

DC POWER SUPPLY OPERATION MANUAL

MODEL:

**PW-3032/ PW-3033
PW-3032R/ PW-3033R
PW-4032/ PW-4033**



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Notice Before Operation

1. Unpack the instrument:

After receipt of the instrument, immediately unpack and inspect it for any damage which might have been sustained when in transportation or shortage of accessories. If any sign of damage and shortage of accessories are found, immediately notify the dealer.

2. Environments:

Normally, operational temperature of the instrument is 10°C to 40°C 90%R.H. (50°F to 104°F). Operation of the instrument outside of this temperature range may cause damage to the circuits.

3. Check the Line Voltage:

The instrument can operate on any one of the line voltages when in the below table by Inserting the line voltage selector plug in the corresponding position on the rear panel.

Before connection the power plug to an AC line outlet, be sure to check that voltage selector plug is set in the correct position corresponding to the line voltage.

Selector	Line Voltage	Fuse					
		PW-3032	PW-3032R	PW-3033	PW-3033R	PW-4032	PW-4033
115V	100~125V 50/60Hz	3.0A	3.0A	6A	6A	3A	6A
230V	220~240V 50/60Hz	1.5A	1.5A	3A	3A	1.5A	3A

Hints for operation:

1. Never place heavy objects on the instrument.
2. Never place a hot soldering iron on or near the instrument.
3. Never insert wires, pins or other metal object into ventilation fan.
4. Never move or pull the instrument with power cord or output lead, especially never move instrument when power cord or output lead is connected.
5. If the instrument is used in a manner not specified by the manufacture, the protection provide by the equipment may be impaired.

▲ WARNING

The following precautions must be observed to help prevent electric shock.

1. When the instrument is use to make testing. There is always a certain amount of danger from electrical shock. The person using the instrument in such condition should be a qualified electronics technician or otherwise trained and qualified to work in such circumstance.
2. Do not operate the instrument with the cover removed unless you are a qualified service technician.
3. The ground wire of the 3-wire AC power plug places the chassis and housing of the instrument at earth ground. Use only a 3-wire outlet, and do not attempt to defeat the ground wire connection or float the instrument to do so may pose a great safety hazard.
4. Do not obstruct the ventilation holes in the rear panel. As this will increase the internal temperature.
5. Never apply external voltage to the output terminal of the instrument.
6. The instrument is designed for **INDOOR USE ONLY**.
7. This instrument has been evaluated to **INSTALLTION CATEGORY II, POLLUTION DEGREE 2**.

■ GENERAL MAINTENANCE:

1. Preventive maintenance --- Clean and recalibrate the instrument on a regular basis to keep the instrument looking nice and working well.
2. Cleaning --- Remove any dirt, dust and grime whenever they become noticeable on the outside cover with a soft cloth moistened with a mild cleaning solution.
3. Servicing --- if the instrument ever becomes inoperative or damaged, refer servicing to a qualified repair facility.

■ FUSE REPLACEMENT:

If the fuse blows, the LED will not light and the instrument will not operate. Replace only with the correct value fuse. The fuse is located on the rear panel adjacent to the power cord receptacle.

Remove the fuse holder assembly as follows:

1. Unplug the power cord from rear of the instrument.
2. Insert a small screwdriver in fuse holder slot (located between fuse holder and receptacle). Pry fuse holder away from receptacle.
3. When reinstalling fuse holder, be sure that the fuse is installed so that the correct line voltage is selected.

General Specification [I]

ITEM	PW-3032	PW-3032R	PW-4032
Power Transformer:	E.I. Type Transformer	Toroidal Transformer	E.I. Type Transformer
Max. Continual Output Power:	105VA		
Max. Raised Temperature:	< 40°C	< 38°C	< 40°C
Independent Output:	0~30V/0~3A, 5V Fixed / 0~3A; Dual Output		
Constant Voltage Characteristic			
Load Regulation:	± 0.05% + 2mV		± 0.01% + 10mV
Line Regulation:	± 0.05% + 2mV		± 0.01% + 5mV
Ripple & Noise:	< 0.4mVrms	< 0.3mVrms	< 0.4mVrms
Constant Current Characteristic			
Load Regulation:	< 15mA		
Line Regulation:	± 0.05% + 2mA		
Ripple & Noise:	< 2.5mArms	< 2.0mArms	< 2.5mArms
5V Fixed Output			
Regulation:	Line Regulation < 5mV, Load Regulation < 10mV		
Ripple & Noise:	< 1.5mVrms	< 1mVrms	< 1.5mVrms
Voltage Accuracy:	5V ± 0.25V		
Max. Output Current:	3A		
Display			
Voltage:	3 Digits 0.56" Green LED		4 Digits 0.36" Green LED
Current:	3 Digits 0.56" Red LED		4 Digits 0.36" Red LED
Accuracy:	0.1% + 2 digits		0.05% + 3 digits
General			
Power Source:	ACV 115/230 ± 10%, 50/60Hz		
Dimensions(W x H x D):	230 x 170 x 310 mm		
Weight:	6.7 kg	5.7 kg	6.8 kg

General Specification [II]

DC POWER SUPPLY

ITEM	PW-3033	PW-3033R	PW-4033
Power Transformer:	E.I. Type Transformer	Toroidal Transformer	E.I. Type Transformer
Max. Continual Output Power:	195VA		
Max. Raised Temperature:	< 45°C	< 43°C	< 45°C
Independent Output:	0~30V/0~3A x 2, 5V Fixed / 0~3A; Triple Output		
Constant Voltage Characteristic			
Regulation:	Line<0.05%+3mV, Load<0.05%+5mv		
Ripple & Noise:	< 0.4mVrms	< 0.3mVrms	< 0.4mVrms
Temperature Coefficient:	< 300PPM/°C		
Constant Current Characteristic			
Regulation:	Line<0.2%+2mA, Load<0.2%+3mA		
Ripple & Noise:	< 2.5mArms	< 2mArms	< 2.5mArms
5V Fixed Output			
Regulation:	Line Regulation < 5mV, Load Regulation<10mV		
Ripple & Noise:	< 1.5mVrms	< 1mVrms	< 1.5mVrms
Voltage Accuracy:	5V ± 0.25V		
Max. Output Current:	3A		
Tracking Operation			
Parallel Regulation:	Line< 0.01%+3mV, Load< 0.01+5mV		
Series+and-Supply Regulation:	Line< 0.01%+3mV, Load< 0.01+5mV Slave tracking error<0.5%+2 digital of the master		
Series Single Supply Regulation:	Line<0.01%+5mA, Load Regulation<300mV		
Display			
Voltage:	3 Digits 0.56" Green LED		4 Digits 0.36" Green LED
Current:	3 Digits 0.56" Red LED		4 Digits 0.36" Red LED
Accuracy:	0.1% + 2 digits		0.05% + 3 digits
General			
Power Dource:	ACV 115/230 ± 10%, 50/60Hz		
Dimensions(W x H x D):	230 x 170 x 310 mm		
Weight:	7.9kg	6.9 kg	8.0 kg