

## Multi-Channel Products for Kenwood -80,-90 Mobile Radios



MCR411A/MCR411A-DM The MCR411A is a telephone style remote control unit designed for use with Kenwood's -90 series conventional radios. The remote has a LCD display for group and channel identification and a 9 character alpha channel alias. The remote provides group and channel up and down buttons, PTT indicator, on-hook PTT capability, monitor button and indicator, intercom button, scan button and indicator, privacy feature, and speaker volume control. The MCR411A allows incoming calls to be received through the speaker in the remotes and transferred to the the earpiece when the handset is removed from the cradle. transmissions made from a remote are heard on all parallel remotes. The MCR411A allows intercom capability

between parallel remotes. The channel display and indicators on all remotes mirror that of all other MCR411A remotes on the system. When connected the MCR/MCP system, the radio becomes dedicated to the operation of the remote system and "COMPUTER" is displayed on the radio display. There is no software or cables required to program the MCR411A units. The system will operate on any two or 4 wire voice grade circuit. The MCR411A-DM is a desk microphone version of the MCR411A and has all of the same features.

MCP401 The MCP401 termination panel provides the interface between the MCR411A remotes and the Kenwood -90 series radio. Installation is plug in with no cutting, crinping, or soldering involved. The termination panel is housed in a rugged housing and connects to the radio's DB25 connected with the provided cable. The system can use any two-wire or four-wire voice grade circuit. Four-wire operation is an available option. The radio must be programmed per CPI specifications for the radio to operate properly with the remote system.



**TSR412A/TSR412A-DM** The TSR412A is a telephone style remote control unit designed for use with Kenwood's -80 series conventional/trunking radios. The remote has a LCD display for system and group identification and a 9

character alpha channel alias. The remote provides system and group up and down buttons, PTT indicator, on-hook PTT capability, monitor button and indicator, intercom button, scan button and indicator, privacy feature, and speaker volume control. The TSR412A allows incoming calls to be received through the speaker in the remotes and transferred to the the earpiece when the handset is removed from the cradle. transmissions made from a remote are heard on all parallel remotes. The TSR412A allows intercom capability between parallel remotes. The system/group display and indicators on all remotes mirror that of all other TSR412A remotes on the system. When connected the the MCR/MCP system, the radio becomes dedicated to the operation of the remote system



**TSP402** The TSP402 termination panel provides the interface between the TSR412A remotes and the Kenwood -80 series radio. Installation is plug in with no cutting, crinping, or soldering involved. The termination panel is housed in a rugged housing and connects to the radio's KCT19 connector with the provided cable. The system can use any two-wire or four-wire voice grade circuit. Four-wire operation is an available option. The radio must be programmed per CPI specifications for the radio to operate properly with the remote system.

## MCR/TSR Series Specifications

Power Requirements	120 VAC, 60Hz for wall pack operation
Indicators	2 watts minimum (in compression) into 8 ohms with less than 3% distortion using supplied power pack
Controls	Less than 3 dB increase in output with 30 dB increase beyond threshold of compression.
Line Input level	-20dBm tp +10 dBm
Line output level	-20dBm tp +10 dBm
Line impedence	200K ohms on-hook/idle 600 ohms off-hook/idle
Receive compression	Less than 3dBm change in output for 30 dBm change in input above thresh-hold
Speaker ouput	2 watts (speaker mutes when off-hook)
Max number of remotes	50
Dimensions/ Weight	9" x 4" x 7" / 4lbs.
Connections	4 pin modular for handset. RJ11 for desk microphone and phone pair
Power Requirements	13.6 Vdc limited to 100 mA. Power taken from radio connections.
TX Control	Adjusts audio level to the radio microphone input
RX Control	Adjusts audio level to phone line. Adjustable from -20 to +10 dBm
Setup	Used for test mode on power up
Line balance	Used to match the termination panel to the phone line
Phone line impedence	600 ohms
Connections to phone line	Two wire via modular phone jack. Four wire optional.
Connections to radio	Supplied cables plug into the DB25 or KCT19 connector.
Max number of remotes	50

**Option Description** 

-FD	Full duplex on panel. Remotes are dip switch selectable.
-DE	10 Key DTMF encoder
-UE1	Multi-format encoder
-WM	Wall mount kit for remote.
-BLK	Unit is black in color

