



MSR-1231

Switching Power Supply

For various applications

User's Guide

Important safety information

Please read these warnings before using the MSR-1231 series power supply.



Warning: Safe operation

To reduce the risk of fire or electric shock, please adhere to these warnings:

Moisture: Do not expose this appliance to water or moisture.

Cleaning: Unplug the power supply from the mains power outlet before cleaning. Switching off the power supply will not reduce this risk.

Ventilation: Place the power supply in an area that will allow air to flow freely around the unit. This will prevent the power supply and mobile radio from overheating. Do not block or obstruct any of the ventilation openings on the unit.



Warning: Electrical connections

To reduce the risk of fire or electric shock, please adhere to these warnings:

The power supply should be properly connected and grounded. Use the provided AC power cable to connect the power supply to a mains power outlet that is properly installed and grounded, in accordance with all local codes and ordinances. If the power supply cord is damaged, it must be replaced with the same type to comply with safety requirements.



Warning: Servicing

This power supply should be serviced by a qualified service technician. Incorrect assembly may result in electric shock or fire.



Warning: High voltage levels

Some of the components inside the power supply can operate at voltage levels that may be lethal.

User information

The MSR-1231 series power supplies enable you to use with any electronic products.

Check the mains supply voltage

Before you plug in and turn on the power supply for the first time, please check the mains supply voltage.

The voltage rating of the power supply is printed on a label on the cover of the unit and the voltage selector on the rear panel. Verify that it corresponds with your local mains supply voltage (that is factory setting at 220VAC).

Turning the power supply on

Turn the power supply on by pressing the power switch to the 'ON' Position.

Turning the power supply off

Before you turn the power supply off, turn the radio off as described in the user documentation for the radio.

Turn the power supply off by pressing the power switch to the 'OFF' Position

Cooling

The MSR-1231 series power supply is cooled by convection and forced air cooling (that is, normal airflow around the power supply in combination with a temperature controlled fan to improve cooling at higher levels of use). The fan is always activated and the speed is controlled by a sensor. When the temperature rises, the fan speed increases.



Caution: Place the power supply in a well ventilated and cool area. Do not block the ventilation openings on the sides, back or top of the unit.



Installation information

Caution: Install the power supply indoors. It is not designed for operation out-of-doors or in wet environments.

Installation

1. Unplug the power supply from the mains supply outlet.
2. Connect the power cable's positive (red) wire to the positive terminal and connect the negative (black) wire to the negative terminal on the back of the power supply.
3. Plug the power cable into the power socket on the back of the radio.

Electrical specifications

MSR-1231 power supply

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|---------------------|--|
| Model | MSR-1231 Series |
| Input Voltage | 220~240VAC or 100~120VAC Switchable |
| Input Frequency | 50/60Hz |
| Polarity Grounded | Negative |
| Output Voltage | 4~16V (MSR-1231Mx, Dx, Dx+A, Dx+B) , 13.8V (MSR-1231Ax , Bx , Nx) |
| Continuous (13.8V) | 22A |
| Surge(13,8V) | 25A |
| Ripple & Noise | <100mV |
| Efficiency | 80% |
| Dimension(D*W*H mm) | 160 x155 x 44 1U/19" rack mountable (brackets option) |
| Net Weight | 1.50 kg |

Note: Specifications may change without prior notice

Panel Descriptions

Front panels:

MSR-1231Ax (x can be A、B、T)



MSR-1231Bx (x can be A、B、T)



MSR-1231Mx (x can be A、B、T)



MSR-1231Nx (x can be A、B、T)



MSR-1231Dx (x can be A、B、T)



MSR-1231Dx+A (x can be A、B、T)



MSR-1231Dx+A (x can be A、B、T)



1. Power Switch

2. DC Output

3. DC Output Voltage Adjust knob

4. FIX/ADJ button

5. Amp meter

6. Volt meter

Note:

1. The ADJ/FIX button of MSR-1231Dx, Dx+A, Dx+B, Mx, is used for adjust output voltage from 4~16V (ADJ), or quickly back to default voltage 13.8V (FIX).

Rear panels:

MSR-1231xA (x can be A、B、D、M、N)



MSR-1231xB (x can be A、B、D、M、N)



MSR-1231xT (x can be A、B、D、M、N)



7. DC Output II
9. AC Input Socket

8. AC Input Voltage 115V/230V Selector