



DC POWER SUPPLY

# PS-30

INSTRUCTION MANUAL

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Your new Model PS-30 DC Power Supply, PS-30 has been carefully engineered and manufactured under rigid quality standards, and should give you satisfactory and dependable operation for many years.

Before using, we suggest that you read through this instruction manual to become acquainted with correct operation.

Should any trouble arise with the unit, please contact your dealer, or the nearest KENWOOD service facility.

## AFTER UNPACKING

**Shipping Container:**

Save the boxes and packing in the event your unit needs to be transported for maintenance and service.

**NOTE:** There are two versions of the PS-30. A 120/220V line model and a 220/240V line model.

## INTRODUCTION

The Model PS-30 is a regulated DC power supply designed to perfectly match the KENWOOD transceiver TS-120S to provide reliable fixed station operation. This unit is equipped with an external output terminal (5A max.) for operation of additional equipment.

## BEFORE USING

The following accessory items are included with the unit:

|                                  |                            |
|----------------------------------|----------------------------|
| Instruction manual . . . . .     | 1 copy                     |
| Fuse (6A) . . . . .              | 1 piece                    |
| Fuse (4A) . . . . .              | 1 piece                    |
| Fuse (4A) . . . . .              | 1 piece (220/240V version) |
| Extension feet with screws . . . | 2 pieces                   |

## CAUTIONS

1. If the output terminal is shorted or a current in excess of 2A (including external output terminal) flows, (for example TS-120S is transmit condition) the unit will not operate. Remove the cause of short or reduce the operating current to less than 2A (The unit is not overloaded when the TS-120S is in receive mode.)
2. The built-in fuse will blow when the unit is overloaded.
3. Allow a sufficient space behind the unit. Install the unit in a well ventilated location.
4. Use a DC power cord having largest possible size, and cut it as short as possible.  
If the power cord is too long, the output voltage drop or it picks up RF energy.
5. When connecting two or more transceivers to the unit or when using the unit for any other purposes, check to make sure that the operating current is below the rated current of the unit.
6. If the unit is operated without connecting load, it delivers about 16V or output voltage. This is normal and not an indication that the unit is defective.

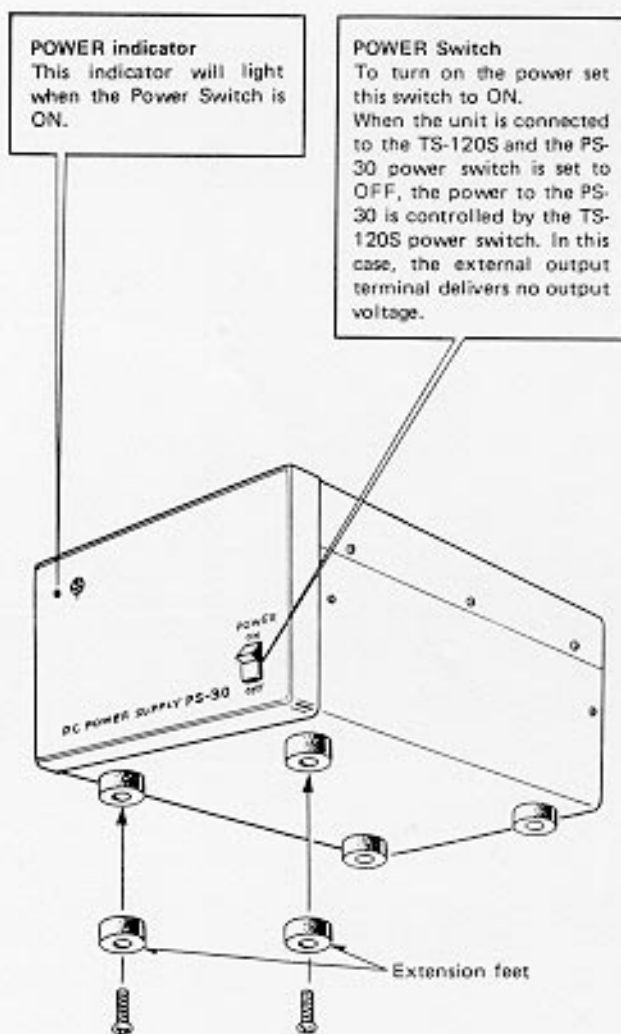


Fig. 1

# INSTALLATION

Connect the AC power cord as shown in Fig. 2. Before connecting, ascertain that the Power Switch is OFF.

**Note:** When connecting the unit to the TS-120V (10W type), use the DC cable supplied with the TS-120V.

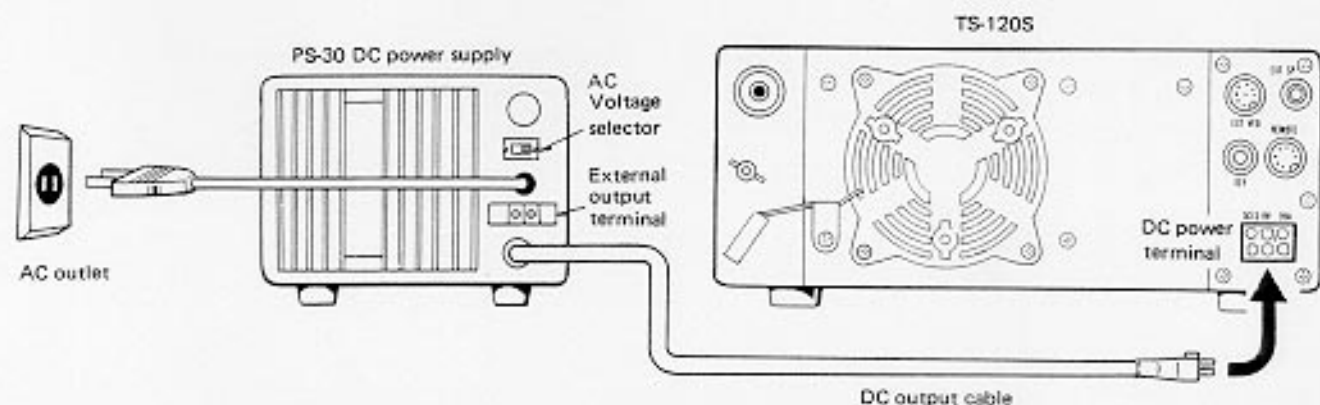


Fig. 2 Connection

# MAINTENANCE

1. The unit is equipped with a 6A or 4A fuse (AC) and a 20A fuse (DC). If either one or both blow, disconnect the AC power cord and check the cause before replacing the defective fuse.  
(Replacement fuse is available from your dealer or KENWOOD service stations.)  
Never use a fuse of higher ratings.
2. The unit is designed to deliver DC13.8V (at 15A) of output voltage. If the voltage should become lower at some future date, consult your dealer or the nearest KENWOOD service station.

## NOTE: The 120/220 version model

When the position of the AC Voltage Selector Switch is changed, it is also necessary to change the power fuse.

For 120 volt operation a 6 ampere fuse, for 220 volt operation a 4 ampere fuse provided with the PS-30 should be used.

# SPECIFICATIONS

## [Power Supply Section]

|                             |  |
|-----------------------------|--|
| Input voltage:              | AC 120V/220V or 220V/240V $\pm$ 10%, 50/60Hz   |
| Output voltage:             | DC 13.8V (standard voltage)  |
| Output current:             | 20A (intermittent load 50% duty cycle)   |
| Continuous load current:    | 15A max. (inclusive of external output terminal)   |
| Output voltage fluctuation: | Within $\pm$ 0.7V at AC 120V, 220V, 240V $\pm$ 10% (Load current: 15A)<br>Within 0.7V at 2–15A of load current<br>(No-load output voltage: Less than 16V at AC 120V, 220V, 240V) |
| Ripple voltage:             | Less than 20mV (rms), <sup>5</sup> output current 15A  |
| Power consumption:          | Approx. 470W at AC 120V, 220V, 240V, (Load current: 20A)   |

## [General]

|             |  |
|-------------|--|
| Dimensions: | 180 (7"-1/16)W x 133 (5"-1/4)H x 287 (11"-5/16)D mm (inch) |
| Weight:     | Approx. 8.9 kg (19.6 lbs.)                                 |

