**Icom** 

**IC PS-125** 

**Service Manual** 

# Brief operational description of the Icom PS-125 power supply

### A. Primary DC supply

1. AC input voltage is applied through the AC switch, to input fuse F-1 and filters IF1, IF2, and associated capacitors C1-5, C24 & C25, through R-2 to the primary rectifier array D-1. Triac Q-1 that is connected across R-2 conducts once the switching supply starts, thus limiting the voltage drop across R-2. A movable jumper from D-1 to the junction of C-9 & C-10 configures the primary supply for 110-volt operation as a voltage doubler. For 220-volt operation, this jumper is not connected. The +310 volt DC output voltage of D1 is connected through L2, & D2 to series connected electrolytic capacitors C-9 & C-10 which filter the DC output voltage of D-1.

#### **B.** Switching supply

1. The output of the primary 310V DC supply is now applied to series connected power FETs Q4 & Q5 and the primary of high frequency transformer T-1. Switch mode controller IC, HIC-1, drives the gates of Q4 & Q5. Upon initial power application, Q4 or Q5 will conduct first, thus causing an ac output voltage on all secondary windings of T-1. The voltage of T-1 pins 7 & 8 is rectified by D-8, regulated by D-9 & Q-6 and applied to HIC-1 pin 12 (vcc) to operate HIC-1. The voltage from T-1 pins 9 &10 is rectified by D23, & filtered by C40 to supply voltage for all IC's and transistors except HIC-1. HIC-1 now begins operating and alternately drives Q4 & Q5 at a high AC frequency.

#### C. Secondary DC supply

- 1. T-1 secondary windings pins 12 & 13, 16 & 17, 14 & 15, 10 & 11 and fast recovery diodes D 21 & D22, along with electrolytic capacitors C31,32,33.34.& 35 form the 25 amp 13.8 volt DC output supply. The output is applied to the output terminals through L-12 & L-13.
- 2. The 13.8 Volt DC output is sensed via R-58 to the base of Q-11, the collector of which drives opto- isolator PC-1. Adjustment of VR-11adjusts the base voltage of Q-11 thus establishing via HIC-1, the power supply DC output voltage.
- 3. IC-11 pins 1, 2, & 3 sense the voltage drop across R-31 & R-32 via VR-12 and R-44, to establish via the adjustment of VR-12, the maximum output current limit.
- 4. Zener diode D-26, Q13, R-48, R-49, PC-2 and associated components detect an over voltage condition of the 13.8 volt supply output.
- 5. IC-11, pins 5,6, & 7, Q-14 & associated components sense temperature rise inside the supply via Thermistor R54 which touches power transformer T-1 and turns on the fan as appropriate.

# PS-125 parts list

Q1         TM1641S-L Triac         1           Q2         2SC4002 NPN transistor         1           Q3, 12         DTC 114E digital transistor         2           Q4, 5         FS22SM-9 Power Mosfet transistor         1           Q6         2SC3246 NPN transistor         1           Q13         2SA733 PNP transistor         1           Q11,14         2SC945 NPN transistor         2           HIC-1         MB 2013A switching controller IC         1           IC 1         S80745         1           IC 11         LM2904 dip op amp         1           IC 12         LM 431 precision regulator         1           PC 1, PC 2         PS2561 opto isolators         2           D1         R8V1506 Bridge rectifier         1           D2         FMN-G12S 200V 5A fast recovery diode         1           D3,25,26         15 volt ½ w zener diode         3           D4,5,6         ISS270A diode         3           D24         7 volt zener diode         1           D21         KCQ60A04 fast recovery diode         2           ER         1         RS 270-1055 or 270-1054           R2         ERU5TAK6R8 1.6 W fuse resistor         1         Panasonic <th>Item</th> <th>Description</th> <th>Qty ea.</th>	Item	Description	Qty ea.
Q3, 12         DTC 114E digital transistor         2           Q4, 5         FS22SM-9 Power Mosfet transistor         2         or FS22SM-10 or NTE 2970           Q6         2SC3246 NPN transistor         1         0           Q13         2SA733 PNP transistor         2         1           Q11,14         2SC945 NPN transistor         2         1           HIC-1         MB 2013A switching controller IC         1         1           IC 1         S80745         1         1           IC 11         LM2904 dip op amp         1         1           IC 12         LM 431 precision regulator         1         1           PC 1, PC 2         PS2561 opto isolators         2         2           D1         R8V1506 Bridge rectifier         1         1           D2         FMN-G12S 200V 5A fast recovery diode         1         2           D4,56         ISS270A diode         3         3           D4,56         ISS270A diode         3         3           D23         ERA91-02 diode         1         1           D24         7 volt zener diode         1         2           D21, D22         KCQ60A04 fast recovery power diode         2         1	Q1	TM1641S-L Triac	1
Q3, 12         DTC 114E digital transistor         2           Q4, 5         FS22SM-9 Power Mosfet transistor         2         or FS22SM-10 or NTE 2970           Q6         2SC3246 NPN transistor         1         I           Q13         2SA733 PNP transistor         1         I           Q11,14         2SC945 NPN transistor         2         I           HIC-1         MB 2013A switching controller IC         1         I           IC 1         S80745         1         I           IC 11         LM2904 dip op amp         1         I           IC 12         LM 431 precision regulator         1         I           PC 1, PC 2         PS2561 opto isolators         2         2           D1         R8V1506 Bridge rectifier         1         I           D2         FMN-G12S 200V 5A fast recovery diode         1         I           D3,25,26         15 volt ½ w zener diode         3         3           D4,56         ISS270A diode         3         3           D4,4         6         ISS270A diode         1           D23         ERA91-02 diode         1           D21, D22         KCQ60A04 fast recovery power diode         2           F1		2SC4002 NPN transistor	1
Q4, 5         FS22SM-9 Power Mosfet transistor         2         or FS22SM-10 or NTE 2970           Q6         2SC3246 NPN transistor         1           Q13         2SA733 PNP transistor         1           Q11,14         2SC945 NPN transistor         2           HIC-1         MB 2013A switching controller IC         1           IC 1         S80745         1           IC 11         LM2904 dip op amp         1           IC 12         LM 431 precision regulator         1           PC 1, PC 2         PS2561 opto isolators         2           D1         R8V1506 Bridge rectifier         1           D2         FMN-G12S 200V 5A fast recovery diode         1           D3,25,26         15 volt ½ w zener diode         3           D4,56         ISS270A diode         3           D4,56         ISS270A diode         3           D24         7 volt zener diode         1           D24         7 volt zener diode         1           D21, D22         KCQ60A04 fast recovery power diode         2           F1         fuse, 5x20mm, 4A (120V) 3A (230V)         1         RS 270-1055 or 270-1054           R2         ERUSTAK6R8 1.6 W fuse resistor         1         Panasonic		DTC 114E digital transistor	2
Q6         2SC3246 NPN transistor         1           Q13         2SA733 PNP transistor         1           Q11,14         2SC945 NPN transistor         2           HIC-1         MB 2013A switching controller IC         1           IC 1         S80745         1           IC 11         LM2904 dip op amp         1           IC 12         LM 431 precision regulator         1           PC 1, PC 2         PS2561 opto isolators         2           D1         R8V1506 Bridge rectifier         1           D2         FMN-G12S 200V 5A fast recovery diode         1           D3,25,26         15 volt ½ w zener diode         3           D4,5,6         ISS270A diode         3           D1,11         RG1C, 1kv 1A fast recovery diode         2           D23         ERA91-02 diode         1           D24         7 volt zener diode         2           D21, D22         KCQ60A04 fast recovery power diode         2           F1         fuse, 5x20mm, 4A (120V) 3A (230V)         1         RS 270-1055 or 270-1054           R2         ERUSTAK6R8 1.6 W fuse resistor         1         Panasonic           C1, C2         0.47uf, 250V         2           C5, C37, C38, C41			2 or FS22SM-10 or NTE 2970
Q13         2SA733 PNP transistor         1           Q11,14         2SC945 NPN transistor         2           HIC-1         MB 2013A switching controller IC         1           IC 1         S80745         1           IC 11         LM2904 dip op amp         1           IC 12         LM 431 precision regulator         1           PC 1, PC 2         PS2561 opto isolators         2           D1         R8V1506 Bridge rectifier         1           D2         FMN-G12S 200V 5A fast recovery diode         1           D3,25,26         15 volt ½ w zener diode         3           D4,5,6         ISS270A diode         3           D10,11         RGIC, 1kv 1A fast recovery diode         2           D23         ERA91-02 diode         1           D24         7 volt zener diode         1           D21, D22         KCQ60A04 fast recovery power diode         2           F1         fuse, 5x20mm, 4A (120V) 3A (230V)         1         RS 270-1055 or 270-1054           R2         ERUSTAK6R8 1.6 W fuse resistor         1         Panasonic           C1, C2         0.47uf, 250V         2         2           C3, C4, C11, C18         .002uf         4           C5, C37,		2SC3246 NPN transistor	1
Q11,14         2SC945 NPN transistor         2           HIC-1         MB 2013A switching controller IC         1           IC 1         S80745         1           IC 11         LM2904 dip op amp         1           IC 12         LM 431 precision regulator         1           PC 1, PC 2         PS2561 opto isolators         2           D1         R8V1506 Bridge rectifier         1           D2         FMN-G12S 200V 5A fast recovery diode         1           D3,25,26         15 volt ½ w zener diode         3           D4,5,6         ISS270A diode         3           D10,11         RGIC, 1kv 1A fast recovery diode         2           D23         ERA91-02 diode         1           D24         7 volt zener diode         1           D21, D22         KCQ60A04 fast recovery power diode         2           F1         fuse, 5x20mm, 4A (120V) 3A (230V)         1         RS 270-1055 or 270-1054           R2         ERUSTAK6R8 1.6 W fuse resistor         1         Panasonic           C1, C2         0.47uf, 250V         2         2           C3, C4, C11, C18         .0022uf         4         4           C5, C37, C38, C41         0.22uf         4         2	Q13	2SA733 PNP transistor	1
HIC-1		2SC945 NPN transistor	2
IC 11		MB 2013A switching controller IC	1
IC 12 LM 431 precision regulator 1 PC 1, PC 2 PS2561 opto isolators 2 D1 R8V1506 Bridge rectifier 1 D2 FMN-G12S 200V 5A fast recovery diode 1 D3,25,26 15 volt ½ w zener diode 3 D4,5,6 ISS270A diode 3 D10,11 RG1C, 1kv 1A fast recovery diode 2 D23 ERA91-02 diode 1 D24 7 volt zener diode 1 D21, D22 KCQ60A04 fast recovery power diode 2 F1 fuse, 5x20mm, 4A (120V) 3A (230V) 1 RS 270-1055 or 270-1054 R2 ERU5TAK6R8 1.6 W fuse resistor 1 Panasonic 2 C1, C2 0.47uf, 250V 2 C3, C4, C11, C18 .0022uf 4 C5, C37, C38, C41 0.22uf 4 C6, C7, C8 76pf 3 C9, C10 1200uf 200V electrolytic 2 C12 41pf 1 C13, C40 22uf 50V 2 C14, C16 470pf 1KV 2 C15, C17 0.56uf 1KV 2 C19 100uf 35V 1 C28 0.22uf 50V 1 C31, C32, C33, C34 220uf 35V 4 C35, C36 1000uf 25V 2 C39, C43, C44, C45 0.1uf 50V 4 C42 0.33uf 50V 1	IC 1	•	1
IC 12 LM 431 precision regulator 1 PC 1, PC 2 PS2561 opto isolators 2 D1 R8V1506 Bridge rectifier 1 D2 FMN-G12S 200V 5A fast recovery diode 1 D3,25,26 15 volt ½ w zener diode 3 D4,5,6 ISS270A diode 3 D10,11 RG1C, 1kv 1A fast recovery diode 1 D23 ERA91-02 diode 1 D24 7 volt zener diode 1 D21, D22 KCQ60A04 fast recovery power diode 2 F1 fuse, 5x20mm, 4A (120V) 3A (230V) 1 RS 270-1055 or 270-1054 R2 ERU5TAK6R8 1.6 W fuse resistor 1 Panasonic 1 C1, C2 0.47uf, 250V 2 C3, C4, C11, C18 .0022uf 4 C5, C37, C38, C41 0.22uf 4 C6, C7, C8 76pf 3 C9, C10 1200uf 200V electrolytic 2 C12 41pf 1 C13, C40 22uf 50V 2 C14, C16 470pf 1KV 2 C15, C17 0.56uf 1KV 2 C19 100uf 35V 1 C28 0.22uf 50V 1 C31, C32, C33, C34 220uf 35V 4 C35, C36 1000uf 25V 2 C39, C43, C44, C45 0.1uf 50V 4 C42 0.33uf 50V 1	IC 11	LM2904 dip op amp	1
PC 1, PC 2 D1 R8V1506 Bridge rectifier D2 FMN-G12S 200V 5A fast recovery diode D3,25,26 D4,5,6 D58270A diode D10,11 RG1C, 1kv 1A fast recovery diode D23 ERA91-02 diode D24 T volt zener diode D24 D25 RCQ60A04 fast recovery power diode D26 FI fuse, 5x20mm, 4A (120V) 3A (230V) R2 ERU5TAK6R8 1.6 W fuse resistor C1, C2 C3, C4, C11, C18 C9, C10 C1, C2 C1, C8 C9, C10 C12 C12 C14 C15 C17 C17 C18 C19 C19 C19 C19 C10 C10 C10 C10 C10 C10 C10 C10 C10 C11 C10 C11 C10 C11 C11	IC 12		1
D1       R8V1506 Bridge rectifier       1         D2       FMN-G12S 200V 5A fast recovery diode       1         D3,25,26       15 volt ½ w zener diode       3         D4,5,6       ISS270A diode       3         D10,11       RG1C, 1kv 1A fast recovery diode       2         D23       ERA91-02 diode       1         D24       7 volt zener diode       1         D21, D22       KCQ60A04 fast recovery power diode       2         F1       fuse, 5x20mm, 4A (120V) 3A (230V)       1       RS 270-1055 or 270-1054         R2       ERU5TAK6R8 1.6 W fuse resistor       1       Panasonic         C1, C2       0.47uf, 250V       2         C3, C4, C11, C18       .0022uf       4         C5, C37, C38, C41       0.22uf       4         C6, C7, C8       76pf       3         C9, C10       1200uf 200V electrolytic       2         C12       41pf       1         C13, C40       22uf 50V       2         C14, C16       470pf 1KV       2         C19       100uf 35V       1         C28       0.22uf 50V       1         C31, C32, C33, C34       2200uf 35V       4         C35, C36       <	PC 1, PC 2		2
D2       FMN-G12S 200V 5A fast recovery diode       1         D3,25,26       15 volt ⅓ w zener diode       3         D4,5,6       ISS270A diode       3         D10,11       RG1C, 1kv 1A fast recovery diode       2         D23       ERA91-02 diode       1         D24       7 volt zener diode       1         D21, D22       KCQ60A04 fast recovery power diode       2         F1       fuse, 5x20mm, 4A (120V) 3A (230V)       1       RS 270-1055 or 270-1054         R2       ERU5TAK6R8 1.6 W fuse resistor       1       Panasonic         C1, C2       0.47uf, 250V       2         C3, C4, C11, C18       .0022uf       4         C5, C37, C38, C41       0.22uf       4         C6, C7, C8       76pf       3         C9, C10       1200uf 200V electrolytic       2         C12       41pf       1         C13, C40       22uf 50V       2         C14, C16       470pf 1KV       2         C19       100uf 35V       1         C28       0.22uf 50V       1         C31, C32, C33, C34       2200uf 35V       1         C35, C36       1000uf 25V       2         C39, C43, C44, C45			1
D3,25,26       15 volt ½ w zener diode       3         D4,5,6       ISS270A diode       3         D10,11       RG1C, 1kv 1A fast recovery diode       2         D23       ERA91-02 diode       1         D24       7 volt zener diode       1         D21, D22       KCQ60A04 fast recovery power diode       2         F1       fuse, 5x20mm, 4A (120V) 3A (230V)       1       RS 270-1055 or 270-1054         R2       ERU5TAK6R8 1.6 W fuse resistor       1       Panasonic         C1, C2       0.47uf, 250V       2         C3, C4, C11, C18       .0022uf       4         C5, C37, C38, C41       0.22uf       4         C6, C7, C8       76pf       3         C9, C10       1200uf 200V electrolytic       2         C12       41pf       1         C13, C40       22uf 50V       2         C14, C16       470pf 1KV       2         C15, C17       0.56uf 1KV       2         C19       100uf 35V       1         C28       0.22uf 50V       1         C31, C32, C33, C34       2200uf 35V       4         C35, C36       1000uf 25V       2         C39, C43, C44, C45       0.1uf 50V	D2		1
D4,5,6       ISS270A diode       3         D10,11       RG1C, 1kv 1A fast recovery diode       2         D23       ERA91-02 diode       1         D24       7 volt zener diode       1         D21, D22       KCQ60A04 fast recovery power diode       2         F1       fuse, 5x20mm, 4A (120V) 3A (230V)       1       RS 270-1055 or 270-1054         R2       ERU5TAK6R8 1.6 W fuse resistor       1       Panasonic         C1, C2       0.47uf, 250V       2         C3, C4, C11, C18       .0022uf       4         C5, C37, C38, C41       0.22uf       4         C6, C7, C8       76pf       3         C9, C10       1200uf 200V electrolytic       2         C12       41pf       1         C13, C40       22uf 50V       2         C14, C16       470pf 1KV       2         C15, C17       0.56uf 1KV       2         C19       100uf 35V       1         C28       0.22uf 50V       1         C31, C32, C33, C34       2200uf 35V       4         C35, C36       1000uf 25V       2         C39, C43, C44, C45       0.1uf 50V       4         C42       0.33uf 50V       1	D3,25,26		3
D10,11         RG1C, 1kv 1A fast recovery diode         2           D23         ERA91-02 diode         1           D24         7 volt zener diode         1           D21, D22         KCQ60A04 fast recovery power diode         2           F1         fuse, 5x20mm, 4A (120V) 3A (230V)         1         RS 270-1055 or 270-1054           R2         ERU5TAK6R8 1.6 W fuse resistor         1         Panasonic           C1, C2         0.47uf, 250V         2           C3, C4, C11, C18         .0022uf         4           C5, C37, C38, C41         0.22uf         4           C6, C7, C8         76pf         3           C9, C10         1200uf 200V electrolytic         2           C12         41pf         1           C13, C40         22uf 50V         2           C14, C16         470pf 1KV         2           C15, C17         0.56uf 1KV         2           C19         100uf 35V         1           C28         0.22uf 50V         1           C31, C32, C33, C34         2200uf 35V         4           C35, C36         1000uf 25V         2           C39, C43, C44, C45         0.1uf 50V         4           C42         0.33		ISS270A diode	3
D23         ERA91-02 diode         1           D24         7 volt zener diode         1           D21, D22         KCQ60A04 fast recovery power diode         2           F1         fuse, 5x20mm, 4A (120V) 3A (230V)         1 RS 270-1055 or 270-1054           R2         ERU5TAK6R8 1.6 W fuse resistor         1 Panasonic           C1, C2         0.47uf, 250V         2           C3, C4, C11, C18         .0022uf         4           C5, C37, C38, C41         0.22uf         4           C6, C7, C8         76pf         3           C9, C10         1200uf 200V electrolytic         2           C12         41pf         1           C13, C40         22uf 50V         2           C14, C16         470pf 1KV         2           C15, C17         0.56uf 1KV         2           C19         100uf 35V         1           C28         0.22uf 50V         1           C31, C32, C33, C34         2200uf 35V         4           C35, C36         1000uf 25V         2           C39, C43, C44, C45         0.1uf 50V         4           C42         0.33uf 50V         1		RG1C, 1kv 1A fast recovery diode	2
D24       7 volt zener diode       1         D21, D22       KCQ60A04 fast recovery power diode       2         F1       fuse, 5x20mm, 4A (120V) 3A (230V)       1 RS 270-1055 or 270-1054         R2       ERU5TAK6R8 1.6 W fuse resistor       1 Panasonic         C1, C2       0.47uf, 250V       2         C3, C4, C11, C18       .0022uf       4         C5, C37, C38, C41       0.22uf       4         C6, C7, C8       76pf       3         C9, C10       1200uf 200V electrolytic       2         C12       41pf       1         C13, C40       22uf 50V       2         C14, C16       470pf 1KV       2         C15, C17       0.56uf 1KV       2         C19       100uf 35V       1         C28       0.22uf 50V       1         C31, C32, C33, C34       2200uf 35V       4         C35, C36       1000uf 25V       2         C39, C43, C44, C45       0.1uf 50V       4         C42       0.33uf 50V       1	The state of the s		
D21, D22         KCQ60A04 fast recovery power diode         2           F1         fuse, 5x20mm, 4A (120V) 3A (230V)         1 RS 270-1055 or 270-1054           R2         ERU5TAK6R8 1.6 W fuse resistor         1 Panasonic           C1, C2         0.47uf, 250V         2           C3, C4, C11, C18         .0022uf         4           C5, C37, C38, C41         0.22uf         4           C6, C7, C8         76pf         3           C9, C10         1200uf 200V electrolytic         2           C12         41pf         1           C13, C40         22uf 50V         2           C14, C16         470pf 1KV         2           C15, C17         0.56uf 1KV         2           C19         100uf 35V         1           C28         0.22uf 50V         1           C31, C32, C33, C34         2200uf 35V         4           C35, C36         1000uf 25V         2           C39, C43, C44, C45         0.1uf 50V         4           C42         0.33uf 50V         1	D24		1
F1 fuse, 5x20mm, 4A (120V) 3A (230V) 1 RS 270-1055 or 270-1054 R2 ERU5TAK6R8 1.6 W fuse resistor 1 Panasonic C1, C2 0.47uf, 250V 2 C3, C4, C11, C18 .0022uf 4 C5, C37, C38, C41 0.22uf 4 C6, C7, C8 76pf 3 C9, C10 1200uf 200V electrolytic 2 C12 41pf 1 C13, C40 22uf 50V 2 C14, C16 470pf 1KV 2 C15, C17 0.56uf 1KV 2 C19 100uf 35V 1 C28 0.22uf 50V 1 C31, C32, C33, C34 2200uf 35V 4 C35, C36 1000uf 25V 2 C39, C43, C44, C45 0.1uf 50V 4 C42 0.33uf 50V 1			2
R2       ERU5TAK6R8 1.6 W fuse resistor       1 Panasonic         C1, C2       0.47uf, 250V       2         C3, C4, C11, C18       .0022uf       4         C5, C37, C38, C41       0.22uf       4         C6, C7, C8       76pf       3         C9, C10       1200uf 200V electrolytic       2         C12       41pf       1         C13, C40       22uf 50V       2         C14, C16       470pf 1KV       2         C15, C17       0.56uf 1KV       2         C19       100uf 35V       1         C28       0.22uf 50V       1         C31, C32, C33, C34       2200uf 35V       4         C35, C36       1000uf 25V       2         C39, C43, C44, C45       0.1uf 50V       4         C42       0.33uf 50V       1	15		1 RS 270-1055 or 270-1054
C1, C2       0.47uf, 250V       2         C3, C4, C11, C18       .0022uf       4         C5, C37, C38, C41       0.22uf       4         C6, C7, C8       76pf       3         C9, C10       1200uf 200V electrolytic       2         C12       41pf       1         C13, C40       22uf 50V       2         C14, C16       470pf 1KV       2         C15, C17       0.56uf 1KV       2         C19       100uf 35V       1         C28       0.22uf 50V       1         C31, C32, C33, C34       2200uf 35V       4         C35, C36       1000uf 25V       2         C39, C43, C44, C45       0.1uf 50V       4         C42       0.33uf 50V       1			
C3, C4, C11, C18       .0022uf       4         C5, C37, C38, C41       0.22uf       4         C6, C7, C8       76pf       3         C9, C10       1200uf 200V electrolytic       2         C12       41pf       1         C13, C40       22uf 50V       2         C14, C16       470pf 1KV       2         C15, C17       0.56uf 1KV       2         C19       100uf 35V       1         C28       0.22uf 50V       1         C31, C32, C33, C34       2200uf 35V       4         C35, C36       1000uf 25V       2         C39, C43, C44, C45       0.1uf 50V       4         C42       0.33uf 50V       1			
C5, C37, C38, C41       0.22uf       4         C6, C7, C8       76pf       3         C9, C10       1200uf 200V electrolytic       2         C12       41pf       1         C13, C40       22uf 50V       2         C14, C16       470pf 1KV       2         C15, C17       0.56uf 1KV       2         C19       100uf 35V       1         C28       0.22uf 50V       1         C31, C32, C33, C34       2200uf 35V       4         C35, C36       1000uf 25V       2         C39, C43, C44, C45       0.1uf 50V       4         C42       0.33uf 50V       1	-	·	4
C6, C7, C8       76pf       3         C9, C10       1200uf 200V electrolytic       2         C12       41pf       1         C13, C40       22uf 50V       2         C14, C16       470pf 1KV       2         C15, C17       0.56uf 1KV       2         C19       100uf 35V       1         C28       0.22uf 50V       1         C31, C32, C33, C34       2200uf 35V       4         C35, C36       1000uf 25V       2         C39, C43, C44, C45       0.1uf 50V       4         C42       0.33uf 50V       1			4
C9, C10       1200uf 200V electrolytic       2         C12       41pf       1         C13, C40       22uf 50V       2         C14, C16       470pf 1KV       2         C15, C17       0.56uf 1KV       2         C19       100uf 35V       1         C28       0.22uf 50V       1         C31, C32, C33, C34       2200uf 35V       4         C35, C36       1000uf 25V       2         C39, C43, C44, C45       0.1uf 50V       4         C42       0.33uf 50V       1			
C12       41pf       1         C13, C40       22uf 50V       2         C14, C16       470pf 1KV       2         C15, C17       0.56uf 1KV       2         C19       100uf 35V       1         C28       0.22uf 50V       1         C31, C32, C33, C34       2200uf 35V       4         C35, C36       1000uf 25V       2         C39, C43, C44, C45       0.1uf 50V       4         C42       0.33uf 50V       1		•	2
C13, C40       22uf 50V       2         C14, C16       470pf 1KV       2         C15, C17       0.56uf 1KV       2         C19       100uf 35V       1         C28       0.22uf 50V       1         C31, C32, C33, C34       2200uf 35V       4         C35, C36       1000uf 25V       2         C39, C43, C44, C45       0.1uf 50V       4         C42       0.33uf 50V       1		•	
C14, C16       470pf 1KV       2         C15, C17       0.56uf 1KV       2         C19       100uf 35V       1         C28       0.22uf 50V       1         C31, C32, C33, C34       2200uf 35V       4         C35, C36       1000uf 25V       2         C39, C43, C44, C45       0.1uf 50V       4         C42       0.33uf 50V       1			2
C15, C17			
C19 100uf 35V 1 C28 0.22uf 50V 1 C31, C32, C33, C34 2200uf 35V 4 C35, C36 1000uf 25V 2 C39, C43, C44, C45 0.1uf 50V 4 C42 0.33uf 50V 1		•	
C28       0.22uf 50V       1         C31, C32, C33, C34       2200uf 35V       4         C35, C36       1000uf 25V       2         C39, C43, C44, C45       0.1uf 50V       4         C42       0.33uf 50V       1			
C31, C32, C33, C34 2200uf 35V 4 C35, C36 1000uf 25V 2 C39, C43, C44, C45 0.1uf 50V 4 C42 0.33uf 50V 1			
C35, C36 1000uf 25V 2 C39, C43, C44, C45 0.1uf 50V 4 C42 0.33uf 50V 1			
C39, C43, C44, C45 0.1uf 50V 4 C42 0.33uf 50V 1			
C42 0.33uf 50V 1			
			1
			1 AD0612MX-C70GL-LF

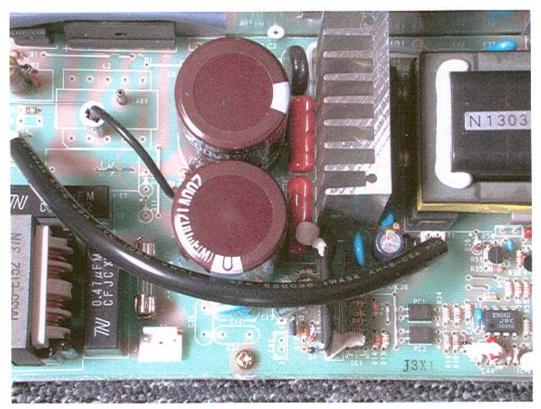
Note: VR-11 adjusts Output Voltage VR-12 adjusts Output Current

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### Icom IC PS-125 Service Manual



110-220 V jumper detail

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