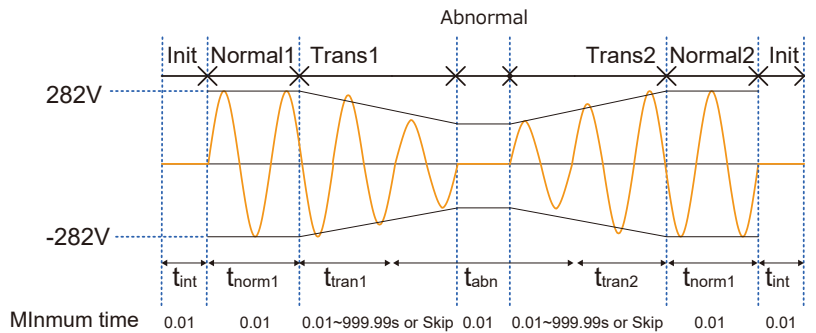Repeat OFF
Time 0.02s ~ 999.99s or 0(Skip)
Vset 0.00

Step Internal => Abnormal
Repeat OFF
Time 0.10s
Vset 0.00

Step Internal => Trans 2
Repeat OFF
Time 00.1s ~ 999.99s or 0(Skip)
Vset 200.00

Step Internal => Normal 2
Repeat 1=> OFF
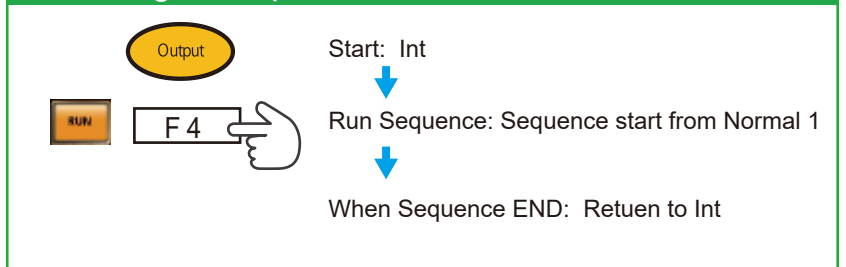Time 0.10s=>0.50s
Vset 0.00 => 200.0

OUPUT ON
F4   Start Sequence

F3   Save Test => 0 Memory Num.
F2 Recall Test => 0 Memory Num.

Abnormal

Init	Normal1	Trans1			Trans2	Normal2	Init

282V

-282V

t_{int} t_{norm1} t_{tran1} t_{abn} t_{tran2} t_{norm1} t_{int}

MInmum time 0.01   0.01   0.01~999.99s or Skip 0.01   0.01~999.99s or Skip   0.01   0.01

Abnormal, Normal and Int time are should need to set-up.

Min = 0.01s

Running a Sequence.

Output

RUN   F 4

Start: Int

Run Sequence: Sequence start from Normal 1

When Sequence END: Retuen to Int

GWINSTEK
Simply Reliable
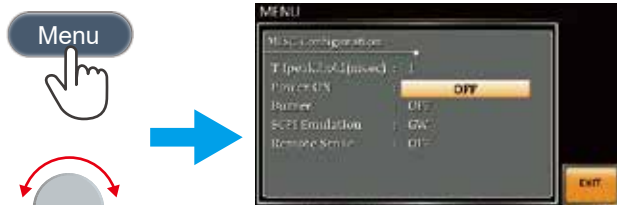
The Power ON Output setting allows you to have the output turn on automatically after startup.

The settings that are loaded are the last settings that were present in the standard mode before the unit was turned off last.

ON	Set Output ON.
OFF	Set Output OFF.
SEQ	Execute the sequence that was loaded before the unit was last turned off.
SIM	Execute the simulation that was loaded before the unit was last turned off.
PROG	Execute the program that was loaded before the unit was last turned off

Press Exit[F4] to exit from the MISC Configuration settings.