

3.0 Controls and Connectors

Figure 3-1 on shows the front panel controls and figure 3-2 shows the rear panel connectors. The items marked ▲ in the following paragraphs refer to the controls and connectors in these figures.

▲1 Press the red power switch to turn the unit on or off.

▲2 Press this switch to dim the front panel LEDS. Pressing it again returns the LEDS to full brightness.

▲3 Bearing data is computed twice per second. The front panel displays a moving average of the last N bearings calculated. The number of bearings averaged, N, may be increased or decreased by pressing the up or down arrow keys. Note that selecting $N = 1$ causes CW and CCW rotation bearings to be displayed, while higher settings average both CW and CCW rotations (recommended).

▲4 Bearing is displayed by illumination of one of the red LEDS on the circular display. The center yellow LED indicates that power is on.

▲5 Bearing angles in degrees are displayed in the 7-segment display. Both the circular LED display and the digital display are held for 10 seconds after the signal disappears. To help distinguish when the bearing is updating and when it is being held, the decimal point following the units' digit alternates on to off whenever the bearing updates.

▲6 Signal strength is indicated in this 7-segment display. It should be calibrated so that the signal strength is 0 when no signal is present and 9 when a very strong signal is present. See the description of controls ▲8, ▲10 and ▲11 for the method of calibrating the S-meter. The S-meter displays a dash if the S-meter input is not connected or if the display has not been calibrated.

▲7 Antenna rate of rotation can be increased or decreased by pressing the up or down arrows here. When a sweep rate of 0 is selected, all antennas are turned ON. This mode is useful in detecting a very weak signal, but bearings are not displayed.

▲8 Switch enables or disables the calibration mode. The calibration mode must be enabled for the bearing and S-meter calibration switches to be effective.

▲9 Pressing this switch when the calibration mode (see ▲8 above) is enabled causes the present bearing to be set to 0 degrees. Momentarily pressing this switch when the calibration mode is not enabled causes the present bearing to be incremented by 1 degree. If the switch is held down, the bearing changes in steps of 10 degrees.

▲10 Switch calibrates the S-meter to 9 on the present signal, provided the calibration mode is enabled (see ▲8 above).

▲11 Switch calibrates the S-meter to 0 on the present signal, provided the calibration mode is enabled (see ▲8 above).

▲12 Press this switch to change the direction finder alternately from the Continuous to the Pulse mode and back. The DF should be used in the Continuous mode on most signals (voice, unmodulated carriers, etc.) and in the Pulse mode when an external Gate signal is present.

▲13 Switch causes a 25 dB attenuation of the RF input to the commutation electronics.

▲14 J1 is an RS232 serial interface configured as a DCE. May be connected directly to PC using a 9-pin male to 9-pin female straight through cable. See section 6.2.1, for details of this interface.

▲15 J2 is an RS232 serial interface configured as a DTE. May be connected to a receiver having an RS232 input or to an optional DDF5921 remote display unit. See section 6.2.2, for details of this interface.

▲16 J3 is the receiver audio input. Connect to the external speaker output of your receiver using the supplied 3.5 mm plug.

▲17 J4, CIV interface. May be connected to the CIV remote control interface on your ICOM receiver. See section 6.2.3, for details of this interface.

▲18 J5 is the S-meter input. Connect to the receiver's S-meter output using the supplied 3.5 mm plug.

▲19 J6 is the external speaker output. May be connected to an external speaker (not supplied) using a 3.5 mm plug.

▲20 J7 is the DC power input. Connect to +12 VDC using the supplied 2.5mm to cigar plug cable, or on North American models from the supplied 110 VAC power supply.

▲21 J8 is the antenna control cable output. Connect to the 15-pin cable supplied with the 609x series fixed site antennas or the RF summer used for mobile operation.

▲22 J9 is the antenna switch output. Used with the DDF6079 three-antenna switch to select VHF, UHF1 or UHF2 antennas.

▲23 J10 is the auxiliary input. A TTL level Gate signal is applied at this connector in the Gated Pulse mode.

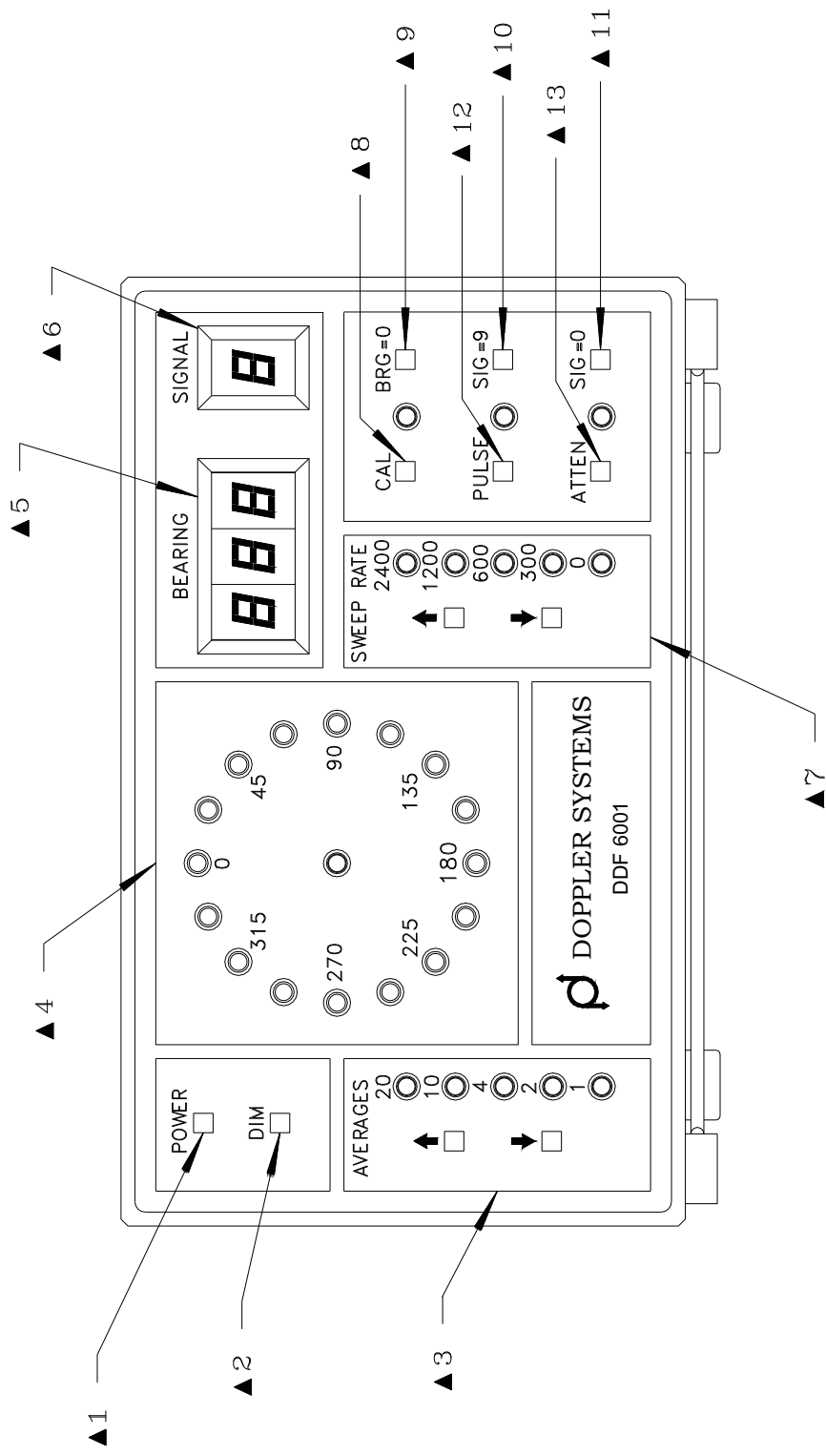


Figure 3-1
Front Panel Controls

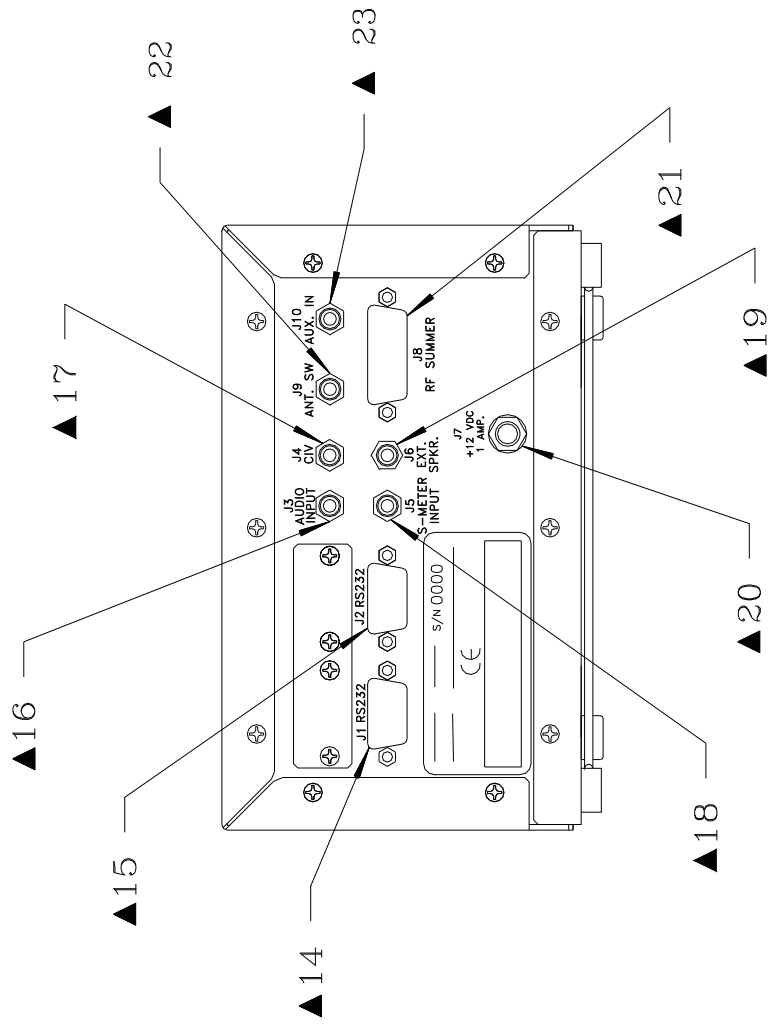


Figure 3-2
Rear Panel Connectors