

TPA-1515 SWITCH MODE POWER SUPPLY

USER'S MANUAL

INTRODUCTION

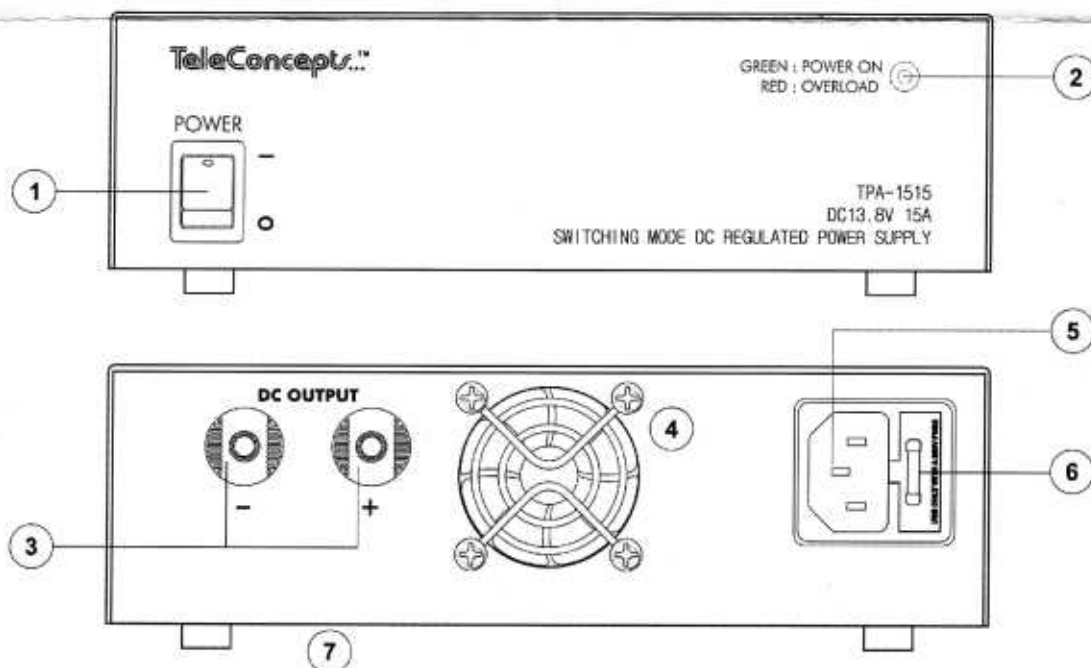
The TPA-1515 Switching Mode DC Power Supply provides high power output with its small size and lightweight. It is suitable for a variety of uses, especially for DC operated radio equipment source from an AC outlet and providing 13.8V under 15A continuous operation.

Please read through this operation instruction carefully and follow the instructions to prevent from abuse or misuse. This manual must be kept for reference at anytime in need.

FEATURES

1. **Lightweight and Small Size:** This switching mode power supply has the advantages of lightweight, small size and same footprint as the standard transceiver. Comparing with linear mode power with the same power output, it is much lighter and smaller.
2. **High Efficiency:** The unit is operated with efficiency over 80% under the best condition.
3. **Overload Protection:** The constant current circuitry is adopted to prevent from overload. The red fault indicator will be lighted up when the unit is overloaded.
4. **Over Temperature Protection:** The over temperature circuitry is functioned when the unit is over a certain high temperature to prevent the unit from damage by the high temperature. When the circuitry is functioned, the output voltage and current will drop down to a safety value and the red fault indicator will be lighted up.
5. **Over Voltage Protection:** The over voltage circuitry protect the unit and the loading equipment from damage by abnormal high output voltage.
6. **High RFI Stability:** The high protection circuitry against RFI (Radio Frequency Interference) provides a stable operation.

PANEL DESCRIPTION



1. On/Off Switch
2. Dual Color Indicator (Green for power on/off, Red for fault condition)
3. Output Terminal
4. Cooling Fan and Air Intake Window
5. Power Input Connector
6. Fuse Holder
7. Fine Tune Adjust is located on the bottom (Adjustable range : 13.3-14.5V)

INSTALLATION

1. Make grounding the unit to prevent from electric shock at high voltage caused by leakage or lightning.
2. **DO NOT** place the unit in high humid, dusty and/or sunshiny places.
3. Place the unit in a location where allows free air circulation.
4. **DO NOT** place the unit close the TV sets or CRT monitor.
5. Couple with an AC outlet directly, as source via distribution cables may heat plugs and cable.
6. Put the unit horizontally for accurate meter readings.

Note: For Indoor Use Only.

CAUTION

1. **DO NOT** use the unit for the equipment requiring higher current input than the designed value otherwise damages the unit.
2. **DO NOT** use the unit for the lamps or motorized equipment, which require high current input at starting and it may damage the unit.
3. **DO NOT** replace the fuse before ceasing problems and *the assigned value of fuse* must be used in place.
4. If the external flexible cable or cord of this transformer is damaged, it shall be replaced by a special cord or assembly available from the manufacturer or his service agent.

SAFETY PRECAUTIONS

1. **NEVER** remove the metal cover of the power supply while AC power is connected.
2. **NEVER** touch the unit when your hands are wet.
3. **NEVER** operate the unit if foreign materials such as metallic objects, water, or other debris have fallen inside. Contact your dealer for check and repair.
4. **NEVER** operate the unit that was being damaged, as the voltage regulation circuitry may have been disabled. The resulting high voltage could damage your equipment.
5. **NEVER** allow foreign objects to touch the DC Power Output Terminals.
6. If you have the need to inspect the interior of the unit, let it to cool down completely, as some components may be enough to burn your hand in the event of component failure.
7. **NEVER** block the cooling fan air intake window.

CONNECTION AND OPERATION

1. Make sure the AC power source fits the input of voltage unit labeled and plug it in the AC outlet.
2. Connect the equipment to the unit. Red (+) is connected to the positive polarity input of the equipment and Black (-) is connected to the negative polarity input of the equipment.
3. First turn ON the unit and then turn the equipment ON.
4. When and operation is finished, turn off the equipment first and then turn OFF the unit.

SPECIFICATIONS

	TPA - 1515
OUTPUT VOLTAGE:	Fixed 13.8Vdc +/-0.5V
OUTPUT CURRENT:	15A continuous
RIPPLE AND NOISE:	$\leq 50\text{mVp-p}$, $5\text{mV}_{\text{r.m.s.}}$
LINE REGULATION:	$\leq 50\text{mV}$ ($\pm 10\%$ Variation)
LOAD REGULATION:	$\leq 100\text{mV}$ (0~100% Load)
POWER SOURCE:	230Vac/50Hz~ (or On Request)
DIMENSION (W×H×D):	181 × 63 × 190 (mm)
WEIGHT:	Approx. 1.7Kg