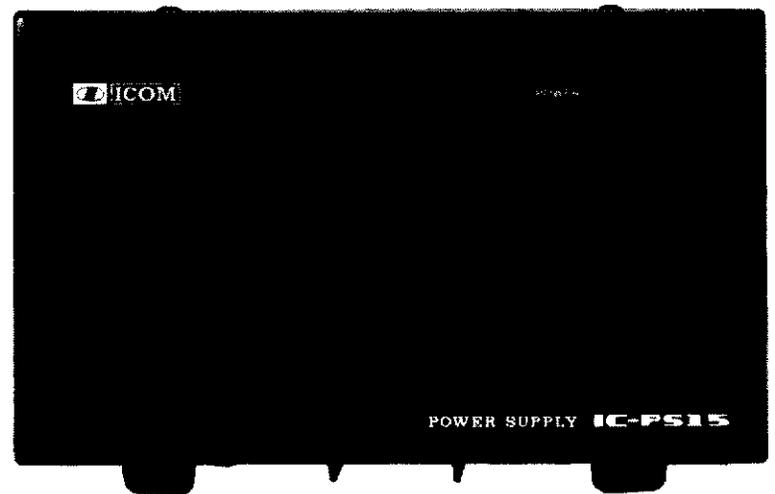


IC-PS15

AC POWER SUPPLY

INSTRUCTION MANUAL



Thank you for having chosen the IC-PS15 Power Supply designed for ICOM's transceivers. This AC power supply is a newly developed power source designed specifically for ICOM's Digital, All Solid-State, All Band, HF Transceiver, 100W continuous output, with a General Coverage Receiver, the IC-720.

■ SPECIFICATIONS

- **Number of Semiconductors:**

Transistors	4
Diodes	7
- **Input Voltage:** 100V, 117V, 200V, 240V, AC (50/60HZ) $\pm 10\%$
- **Input Capacity:** 550VA, at 20A load
- **Output Voltage:** 13.8V DC, negative ground
- **Max. Load Current:** 20A, 10 minutes on, 10 minutes off, 50% duty cycle
- **Dimensions:** 110(H) x 180(W) x 290(D) mm.
- **Weight:** Approximately 8.2 kgs.
- **Accessories supplied:** 2 spare fuses
Instruction Manual

■ BEFORE USE:

This is a regulated power supply with output of 13.8V DC, 20A, for use with ICOM's IC-720, with continuous RF output of 100W, or other matching transceiver.

The IC-PS15 has complete safeguards against: Increased ripple in the output voltage caused by lower input voltage, fluctuation of output voltage caused by ambient temperature change, breakdown of transistors caused by high current at output terminals, etc.

This power supply is designed to be turned on/off by the power switch on the transceiver. There is no power switch on the IC-PS15. This unit supplies 20A maximum at 13.8V DC; avoid using this unit with sets other than ICOM's matching transceivers, even for experiments.

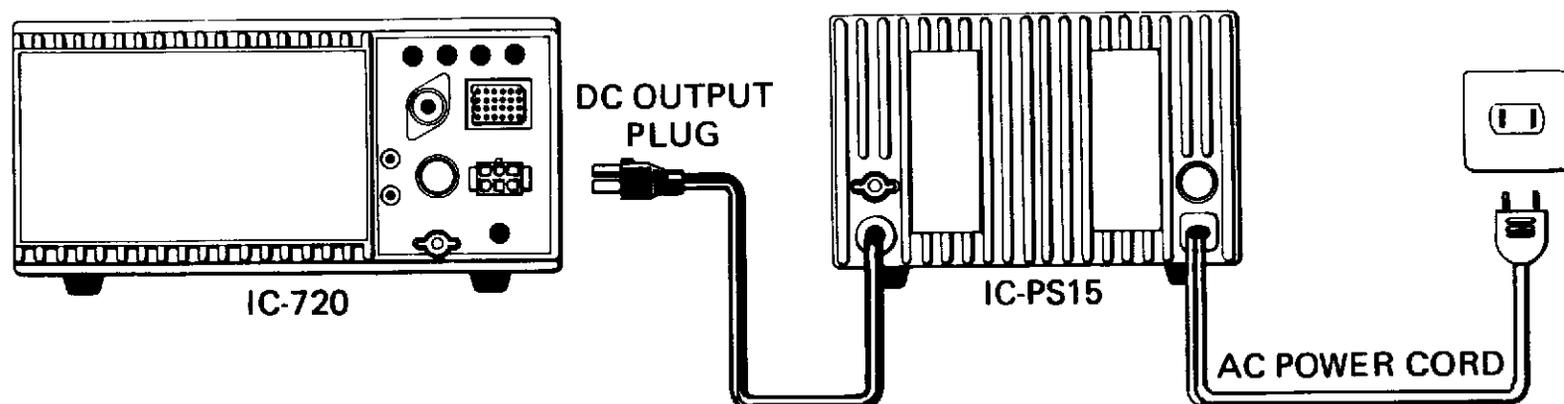
A cooling fan, IC-CF1, with mounting hardware, is available as an option. Its use is recommended when the IC-720 is operated in the RTTY mode, or the power supply heats up due to ambient temperatures.

■ HOW TO USE:

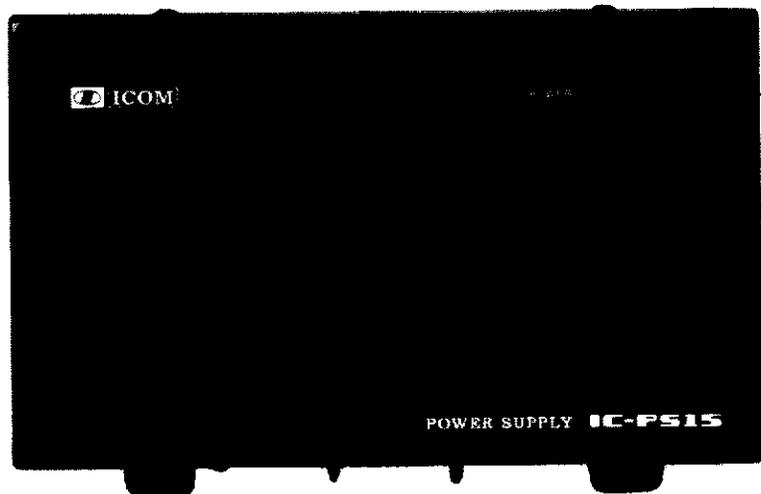
Connect the DC OUTPUT plug of the IC-PS15 to the power connector of the IC-720, or other ICOM's matching transceiver, firmly. The drawing shows this connection. When this is done, be sure:

1. The power switch of the transceiver is OFF;
2. The T/R switch is in the RECEIVE position; and,
3. No microphone is connected to the transceiver.

Connect the AC POWER cord to a power outlet. When the power switch of the transceiver is turned on, the IC-PS15 will be turned ON, and the power indicator LED will light. For further operating information, refer to the Instruction Manual of the transceiver.



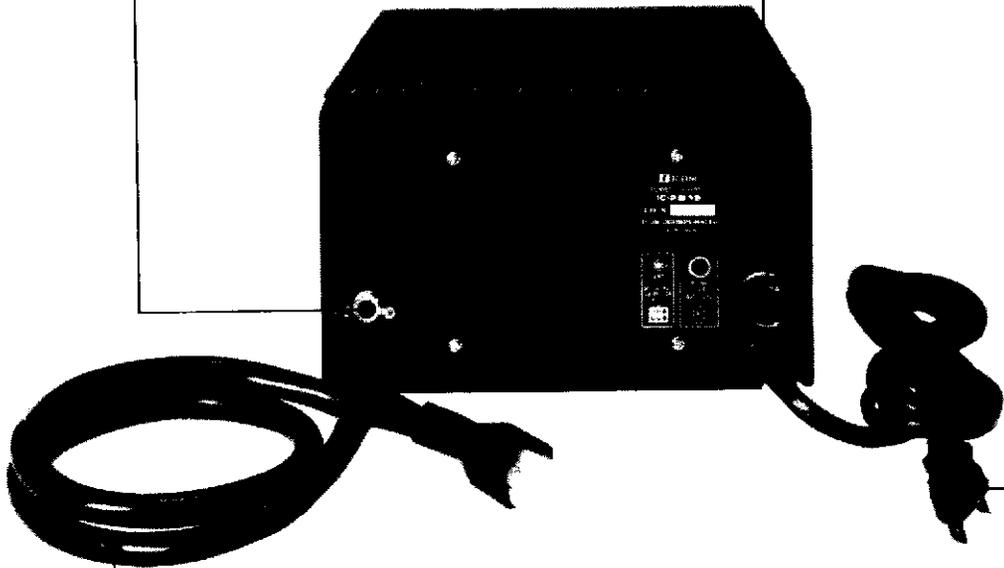
FUNCTIONS



POWER DISPLAY LED
Illuminates when power is on. No power switch is installed on IC-PS15. ON/OFF is controlled by the POWER SWITCH of the transceiver.

GND TERMINAL
Ground this terminal with the shortest possible wire for shock protection or other mishap.

FUSE HOLDER
Fuse holder for the AC power line. If blown, replace it with a 10A (at 117V) or 5A (at 240V) fuse after checking cause of problem. Use a Philips screwdriver to open the holder. The outside ring of the holder is fixed.

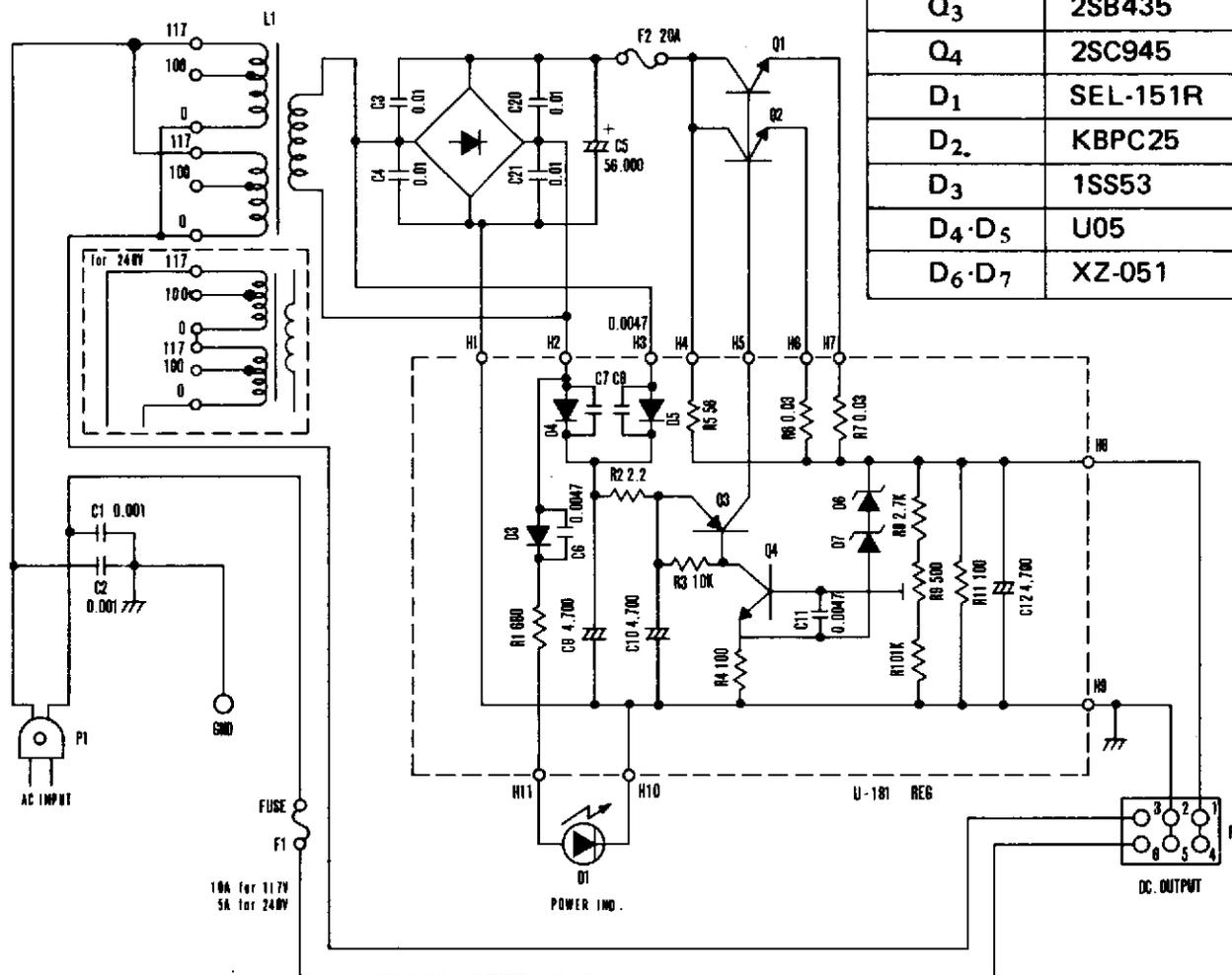


DC OUTPUT PLUG
13.8V DC is available at up to 20A. Connect this plug to the power connector of the transceiver.

AC POWER CORD
Connect the plug to a power outlet.

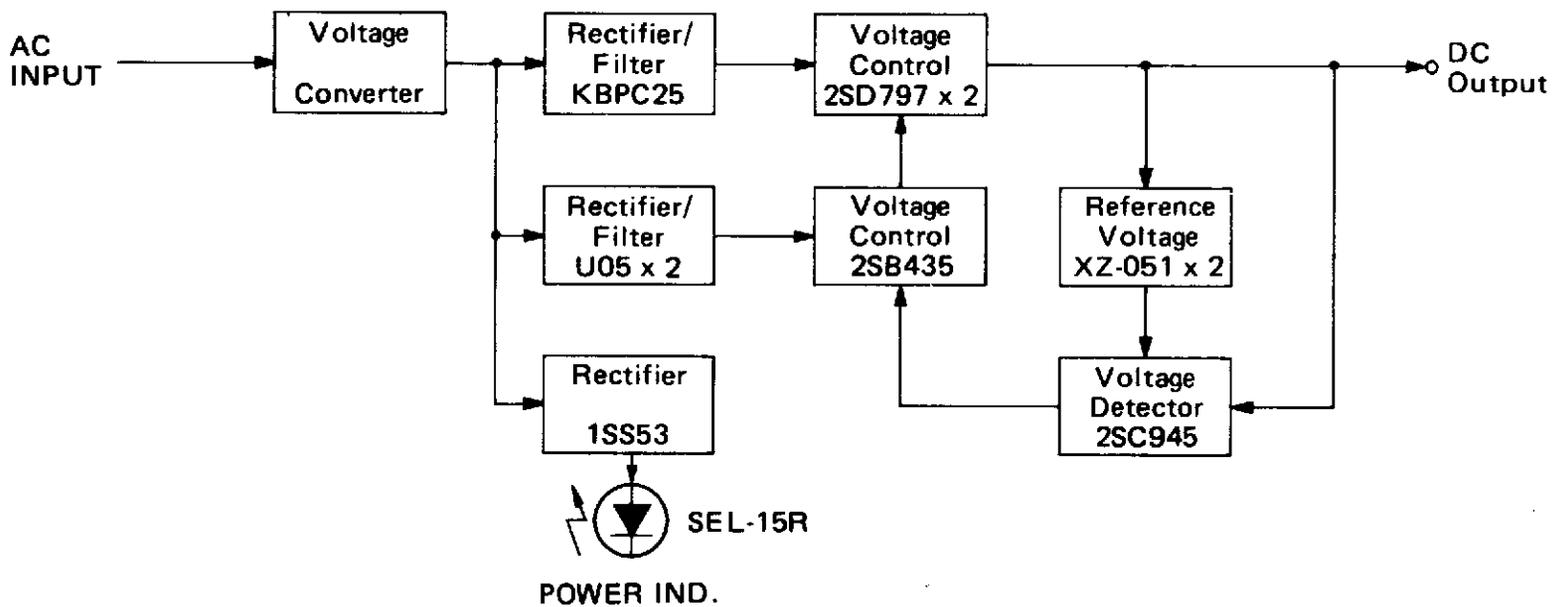
SCHEMATIC DIAGRAM

COMPONENTS USED IN POWER CIRCUIT



PART No.	Type	Operation
Q ₁ ·Q ₂	2SD797	Voltage Control
Q ₃	2SB435	Voltage Control
Q ₄	2SC945	Voltage Detector
D ₁	SEL-151R	Power IND.
D ₂	KBPC25	Rectifier/Filter
D ₃	1SS53	Rectifier
D ₄ ·D ₅	U05	Rectifier/Filter
D ₆ ·D ₇	XZ-051	Reference Voltage

BLOCK DIAGRAM



ICOM INCORPORATED

1-6-19, KAMI KURATSUKURI, HIRANO-KU,
OSAKA JAPAN