



# PS-55 INSTRUCTIONS

## AC POWER SUPPLY

### INTRODUCTION

Thank you for selecting the PS-55 AC Power Supply. It supplies a regulated 13.8V DC, 20A maximum output, and was developed specifically for use with the ICOM IC-735 All Band, 100W HF transceiver with general coverage receive capability.

Please study these instructions carefully before using the PS-55 in order to obtain maximum performance from the power supply.

### DESCRIPTION

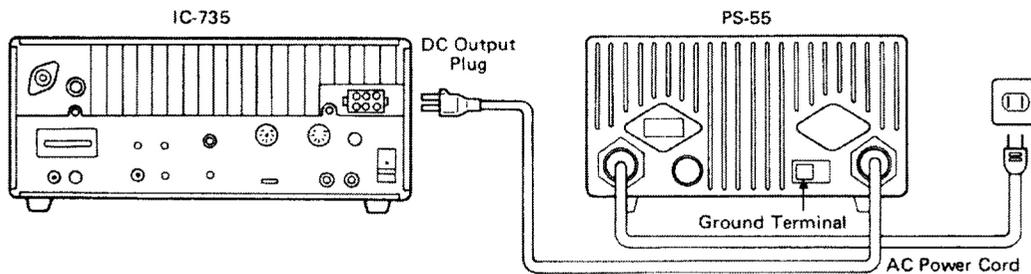
The PS-55 operates in conjunction with the ON/OFF power switch on the transceiver. The power supply itself has no power switch. Avoid using the PS-55 for experiments or other purposes; use it only with the IC-735 or similar matching ICOM transceivers.

It was engineered with circuitry which ensures low output voltage ripple even with low input voltages. Fluctuations of output voltage caused by ambient temperature changes are also minimized. In addition, the risk of transistor breakdown as a result of high output current is greatly reduced.

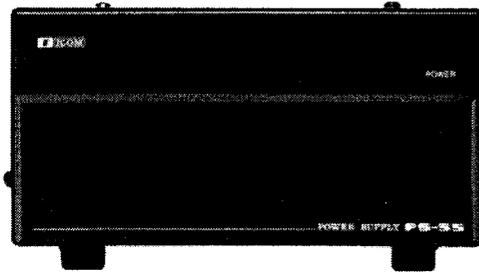
A squirrel cage fan is included as standard equipment on each PS-55. This fan begins to operate whenever the power supply temperature reaches 80°C or higher. After the unit cools to less than 70°C, the fan stops operating.

Keep in mind that the maximum power consumption of the PS-55 is 545 VA when installing any type of AC line filters. Choose components with appropriate electrical ratings for the filter.

### ● CONNECTIONS



### PS-55 AC POWER SUPPLY



### OPERATION

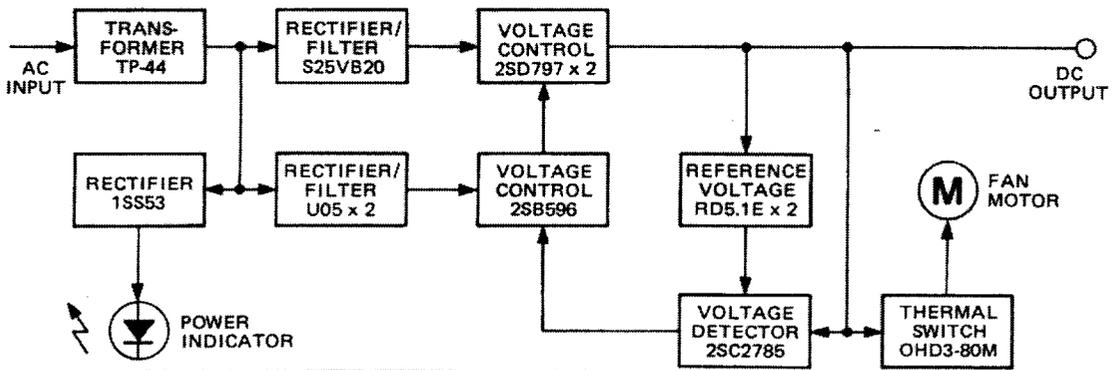
**CAUTION:** Do not plug the PS-55 AC Power Cord into a power outlet until after step 5 is completed, and all connections and settings are as stated below.

- 1) Connect the DC Output Plug of the PS-55 to the power connector on the rear panel of the transceiver. Ensure it is connected securely.
- 2) Connect a length of heavy gauge wire to the Ground Terminal. Connect this wire to the nearest good earth ground.
- 3) Turn the power switch of the transceiver OFF.
- 4) Place the transceiver in the RECEIVE mode.
- 5) Disconnect the microphone from the transceiver.
- 6) Plug the AC Power Cord into a power outlet.
- 7) Turn the power switch of the transceiver ON. Note that the PS-55 LED Power Indicator lights, and the power supply turns ON.

## SPECIFICATIONS

Number of semiconductors	: Transistors	4
	: Diodes	7
Input voltage	: 117, 220, 240V AC $\pm 10\%$	50/60Hz
Power consumption	: 545VA (450W) at full load	
Output voltage	: 13.8V DC $\pm 10\%$ (Negative ground)	
Maximum load current	: 20A, 50% duty cycle	(10 minutes ON, 10 minutes OFF)
Dimensions	: 180(183)mm(W) x 94(107)mm(H) x 267(267)mm(D)	( ) Dimensions include projections
Weight	: 6.7kg	
Operating temperature	: $-10^{\circ}\text{C} \sim +60^{\circ}\text{C}$	

## BLOCK DIAGRAM



## SCHEMATIC

