

# KENWOOD

Listen to the Future



## TKR-750/850

VHF/UHF FM Repeater-Base Units

A versatile unit, the TKR-750/850 is a 16-user group conventional repeater, a simplex or full duplex base station or the RF core of a trunking system. Advanced features include DSP audio processing, DTMF over-the-air remote control and programmable Auxiliary I/O's.

### CONVENTIONAL REPEATER OPERATION

The TKR-750/850 are "community repeater-ready" with a built-in internal 16 QT/DQT group controller and programmable repeater functions such as CW Transmitter ID, Hang-Timer, Time-Out-Timer and Repeat Enable/Disable Key. The 15W-to-50W (TKR-850: 15W-to-40W) adjustable output power is ideal for on-site low power repeater applications.

### CONVENTIONAL OR TRUNKING SYSTEM USE

The TKR-750/850 can serve as the core element of any conventional or trunking repeater system. The internal conventional controller can be used, or an external conventional or trunking logic controller can be easily interfaced for advanced systems.

### SIMPLEX OR DUPLEX BASE STATION OPERATION

The TKR-750/850 can be operated in simplex or full-duplex base station mode with up to 16 channels and priority scan. Internal solid state antenna switching is provided for simplex single-antenna base station operation. The accessory connectors provide remote control interface. Also programmable are the six PF function keys, LED indicators, control/warning/alert/power-on tones and tone volume for facilitating any remote site installation.

### DTMF OVER-THE-AIR REMOTE CONTROL

All front panel PF Key functions and AUX Input functions can be remotely activated and deactivated over-the-air via DTMF codes (up to 16 digits each) and provide an acknowledgement single tone or custom DTMF transpond code. Also AUX Inputs, upon activation and deactivation will encode unique DTMF codes for monitoring and alarm purposes.

### LED DISPLAY & INDICATORS

The enhanced 7-segment/2-character front panel LED provides 2-character alphanumeric channel designator and scan indicator for base station operation, a PLL unlock indicator and a PC program mode status. Front panel dual-color LED's provide Transmit, Busy, Primary/Backup DC Power indications.

### BACKUP POWER FEATURES

The Backup Battery Warning Tone transmits an over-the-air 5-second tone after DC supply has switched from "main" to "backup" power. Optionally a reminder Operation Tone can be transmitted while on backup power. These tones can be triggered when either DC power is connected to the "backup" DC input line or when the supplied voltage is lower than the programmed Power Supply Level DC voltage setting.

### REPEATER FEATURES

- Full-Duplex Operation
- Built-in 16 QT/DQT Tone/Code Pair Community Repeater Operation
- External Controller Interface
- Conventional or Trunking Controller Compatible
- Repeat Enable/Disable
- 8 CW Transmitter IDs
- Repeat Hold Timer (hang timer)
- Time Out Timer

### BASE STATION FEATURES

- 16 Channel
- Simplex or Full Duplex Operation
- Antenna Switch For Simplex/Single Antenna Operation
- Priority Scan
- Remote Control Inputs
- 7-Segment 2-Character Channel & Scan LED
- 2 Character Alphanumeric Channel Designator
- Power/Transmit/Busy LED Indicators
- 6 Lighted PF Keys
- Local Takeover/Remote PF Key
- Channel Up/Down PF Keys
- Volume Control Knob
- Courtesy Tone
- Front Microphone Jack
- Front Panel Speaker
- Voice Encryption Port

### GENERAL

- 19" Rack Mount Design
- Primary DC Input Connector
- Auto-Switched Back-up DC Input Connector
- Backup Battery Warning/Operation Tones
- Rear External Speaker Output (4 Watts Audio)
- Rear Test-Speaker-AUX Connector (15-Pin)
- Built-in Cooling Fan (temperature or continuous)
- Programmable AUX Input/Output Functions
- BCD Remote Channel Selection (4 lines)
- Toggle or Momentary Operation on AUX Input Ports
- Pre-Emphasis On/Off Control (at TA AUX Input)
- DSP Processed QT/DQT
- DSP Processed Companded Audio
- QT/DQT Squelch-Tail Elimination
- Beep Tones for Control, Warning, Alert & Power On
- Electronic Serial Number (ESN)
- Embedded Message with Password Protection
- High Stability Oscillators (TCXO)
- Windows® 98/2000/Me/XP PC programming & tuning
- Flash Memory



