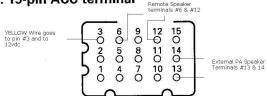
## TK-830/(B)/(D)

## **TERMINAL FUNCTIONS**

## 1. Functions of Pins Used During System Set-up

1-1. 15-pin ACC terminal



1 pin: HK (MIC Hook Signal Input/Output)

This normally functions the same as for the transceiver MIC HOOK (microphone). High (5V): Offhook; Low: Onhook.

Since the MIC HOOK can be controlled by using this pin as an input pin, the hook operation need not be performed from the microphone. Set this pin to low to automatically perform the onhook operation.

2 pin: ME (MIC Earth)

Use this MIC earth pin if the ACC terminal MIC is used.

3 pin: IGN (Ignition Input)

If you use this pin, see the KCT-18 section (page 19) of this service manual.

4 pin : DEO (Detect Signal Output)

The transceiver detection output (400mV/47k $\Omega$ ) is present.

5 pin: MIC (MIC Signal Input/Output)

Same as the transceiver MIC input because this pin is directly connected to the transceiver MIC input. 5mV/3kHz dev. (600 $\Omega$ ) modulation is gained on input.

The input from the transceiver panel is output as it is.

6 pin: ES1 (Output for External Speaker A)
12 pin: ES2 (Output for External Speaker A)
Output for External Speaker (BTL 13W/5%)

7 pin: SB (DC Power Output after Power Switch) When you modify your radio as described in system set-up, take the following precaution.

The rating of pin 7 (SB) of the accessory connector (J4) on the rear of the radio is 13.6V (1A). Insert a 1A fuse if you use the SB pin for external equipment.

8 pin : PTT (PTT Signal Input/Output)

Normally functions the same as the transceiver PTT (microphone). It is high (5V) when the PTT is off and low when the PTT is on, to control the external PTT. Since the PTT can be controlled by using this terminal as an input pin, the microphone PTT operation is not required. Set this pin to low to perform the PTT operation.

9 pin: RS2 (Output for Remote Speaker)

If the speaker input is not applied to this remote speaker input pin, the front panel speaker is nonfunctional. (See the KES-4 section (page 20).)

10 pin : HN1 (Horn Alert Signal Output 1)

11 pin: HN2 (Horn Alert Signal Output 2)

Output pin for the horn alert relay when the KCK-5 is connected (rating: 24V DC/1A). See the KCK-5 service manual. (B51-8155-00)

If you do not use the KCK-5, another function could be output to this pin after special modification.

13 pin: OS1 (Output for External Speaker B)

14 pin : OS2 (Output for External Speaker B)

PA speaker output pin (BTL 13W/5%)

15 pin: E (Earth)

Use this pin as the ground pin when external equip-

ment is connected to the ACC terminal.

## 1-2. Control unit (X57-3740-XX) (A/4)

· CN106 to signaling

1 pin : AC2 (Audio Control 2)

External audio control pin for optional signaling. Normally high (5V). When it is switched to low by external control, such as optional signaling, audio muting is canceled and the CALL indicator flashes. Note that the audio muting is not canceled unless the SQ on the main unit is also canceled.

2 pin : PTT (PTT Signal Input/Output) Same as pin 8 of the 15-pin ACC terminal.

3 pin : DEO (Detect Signal Output) Same as pin 4 of the 15-pin ACC terminal.

4 pin : E (Earth)