ZVS-8350 / 8352 / 8354 Fixed Voltage Switching Mode Power Supply

USER'S MANUAL

INTRODUCTION

This fixed voltage switching mode power supply is designed with high RFI stability especially for DC operated radio equipment. It is also suitable for a variety of applications that need a clean DC source.

The concealed trimmer allows fine tuning of output voltage range of 12 ~ 14.5V for ZVS-8350, 24 ~ 29V for ZVS-8352 & 48 ~ 57V for ZVS-8354.

Constant current circuitry is used for overload and short circuit, red indicator will turn ON. Over temperature protection will shut down the output and the indicator will turn off. This power supply also has Over Voltage Protection to prevent your connected equipment from damage by abnormal high output voltage.

With the optional accessory, unit can be easily converted to 19" rack mount construction.

Please read through this manual and pay special attention to the caution and safety precautions.

Keep this manual in an easy to find place for future reference.

CAUTIONS

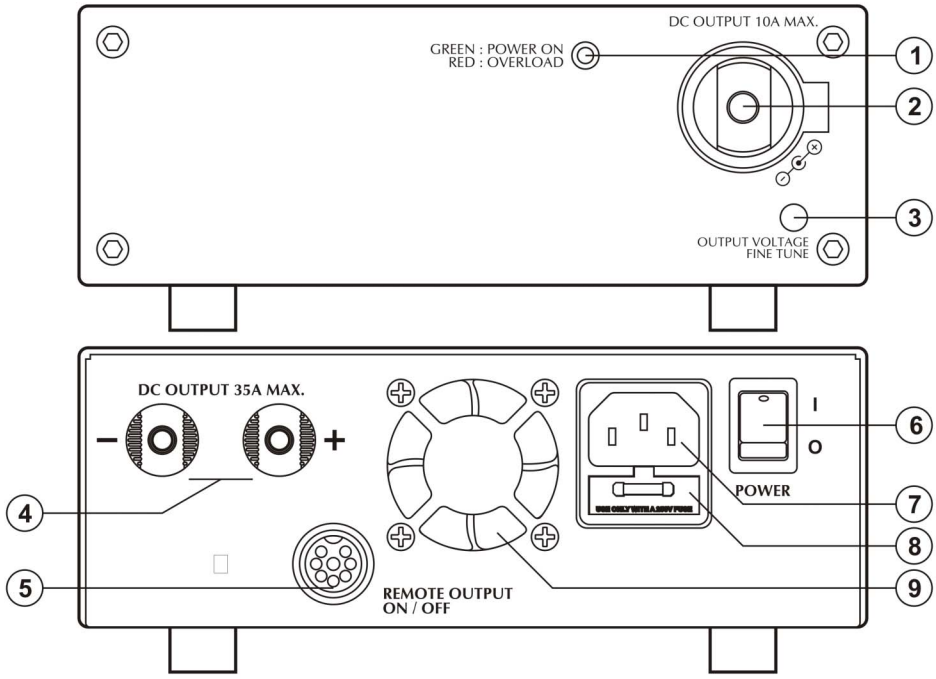
DO NOT use this power supply for high inductive load such as solenoid or motorized equipment because of the inductive kick back from the output may damage the power supply.

DO NOT operate power supply immediately with a newly replaced fuse before the fault has been found and rectified. Make sure to use the same rating and type as the original fuse.

SAFETY PRECAUTIONS

Never remove the casing when the power supply is connected to AC or load.
Never touch the unit when your hands are wet.
Never block any of the grille openings or allow foreign object to get inside .
Must use a mains AC 3 pin socket with effective grounding.

PANEL DESCRIPTION



1.Indicator: **GREEN** - Power ON, **RED** - Overload & Output Short Circuit Protection, **OFF** - Over Temperature
2. Cigar Socket with center positive (10A max.) only for ZVS-8350/ZVS-8352
3. Fine tune access port. **(Range : 12-14.5V for ZVS-8350, 24 -29V for ZVS-8352 & 48-57V for ZVS-8354)**
4. Main DC Output Binding Post
5. Remote Output ON/OFF socket
6. ON / OFF Switch
7. AC Power Input Connector
8. Cover Fuse Holder
9. Cooling Fan (Variable speed)

INSTALLATION

1. This power supply is designed for indoor use only , put the unit in a well ventilated place and allow at least 50mm(2 in.) space on two sides and the back to allow sufficient fan cooling.

2. Check for the correct input AC voltage with the rating label on the power supply

   Make sure your mains plug is of 3 pin version and the ground pin is effective as the grounding of the power supply will prevent electrical shock caused by leakage.

3. Turn on the power supply for a few minutes , the power switch(1) should be lit and the indicator (2) should be in green.

4. Turn off the power supply and connect the equipment with correct polarity.

5. Turn on the power supply first , then turn on the equipment .

6. When the operation is finished, turn off the equipment first , then turn off the power supply.

REMOTE CONTROL

ENABLE AND DISABLE THE OUTPUT

You can use Port 7 and 8 to remote control the OUTPUT ON/OFF.
a) Open Port 7 and 8 if you want to ENABLE the output (By default)
b) Short Port 7 and 8 if you want to DISABLE the output.

Set up the provided remote connector plug

(a) Remove the black portion of the remote control connector plug by removing the screw as Fig 1.

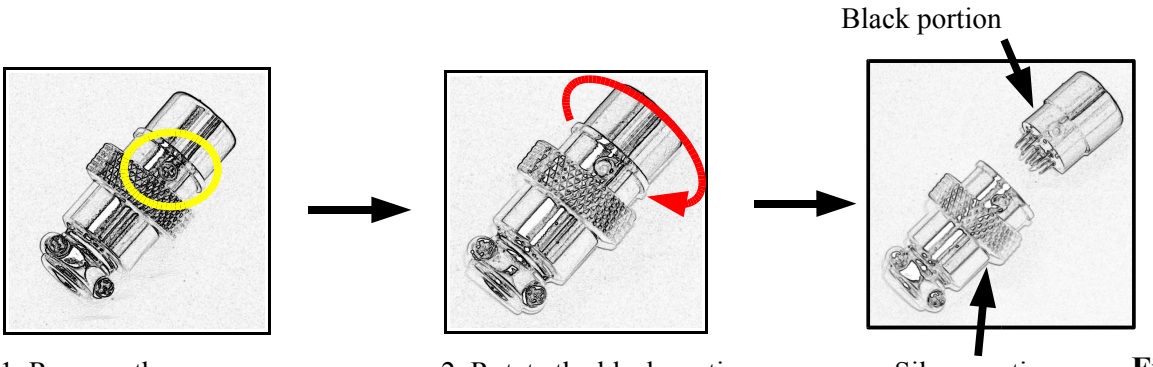
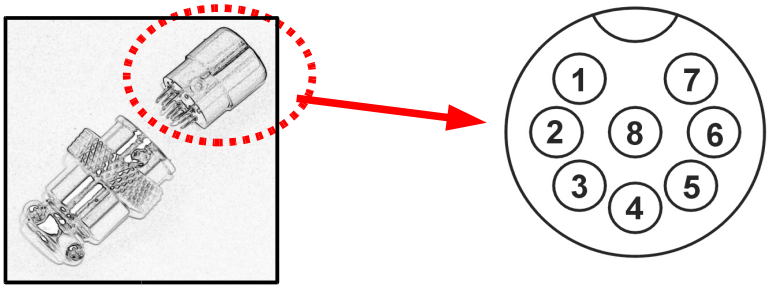


Fig. 1

(b) Solder 2 wires(22AWG) to PORT 7 & 8 of black portion as shown in Fig.2.



Port numbers are marked on the black portion

Fig. 2

(c) Make sure the load is disconnected and the power supply is OFF.
(d) Plug the remote connector plug into the remote control terminal of the power supply.
(e) Secure the remote connector plug to the terminal socket by locking connector ring(Fig 3).

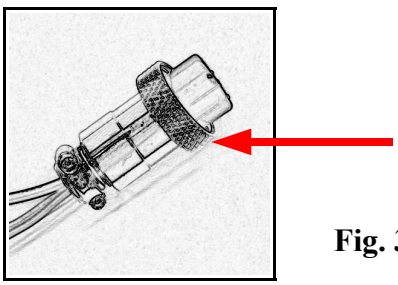


Fig. 3

FINE TUNING THE OUTPUT VOLTAGE
(12 ~14.5V for ZVS-8230, 24 ~ 29V for ZVS-8232 & 48 ~ 57V for ZVS-8354)

This regulated power supply has been factory preset at a stable DC output.

Rarely you need to do any fine tuning under normal operation .

However , should the need for specific precise output voltage other than the preset voltage is required , refer to the following procedure.

Front View

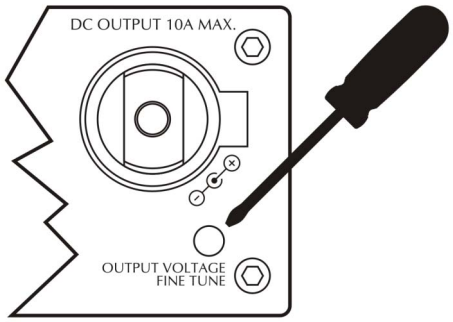


Fig.4

1. Let the power supply warm up for about 15 min.
2. Turn the power supply over with the bottom up and connect a digital multi-meter(DMM) with at least 2 decimal read out to the main output terminal (4).
3. Locate the fine tune access hole (3) on the bottom as shown in Fig.4.
4. Insert a slim flat head screw driver to get to the trimmer as shown in Fig.4.
5. Carefully and slowly turn the screw driver clockwise or anti-clockwise while keeping an eye on the DMM for your desired voltage setting.
6. Measure again the output voltage to re-confirm your new setting after returning the power supply to its normal operation position.

SPECIFICATIONS

	ZVS - 8350	**ZVS - 8352**	**ZVS - 8354**
OUTPUT VOLTAGE:	Fixed 13.8Vdc +/-0.5V	Fixed 27.6Vdc +/-0.5V	Fixed 55.2Vdc +/-0.5V
OUTPUT CURRENT:			
Main Output Post	35A Continuous	18A Continuous	9A Continuous
Main Output Post + Cigar Socket	35A Continuous	18A Continuous	9A Continuous (no cigar socket)
RIPPLE AND NOISE:	≤50mVp-p	≤80mVp-p	≤100mVp-p
LINE REGULATION:	≤20mV (±10% Variation)		
LOAD REGULATION:	≤50mV (0~100% Load)		
POWER SOURCE:	230Vac/50Hz~ (or On Request)		
COOLING SYSTEM	Forced air cooling by variable speed cooling fan		
OPTIONAL ACCESS.	19” Rack Mount Kit		
DIMENSION (W×H×D):	175 × 72 × 196 (mm) / 6.9 x 2.9 x 7.8 inch		
WEIGHT:	Approx. 1.8Kg / Approx. 4Lbs.		