The Model 20-18 is a low cost multi-featured DC Remote Adapter used in conjunction with DC remote controllers to remotely control repeaters and base station radios. The 20-18 detects DC currents from remote controllers to control the remotely located repeater or base station. At the same time, it provides a two-way audio path in either 2 or 4 wire mode.

By using the internal DIP switches and jumpers, some of the operational characteristics of the 20-18 can be changed. Depending on the system, the installer has the choice of either 2 or 4 wire operation. In addition to the IDA current scheme (F1 MON+6mA TX+15mA F2 MON-6mA TX-15mA) the 20-18 can be configured for the current scheme of (F1 MON-2.5mA TX +6mA) in the one frequency mode. The monitor function can be set up for momentary or latched as well as set up to follow the PTT function.

The 20-18 provides a local microphone jack and related circuitry for applications which require regular operation from the radio/panel. An amplified desk microphone from IDA Corporation is available. Also for quick and easy installation, various radio interface cables are available.

The metal cabinet not only provides sturdiness and ruggedness, but also has excellent EMI shielding characteristics.
Model 20-18
Specifications

Input voltage ........................................ 10.7Vdc - 18Vdc
Standby current @ 13.8Vdc ...................... 17.5 mA
Input power (max) ................................ 1.9 Watts
Temperature range .............................. -30 to +70° C
Relative humidity .............................. 90% at 50° C
Line impedance (1KHz) ......................... 600 ohms
Receive to line audio output .............. 50 mVRMS - 3VRMS into 600 ohms
Receive to line s/n ratio ...................... > 55dB (ref +10dBm)
Receive to line distortion ...................... < 3%
Receive to line frequency response ........ +1, -3dB

Through de-emphasis (300 - 3000Hz) .... +1, -3dB at 6dB/octave
Line to TX s/n ratio ................................. > 55dB
Line to TX distortion .............................. < 3%
Line to TX output level ....................... 30mVRMS - 1.3VRMS into 600 ohms

Line control ......................................... 2 or 4 wire audio
PTT, monitor,
frequency relay contacts ..................... 1 amp - Form C
Weight ..................................................... 1 lb. 1 oz.
Dimensions .................. 1.625” (h) x 6.5” (d) x 4.25” (w)

Other D.C. Remote Adapters Available from IDA Corporation

The 20-15, 20-16 and 20-17 D.C. Remote Adapters are universal line termination panels and base station interface boards designed for use with all IDA D.C. Remotes and most others which utilize dual current, dual polarity function commands. Input and output impedances are 600 ohms with adjustable input and output audio levels. Size is 3.75” D x 3” W x 1.5” H. The following adapter board options are available.

Model 20-15: Standard adapter with one frequency, high current key.

Model 20-16: Adapter with one frequency, high current polarity key and low current, CTCSS disable.

Model 20-17: Adapter with two frequency key and two frequency CTCSS disable. Frequency one is high current, positive polarity key, low current positive polarity disable. Frequency two is high current, negative polarity key and low current, negative polarity disable.