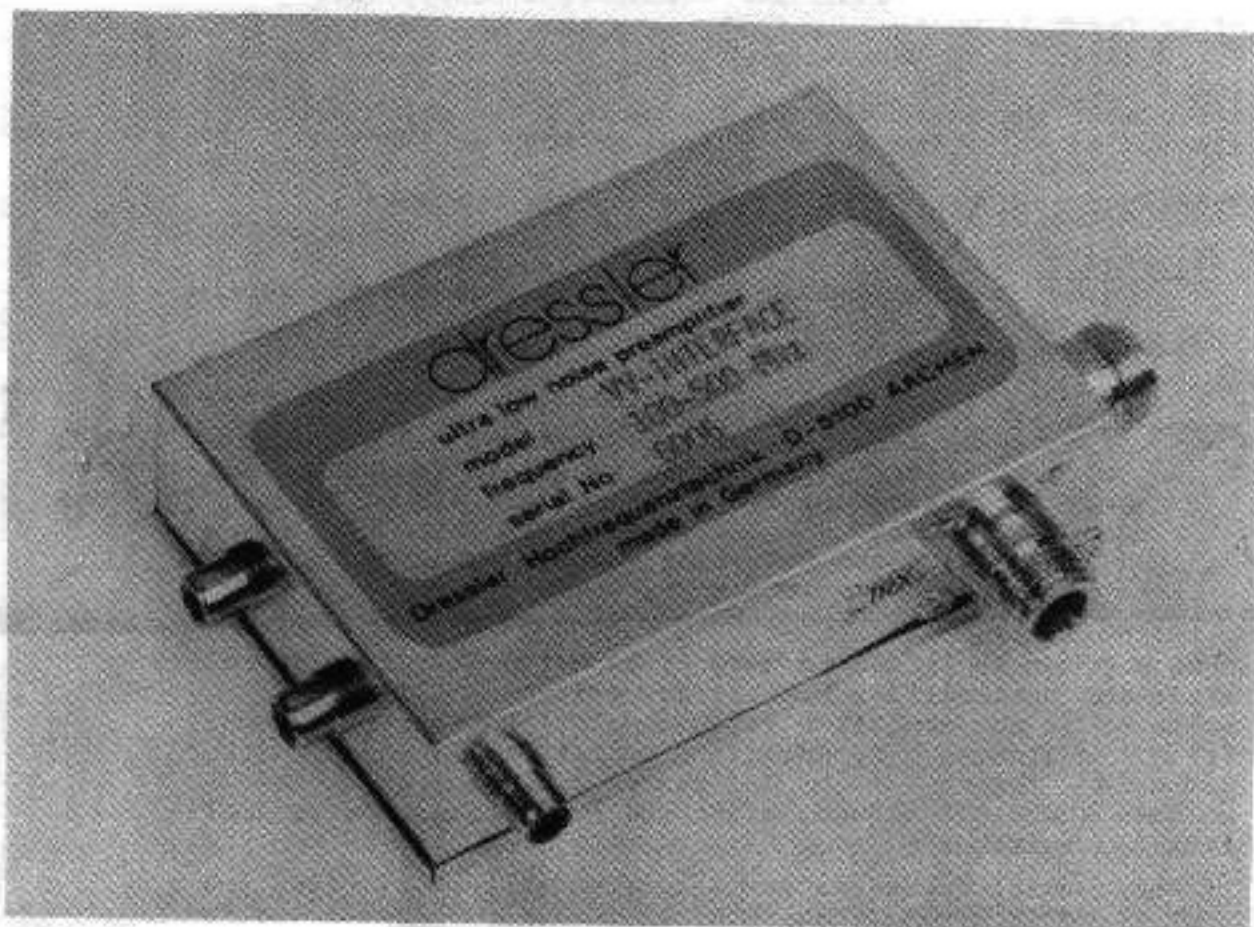


dressler

VV - INTERFACE



The DRESSLER - Preamplifier - Interface (VV-INTERFACE) allows remote switching and remote power supply of mast mounted preamplifiers via the coaxial feeder cable .

It also provides delayed switching by internal relay for a power amplifier.

Information for receive-transmit-switching can be given to the VV-INTERFACE by two different modes :
Either from the push-to-talk-line (PTT) of the transceiver or via a positive switching voltage taken from the transceiver.

In all cases the VV-INTERFACE connects in the system at the point nearest to the antenna.

In practice this will be between transceiver and coaxial feeder cable or between power-amplifier and coaxial cable. (System configuration are shown in figures 3 and 4 for the cases without and with power amplifier)

During receive mode power is supplied to the preamplifier via the coaxial cable. On transmit this power source is disconnected by the Internal circuitry.

The DC-supply to the system is via Phono connector to connector 1 (see figure 1) .
The centre pin is positive (+) and the screen negative (-).

The mast mounted preamplifier must have a supply voltage of at least 12 volts DC . This means that the supply to the VV-INTERFACE must be greater than 12 Volts to allow for voltage drop in the coaxial cable. The actual safety margin depends on the resistance of the cable , typically allow minimum of 1-2 volts for 25 metres of RG8U or RG213/U .

Transmit/receive switching can be done in two ways :

1. P T T

Using phono connector 2 (figure 1) ground the centre pin to select transmit mode.
(Connect centre pin to screen = cabinet = ground)

2. Positive switching voltage

If a transmit/receive-voltage level of + 6 ... + 10 volts DC in transmit mode is available from the transceiver, this can be fed to the centre pin of Phono connector number 3 (figure 1) .
(negative of the switching voltage connects to screen of the phono connector = ground)

When a power amplifier is used it is better if it is energised after the preamplifier has already switched. This can be achieved if the amplifier has a separate Push-to-talk input for r/t-switching , by using the output from phono connector number 4 (figures 1) . The centre connector is grounded to case about 0,8 seconds after the transceiver and preamplifier has switched .

If the coaxial feeder cable is accidentally short circuited protection is given by an internal fuse (0,3 Amps) located on the printed circuit board. If no DC voltage appears at the coaxial output connector (in receive mode) then check the fuse. Access to the fuse is obtained by removing the lid from the case .

CAUTION !!!

When DC power is applied to the VV-INTERFACE it is absolutely vital that the transmitter (transceiver) is only energised when the push-to-talk (PTT) connections have been made to the VV-INTERFACE ! Otherwise the rf-power will destroy the rf preamplifier transistor because the internal relays will not have switched.

There is no warranty regulation in this case .

If preamplifier operation isn't desired please disconnect DC power from the VV-INTERFACE at phono connector 1 and leave the control lines (PTT or switching voltage) .

TECHNICAL DATAS

OPERATION FREQUENCY RANGE	100 ... 500 MHz
INSERTION LOSSES	0,5 dBs typ.max.
OPERATION VOLTAGE	12 ... 18 Volts max.
CURRENT MAX.	0,3 Amps
TRANSMIT/RECEIVE SWITCHING	PTT to ground or positive switching voltage
SWITCHING VOLTAGE LEVEL	+ 6 ... + 12 Volts DC
RF-CONNECTORS	N-connectors (or SO239)

FIGURE 1 W-INTERFACE CONNECTORS

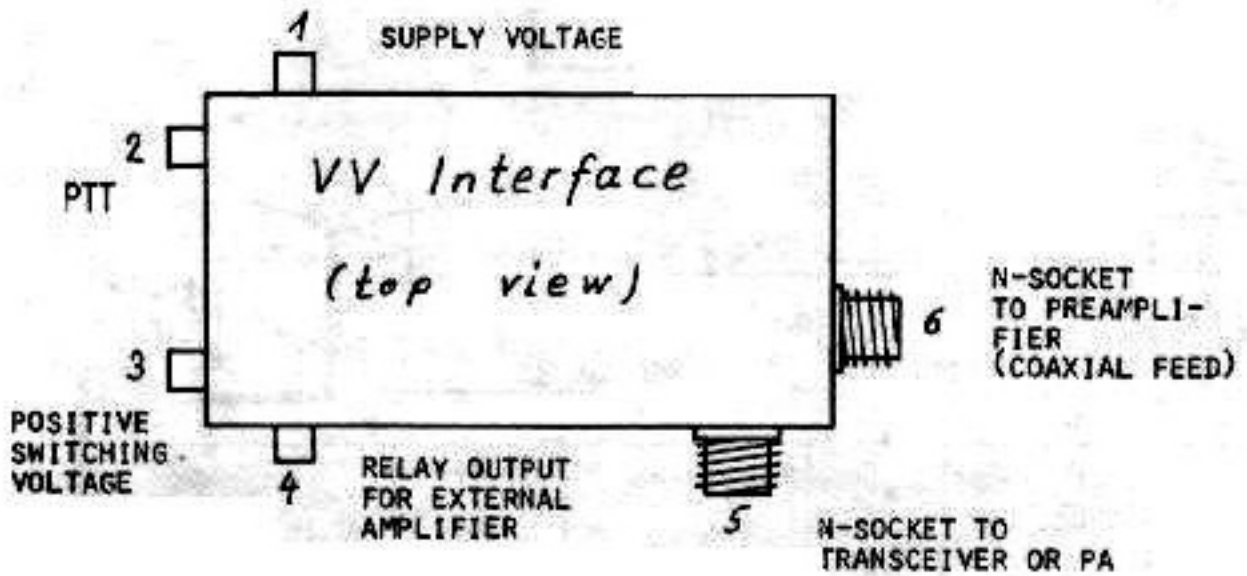


FIGURE 2 CIRCUIT - DIAGRAM

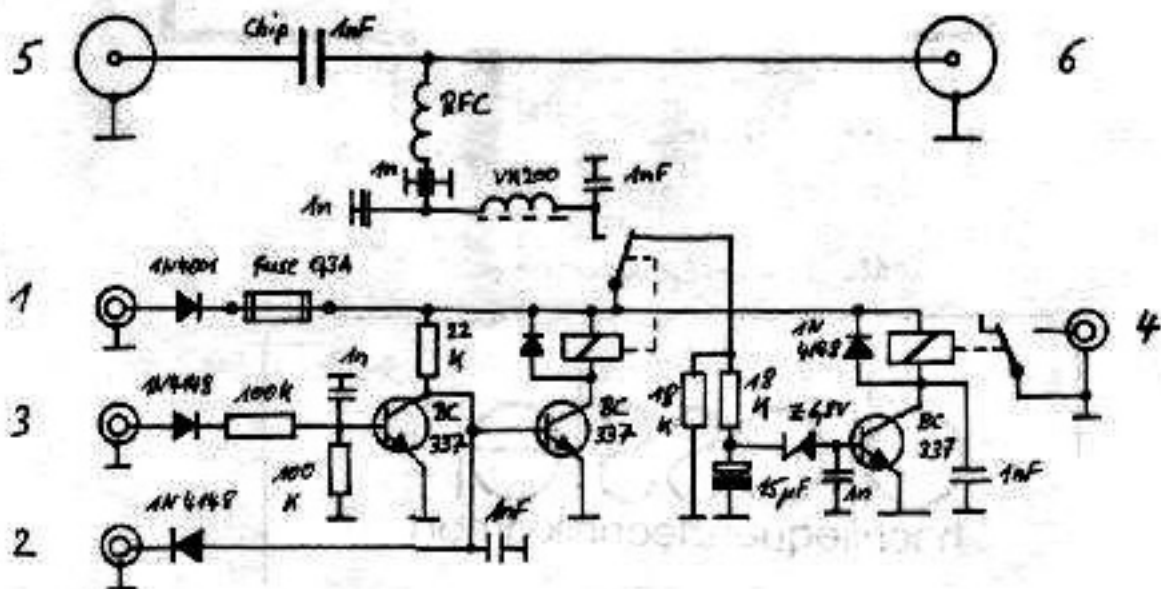


FIGURE 3
WIRING OF INTERFACE AND TRANSCEIVER

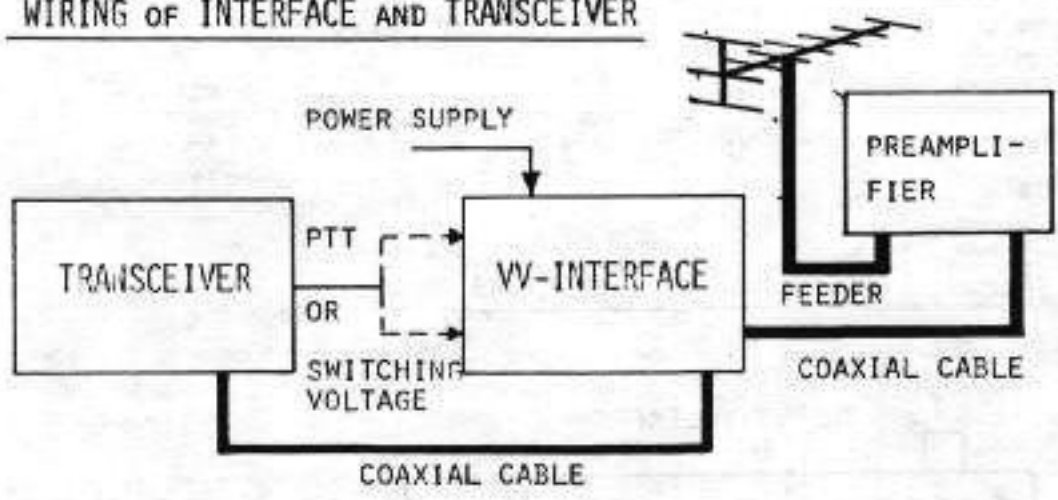
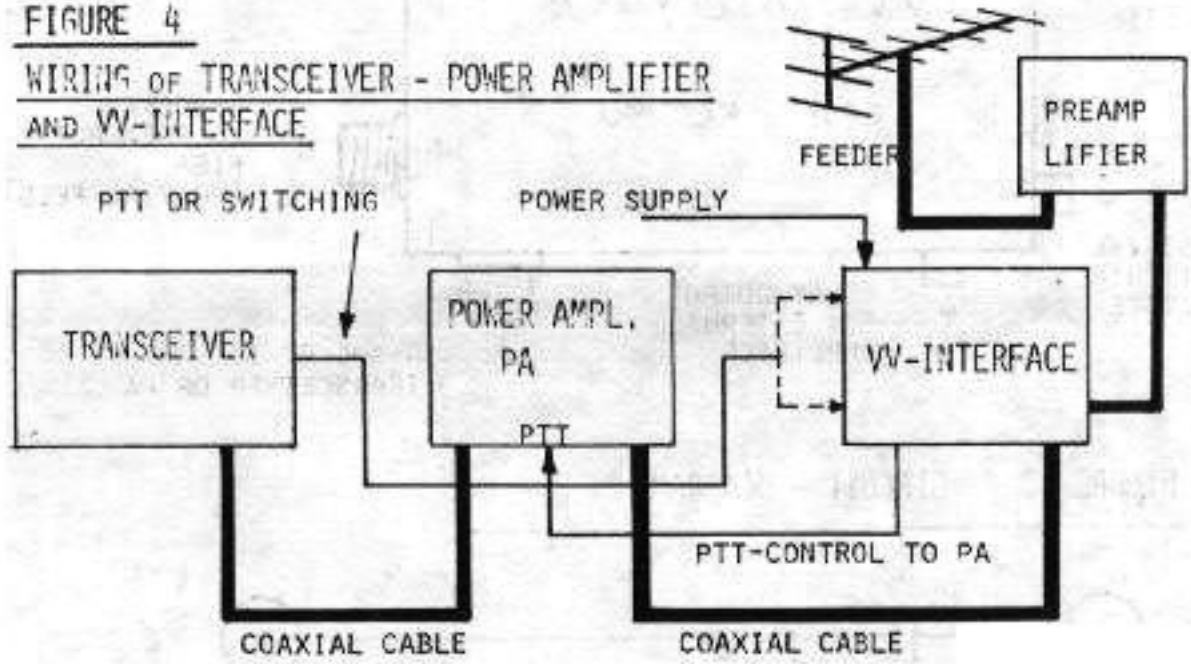


FIGURE 4
WIRING OF TRANSCEIVER - POWER AMPLIFIER
AND VV-INTERFACE



Subject to change without notice.

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