

Desktop Basestation Accessory Kit

converts the RS-5300 mobile radio into a desktop basestation.



431-BAK Basestation Accessory Kit

IDA Corporation's **Desktop Basestation Accessory Kit Model 431-BAK** features compact size and versatility in a desktop basestation.

Currently available for the following radios:

EF Johnson's RS5300 (APCO 25),
Summit (Multi-Net), 9800 series (Multi-Net,
SmartNet, SmartZone)

Model 24-66MMSK (Desk Microphone) Model 24-66HMSK (Handset)

IDA Corporation's industry leading **Mini-Console Deskset**, now with digital signaling, provides the high speed switching and communication required for demanding trunking systems.



Model 20-28

Model 20-28 remote termination panel is field programmable via IBM compatible PC and features digital signaling in a MSK format. This method of communicating with the radios microprocessor offers virtually total remote control.





431-BAK Basestation Accessory Kit

IDA Corporation has designed a desktop base-station accessory kit, which converts the RS-5300 mobile radio into a desktop basestation.

The 431-BAK accessory kit includes a wrap-around hood enclosure with power supply, IDA Corporation's digital termination panel (20-28), front firing speaker and local desk microphone.

431-BAK FEATURES

- 18 amp power supply with wrap around hood
- Front firing speaker (4ohm 5 watt)
- Radio interface and speaker cables
- Model 20-28 termination panel
- PC Programmable
- Local Control Operation

BENEFITS

Upgrading is easy and cost effective
 Local Control (fully useable basestation)
 Remote controllable over 2 or 4 wire lines
 Intercom between basestation
 and IDA remotes



Model 24-66MSK Remote Console

24-66MSK FEATURES

- Field Programmable by PC
- Control and display up to 99 channels and groups or zones and channels.
- Monitor
- Intercom
- Scan
- Programmable faceplate for Auxiliary functions.
- Mute
- 30db of Compression and 3 watts of Speaker audio.

BENEFITS

As your communication needs grow and change the the 24-66MSK will keep up. Standard features that are not needed now, can be activated later with simple programming done in the field.

Monitor, Intercom, Mute, Scan, Alpha-Numeric Display, Number of Channels, System and Groups or Zones and Channels, Full Faceplate programmability.

Other 24-66MSK Options:

- | | |
|-------------------|---|
| RBC-001 | Wall Mounting Bracket |
| RBC-002 | External Encode/Decode Cable |
| RBC-003-95 | Windows 95 Programming Cable & Software |

20-28 Digital Termination Panel

The 20-28 is a programmable termination panel, featuring digital signaling in a proprietary MSK format, 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.

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
- MSK signaling
- Selectable input/outputs
- Rugged metal case

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



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.

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

EF JOHNSON SUMMIT

Interface cable is IDA part #106-EFJ28SUM

EF JOHNSON 9800 series (high tier)

Install kit is IDA part #105-2028EFJ98KIT
(requires EFJ cable #597-9800-005)

KENWOOD TK 840/940

Interface cable is IDA part #106-KEN27CBL

KENWOOD TK780/880/980/790/890/990

Interface cable is IDA part #106-28KEN880

SEA ESP520

Interface cable is IDA part #106-SEA27CBL

THESE RADIOS CAN BE DIRECTLY CONTROLLED BY THE 20-28B:

EF JOHNSON RS5300

Interface cable is IDA part #105-28EF5300
(requires EFJ cable #597-2002-249)

HOOD ASSEMBLY SPECIFICATIONS

Overall Size	7.5" W x 8.5" D x 8.25" H
Overall weight (without radio)	10 lbs.
Speaker	4 Ohm 5 watt
Power Supply	DuraComm Model LP-18
Digital Termination Panel	IDA Model 20-28
Interface Cable Assembly	Radio and speaker cables



POWER SUPPLY DURACOMM MODEL LP-18

DC Output Voltage	13.8VDC
Regulation	+/- 1%
Output Amps Peak	18
Output Amps Constant	14
Output Ripple & Noise	<100mv P to P
Input Voltage Range	100-300 04 200-260 VAC
Typical Efficiency	80%
Cooling Method	Thermostat Controlled Fan
Overload Protection	Foldback limited at 120% of maximum
Output Terminals	Binding Posts
Size	7" W x 7.62" D x 1.75" H
Weight	2.7lbs

24-66MSK TECHNICAL SPECIFICATIONS

Input Voltage	117/230 VAC 50/60Hz +/- 20%
Standby Voltage	12-15VDC
Standby Current	287mA (TX) 250mA (MAX) 620mA (RX) (STBY)

Input Power (max)	8.5W (TX) 8.5W (STBY)
Temperature Range	0 deg to +60 deg C
Relative Humidity	90% at 50 deg C
Line Impedance (1KHz)	600 ohms (TX)
600 or 5k ohms (RX)	
Line Audio Output	-20 to +10dbm
(600 ohm load)	
TX Hum & Noise (ref +11dbm)	-55db
Threshold of Compression	-20dbm adjustable
(line to speaker audio)	
Speaker Audio Output RMS	3W into 4 ohms
Distortion (at rated speaker output)	Less than 3%
RX Hum & Noise	-49db

Frequency Response	+1,-3db except at notch frequency
(300 to 3000Hz)	

RX compression with an audio increase of 30db beyond the start of compression the output increase less than 3db

TX compression with an audio increase of 30db beyond the start of compression the output increases 15 to 16db

Line control 4 wire audio

Notch filter depth -45db (RX) -25db (TX)

Weight 4lbs 15oz

Dimensions 4.75" (H) x 10" (W) x 8" (D)

Multi-Net is a trademark of EF Johnson.
SmartNet and SmartZone are trademarks of Motorola.
Specifications subject to change without notice.

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