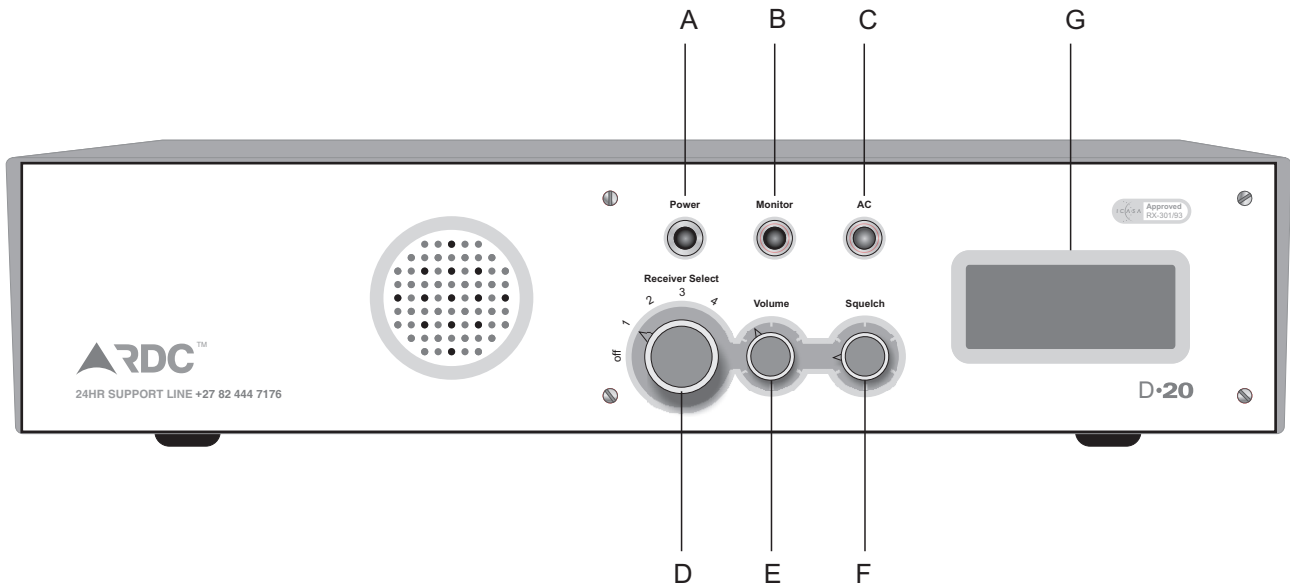


Reporter D20 - Information & installation instructions

24hr Standby
082 444 7176

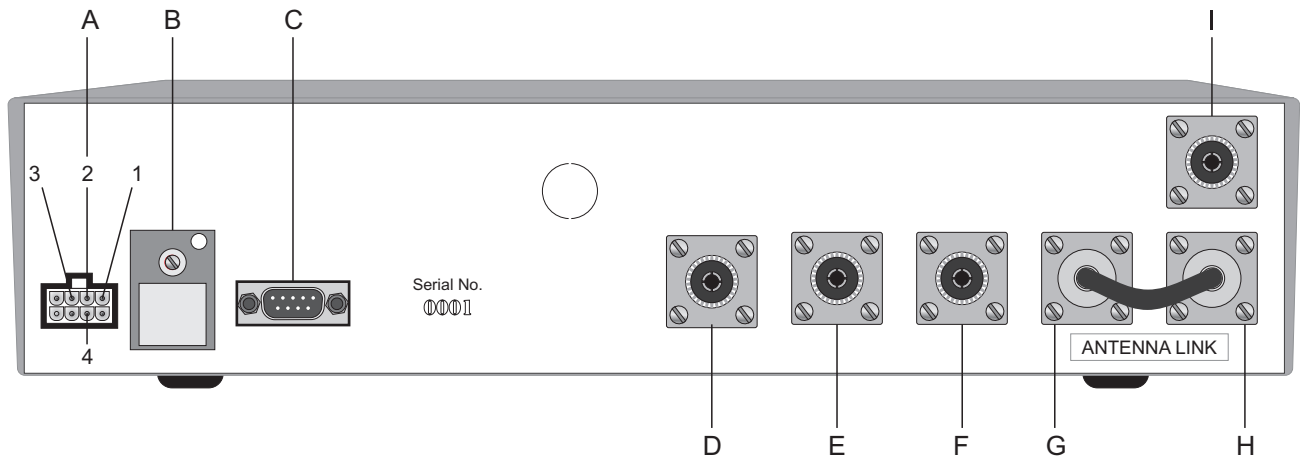


- A** POWER LED indicates 12v dc to the unit is present
- B** MONITOR LED flashing once per second indicates normal operation
flashing twice per second indicates AC fail
- C** AC LED on indicates 220V ac to charger is on
- D** RECEIVER SELECT select and "listen in" on radio signals etc. on the various frequencies (max 4)
turning off the switch will turn off the display back-light (power save mode)
- E** VOLUME CONTROL increase or decrease the audio volume
switch is off for normal operation
- F** SQUELCH CONTROL adjusts the required squelch threshold
turn off for normal operation
- G** LCD DISPLAY displays the last 4 events - scrolls up

System Defaults

SELF TEST INTERVALS	60 minutes		
AC FAIL DELAY	15 minutes, thereafter every 30 minutes		
TRANSMISSION TIME	118 mS		
CURRENT DRAW	back-light off - receive mode	1 receiver	200mA
		4 receivers	480mA
	back-light on - receive mode	1 receiver	290mA
	4 receivers	570mA	
	- transmit mode		1.5 A





A MOLEX CONNECTOR

- 1 Red - 12V DC (12v battery)
- 2 Black - 0V DC (12v battery)
- 3 White - AC fail monitor - connects to AC fail output of a power supply
When output is 12V - unit detects AC present
When output is 0V - unit detects AC fail
- 4 Green - Earth

If unit is being powered by a battery and solar panel, the white wire should be connected to +12V DC

B PERSONALITY MODULE

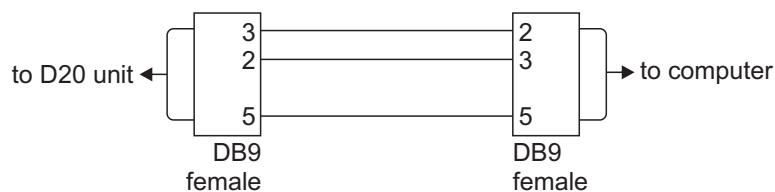
can only be programmed by RDC

NB. Each personality module is specifically programmed for a specific repeater or base station unit and a specific location. Interchanging or replacing the incorrect personality modules will cause serious network problems.

C COMPUTER RS 232 CABLE

RS 232 Protocol
 Baud Rate 9600
 Data Bits 8
 Flow control off
 Parity none
 Stop Bits 1

RS 232 cable



RS 232 cable to computer not to exceed 10 meters

D RECEIVER 4 ANTENNA INPUT (when in use)

E RECEIVER 3 ANTENNA INPUT (when in use)

F RECEIVER 2 ANTENNA INPUT (when in use)

G&H CONNECT TOGETHER WITH JUMPER CABLE (provided)

I RECEIVER 1 AND TRANSMITTER ANTENNA NB. Must be connected directly to antenna and not to a multi coupler.

Problem	Diagnosis and Solution
Unit is dead	Check DC cable is firmly connected to back of unit / Cable plugged in / Batt connected to charger / Check battery voltage
No back light on display	Selection switch is in OFF position. Turn selection switch to position 1. After test is complete, return switch to OFF position to conserve battery power during mains failures. In case of a base station, the back light may be left on.
Radio codes are not displayed on D20 screen	Trigger a test transmitter with it's antenna removed near the D20 and note if code is displayed. If code is displayed D20 is operating correctly. Ensure that antenna loop on D20 has been correctly installed. Check correct antenna connection. Check antenna and antenna cable condition using SWR meter.
Codes displayed on D20 Base but not on computer screen.	Check RS232 cable and connection between base and computer. Run hyper-terminal on your computer, trigger a test transmitter and confirm that the transmitter code is displayed on the hyper-terminal window. If code appears on is displayed then communication exists between D20 base and computer. Ensure control room software has been set up to read the RS232 string from the base station. If not consult software provider.
Radio codes appear on repeater display but not on base display (for repeaters close to the base)	Poor or no RF path between repeater and base.Ensure that antenna loop on D20 has been correctly installed. Check correct antenna connection. Check antenna and antenna cable condition using SWR meter.
Radio codes appear on repeater display but not on base display (for repeaters far from the base)	Poor or no RF path between originating repeater and destination repeater. Ensure that antenna loop on D20 has been correctly installed. Check correct antenna connection. Check antenna and antenna cable condition using SWR meter. An additional repeater may be necessary.
No sound	Select appropriate channel on select sw.
Not receiving radio signals @ base from radios in the field	Check proper connection of antenna link at back of base. Check antenna (with SWR meter).