

# MODEL 20-28 REMOTE TERMINATION PANEL



**20-28** The 20-28 is a programmable termination panel, designed for use with IDA Model 24-66 desk top controllers equipped with digital signaling. By decoding the proper digital signals, the 20-28 can control remotely located base stations or repeaters. In addition to providing a two-way path for audio, the unit also provides update information back to the desk top controllers. This update allows the operator immediate information as to the remote radio's status, such as channel, in or out of scan, or the current System & Group if a trunking application.

## Available in TONE or MSK Signaling

The Model 20-28 is field programmable via PC and can be ordered as either standard TONE format or our proprietary MSK format.

The MSK format, when used along with the MODEL 24-66MSK, provides the high speed switching and communication required for demanding trunking applications.

## Programmable Outputs

To meet the requirements of various manufacturers base stations the 20-28 can be programmed for a wide variety of outputs. For stations that are capable of receiving external serial commands, the 20-28 can be programmed to provide the proper command set. In addition, the unit can be programmed for Binary output. This method of communicating with the radio's microprocessor — in much the same way that it's own faceplate display does — offers virtually total remote control. Advanced features such as SCAN, Lockout, Selective calling, Priority SCAN, and others become possible. When programming the 20-28, up to eight of the outputs can be selected as inputs.

## Local Operation

For installations where local operation of the base station is desired, the 20-28 is available with a desk microphone, speaker jack, and volume control (Option RTM-604).

## The Total Solution

Comprising a truly integrated remote control system, the 20-28 Termination Panel — along with IDA Model 24-66 Remote Deskset — allows the operator *Total Remote Control*. The panel and the desksets are always in touch. If the base station radio scans to a different channel or System & Group, the panel updates all the desksets and changes their display. If one operator selects a new channel, all the other remote desksets that are installed in parallel keep pace and display the new selection.

### STANDARD OR FIELD PROGRAMMABLE FEATURES

*2 or 4 wire*

*PC programmable*

*Local control option*

*Remote update*

*Non-volatile memory*

*Serial or Binary output*

*Tone or MSK signaling*

*Selectable input/outputs*

*Rugged metal case*

**THESE RADIOS CAN BE DIRECTLY CONTROLLED BY THE MODEL 20-28 TONE:**

**EF JOHNSON RS5300 (Project 25)**

Interface cable is IDA part #106-28EF5300  
(requires EFJ cable #597-2002-249)

**MIDLAND BaseTech II**

Interface cable is IDA part #106-28MIDBTECH

**KENWOOD TK-7180, TK-8180, TK-5710 (Project 25)**

Interface cable is IDA part #106-28KN8180

**DATRON Guardian (Project 25)**

Interface cable is IDA part #106-28DATG25

**THESE RADIOS CAN BE DIRECTLY CONTROLLED BY THE MODEL 20-28 MSK:**

**EF JOHNSON RS5300 (Project 25)**

Interface cable is IDA part #106-28EF5300  
(requires EFJ cable #597-2002-249)

**EF JOHNSON SUMMIT**

Interface cable is IDA part #106-EFJ28SUM

**EF JOHNSON 9800 series (high tier)**

Interface cable is IDA part #105-28EFJ98 KIT  
(requires EFJ cable #597-9800-005)

**KENWOOD TK-7180/8180, TK-5710 (Project 25)**

Interface cable is IDA part #106-28KN8180

**KENWOOD TK-780/880/980/981**

Interface cable is IDA part #106-28KEN880

**KENWOOD TK-790**

Interface cable is IDA part #106-28KEN790

**DATRON Guardian (Project 25)**

Interface cable is IDA part #106-28DATG25

**20-28 SPECIFICATIONS**

Input voltage .....	10.7VDC - 18Vdc
Standby current @ 13.8VDC .....	75 mA
Input power (max) .....	<3 W
Temperature range .....	0 to +70 deg C
Relative humidity .....	90% at 50 deg C
Line impedance (1KHz) .....	600 ohms
Receive to line audio output .....	50mVrms - 2.75 Vrms
.....	into 600 ohms
Receive to line audio s/n ratio .....	> 50dB
(reference +10dBm)	
Receive to line distortion .....	< 3%
Receive to line frequency response .....	+1, -3dB
through de-emphasis .....	+1, -3dB at 6dB/octave
(300 to 3000Hz)	
Line to TX s/n ratio .....	> 40dB
Line to TX frequency response .....	+1, -3dB
(300 to 3000Hz)	
Line to TX distortion .....	< 3%
Line to TX output level .....	30mVrms - 1.3Vrms
.....	into 600 ohms
Line control .....	2 or 4 wire
PTT, monitor, F1/F2 relay contacts .....	1 amp - Form C
F3 — F8 outputs .....	Open collector-100mA sink
Serial output .....	RS 232
Weight .....	1 lb 5 oz (2.9 kilo)
Dimensions .....	1.5"H x 5.5"W x 5.5"D

2028 / R506