

Using The Preamp With Other Rigs

This preamplifier is ideal for use with almost any other receiver or

transceiver, providing space to mount it can be found. With most rigs, it is unlikely that the receive/transmit switching function will be required unless the preamp is located in a

signal path that provides a bi-directional low level RF signal path (as in Omega where the preselector handles both receive, and low level Tx signals). The normal place for the preamp would be immediately ahead of the receive RF amplifier (or mixer if no RF amplification) and after any filtering. In such a case, the Preamp on/off control (Q3) should be permanently wired ON (connect D to F) and ON/OFF control then obtained by switching point E to +12 on receive via a switch. **Note** that UNDER NO CIRCUMSTANCES should other than low-level Transmit power be passed through this unit.

Component Listing

R1	470R
R2	33R
R3,4	68R
R5,6,7,8	220R 0.5 watt
R9,11	100K
R10,12	1K
All 0.25W 5% carbon film except R5 — R8	
C1,2	1p0 ceramic
C3,10	100n monolithic ceramic
C4,5,6,7,8,9	10n ceramic
Q1,2	J310
Q3,5	BC237 or 238 or 239
Q4	BFY51
Q6	BC307 or BC308
D1,2,3	BA379
L1	TOKO RF Choke type 7BA. 3.9uH (coded 3R9)
RFC1,2,3,4,5	TOKO RF Choke type 7BA. 1mH (coded 102)
T1	Wound on Fair-Rite Balun core Type 28-43002402. Primary 2 turns. Secondary 8 turns centre tapped. 0.2mm dia en Cu wire.
T2	Wound on 10mm square block ferrite toroid. Primary 10 turns centre tapped. Secondary 2 turns. 0.2mm en Cu wire.

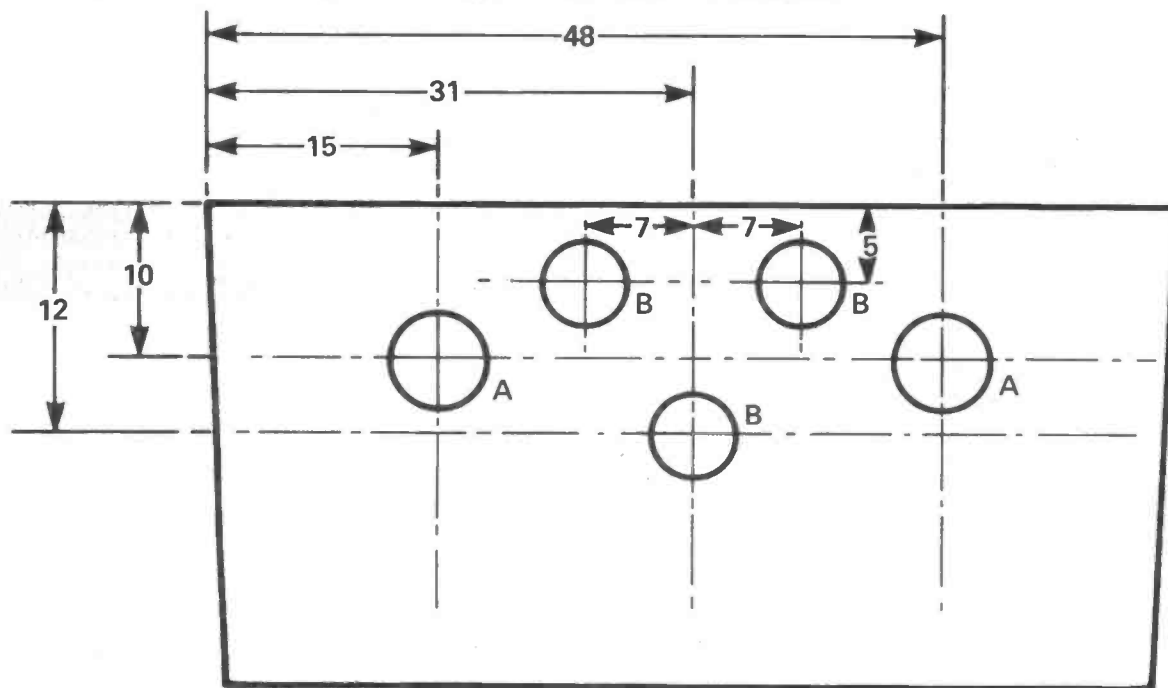
Also required: 7 x 1mm dia PCB connection pins; SPCO toggle switch; Min 50 ohm coaxial cable; Diecast Box RS type 509-939

Kits

A kit of parts for this project including a drilled tinned PCB, switch and all PCB mounted components is available from WPO Communications at £13.50 inc VAT & p&p. The PCB alone is £3.50. The diecast box is not included in this kit but is available at £3.50 inc.

* The diode switching of the preamplifier can be usefully replaced with relays if this facility is not required by the would-be constructor.

Fig.3. Preamp diecast box drilling detail Omega overlay diagram Foil Pattern



BOX: RS TYPE 509-939

A = HOLE TO SUIT GROMMET
B = 5mm Ø
MEASUREMENTS WITHOUT LID IN PLACE