

KENWOOD TK-270/370 PORTABLE PROGRAMMING AND CLONING

HOW TO ENTER EACH MODE OF PROGRAMMING

MODE	KEYS TO PRESS TO ENTER FUNCTION
USER MODE	POWER ON
PC PROGRAMMING	POWER ON
CLONE MODE	[DEALER MODE]+[LAMP]
DEALER MODE	[LAMP]+[DIAL]+TURN POWER ON (HOLD KEYS DOWN FOR 2 SECONDS)
TEST MODE	[LAMP] + [T/A] + TURN POWER ON (HOLD KEYS DOWN FOR 2 SECONDS)

WARNING: TEST MODE NOT RECOMMENDED FOR USER / ALL DATA MAY BE CLEARED FROM THE RADIO IN THIS MODE

NOTE: DEALER MODE MUST BE ENTERED BEFORE FIELD PROGRAMMING MODES CAN BE ENTERED

PC

PROGRAMMING MODE

TO ENTER THE PC PROGRAMMING MODE POWER ON.

- WHEN DATA IS TRANSMITTING FROM THE TRANSCEIVER TO THE COMPUTER, THE RED LED GOES ON.
- WHEN DATA IS BEING TRANSMITTED FROM THE COMPUTER TO THE RADIO THE GREEN LED GOES ON.

NOTES:

- THE DATA STORED IN THE PERSONAL COMPUTER MUST MATCH VHF, UHF, AND IF WHEN IT IS WRITTEN INTO THE E²PROM.
- DO NOT PRESS THE [PTT] KEY DURING DATA TRANSMISSION OR RECEPTION.

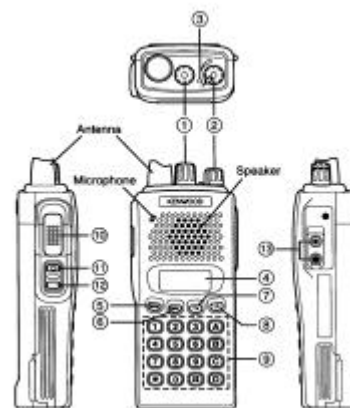
PROGRAMMING WITH AN IBM COMPATIBLE COMPUTER

IF DATA IS TO BE TRANSFERRED BETWEEN THE RADIO AND THE PC USING THE KPG-27D PROGRAMMING SOFTWARE, CONNECT THE PROGRAMMING CABLE TO THE COMPUTER SERIAL PORT AND THE SPEAKER/MIC PLUG ON THE RADIO. FOLLOW THE PROGRAM INSTRUCTIONS IN THE KPG-27D SOFTWARE PROGRAM TO READ OR WRITE TO THE RADIO E²PROM.

CONNECTIONS FOR PC COMPUTER PROGRAMMING

RADIO LAYOUT

1. Channel
2. On/Off Volume
3. RX/TX LED
4. LCD Display
5. Scan
6. Dial
7. T/A (Talk-Around)
8. Low Power
9. DTMF Keypad
10. PTT
11. Lamp
12. Monitor [Moni]
13. Speaker Mic Jack



INDUSTRIAL COMMUNICATIONS

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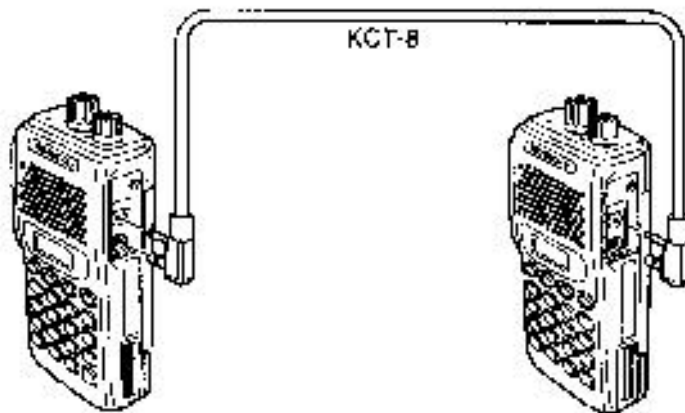
PC CLONING MODE

- CONNECT THE TWO TK-270/370 TRANSCEIVERS IN THE CLONE MODE WITH THE **KCT-8** INTERFACE CABLE. (*KENWOOD P/N E30-3021-08*)
- ON THE DATA RECEPTION SIDE (RADIO TO BE CLONED) ENTER THE DEALER MODE BY HOLDING DOWN THE [LAMP] AND [DIAL] KEYS AND TURN THE POWER SWITCH ON. (HOLD DOWN THE KEYS FOR AT LEAST 2 SECONDS) WHEN THE DEALER MODE IS ENTERED, "SEL" IS DISPLAYED ON THE LCD.
- WHEN THE [MON] KEY ON THE TRANSMITTING RADIO IS PRESSED, THE E²PROM DATA IS COPIED, AND THE ON AIR INDICATOR LIGHTS. THE STATE OF THE RECEIVER DOES NOT CHANGE. AFTER ABOUT 40 SECONDS THE E²PROM COPYING ENDS AND "END" IS DISPLAYED ON TRANSMISSION SIDE LCD. THE ON AIR INDICATOR ON THE TRANSMITTER GOES OFF.
- CONNECT ADDITIONAL RADIOS AND TRANSFER THE EEPROM DATA IN THE SAME FASHION. USE THE [MONI] KEY TO SEND THE DATA TO EACH ADDITIONAL RADIO.

NOTES:

- **VHF, UHF, AND IF MUST MATCH .**
 - **DO NOT PRESS THE [PTT] KEY DURING DATA TRANSMISSION OR RECEPTION.**
- THE TK-270/370 CANNOT BE CLONED WITH ANY OTHER MODELS.

CONNECTIONS FOR CLONING ONE PORTABLE TO ANOTHER



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FIELD PROGRAMMING MODE

WARNING: PRESS ONLY THE KEYS INDICATED BELOW FOR CHANNEL AND FUNCTION DATA PROGRAMMING. PRESSING OTHER KEYS WHILE IN THIS MODE MAY CAUSE OPERATIONAL DATA TO BE ERASED OR MODIFIED, DISABLING THE RADIO. IF THIS OCCURS, THE RADIO MUST BE RETURNED TO THE SERVICE SHOP FOR MASTER PROGRAMMING!!!

NOTE: THE RADIO MUST BE SET UP FOR SELF PROGRAMMING BY INDUSTRIAL COMMUNICATIONS BEFORE SELF PROGRAMMING CAN BE DONE BY THE USER.. ORDER OPTION PGMFP

DEALER MODE

TO FIELD PROGRAM THE RADIO THE DEALER MODE MUST FIRST BE ENTERED.

ENTER THE TEST MODE BY HOLDING DOWN THE [LAMP] + [DIAL] KEYS TOGETHER WHILE TURNING ON THE RADIO. (KEYS MUST BE HELD FOR 2 SECONDS) "SEL" WILL BE DISPLAYED ON THE RADIO LCD DISPLAY.

TO CLEAR ALL DATA AND INITIALIZE THE MEMORY PRESS AND HOLD THE [LO] KEY AND PRESS THE [PTT] KEY. THE DISPLAY WILL INDICATE CLR WHILE DATA IS BEING CLEARED.

THIS FUNCTION IS NOT RECOMMENDED UNLESS ALL NEW DATA IS TO BE ENTERED IN THE RADIO.

SELF PROGRAMMING MODE (CHANNEL-SETTING MODE)

TO ENTER THE SELF PROGRAMMING MODE, PRESS THE [T/A] KEY. THE RADIO IS NOW IN THE CHANNEL SETTING MODE AND CH 1 IS DISPLAYED. TURN THE CHANNEL SELECTOR TO THE CHANNEL YOU WISH TO PROGRAM AS INDICATED ON THE DISPLAY. PRESS THE [PTT] SWITCH AND THE FREQUENCY PRESENTLY PROGRAMMED ON THE CHANNEL WILL BE SHOWN IN THE DISPLAY.

1. RECEIVE FREQUENCY SETTING MODE

IF THERE IS NO DATA STORED IN THE E²PROM, "-----" IS DISPLAYED. IF THE [LO] KEY IS PRESSED, THE INITIAL FREQUENCY IS DISPLAYED. IF THERE IS DATA STORED IN THE E²PROM, THE FREQUENCY IS DISPLAYED. IF THE CHANNEL SELECTOR IS TURNED, THE FREQUENCY CHANGES IN STEPS. IF THE [LAMP] KEY IS HELD DOWN AND THE CHANNEL SELECTOR IS TURNED, THE 1MHz DIGIT IS INCREMENTED OR DECREMENTED. IF THE [PTT] KEY IS PRESSED, THE DISPLAY FREQUENCY IS WRITTEN OR SAVED TO THE E²PROM AND THE RECEIVE SIGNALING SETTING MODE IS ENTERED.

2. RECEIVE SIGNALING SETTING MODE

IF THERE IS NO DATA STORED IN THE E²PROM, "-----" IS DISPLAYED. IF THE [LO] KEY IS PRESSED, THE INITIAL CTCSS TONE OF 67.0 Hz IS DISPLAYED. IF THE [LO] KEY IS PRESSED AGAIN, THE INITIAL DIGITAL CTCSS VALUE OF 023N IS DISPLAYED. IF THERE IS DATA STORED IN THE E²PROM, THE SIGNALING VALUE IS DISPLAYED. IF THE CHANNEL SELECTOR IS TURNED, THE CTCSS OR DIGITAL CTCSS VALUE WILL BE CHANGED. IF THE [PTT] KEY IS PRESSED, THE DISPLAY FREQUENCY IS WRITTEN OR SAVED TO THE E²PROM AND THE TRANSMIT FREQUENCY SETTING MODE IS ENTERED.

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3. TRANSMIT FREQUENCY SETTING MODE

IF THERE IS NO DATA STORED IN THE E²PROM, "-----" IS DISPLAYED. IF THE [LO] KEY IS PRESSED, THE INITIAL FREQUENCY IS DISPLAYED. IF THERE IS DATA STORED IN THE E²PROM, THE FREQUENCY IS DISPLAYED. IF THE **CHANNEL SELECTOR** IS TURNED, THE **FREQUENCY** CHANGES IN STEPS. IF THE [TA] KEY IS PRESSED, THE STEP CHANGES BETWEEN 5KHz AND 6.25 KHz. (INITIAL 6.25KHz) IF THE [LAMP] KEY IS HELD DOWN AND THE **CHANNEL SELECTOR** TURNED, THE **1MHz DIGIT** IS INCREMENTED OR DECREMENTED. IF THE [PTT] KEY IS PRESSED, THE **DISPLAY FREQUENCY** IS WRITTEN OR SAVED TO THE E²PROM AND THE RECEIVE SIGNALING SETTING MODE IS ENTERED.

4. TRANSMIT SIGNALING SETTING MODE

IF THERE IS NO DATA STORED IN THE E²PROM, "-----" IS DISPLAYED. IF THE [LO] KEY IS PRESSED, THE INITIAL CTCSS TONE OF 67.0 Hz IS DISPLAYED. IF THE [LO] KEY IS PRESSED AGAIN, THE INITIAL DIGITAL CTCSS VALUE OF 023N IS DISPLAYED. IF THERE IS DATA STORED IN THE E²PROM, THE SIGNALING VALUE IS DISPLAYED. IF THE CHANNEL SELECTOR IS TURNED, THE CTCSS OR DIGITAL CTCSS VALUE WILL BE CHANGED. IF THE [PTT] KEY IS PRESSED, THE **DISPLAY FREQUENCY** IS WRITTEN OR SAVED TO THE E²PROM AND THE TRANSMIT FREQUENCY SETTING MODE IS ENTERED.

5. DTMF SIGNALING

WHEN THE CHANNEL SELECTOR IS TURNED, THE DISPLAY CHANGES. **OFF** <-----> **ON**

6. 2-TONE / DTMF

WHEN THE CHANNEL SELECTOR IS TURNED, THE DISPLAY CHANGES. **OFF** <-----> **DTMF** <-----> **2-TONE**
NOTE: SHOULD BE OFF IN NORMAL MODE

7. PTT ID ENABLE

WHEN THE CHANNEL SELECTOR IS TURNED, THE DISPLAY CHANGES. **OFF** <-----> **ON**
NOTE: SHOULD BE OFF IN NORMAL MODE

8. SCAN ADD/DELETE

WHEN THE CHANNEL SELECTOR IS TURNED, THE DISPLAY CHANGES. **ADD** <-----> **DEL**

9. BUSY CHANNEL LOCKOUT

WHEN THE CHANNEL SELECTOR IS TURNED, THE DISPLAY CHANGES. **OFF** <-----> **ON**
NOTE: SHOULD BE OFF IN NORMAL MODE

10. CLOCK SHIFT

WHEN THE CHANNEL SELECTOR IS TURNED, THE DISPLAY CHANGES. **OFF** <-----> **ON**
NOTE: SHOULD BE OFF IN NORMAL MODE

11. TRANSMIT POWER

WHEN THE CHANNEL SELECTOR IS TURNED, THE DISPLAY CHANGES. **H** <-----> **L**
NOTE: SHOULD BE H IN NORMAL MODE

11. ID CODE

WHEN THE CHANNEL SELECTOR IS TURNED, THE DISPLAY CHANGES. **000** <-----> **99999**
NOTE: SHOULD BE 000 NORMAL MODE

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