

Programmable DC Power Supply 01 Output

User Manual



Part Number: 72-13350 and 72-13360

When using electrical appliances, basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury to persons or property.

Important Safety Information

Read all instructions before using the appliance and retain for future reference.

- Check that the voltage indicated on the rating plate corresponds with that of the local network before connecting the appliance to the mains power supply.
- Check the voltage setting is correct before connecting to the mains power supply.
- Do not operate this appliance with a damaged plug or cord, after a malfunction or after being dropped or damaged in any way.
- Check the product before use for any damage. Should you notice any damage on the cable or casing, do not use.
- This appliance contained no user-serviceable parts. All repairs should only be carried out by a qualified engineer. Improper repairs may place the user at risk of harm.
- Do not block or obstruct the cooling fan vent opening.
- Avoid severe impacts or rough handling that leads to damage.
- Do not discharge static electricity.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory, or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- Children should be supervised to ensure that they do not play with the appliance.
- Always disconnect from the mains when the product is not in use or before cleaning.
- Do not use the appliance for any purpose other than that for which it is designed.
- Do not operate or store in an environment of high humidity or where moisture may enter the product as this can reduce insulation and lead to electric shock.

Product Overview

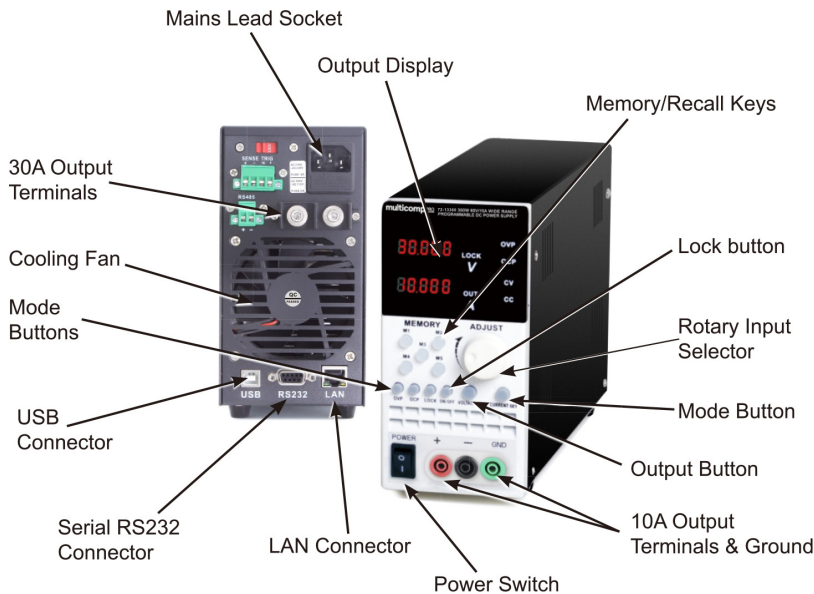
Main Features

- High accuracy/resolution DC power supply
- 0.1mV/0.1 mA overvoltage protection
- Constant voltage/constant current modes
- Digital panel control- 5 digit LED display
- External trigger function
- Remote compensation function
- Input adjustment lock
- Memory function
- Standard interfaces: USB, RS232 & LAN

What's Included

- Power Supply Main Unit
- Mains Power Lead
- USB Cable
- User Manual

Operation



Steady State Function Modes

The electronic load can work in the following steady-state modes.

Constant Current Operation Mode CC

Note: In constant current mode, the load holds the tested equipment on the set current no matter how the input voltage changes.

Operation Method:

1. Press the CC button on the panel to enter constant current operation mode.
2. Set the desired constant current using the rotary control.
3. Press CC to confirm.
4. Press the ON/OFF button to start the electronic load.

Constant Voltage Operation Mode CV

Note: In constant voltage mode, the load holds the tested equipment on the set voltage no matter how the input current changes.

Operation Method:

1. Press the CV button on the panel to enter constant voltage operation mode.
2. Set the desired constant voltage using the rotary control.
3. Press CV to confirm.
4. Press the ON/OFF button to start the electronic load.

Quick access steady state value memory

For commonly used values there are 5 quick access and storage buttons.

- Once a set of values are input press and hold button M1 to M5 to store the settings.
- To recover the required saved settings, press M1 to M5.

Operation

OVP Setting

- Press OVP button to set the OVP value using the rotary control.
- Press OVP again to store and exit.

- Press and hold to select the external trigger.

OCP Setting

- Press OCP button to set the OCP value using the rotary control.
- Press OCP again to store and exit.
- Press and hold to select the external compensation.

Key Press Tone

- Press LOCK to turn key tones on or off.
- Press and hold to lock out all keys.

Dynamic Values

- Press and hold ON/OFF to enter dynamic value settings.
- Set the number of repetitions.
- Set the dynamic voltage using the rotary control and press to store.
- Set the dynamic current using the rotary control and press to store.
- Press and hold the rotary control to save and exit.

Button Sounder ON/OFF Function

- Press SHIFT +1 to switch the button press sound on or off.

Remote Compensation Function

Note: No memory function available in this mode.

- Press SHIFT+CW to enter the remote compensation mode.
- The LED COMM will illuminate.

Remote Control

Software Installation

- Connect the USB cable and the power supply will connect and all control will transfer to the PC.
- All buttons on the power supply will be locked out and there will be a confirmation beep from the power supply.
- Disconnect the USB cable to return control to the power supply front panel controls.

COM Port Setting

- Com port setting should be set as follows:
- Baud Rate: 9600
- Parity Bit: None
- Data Bit: 8
- Stop Bit: 1
- Data Flow Control: None
- As a functionality check run the following command via the terminal application:
MTTTH*DIN?
- This should return the model identification information.

Specifications

Characteristics		72-13350	72-13360
Input Rating	Power	300W	300W
	Voltage	0-30V	0-60V
	Current	0-30A	0-15A
Load Regulation	Voltage	$\leq 0.01\% + 2\text{mV}$	
	Current	$\leq 1\% + 5\text{mA}$	

Characteristics		72-13350	72-13360
Line Regulation	Voltage	$\leq 0.01\% + 3\text{mV}$	
	Current	$\leq 0.1\% + 3\text{mA}$	
Setup Resolution	Voltage	1mV	
	Current	1mA	
Read Back Resolution	Voltage	1mV	
	Current	1mA	
Setup Accuracy	Voltage	$\leq 0.5\% + 5\text{mV}$	
	Current	$\leq 0.5\% + 3\text{mA}$	
Voltage Rise Time	Rise time	$\leq 65\text{ms}$	
	Fall Time	$\leq 50\text{ms}$	
Ripple	Voltage	$\leq 10\text{mVrms} + 0.03\%$ of current output	
	Current	$\leq 3\text{mA}_{\text{rms}}$	
Temp/ Read Back Coefficient	Voltage	$\leq 150\text{ppm}$	
	Current	$\leq 150\text{ppm}$	
Input Voltage		115V/230V ~ 50Hz	
Dimension W × D × H		90mm × 337mm × 184mm	

Note: The above specifications are given in the ambient temperature $25^{\circ}\text{C} \pm 5^{\circ}\text{C}$ and after a 5 minute warm up time.

Maintenance

Cleaning

- Use a damp cloth and a small amount of liquid detergent if necessary.
- Never submerge the power supply in liquid or allow any liquid to enter the case.
- Do not use any chemicals, abrasives or solvents that could damage the power supply casing.

Changing the fuse

- Replace the fuse only with one of exactly the same type and rating.
- Disconnect the mains power and unplug the mains lead before replacing the fuse.

Voltage	115V	230V
Fuse	T6A/250V	T4A/250V



INFORMATION ON WASTE DISPOSAL FOR CONSUMERS OF ELECTRICAL & ELECTRONIC EQUIPMENT.



When this product has reached the end of its life it must be treated as Waste Electrical & Electronic Equipment (WEEE). Any WEEE marked products must not be mixed with general household waste, but kept separate for the treatment, recovery and recycling of the materials used. Contact your local authority for details of recycling schemes in your area.

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