



Photo is TK-190 K type.
Does not come with antenna.
Antenna is available as an option.

CONTENTS

GENERAL	2
SYSTEM SET-UP	2
OPERATING FEATURES	3
REALIGNMENT	10
CIRCUIT DESCRIPTION	12
SEMICONDUCTOR DATA	20
DESCRIPTION OF COMPONENTS	22
PARTS LIST	24
EXPLODED VIEW	31
PACKING	32
DISASSEMBLY FOR REPAIR	33
ADJUSTMENT	34
PC BOARD VIEWS	
FINAL UNIT (X45-3610-10)	43
CONTROL UNIT (X53-3930-10)	43
TX-RX UNIT (X57-608X-XX)	47
SCHEMATIC DIAGRAM	53
BLOCK DIAGRAM	59
LEVEL DIAGRAM	61
TERMINAL FUNCTION	62
KNB-17A (Ni-Cd BATTERY)	63
KMC-25A (SPEAKER MICROPHONE)	64
KSC-19 (CHARGER)	65
KSC-20 (RAPID CHARGER)	65
KPG-36 (PROGRAMMING INTERFACE CABLE)	65
KBP-4	65
SPECIFICATIONS	BACK COVER

CAUTION

When using an external power connector, please use with maximum final module protection of 10V

OPERATING FEATURES

You can use these features, using the programming software (KPG-59D). Selector function is selectable channel select or group select.

The functions for Toggle switch are listed page 7 (Fig. 2). Right position is active for programmed function on toggle switch except "group select".

The functions for the top key are listed page 7 (Fig.2). Hold action and shift action are programmable.

The functions for side key are listed page 7 (Fig.2). Hold action and shift action are programmable.

The functions for microphone key are listed page 7 (Fig.2). Hold action is programmable.

5-1. No Function

Sounds error operation beep, and no action will occur. Use this function when the transceiver is required to be more simple operated.

5-2. AUX.

This function can be programmed when the voice scrambler board is not installed.

If this key is pressed, "AUX" icon lights on the LCD and "CLR/C" port which is inside of the transceiver turns to the high level. If pressed again, the "AUX" icon goes off and the "CLR/C" ports turns to the lower level.

5-3. Channel Down

If this key is pressed once, the channel number decreases by one step. If this key is hold down, the channel number decreases continuously.

5-4. Channel Up

If this key is pressed once, the channel number increases by one step. If this key is hold down, channel number increases continuously.

5-5. Channel Name

This key switches the LCD display between the current channel number and programmed channel name.

5-6. Delete/Add

This key switches the currently displayed channel between "Delete" and "Add".

The "Add" channel contained in the scan sequence, and "Delete" channel is not contained. In the scan mode, this key switches the channel delete or add temporarily.

5-7. Home Channel

Press this key once, the channel switches to the pre-programmed home channel. Press this key again, the channel goes back to the previous channel.

5-8. Invert Display

Press this key once, the displayed the channel number or channel name are inverted. Press this key again, the display returns to the normal.

For the operator who does not change the display and needs "Invert" only, refer "Invert Display" setting of optional feature.

5-9. Key Lock

Pressing this key causes the transceiver to accept an entry of only the [Shift], [KeyLock], [PTT], [Emergency] keys, [Selector switch], [Volume], [Toggle], [Lamp], [Moni], [Moni momentary], [SQ off], [SQ momentary] and [SP Attenuation]

"Lock" is used to prevent users from unexceptable key press which might cause a transceiver malfunction. The display does not change while the key is being locked.

Pressing Key Lock again cancels the key lock. Key locked transceiver can still receive. Pressing this key while scanning, keys are locked but a scanning continues.

5-10. Lamp

Press this key, the transceiver illuminates the display and back lit approximate 5 seconds. Press this key again, the transceiver stops the illuminating.

Pressing any key except the LAMP key while the illuminated restarts the 5 second timer.

5-11. Low Power

Press this key, the transmission power of all channel changes to Low. Press this key again, the transmission power returns to programmed value.

5-12. Monitor

Monitor the channel before a transmission.

Press this key once, "MON" appears and unmutes speaker if a carrier is present, regardless of the specified signalling (including option signalling). Press this key again, "MON" disappears and mutes speaker.

Press this key after the Option Signalling is matched, the Option Signaling is reset. DBD (Dead Beat Disable) mode is not reset by this operation.

5-13. Monitor Momentary

While pressing this key, the monitor function (refer 5-12) is activated. Release this key, the monitor function is deactivated.

5-14. Operator Selectable Tone

This key switches the pre-set decode QT/DQT and encode QT/DQT to OST (Operator Selectable Tone) tone pair.

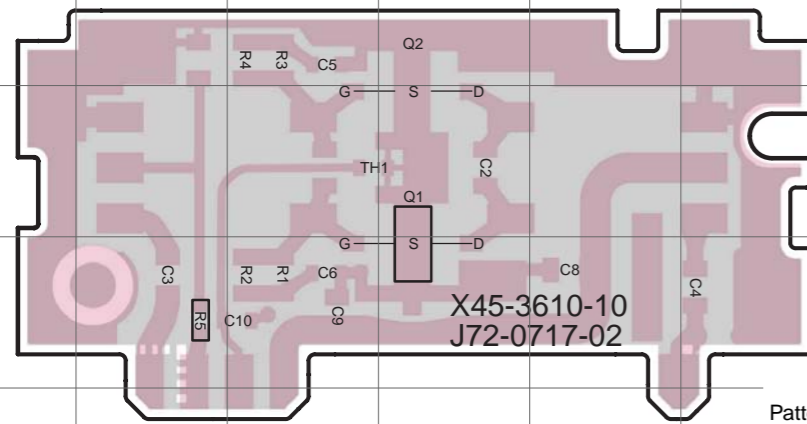
Press this key, the transceiver enters to OST select mode. In this mode, the display shows "OFF" and the operator can select one of the OST tone pair using the Side 1/Side 2 key. The display shows "TONE **" and tone pair No. ** is selected or OST name.

Press OST key again, the transceiver exits from the OST select mode, and returns to the channel mode with "OPT" icon. "OPT" icon means that the OST tone pair is selected. OST tone pair number or OFF can be memorized for each channel.

16 kinds of tone pair for OST can be programmed by KPG-59D. OST is useful to access the repeater with same radio frequency and different tone (QT/DQT).

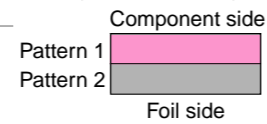
TK-190 PC BOARD VIEWS

FINAL UNIT (X45-3610-10) Component Side View

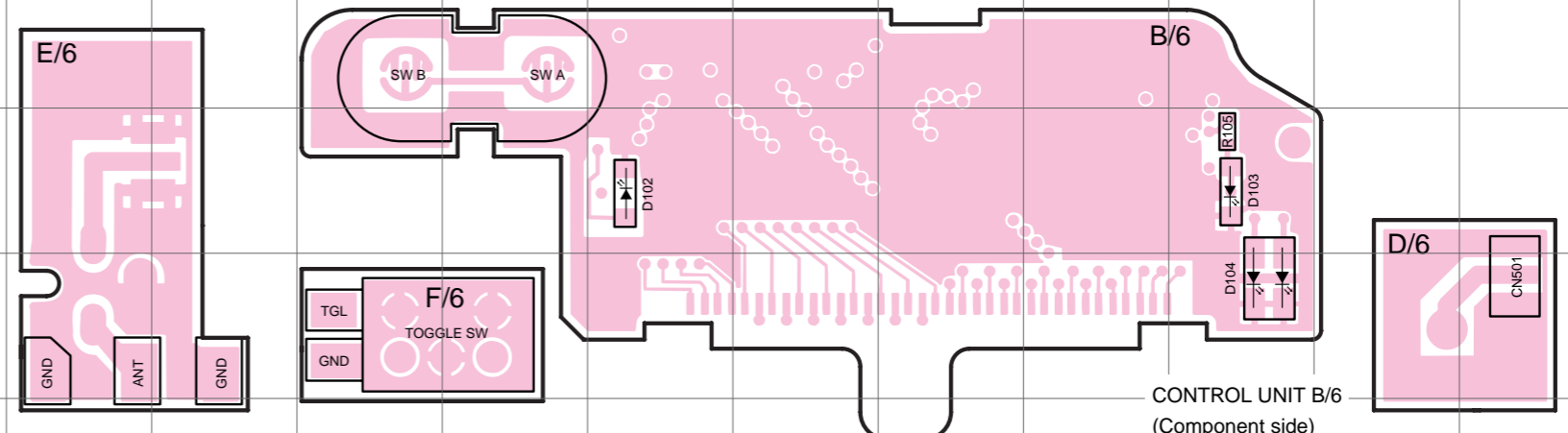


FINAL UNIT
(Component side)

Ref No.	Address
Q1	3D
Q2	2D



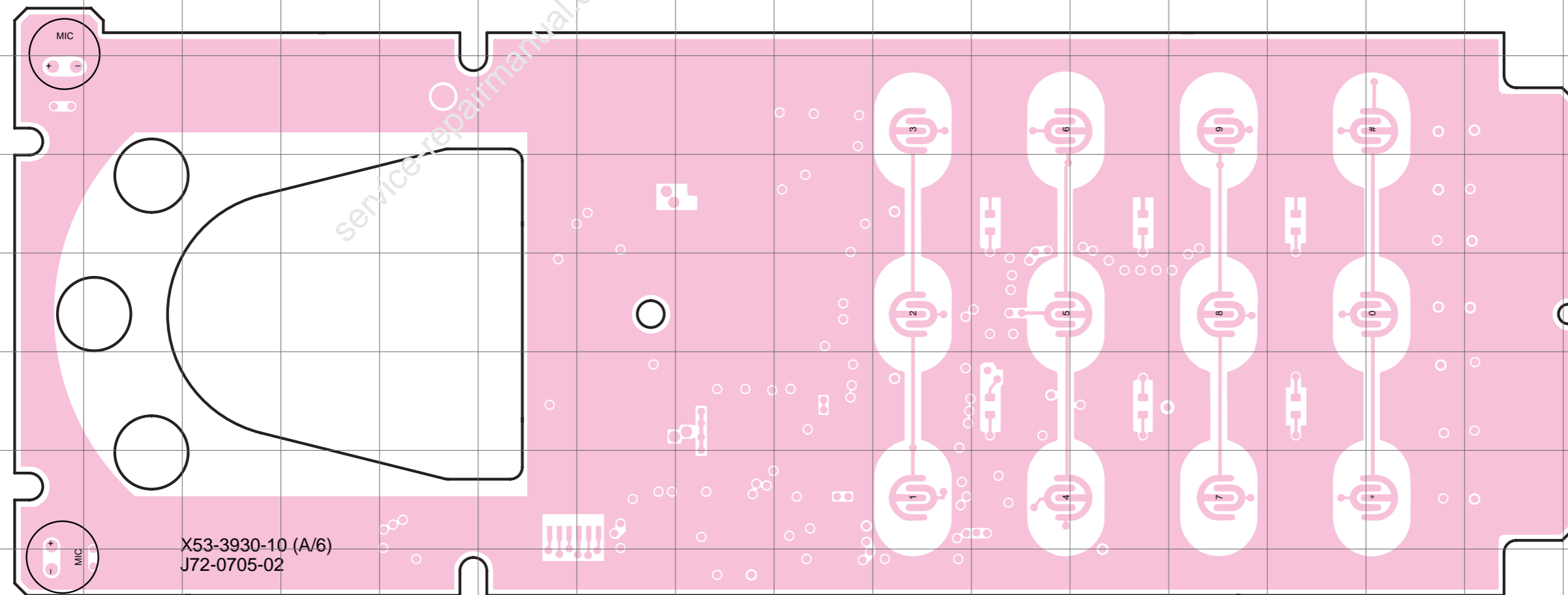
CONTROL UNIT (X53-3930-10 B/6,D/6,E/6,F/6) Component Side View



CONTROL UNIT B/6
(Component side)

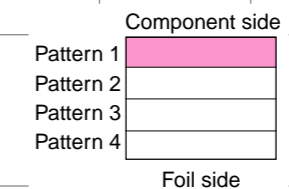
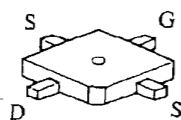
Ref No.	Address
D102	3M
D103	3Q
D104	4Q

CONTROL UNIT (X53-3930-10 A/6) Component Side View



X53-3930-10 (A/6)
J72-0705-02

2SK3075



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