ICOM

OPERATING GUIDE

MDC 1200
Compatible

BIIS 1200
Compatible

iDAS
ICOM DIGITAL ADVANCED SYSTEM

**OPERATING GUIDE FOR
IC-F5060/F6060 SERIES
BIIS 1200/MDC 1200 SYSTEM/
LTR®/IDAS™ NXDN™ OPERATION**

Icom Inc.

IMPORTANT

Thank you for purchasing this Icom transceiver.
The BIIS 1200/MDC 1200 system/LTR®/IDAS™ NXDN™ functions are built into your IC-F5060/F6060 series transceiver.

READ ALL INSTRUCTIONS carefully and completely before using the transceiver.

SAVE THIS OPERATING GUIDE — This operating guide contains important operating instructions for:
• **IC-F5061/F5061D/F5062/F5063** VHF MOBILE TRANS-CEIVERS
• **IC-F6061/F6061D/F6062/F6063** UHF MOBILE TRANS-CEIVERS

NOTE: In this operating guide, the LCD illustration is described using the 2 line display mode.

INFORMATION: The 10-key pad of the optional DTMF microphone (HM-148T) has only the DTMF code transmitting capability, so an ID and message cannot be input with this microphone.

TABLE OF CONTENTS

1 PREPARATION

■ Programmable function keys

The following functions can be assigned to the **[UP]**, **[DOWN]**, **[P0]**, **[P1]**, **[P2]**, **[P3]** and **[P4]** programmable function keys. Consult your Icom dealer or system operator for details concerning your transceivers programming.
If the programmable function names are bracketed in the following explanations, the specific key is used to activate the function.

◇ For BIIS 1200 operation only
BIIS BUTTON KEY
➡ Push to toggle the call ID list, transmit message and standby modes.
➡ Push to toggle between the queue channel and the received message record display, after the queue channel is selected.
➡ Hold down for 1 second to select the queue channel mode.

STATUS UP/DOWN KEYS
➡ While in standby, push to display the transmit status screen and select a status number.
➡ When a received SDM (Short Data Message) is displayed, push to cancel the automatic scroll and then manually scroll the message.
➡ When an SDM that contains more than 12 characters is displayed, push to manually scroll the message.

◇ For MDC 1200 system operation only
MDC CALL KEY
➡ Push to enter the MDC menu selection mode.
➡ Push **[CH Up]** or **[CH Down]** to select the desired "**SELCALL**," "**CALALERT**," "**STUN**," "**REVIVE**," "**RADIOCHK**," "**STATUS**", "**MSG**" and "**CALL LOG**" MDC menu.
 After selecting, push this key again to enter the transceiver alias selection mode.
 • If no operation is performed for approximately 15 seconds, the transceiver returns to the normal operating mode.
➡ In the transceiver alias selection mode, push to return to the MDC menu selection mode.

MDC SELCALL KEY
Push to enter the transceiver alias selection mode for a SelCall.
• After selecting the desired alias, push **[PTT]** to transmit a SelCall.
• If no operation is performed for approximately 15 seconds, the transceiver returns to the normal operating mode.

MDC CALLALERT KEY
Push to enter the transceiver alias selection mode for a CallAlert.
• After the desired alias selection, push **[PTT]** to transmit a Call Alert.
• If no operation is performed for approximately 15 seconds, the transceiver returns to the normal operating mode.

1

◇ For LTR operation only
PHONE KEY
Push to connect or disconnect the telephone network.

◇ For IDAS operation only
DIGITAL BUTTON KEY
➥ Push to enter the application selection mode.
➥ Hold down for 1 second to toggle the call type between Individual and Talkgroup, and then automatically enter the application selection mode.
  • Push **[CH Up]** or **[CH Down]** to select the desired "**VOICE**," "**CALALERT**," "**STUN**," "**KILL**," "**REVIVE**," "**REM MON**," "**RADIOCHK**," "**STATUS**," "**MSG**," "**STAT POL**" and "**CALL LOG**" application.
➥ While in the application selection mode, push to enter the Individual or Talkgroup ID selection mode.
  • If "**STATUS**" or "**MSG**" is selected as the application, the message selection mode appears. Push **[CH Up]** or **[CH Down]** to select the desired message, then push the Digital Button key again to enter the Individual or Talkgroup ID selection mode. (pp. 39, 40)
➥ In the application selection mode, hold down for 1 second to return to the normal operating mode.

STATUS UP/DOWN KEYS
➥ When a received SDM is displayed, push to cancel the automatic scroll and manually scroll the message.
➥ When an SDM that contains more than 12 characters is displayed, push to manually scroll the message.

10-KEY ENTER KEY
Push to enable the microphone's 10-key pad operation to select the memory channel, status message number, and so on, depending on the presetting. Ask your dealer for details.

SITE SELECT KEY "SSEL"
This key allows you to manually select the desired site without roaming scan operation.
• This function is usable in transceivers whose revision number is 4.6 or later. Ask your dealer for details.

NOTE: This key can be used for only Multi-site Trunking mode.

① Push [Site Select] to show the Site Select screen.
② Push [CH Up] or [CH Down] to select the desired site from the preprogrammed roaming list*.
  * The valid roaming areas (up to 48) are listed on the roaming list. Ask your dealer for details.
③ Push [Site Select] again to set the selected site, and return to the stand-by mode.
④ The transceiver tries to register to the selected site.

BIIS 1200 OPERATION

■ Setting example

The following key functions are recommended to be assigned to each programmable key for BIIS 1200 operation. The key functions can be assigned by your dealer. Ask your dealer for details.

NOTE: During BIIS 1200 operation, the MDC 1200 system, LTR and IDAS operations are disabled.

[Call] : Push to transmit a BIIS call when the selected channel is an MSK channel.

[BIIS Button] : Push to select the call list ID/transmit message, or a displayed receive message record.
  • The key indicator appears above the key that this key function is assigned to, while it is activated. See the instruction manual for details.

[TX Code Enter] : Push to directly enter the ID code edit mode, then push **[CH Up]** or **[CH Down]** to set the desired digit.

[Moni (Audi)] : When your communication in the MSK channel mode is finished, push this key to send a 'Clear down' signal.

[CH Up]/**[CH Down]**: While in the standby mode, push to select an operating channel.
  After pushing **[BIIS Button]** or **[TX Code CH Enter]**, push to select a call list or TX code digit, respectively.

■ Receiving a call

◇ Individual call

① When an individual call is received:
  • Beeps sound.
  • " " appears and the mute is released.
  • " ♣ " appears or blinks, depending on the presetting.
  • Your own ID (or text) and the calling station ID (or text) blink.

Appears   Appears or blinks

0001
1234

Your own ID   Calling station ID
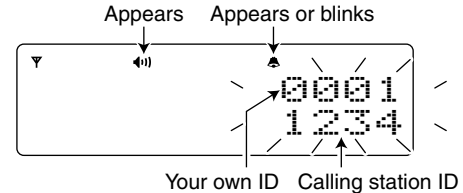
② Hold down **[PTT]**, then speak into the microphone at your normal voice level.
  • The LED lights red.

③ Release **[PTT]** to return to receive.
  • The LED indicator lights green while receiving a signal.

④ To end the call, push **[Moni(Audi)]** to send the 'Clear down' signal.
  • Either station can send a 'Clear down' signal.
  • "CLR DOWN" is displayed for approximately 2 seconds.
  • The " " icon disappears and the transceiver returns to the standby mode.

◇ Group call

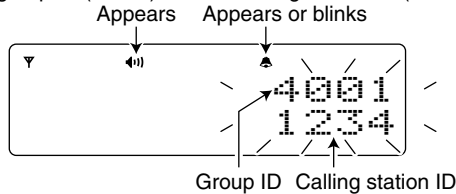① When a group call is received:
- Beeps sound.
- " ◀)) " appears and the mute is released.
- " ♣ " appears or blinks, depending on the presetting.
- The group ID (or text) and the calling station ID (or text) blink.

Appears   Appears or blinks

Group ID   Calling station ID

② Hold down **[PTT]**, then speak into the microphone at a normal voice level.
- The LED indicator lights red.

⚡ **NOTE:** Only one station is permitted to speak at a time.

③　Release **[PTT]** to return to receive.
- The LED lights green while receiving a signal.

④ To end the call, push **[Moni (Audi)]** to send a 'Clear down' signal.
- Either station can send a 'Clear down' signal.
- "CLR DOWN" is displayed for approximately 2 seconds.
- " ◀)) " disappears, and the transceiver returns to the standby mode.

◇ Emergency call

① When an emergency call is received:
- Beeps sound.
- "**Emergency**" and the calling station ID (or text) blink.
- The state of the backlight depends on the Backlight setting in the User set mode. When "OFF Auto" is selected, the backlight turns ON for the preprogrammed time period. (Auto Backlight Timer) This function is usable in transceivers whose revision number is 3.0 or later. Ask your dealer for details.
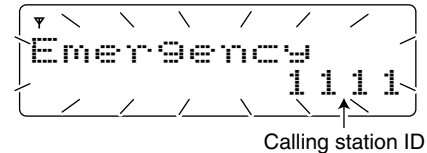
Calling station ID

② The transceiver automatically transmits an acknowledgement to the calling station.

③ Turn power OFF or change the channel to stop the beep and display indication.

◇ **Displaying the received call record**
— Queue display

The transceiver memorizes the calling station ID in the memory. Up to 3 calls can be memorized, and the oldest call record is erased when a 4th call is received. However, once the transceiver is powered OFF, all the records are erased.

① Hold down **[BIIS Button]** for 1 second.
   • The following display appears.

When a record is selectable

```
▼
        < QUEUE >
        —QUEUE ! —
```

When no record is stored

```
▼
        < QUEUE >
        NO  QUEUE
```

② Push **[CH Up]** or **[CH Down]** to select the desired call.
③ Push and hold **[BIIS Button]** for 1 second again to return to the standby mode.
   • If no operation is performed for 30 seconds, the transceiver au-tomatically returns to the standby mode.

■ Transmitting a call

There are 3 ways to select a call code— selecting from memory, calling back from the queue channel record, and entering from the keypad.

◇ Using call memory

① While in the standby mode, push **[BIIS Button]** to enter the call code memory channel selection mode.
  • "☎" appears.

Appears
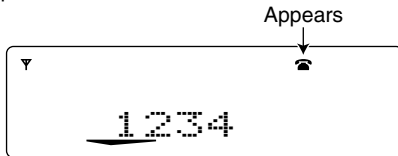
② Push **[CH Up]** or **[CH Down]** to select the desired call code.

③ Push **[Call]** or **[PTT]*** to call.
  * A PTT call can be made only when PTT call capability is permitted.

  NOTE: When no answer back is received, the transceiver automatically repeats the call 3 times (default), and "WAIT" is displayed during each call. However, an error beep sounds and "FAILED" is displayed when no answer back is received after the repeated calls.

④ Push **[PTT]** to transmit; release to receive.

⑤ Push **[Moni (Audi)]** to send a 'Clear down' signal.

◇ Calling back from the queue channel

① While in the standby mode, push and hold **[BIIS Button]** for 1 second to enter the queue memory channel selection mode.

② Push **[Up]** or **[Down]** to select the desired record.
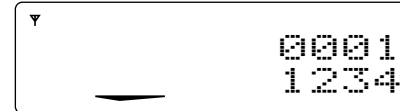
③ Push **[Call]** or **[PTT]*** to call.
  * A PTT call can be made only when PTT call capability is permitted.

  NOTE: When no answer back is received, the transceiver automatically repeats the call 3 times (default), and "WAIT" is displayed during each call. However, an error beep sounds and "FAILED" is displayed when no answer back is received after the repeated calls.

④ Push **[PTT]** to transmit; release to receive.

⑤ Push **[Moni (Audi)]** to send a 'Clear down' signal.

◇ Direct code entry

① In the standby mode, push **[TX Code Enter]** to enter the TX code edit mode.
  • A Code digit blinks.

② Push **[TX Code Enter]** to select the desired digit to be edited.
  • Editable digits differ according to the transceiver setting.
③ Push **[CH Up]** or **[CH Down]** to select the desired digit.
④ Push **[TX Code Enter]** to set the digit, then the digit to the right will automatically blink.
⑤ Repeat ③ and ④ to edit all allowable digits.
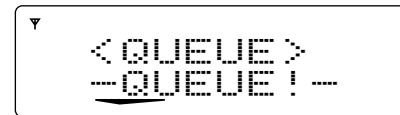⑥ Push **[Call]** or **[PTT]*** to call.
  * A PTT call can be made only when PTT call capability is permitted.

  NOTE: When no answer back is received, the transceiver automatically repeats the call 3 times (default), and "WAIT" is displayed during each call. However, an error beep sounds and "FAILED" is displayed when no answer back is received after the repeated calls.

⑦ Push **[PTT]** to transmit; release to receive.
⑧ Push **[Moni (Audi)]** to send a 'Clear down' signal.

For your information

When the "UpDate" setting for the call code is enabled, the set code is overwritten into the call code memory.

■ Receiving a message

◊ Receiving a status message

① When a status message is received:
- Beeps sound.
- The status message and the calling station ID (or text) is displayed when the display mode is 2 lines, as shown below.
- When the display mode is 1 line, the status message and the calling station ID (or text) may be alternately displayed depending on the setting.

```
Ψ
RX Status 01
              1234
```
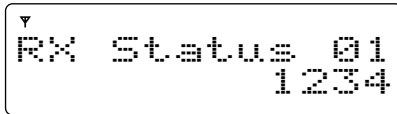
② Push **[Moni (Audi)]** to return to the standby mode.

NOTE: When the display mode is 1 line
Only the calling station ID (or text) is displayed (no message is alternately displayed) when the scroll timer is set to 'OFF.' In this case, push **[Status Up]**/**[Status Down]** to manually display the status message.

◊ Receiving an SDM (Short Data Message)

① When an SDM is received:
- Beeps sound.
- "✉" appears.
- The SDM and the calling station ID (or text) may be displayed when the display mode is 2 lines, as shown below.
- The SDM and the calling station ID (or text) is alternately displayed when the display mode is 1 line, depending on the presetting.

Appears

```
Ψ                    ✉
SDM 8
              1234
```
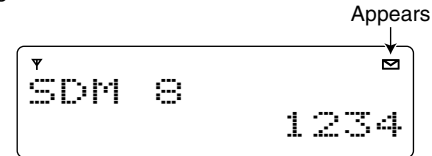
NOTE: When the received SDM includes more than 12 characters, the message automatically scrolls when the automatic scroll function is activated.
- Push **[Status Up]**/**[Status Down]** to manually scroll the message.

Appears

```
Ψ                    ✉
SDM 12345678
              1234
```
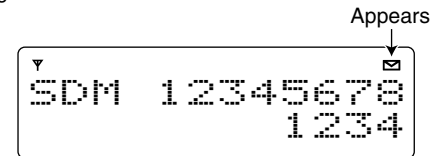
② Push **[Moni (Audi)]** to return to the standby mode.

◇ Selecting a received message

The transceiver memorizes the received message in the memory. Up to 6 messages for status and SDM, or 95 character SDM's can be memorized. The oldest message is erased when the 7th message is received. However, once the transceiver is powered OFF, all messages are cleared.

① Hold down **[BIIS Button]** for 1 second.
  • The queue memory is displayed.
② Push **[BIIS Button]** again for 1 second.
  • The message memory is displayed.

When a message is selectable

```
▼
      MESSAGE
   ─ MSG!  ─
```
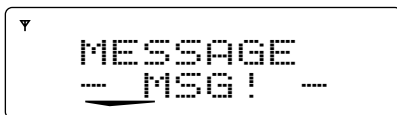
When no message is stored

```
▼
      MESSAGE
   ─NO MSG─
```
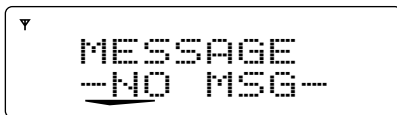
③ Push **[CH Up]** or **[CH Down]** to select a desired message.
  • When selecting a SDM that includes more than 12 characters, the message automatically scrolls when the automatic scroll function is activated.
  • Push [Status Up]/[Status Down] to manually scroll the message.
④ Push and hold **[BIIS Button]** for 1 second again to return to the standby mode.
  • If no operation is performed for 30 seconds, the transceiver automatically returns to the standby mode.

■ Transmitting a status

◇ General

The programmed status message can be selected, and the message text is also displayed on the function display of the called station.

Up to 24 status types (1 to 24) are selectable, and status messages 22 and 24 have designated meanings.

    Status 22: Emergency*
    Status 24: GPS request
    * Status 22 can also be used as a normal status message by disabling the designated meaning. However, the status 24 meaning is fixed.

A status call can be sent with both individual and group calls.

◇ Transmitting a status

① While in the standby mode, push **[BIIS Button]**, then push **[CH Up]** or **[CH Down]** to select the desired station/group code.

② Push **[BIIS Button]** again, then push **[CH Up]** or **[CH Down]** to select the desired status message.

```
▼
    STATUS 01
TX Status 01
```
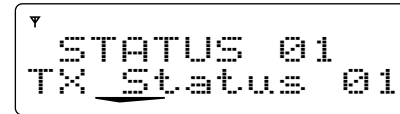
Status message is displayed.

③ Push **[Call]** or **[PTT]*** to transmit the status message to the selected station or group.
    * A PTT call can be made only when PTT call capability is permitted.
    • When the transmission is successful, 2 beeps sound and the transceiver automatically returns to the standby mode.

■ Transmitting an SDM

◇ General
The short data message, SDM, can be sent to an individual station or group stations. Also, 8 SDM memory channels are selectable and the messages can be edited on your PC.

◇ Transmitting an SDM
① While in the standby mode, push **[BIIS Button]**, then push **[CH Up]** or **[CH Down]** to select the desired station/group code.

② Push **[BIIS Button]** again, then push **[CH Up]** or **[CH Down]** to select the desired SDM.
• "✉" appears.

Appears

```
 ▼                              ✉
  MESSAGE  1
 SDM 1
```
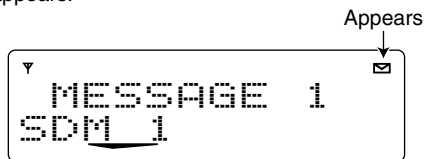
SDM is displayed.

③ Push **[Call]** or **[PTT]*** to transmit the SDM to the selected station/group.
* A PTT call can be made only when PTT call capability is permitted.
• 2 beeps sound and the transceiver automatically returns to the standby mode when transmission is successful.

◇ Direct message input
The optional HM-152T is required for this operation.

① While in the standby mode, push **[BIIS Button]** twice, then push **[CH Up]** or **[CH Down]** to select the desired SDM to be edited.
• "✉" appears.

② Push **[∗]** or **[#]** to enter the message editing mode.
• The first character blinks when **[#]** is pushed; the last character blinks when **[∗]** is pushed.
• "✉" blinks.

③ Push the appropriate digit key, [0] to [9], to enter the desired character.
• See the table on page 12 for the selectable characters.
• Pushing **[CH Up]** also enters a space, pushing **[CH Down]** deletes the selected character.

④ Push **[#]** to move the cursor to the right, push **[∗]** to move the cursor to the left.

⑤ Repeat steps ③ and ④ to enter the desired text message.

⑥ Push and hold **[BIIS Button]** for 1 second to write the set message into the message memory.
• Push **[BIIS Button]** momentarily to cancel the editing and return to the original message display.

2

• Selectable characters

Key	Characters
[0]	0 , ! ? ' " ; ; : _ ( ) < > [ ]
[1]	1 (sPace) # * / + - = \ & % $ @ ^
[2]	2 A B C a b c
[3]	3 D E F d e f
[4]	4 G H I g h i
[5]	5 J K L j k l
[6]	6 M N O m n o
[7]	7 P Q R S p q r s
[8]	8 T U V t u v
[9]	9 W X Y Z w x y z

■ Position data transmission

When a GPS receiver is connected to the transceiver, the position (longitude and latitude) data can be automatically transmitted. Ask your dealer or system operator for connection details.

The position data is transmitted when:
  • A status 24 message is received
    * When the status 24 message, GPS request, is received.
  • Automatic is enabled.
    When automatic position transmission is enabled, sends the position data according to 'Time Marker' and 'Interval Timer' settings.
  • PTT is released
    When 'Send with Logoff' is enabled.
    - Set the 'Log-In/Off' item as 'L-OFF.'
  • Send with Status is enabled
    Sent after sending a status message.
  • Send with SDM is enabled
    Sent after sending an SDM.
  • Send with Emergency is enabled
    Sent after sending status 22 (Emergency).

■ Printer connection

When a printer is connected to the D-sub 25-pin connector on the transceiver, the received SDM content and the called station ID can be printed out. Ask your dealer or system operator for connection details.

■ BIIS ANI

Your own ID can be transmitted each time the PTT is pushed (log-in) or released (log-off) with individual or group calls communications.
When receiving an ANI, the communication log will be recorded when using a PC dispatch application.

In addition, when using the ANI with log-in, the PTT side tone function can be used to inform you that the ID is sent and voice communication can be made.

■ Transmitting an Emergency call

When **[Emergency]** (described in the instruction manual) is held down for the specified time period, an emergency signal (Status 22) is transmitted once or repeatedly* on the emergency channel. When no emergency channel is specified, the signal is transmitted on the operating channel.
*When the Repeat Cancel function is ON, the transceiver cancels repeating after receiving an acknowledgement.
When the Repeat Cancel function is OFF, the transceiver repeats calling according to the number of repeat cycles, even after receiving an acknowledgement.
This function is usable in transceivers whose revision number is 3.0 or later. Ask your dealer for details.

If you want to cancel the emergency call, hold down the key again before transmitting the call.

The emergency call may be transmitted without a beep sounding, and the LCD display, depending on the presetting. (Silent operation)

The transceiver can also be programmed to keep the microphone open during an emergency call, to allow monitoring of the situation.

Ask your dealer for details.

IMPORTANT: Setting a separate emergency channel to provide reliable emergency call operation is recommended.

■ Stun function

When the specified ID, set as a killer ID, is received, the stun function is activated.

When a killer ID is received, the transceiver switches to the password required condition. Entering the password with the keypad is necessary to operate the transceiver again in this case.

■ BIIS indicators

The following indicators are available for the BIIS operation on an MSK channel.

CONNECT   : Individual/group calls are successful.

OK   : Message (status or SDM) transmission was successful.

FAILED   : No answer back is received.

WAIT   : Appears during retry of the call (2nd call).

CLR DOWN : End the call.

BUSY   : The operating channel is busy.

■ Priority A channel selection

When one of the following operations is performed, the transceiver automatically selects the Priority A channel.

Priority A is selected when:
- A clear down signal is received or transmitted
  - Set the 'Clear down' option as 'Enable' in 'Move to PrioA CH.'
- Turning the power ON
  Priority A channel is selected each time the transceiver power is turned ON.
- Status call
  Priority A channel is selected when transmitting a status call.
  - Enable the 'Send Status on PrioA CH' item in the MSK configuration.

■ Horn output

An automatic honking function can be used when a horn is connected to D-Sub 25-pin connector on the transceiver. When a status message is received, the transceiver sounds the vehicle's horn for a specified time period to announce a status message has been received.

This is a convenient function when the operator is away from the transceiver.

Ask your dealer or system operator, or refer to the service manual for connection and setting details.

■ MDC 1200 system operation

The MDC 1200 signaling system enhances your transceiver's capabilities. It allows PTT ID, Selective Calling (SelCall), Call Alert, Radio Check, Stun, Revive, Status, Messaging and Emergency signaling.

An additional feature of the MDC 1200 system found in Icom transceivers is called aliasing. Each transceiver on the system has a unique ID number. Aliasing substitutes the ID number with an alphanumeric name. For transmit, you can use this alias to select a transceiver to call. For receive, the alias of the calling station is displayed instead of the ID.

Please confirm that your dealer has set one of the programmable keys (**[UP]**, **[DOWN]**, **[P0]**, **[P1]**, **[P2]**, **[P3]** or **[P4]**) for MDC 1200 system operation.

NOTE: During MDC 1200 system operation, BIIS 1200 system and IDAS operations are disabled.

■ Receiving a call

◇ Receiving a SelCall

① When a SelCall is received:
  • Beeps sound.
  • "◀))" appears.
  • "♣" blinks.
  • The calling station ID (or alias) and "**SELCALL**" are alternately displayed.
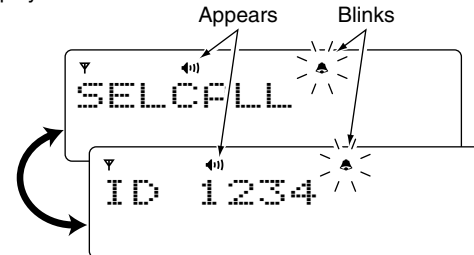
Appears   Blinks

SELCRLL

ID 1234

② Hold down **[PTT]** and speak at your normal voice level.
③ Release **[PTT]** to receive.

◇ Receiving a Call Alert

① When a Call Alert is received:
- Beeps sound.
- " ♣ " blinks.
- The calling station ID (or alias) and "**CALLALRT**" are alternately displayed

Blinks
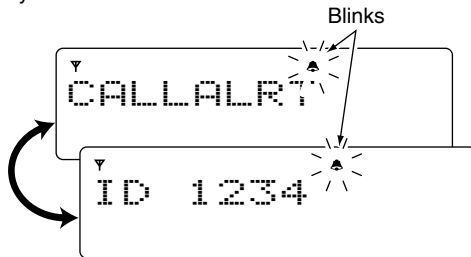
② Hold down **[PTT]** and speak at your normal voice level.
③ Release **[PTT]** to receive.

◇ Receiving an Emergency Call

① When an emergency call is received:
- Beeps sound.
- The calling station ID (or alias) and "**EMG EMG**" are alternately displayed.
- The action of the backlight depends on the Backlight setting in the User set mode. When "OFF Auto" is selected, the backlight turns ON for the specified time period*.
  *If the Backlight Update setting is "Enable," the preprogrammed time period is enabled. (Auto Backlight Timer)
  If the Backlight Update setting is "Inhibit," the backlight does not turn ON.
  The Backlight Update and Auto Backlight Timer functions are usable in transceivers whose revision number is 3.0 or later. Ask your dealer for details.
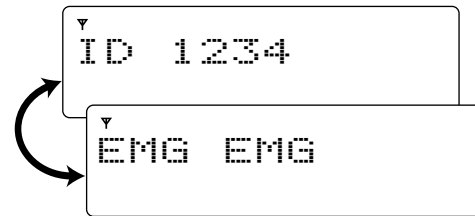
② When the Send Ack function is turned ON, the transceiver automatically transmits an acknowledgement to the calling station.
③ Turn power OFF or change the channel to stop the beep and display action.

◇ **Receiving a Message**

① When a Message is received:
  • Beeps sound.
  • The calling station ID (or alias) and the message are alternately displayed.

```
▼
ID 1234
```

```
▼
MSG 1
```
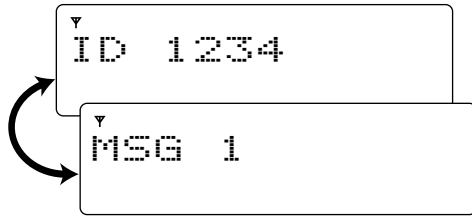
② Turn power OFF, push **[PTT]**, or change the channel to stop the display indication.

◇ **Receiving a Status Message**

➥ When a Status Message is received:

  • Beeps sound.
  • The calling station ID (or alias) and the status message are displayed once.

```
▼
ID 1234
```

```
▼
STATUS1
```
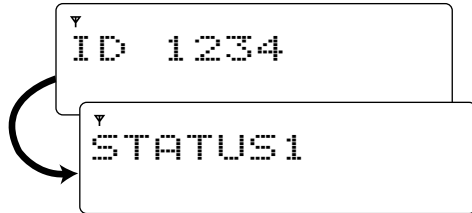
◇ **Receiving a Stun or Revive**

If a Stun command is received that matches your station ID, the transceiver will display "SORRY" and you can not receive or transmit. When a Revive command is received that matches your station ID, normal operation is restored.

◇ **Call log function**

After receiving the SelCall, Call Alert and Emergency call, the call logs may be displayed, depending on the presetting. Up to 5 logs can be memorized, and the oldest log is erased when a 6th call is received.

① Push **[MDC Call]** to enter the MDC menu selection mode.
② Push **[CH Up]** or **[CH Down]** to select "**CALL LOG**".
③ Push **[MDC Call]** again to display the call logs.
  • When no call is received, an error beep sounds.

Calling station ID

```
▼
ID 1234
SC ―― 0:27
```

Call type
SC : SelCall
CA : Call Alert
EMG : Emergency call

Elapsed time after receiving the call
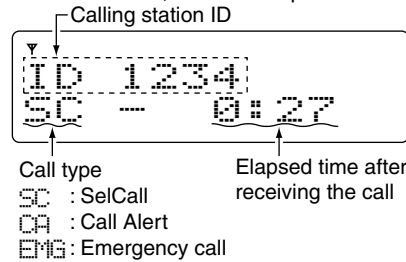
④ Push **[CH Up]** or **[CH Down]** to select the desired call log memory.

NOTE: After 1000 hours has passed from when the call was received, the elapsed time resets to 0:00.

■ Transmitting a call

◇ Transmitting a SelCall

SelCall allows you to make calls to a specific station or to a particular group. Other MDC 1200 system transceivers on the channel will not hear a SelCall that does not match their station or group ID's.

① Push **[MDC Call]** to enter the MDC menu selection mode.
  • Or push **[MDC SelCall]** to enter the transceiver alias selection mode. In this case, skip step ②.

```
▼
SELCALL
```
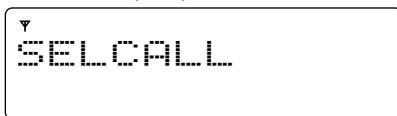
② Push **[MDC Call]** again to enter the transceiver alias selection mode.
③ Push **[CH Up]** or **[CH Down]** to select the desired alias**.**
④ Hold down **[PTT]** to transmit the SelCall to the selected station, then speak into the microphone.
  • "◀))" appears.
⑤ Release **[PTT]** to receive.

◇ Transmitting a Call Alert

Call Alert allows you to notify another user who may be away from their transceiver, that you want to talk.

① Push **[MDC Call]** to enter the MDC menu selection mode.
  • Or push **[MDC CallAlert]** to enter the transceiver alias selection mode. In this case, skip steps ② and ③.
② Push **[CH Up]** or **[CH Down]** to select "**CALALERT**".

```
▼
CALALERT
```

③ Push **[MDC Call]** again to enter the transceiver alias selection mode.
④ Push **[CH Up]** or **[CH Down]** to select the desired alias.
⑤ Push **[PTT]** to transmit the Call Alert to the selected station.
  • "**CA CALL**" is displayed.
⑥ Release **[PTT]**.
  • "**CA OK**" is displayed if the targeted station sent back an acknowledgement.
  • "**CA FAIL**" is displayed if the targeted station does not send back an acknowledgement.
⑦ After a specified time period has passed, the transceiver will return to receive.

◊ **Transmitting a Stun Call**

Stun call allows you to send MDC 1200 system signal that will stun the targeted station.

① Push **[MDC Call]** to enter the MDC menu selection mode.
② Push **[CH Up]** or **[CH Down] to** select "**STUN**".

```
Y
STUN
```

③ Push **[MDC Call]** again to enter the transceiver alias selection mode.
④ Push **[CH Up]** or **[CH Down]** to select the desired alias.
⑤ Push **[PTT]** to transmit the stun call to the selected station.
  • "**STN TX**" is displayed.
⑥ Release **[PTT]**.
  • "**STN ACK**" is displayed if an acknowledgement is received from the targeted station.
  • "**STN FAIL**" is displayed if the targeted station does not send back an acknowledgement.
⑦ After a specified time period has passed, the transceiver will return to receive.

◊ **Transmitting a Revive Call**

Revive call allows you to send MDC 1200 system signals that will revive a stunned transceiver.

① Push **[MDC Call]** to enter the MDC menu selection mode.
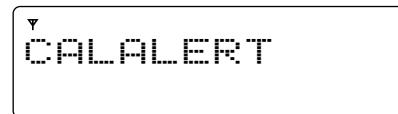② Push **[CH Up]** or **[CH Down]** to select "**REVIVE**".

```
Y
REVIVE
```

③ Push **[MDC Call]** again to enter the transceiver alias selection mode.
④ Push **[CH Up]** or **[CH Down]** to select the desired alias.
⑤ Push **[PTT]** to transmit the revive call to the selected station.
  • "**REV TX**" is displayed.
⑥ Release **[PTT]**.
  • "**REV ACK**" is displayed if an acknowledgement is received from the stunned station.
  • "**REV FAIL**" is displayed if no acknowledgement is received from the stunned station.
⑦ After a specified time period has passed, the transceiver will return to receive.

3

◇ Transmitting a Radio Check Call

A Radio Check call allows you to determine whether the targeted station is turned on, within the communication range and on channel without requiring any action from the targeted station user.

① Push **[MDC Call]** to enter the MDC menu selection mode.
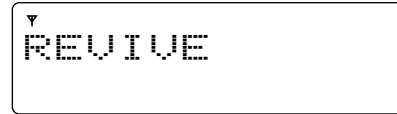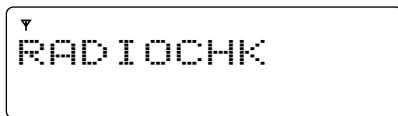② Push **[CH Up]** or **[CH Down]** to select "**RADIOCHK**".

```
▼
RADIOCHK
```

③ Push **[MDC Call]** again to enter the transceiver alias selection mode.
④ Push **[CH Up]** or **[CH Down]** to select the desired alias.
⑤ Push **[PTT]** to transmit the radio check call to the selected station.
   • "**RDO CHK**" is displayed.
⑥ Release **[PTT]**.
   • "**CHK ACK**" is displayed if the targeted station is turned ON, on channel and within the communication range.
   • "**CHK FAIL**" is displayed if the targeted station does not send back an acknowledgement.
⑦ After a specified time period has passed, the transceiver will return to receive.

◇ Transmitting a Status Message

A Status Messaging allows you to send a preprogrammed status message. There are 16 status codes that can be sent. In addition, the transceiver can send an MDC 1200 system signal that causes the targeted station to automatically transmit its current status.

① Push **[MDC Call]** to enter the MDC menu selection mode.
② Push **[CH Up]** or **[CH Down]** to select "**STATUS**".

```
▼
STATUS
```
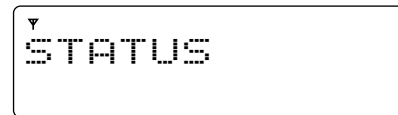
③ Push **[MDC Call]** again to enter the status message selection mode.

Preprogrammed status message is displayed. →
```
▼
STATUS
STATUS1
```

④ Push **[CH Up]** or **[CH Down]** to select the desired status message.
⑤ Push **[PTT]** to transmit the selected status message.
   • "**STAT TX**" is displayed.
⑥ Release **[PTT]**.
   • "**STAT OK**" is displayed if the targeted station sends an acknowledgement.
   • "**STA FAIL**" is displayed if the targeted station does not send back an acknowledgment.
⑦ After a specified time period has passed, the transceiver will return to receive.

◇ Transmitting a Message

The transceiver can send a preprogrammed message. There are 16 messages that can be sent.

① Push **[MDC Call]** to enter the MDC menu selection mode.
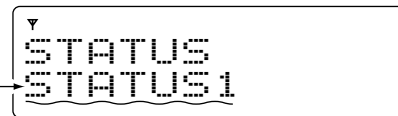② Push **[CH Up]** or **[CH Down]** to select "**MSG**".

```
┌─────────────────────────┐
│ ▼                       │
│ MSG                     │
│                         │
│                         │
└─────────────────────────┘
```

③ Push **[MDC Call]** again to enter the preprogrammed message selection mode.

```
┌─────────────────────────┐
│ ▼                       │
│ MSG                     │
│ MSG  1                  │
└─────────────────────────┘
```
        ↑
Preprogrammed message is displayed.
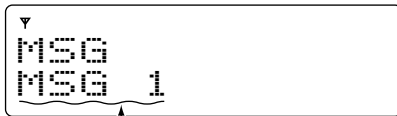
④ Push **[CH Up]** or **[CH Down]** to select the desired message.
⑤ Push **[PTT]** to transmit the selected message.
   • "**MSG TX**" is displayed.
⑥ Release **[PTT]**.
   • "**MSG OK**" is displayed if the targeted station sends an acknowledgement.
   • "**MSG FAIL**" is displayed if the targeted station does not send an acknowledgement.
⑦ After a specified time period has passed, the transceiver will return to receive.

◇ PTTID Calls

The transceiver can send an MDC 1200 system signal that includes PTTID when **[PTT]** is pushed (beginning of transmission) and released (end of transmission). If a PTTID call is received, the transceiver may display the calling station ID (or alias) and emit a beep, depending on the presetting.

3

22

◇ Transmitting an Emergency Call

When **[Emergency]**, described in the instruction manual, is held down for the specified time period, the MDC 1200 emergency signal is transmitted once or repeatedly* on the emergency channel. When no emergency channel is specified, the signal is transmitted on the operating channel.

*When the Repeat Cancel function is ON, the transceiver cancels repeating after receiving an acknowledgement.
When the Repeat Cancel function is OFF, the transceiver repeats calling according to the number of repeat cycles, even after receiving an acknowledgement.
This function is usable in transceivers whose revision number is 3.0 or later. Ask your dealer for details.

If you want to cancel the emergency call, hold down the key again before transmitting the call.

The emergency call may be transmitted without a beep sounding, and the LCD lighting, depending on the presetting. (Silent operation)

The transceiver can also be programmed to keep the microphone open during an emergency call, to allow monitoring of the situation.

Ask your dealer for details.

IMPORTANT: Setting an emergency channel individually to provide the certain emergency call operation is recommended.

■ Status message transmission

The status message can be automatically transmitted when the transceiver is turned ON.
- Set the status message to be transmitted in the 'Power ON Status' item.

■ **LTR operation**

Push **[Zone]**, then push **[CH Up]** or **[CH Down]*** to select the LTR zone.

* The way of selecting the desired zone may differ, depending on your system set up.

NOTE: In the LTR mode, BIIS 1200 and IDAS modes are disabled.

■ **Receiving a call**

◇ **Group call**

① When a call is received:
  • LED lights green.
② Hold down **[PTT]**, then speak into the microphone at a normal voice level.
③ Release **[PTT]** to return to receive.

◇ **Selective call** (DTMF call)

① Push **[Call]** to mute the channel.
② When receiving a call, the calling station name appears and a beep sounds. Then the mute is released.
  • "◀))" appears.

Appears

```
 Y          ◀))
002 ch-03
      fH 173.7M
```
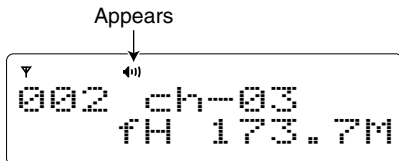
◇ **Phone call**

① Push **[CH Up]** or **[CH Down]** to select the phone channel.
  • "☎" appears.
② When a phone call is received (transceiver rings), push **[Phone]** (or push **[PTT]**).
  • "☎" blinks.

Blinks

```
 Y           ☎
002 ch-03
      fH 173.7M
```
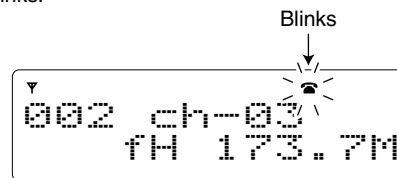
③ Hold down **[PTT]**, then speak at a normal voice level. Release **[PTT]** to return to receive.
④ After conversation is finished, push **[Phone]** to disconnect the phone call.
  • "☎" stops blinking.

■ Transmitting a call

◇ Group call

① Push **[CH Up]** or **[CH Down]** to select a channel or talk group.
② While holding down **[PTT]**, speak into the microphone at a normal voice level after a beep sounds.
• If an error beep sounds, release **[PTT]**, then repeat step ②.
• The beep can be turned OFF in User set mode.

◇ Selective call (DTMF call)

① Push **[CH Up]** or **[CH Down]** to select a channel or talk group.
② Push **[DTMF Autodial]**— a DTMF encode channel appears.
③ Push **[CH Up]** or **[CH Down]** to select the desired DTMF encode channel.
④ Push **[PTT]** to transmit the DTMF code in the DTMF channel.
• Push **[DTMF Autodial]** to cancel the DTMF call.

◇ Phone call

① Select the phone channel.
• "☎" appears.
② Push **[Phone]** (or push **[PTT]**).
• "☎" blinks.

Blinks

```
002 ch-03
    fH 173.7M
```
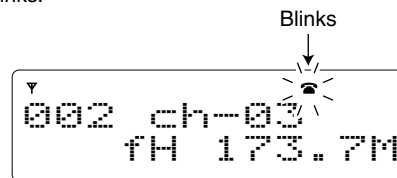
③ Push **[DTMF Autodial]** to make a phone call.
④ After conversation is finished, push **[Phone]** to disconnect the phone call.
• "☎" stops blinking.

■ IDAS operation

The transceiver provides Icom Digital Advanced System (IDAS) that meets the 6.25 kHz emission mask requirements for narrow banding, and increases efficiency of channel allocation and use of spectrum using the NXDN common air interface.

The optional UT-126H provides 6.25 kHz digital mode operation for the transceiver that does not support digital communication.

NOTE: In the IDAS mode, BIIS 1200 system, MDC 1200 system and LTR modes are disabled.

■ IDAS-Trunk operation

The IDAS-Trunk system enables further effective channel management by sharing a minimum of channels with a large number of users.
Push **[Zone]**, then push **[CH Up]** or **[CH Down]*** to select the IDAS-Trunk zone.
* The way of selecting the desired zone may differ, depending on your system set up.

NOTE: While in the IDAS-Trunk mode, you can receive and transmit digital calls in the same way with the IDAS operation described above.

■ IDAS Multi-site conventional operation

The IDAS Multi-site Conventional can support up to 16 sites (each site has one repeater) through an IP network, and enables efficient conventional operation in the digital mode.
Push **[Zone]**, then push **[CH Up]** or **[CH Down]*** to select the Multi-site conventional zone.
* The method to select the desired zone may differ, depending on your system set up.

■ Roaming function
(Multi-site Trunking mode only)

The Multi-site Trunking mode allows the transceiver to move to another site, according to the preprogrammed roaming list*, in order to find a site that has a higher quality signal, or provides better services.
The Roaming function is automatically activated when the transceiver goes out of the range and does not receive the downlink signal from the repeater in the current registered site.
* The valid roaming areas (up to 48) are listed on the roaming list. Ask your dealer for details.

Depending on the preprogrammed settings, the transceiver tries to register to the repeater that has the strongest RSSI level in the last registered site or adjacent site. This roaming type takes time than other roaming types. Ask your dealer for details.
• This function is usable in transceivers whose revision number is 4.6 or later. Ask your dealer for details.

■ Receiving a call

◇ Receiving a Voice Call

① When a Voice call is received:
  • Mute is released.
  • The calling station or Talkgroup ID name (or code) may be displayed while receiving the signal, depending on the presetting.
  • When an All Call is received, "All Call" is displayed.
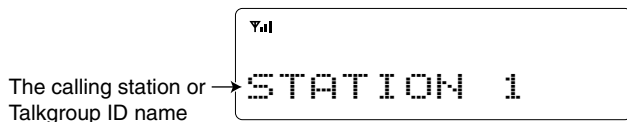
The calling station or Talkgroup ID name → STATION 1

② Hold down **[PTT]**, then speak into the microphone.
③ Release **[PTT]** to receive.

◇ Receiving a Call Alert

① When a Call Alert is received:
  • Beeps sound.
  • "♣" blinks.
  • The calling station or Talkgroup ID name (or code) and "**CALLALRT**" blink.

Blink

The calling station or Talkgroup ID name → CALLALRT STATION 1

② Hold down **[PTT]**, then speak into the microphone.
③ Release **[PTT]** to receive.

◇ Receiving a Status Message

① When a Status Message is received:
  • Beeps sound.
  • The calling station or Talkgroup ID name (or code) and the status message blink.

The received status message

Blink

RX STATUS 01
STATION 1

The calling station or Talkgroup ID name
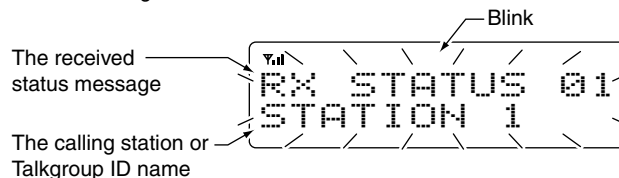
② Push **[PTT]**, turn power OFF, or change the channel to stop the display blinking.

◇ **Receiving a Message**
① When a Message is received:
• Beeps sound.
• The calling station ID name (or code) and the message blink.

The received message —
The calling station or Talkgroup ID name —

Blink

MSG 1
STATION 1
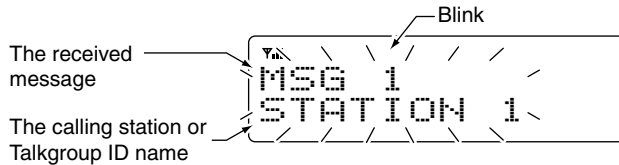
NOTE: When the received message includes more than 12 characters, the message automatically scrolls, when the automatic scroll function is activated.
• Push **[Status Up]**/**[Status Down]** to manually scroll the message.

RETURN TO OFFICE
STATION 1

Scrolls
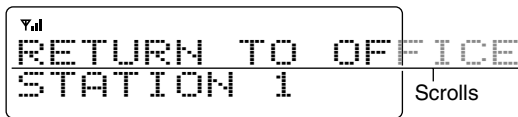
② Push **[PTT]**, turn power OFF, or change the channel to stop the display blinking.

◇ **Receiving a Stun, Kill or Revive**
If an individual call with Stun or Kill command is received, the transceiver will display "SORRY" and you can not receive* or transmit. (RAN code matching may not be necessary, depending on the presetting.)
* Depending on the received Stun command setting.

➡ When a Stun command is received:
• The transceiver cannot be operated until an individual call with a Revive command is received or you input a password. (RAN code matching may not be necessary, depending on the presetting.)
➡ When a Kill command is received:
• The transceiver cannot be operated until the transceiver is reprogrammed. Ask your dealer for details.

NOTE: Depending on the presetting, the transceiver may ignore the Stun, Revive and Kill commands that are from a non-specified station.
This function is usable in transceivers whose revision number is 2.9 or later. Ask your dealer for details.

◇ Receiving a Remote Monitor, Radio Check or Status Polling Call

If an individual call with a Remote monitor, Radio check or Status polling command is received, the transceiver automatically will transmit. (RAN code matching may not be necessary, depending on the presetting.)

➡ When a Remote monitor command is received:
  • The microphone audio is automatically transmitted for the set time period.
➡ When a Radio check command is received:
  • The transceiver automatically transmits an acknowledgement call.
➡ When a Status polling command is received:
  • The transceiver automatically transmits a status call.

◇ Receiving an Emergency call

① When an emergency call is received:
  • Beeps sound.
  • "**RX Emergency**" and the calling station ID name (or code) blink.
  • The state of the backlight depends on the Backlight setting in the User set mode. When "OFF Auto" is selected, the backlight turns ON for the preprogrammed time period. (Auto Backlight Timer) This function is usable in transceivers whose revision number is 3.0 or later. Ask your dealer for details.

Blink

The calling station ID name
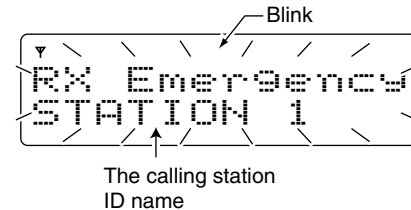
② When the Send ACK function is turned ON, the transceiver automatically transmits an acknowledgement to the calling station, if the received call type is Talkgroup or All Call.
  • If the received call type is Individual, and it requests an acknowledgment, the transceiver automatically sends the acknowledgement.
  • This function is usable in transceivers whose revision number is 3.0 or later. Ask your dealer for details.
③ Turn power OFF or change the channel to stop the beep and display blinking.

◇ Displaying the received call log

If activated, the transceiver stores a log of all calls in memory. Up to 10 call logs can be stored, and the oldest call record is erased when an 11th call is received. However, once the transceiver is turned OFF, the all records are erased.

The received voice call (for individual), call alert, status call and message logs are stored.

① Push **[Digital Button]** to enter the application selection mode.
  • "**VOICE**" appears.
  • To change the call type, hold down **[Digital Button]** for 1 second in the standby mode. After changing, the transceiver automatically enters the application selection mode.
② Push **[CH Up]** or **[CH Down]** to select "**CALL LOG**".

③ Push **[Digital Button]** again to display the call log information.

When log information is stored

```
▼
VOICE
STATION 1
```

When no log information is stored

```
▼
    NO LOG
```
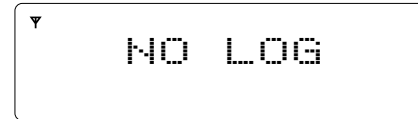
④ Push **[CH Up]** or **[CH Down]** to select the desired log.
⑤ Hold down **[PTT]** to send a voice call.

5 IDAS OPERATION

◇ Talk back function

The talk back function allows you to select the same call mode (Analog or Digital) and/or call type (Individual or Talk-group) as the received call.

When the talk back timer is set to 0 seconds, this function is not activated. Ask your dealer for details.

If this function is cancelled by pushing **[Digital Button]** or any key on the 10-key keypad, or after the talk back timer period has passed, your transceiver automatically returns to the default call mode and type.

If the received call is a digital signal, the talk back function is activated only for Voice Call, Call Alert, Status Message and Message.*

* Depending on the presetting, the talk back function may be activated only for Voice Call.

When the channel type is "Mixed-Analog"

After receiving a digital signal, you can select the digital call mode by pushing **[PTT]** before or during the talk back timer period.

When the channel type is "Mixed-Digital"

After receiving an analog signal that can release the mute, you can select the analog call mode by pushing **[PTT]** before or during the talk back timer period.

When the channel type is "Mixed-Digital" or "Digital"

After receiving a digital signal, you can select the same call digit mode to transmit by pushing **[PTT]** before or during the talk back timer period.

NOTE:
When this function is not activated, the transceiver transmits an analog signal on a "Mixed-Analog" channel, and transmits a digital signal on a "Mixed-Digital" channel.
• The transceiver receives both analog and digital signals on the "Mixed-Analog" and "Mixed-Digital" channels, regardless of the function's setting.

This function is usable in transceivers whose revision number is 2.9 or later. Ask your dealer for details.

■ Transmitting a call

IDAS operation allows you to make a call to a specific station (Individual call) or to a particular group (Talkgroup call). Other transceivers on the channel will not receive a call that does not match their individual or talkgroup ID and/or RAN (Radio Access Number) code.

NOTE: When the handshake (repeater access) is failed within the specified time period after pushing **[PTT]**, the transceiver starts roaming.
• This function is usable in transceivers whose revision number is 4.3 or later. Ask your dealer for details.

◇ Transmitting a Voice Call

① Push **[Digital Button]** to enter the application selection mode.
  • "**VOICE**" appears.
  • To change the call type, hold down **[Digital Button]** for 1 second in the standby mode. After changing, the transceiver automatically enters the application selection mode.

```
  ▼
      INDIVIDUAL

  ▼
  VOICE
```
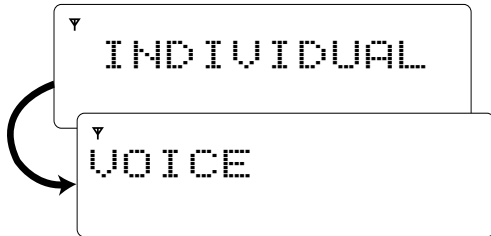
* This illustration is described with Individual call type.

② Push **[Digital Button]** again to enter the Individual or Talk-group ID selection mode.
  • The preprogrammed ID name is displayed.
  • When an ID name is not programmed, the ID code is displayed.
  • The primarily ID can be preset to display first.
    This function is usable in transceivers whose revision number is 2.9 or later. Ask your dealer for details.
  • When you want to send a voice message to all transceivers within the communication range, use the 'All Call' function—select the Talkgroup ID code "65535".

③ Push **[CH Up]** or **[CH Down]** to select the desired ID name or ID code.
  • Depending on the presetting, you may be able to directly input the ID. (The optional HM-152T is required.) See page 43 for details.

Individual or Talkgroup →
ID name is displayed.

```
  ▼
  VOICE
  STATION  1
```

④ Hold down **[PTT]**, then speak into the microphone to send a voice message to the selected station or talkgroup.
⑤ Release **[PTT]** to receive.

Convenient! (The optional HM-152T is required.)
Depending on the presetting, you may be able use the quick ID selection for Voice Call.
➥ While in the standby mode, push the desired digit key ([1] to [9] or [0]) to enter the ID selection mode.
  • The appropriate ID is displayed.

◊ Transmitting a Call Alert

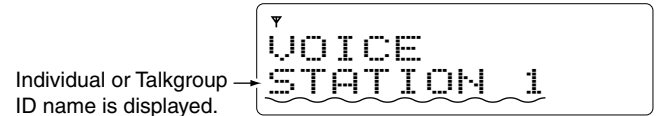Call Alert allows you to inform another user who may be away from the transceiver that you want to talk.

① Push **[Digital Button]** to enter the application selection mode.
  • "**VOICE**" appears.
  • To change the call type, hold down **[Digital Button]** for 1 second in the standby mode. After changing, the transceiver automatically enters the application selection mode.
② Push **[CH Up]** or **[CH Down]** to select "**CALALERT**."
③ Push **[Digital Button]** again to enter the Individual or Talk-group ID selection mode.
  • A preprogrammed ID name is displayed.
  • When an ID name is not programmed, the ID code is displayed.
  • The primarily ID can be preset to display first.
    This function is usable in transceivers whose revision number is 2.9 or later. Ask your dealer for details.
④ Push **[CH Up]** or **[CH Down]** to select the desired ID name or ID code.
  • Depending on the presetting, you may be able to directly input the ID. (The optional HM-152T is required.) See page 43 for details.

```
┌─────────────────────┐
│ ▼                   │
│ CALALERT            │
│ STATION 1           │
│    ‿‿‿‿‿‿‿‿‿         │
└─────────────────────┘
           ↑
```

The individual or Talkgroup ID name is displayed.

⑤ Hold down **[PTT]** to transmit the Call Alert to the selected station or talkgroup.
  • "**CA CALL**" is displayed.
⑥ Release **[PTT]**.
  • "**CA OK**" is displayed if an acknowledgement is received from the targeted station.
  • "**CA FAIL**" is displayed if no acknowledgement is received from the targeted station.
⑦ After a specified time period has passed, your transceiver will return to the standby mode.

◇ Transmitting a Stun Call

A Stun call allows you to send a signal that will stun a targeted station.

① Push **[Digital Button]** to enter the application selection mode.
  • "**VOICE**" appears.
  • To change the call type, hold down **[Digital Button]** for 1 second in the standby mode. After changing, the transceiver automatically enters the application selection mode.
② Push **[CH Up]** or **[CH Down]** to select "**STUN**."
③ Push **[Digital Button]** again to enter the Individual ID selection mode.
  • A preprogrammed ID name is displayed.
  • When an ID name is not programmed, an ID code is displayed.
  • The primarily ID can be preset to display first.
    This function is usable in transceivers whose revision number is 2.9 or later. Ask your dealer for details.
④ Push **[CH Up]** or **[CH Down]** to select the desired ID name or ID code.
  • Depending on the presetting, you may be able to directly input the ID. (The optional HM-152T is required.) See page 43 for details.

```
  ▼
STUN
STATION 1
       ↑
```

The individual ID name is displayed.

⑤ Push **[PTT]** to transmit the Stun call to the selected station.
  • "**STN TX**" is displayed.
⑥ Release **[PTT]**.
  • "**STN ACK**" is displayed if an acknowledgement is received from the targeted station.
  • "**STN FAIL**" is displayed if no acknowledgement is received from the targeted station.
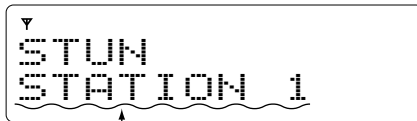⑦ After a specified time period has passed, your transceiver will return to the standby mode.

◇ Transmitting a Kill Call

A Kill call allows you to send a signal that will disable the targeted station.

① Push **[Digital Button]** to enter the application selection mode.
 • "**VOICE**" appears.
 • To change the call type, hold down **[Digital Button]** for 1 second in the standby mode. After changing, the transceiver automatically enters the application selection mode.
② Push **[CH Up]** or **[CH Down]** to select "**KILL**."
③ Push **[Digital Button]** again to enter the Individual ID selection mode.
 • A preprogrammed ID name is displayed.
 • When an ID name is not programmed, an ID code is displayed.
 • The primarily ID can be preset to display first.
  This function is usable in transceivers whose revision number is 2.9 or later. Ask your dealer for details.
④ Push **[CH Up]** or **[CH Down]** to select the desired ID name or ID code.
 • Depending on the presetting, you may be able to directly input the ID. (The optional HM-152T is required.) See page 43 for details.

```
▼
KILL
STATION 1
```

The individual ID name is displayed.

⑤ Push **[PTT]** to transmit the Kill call to the selected station.
 • "**KIL TX**" is displayed.
⑥ Release **[PTT]**.
 • "**KIL ACK**" is displayed if an acknowledgement is received from the targeted station.
 • "**KIL FAIL**" is displayed if no acknowledgement is received from the targeted station.
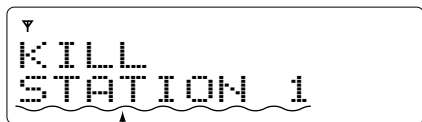⑦ After a specified time period has passed, your transceiver will return to the standby mode.

◇ Transmitting a Revive Call

A Revive call will send a signal that will revive a stunned transceiver.

① Push **[Digital Button]** to enter the application selection mode.
   • "**VOICE**" appears.
   • To change the call type, hold down **[Digital Button]** for 1 second in the standby mode. After changing, the transceiver automatically enters the application selection mode.
② Push **[CH Up]** or **[CH Down]** to select "**REVIVE**."
③ Push **[Digital Button]** again to enter the Individual ID selection mode.
   • A preprogrammed ID name is displayed.
   • When an ID name is not programmed, an ID code is displayed.
   • The primarily ID can be preset to display first.
     This function is usable in transceivers whose revision number is 2.9 or later. Ask your dealer for details.
④ Push **[CH Up]** or **[CH Down]** to select the desired ID name or ID code.
   • Depending on the presetting, you may be able to directly input the ID. (The optional HM-152T is required.) See page 43 for details.

```
 ▼
REVIVE
STATION 1
```

The individual ID name is displayed.

⑤ Push **[PTT]** to transmit the Revive call to the selected station.
   • "**REV TX**" is displayed.
⑥ Release **[PTT]**.
   • "**REV ACK**" is displayed if an acknowledgement is received from the targeted station.
   • "**REV FAIL**" is displayed if no acknowledgement is received from the targeted station.
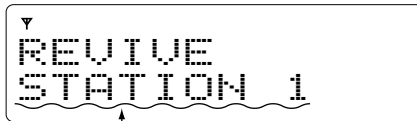⑦ After a specified time period has passed, your transceiver will return to the standby mode.

5

◇ Transmitting a Remote Monitor Call

A remote monitor call will send a signal that requires the targeted station to transmit its microphone audio.

① Push **[Digital Button]** to enter the application selection mode.
  • "**VOICE**" appears.
  • To change the call type, hold down **[Digital Button]** for 1 second in the standby mode. After changing, the transceiver automatically enters the application selection mode.
② Push **[CH Up]** or **[CH Down]** to select "**REM MON**."
③ Push **[Digital Button]** again to enter the Individual ID selection mode.
  • A preprogrammed ID name is displayed.
  • When an ID name is not programmed, an ID code is displayed.
  • The primarily ID can be preset to display first.
   This function is usable in transceivers whose revision number is 2.9 or later. Ask your dealer for details.
④ Push **[CH Up]** or **[CH Down]** to select the desired ID name or ID code.
  • Depending on the presetting, you may be able to directly input the ID. (The optional HM-152T is required.) See page 43 for details.

```
┌─────────────────────────┐
│ ▼                       │
│ REM MON                 │
│ STATION 1               │
└─────────────────────────┘
```

The individual ID name is displayed.

⑤ Hold down **[PTT]** to transmit the Remote monitor call to the selected station.
  • "**REM TX**" is displayed.
⑥ Release **[PTT]**.
  • "**REM ACK**" is displayed if an acknowledgement is received from the targeted station.
  • "**REM FAIL**" is displayed if no acknowledgement is received from the targeted station.
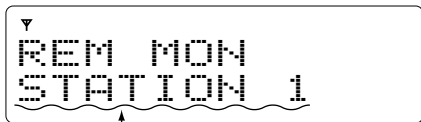⑦ After a specified time period has passed, your transceiver will return to the standby mode.

◇ Transmitting a Radio Check Call

A radio check call will determine whether the targeted station is turned ON, within the communication range and on channel without requiring any action from the targeted station user.

① Push **[Digital Button]** to enter the application selection mode.
   • "**VOICE**" appears.
   • To change the call type, hold down **[Digital Button]** for 1 second during standby operation. After changing, the transceiver automatically enters the application selection mode.

② Push **[CH Up]** or **[CH Down]** to select "**RADIOCHK**."

③ Push **[Digital Button]** again to enter the Individual ID selection mode.
   • A preprogrammed ID name is displayed.
   • When ID name is not programmed, an ID code is displayed.
   • The primarily ID can be preset to display first.
     This function is usable in transceivers whose revision number is 2.9 or later. Ask your dealer for details.

④ Push **[CH Up]** or **[CH Down]** to select the desired ID name or ID code.
   • Depending on the presetting, you may be able to directly input the ID. (The optional HM-152T is required.) See page 43 for details.

```
┌─────────────────────┐
│ ▼                   │
│ RADIOCHK            │
│ STATION 1           │
└─────────────────────┘
```

The individual ID name is displayed.

⑤ Hold down **[PTT]** to transmit the Radio check call to the selected station.
   • "**RDO CHK**" is displayed.

⑥ Release **[PTT]**.
   • "**CHK ACK**" is displayed if an acknowledgement is received from the targeted station.
   • "**CHK FAIL**" is displayed if no acknowledgement is received from the targeted station.

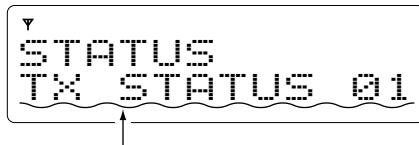⑦ After a specified time period has passed, your transceiver will return to the standby mode.

5

◇ Transmitting a Status Message

The transceiver can send a preprogrammed status message.
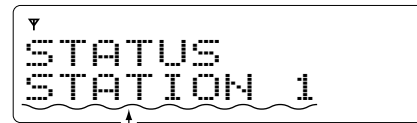
There are 100 selectable status messages.

① Push **[Digital Button]** to enter the application selection mode.
  • "**VOICE**" appears.
  • To change the call type, hold down **[Digital Button]** for 1 second in the standby mode. After changing, the transceiver automatically enters the application selection mode.

② Push **[CH Up]** or **[CH Down]** to select "**STATUS**."

③ Push **[Digital Button]** again to enter the status message selection mode.
  • A preprogrammed status message is displayed.

④ Push **[CH Up]** or **[CH Down]** to select a desired message.

```
 ▼
 STATUS
 TX STATUS 01
```

The status message is displayed.

⑤ Push **[Digital Button]** again to enter the Individual or Talkgroup ID selection mode.
  • The preprogrammed ID name is displayed.
  • When an ID name is not programmed, an ID code is displayed.
  • The primarily ID can be preset to display first.
    This function is usable in transceivers whose revision number is 2.9 or later. Ask your dealer for details.

⑥ Push **[CH Up]** or **[CH Down]** to select the desired ID name or ID code.
  • Depending on the presetting, you may be able to directly input the ID. (The optional HM-152T is required.) See page 43 for details.

```
 ▼
 STATUS
 STATION 1
```

The individual or Talkgroup ID name is displayed.

⑦ Push **[PTT]** to transmit the status message to the selected station or talkgroup.
  • "**STAT TX**" is displayed.

⑧ Release **[PTT]**.
  • "**STAT OK**" is displayed if an acknowledgement is received from the targeted station.
  • "**STA FAIL**" is displayed if no acknowledgment is received from the targeted station.

⑨ After a specified time period has passed, the transceiver will return to receive.

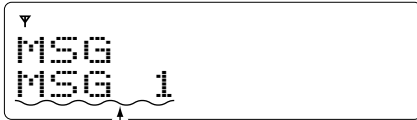*Convenient!* (The optional HM-152T is required.)
Depending on the presetting, you may be able to use the quick status message selection and transmission.
➡ Push the desired digit key ([1] to [9] or [0]) to enter the status message selection mode.
  • The appropriate status message is displayed.
➡ Hold down the desired digit key ([1] to [9] or [0]) for 1 second to transmit the appropriate status message, 1 to 10.

◇ **Transmitting a Message**
The transceiver can send a preprogrammed message.
There are 10 selectable messages.

① Push **[Digital Button]** to enter the application selection mode.
 • "**VOICE**" appears.
 • To change the call type, hold down **[Digital Button]** for 1 second in the standby mode. After changing, the transceiver automatically enters the application selection mode.
② Push **[CH Up]** or **[CH Down]** to select "**MSG**."
③ Push **[Digital Button]** again to enter the message selection mode.
 • A preprogrammed message is displayed.
④ Push **[CH Up]** or **[CH Down]** to select a desired message.
 • You can edit the contents of the message. See page 41 for details.

```
Y
MSG
MSG  1
```

The message is displayed.

⑤ Push **[Digital Button]** again to enter the Individual or Talkgroup ID selection mode.
 • A preprogrammed ID name is displayed.
 • When an ID name is not programmed, an ID code is displayed.
 • The primarily ID can be preset to display first.
   This function is usable in transceivers whose revision number is 2.9 or later. Ask your dealer for details.

⑥ Push **[CH Up]** or **[CH Down]** to select the desired ID name or ID code.
 • Depending on the presetting, you may be able to directly input the ID. (The optional HM-152T is required.) See page 43 for details.

```
Y
MSG
STATION  1
```
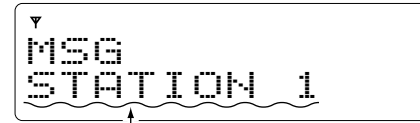
The individual or Talkgroup ID name is displayed.

⑦ Push **[PTT]** to transmit the message to the selected station or talkgroup.
 • "**MSG TX**" is displayed.
⑧ Release **[PTT]**.
 • "**MSG OK**" is displayed if an acknowledgement is received from the targeted station.
 • "**MSG FAIL**" is displayed if no acknowledgment is received from the targeted station.
⑨ After a specified time period has passed, your transceiver will return to the standby.

Convenient! (The optional HM-152T is required.)
Depending on the presetting, you may be able to use the quick message selection/transmission.
➥ Push the desired digit key ([1] to [9] or [0]) to enter the message selection mode.
 • The appropriate message is displayed.
➥ Hold down the desired digit key ([1] to [9] or [0]) for 1 second to transmit the message, 1 to 10.

5

◊ **Direct message input**

The optional HM-152T is required.

① Push **[Digital Button]** to enter the application selection mode.
  • "**VOICE**" appears.
  • To change the call type, hold down **[Digital Button]** for 1 second in the standby mode. After changing, the transceiver automatically enters the application selection mode.
② Push **[CH Up]** or **[CH Down]** to select "**MSG**."
③ Push **[Digital Button]** again to enter the message selection mode.
  • A preprogrammed message is displayed.
④ Push **[CH Up]** or **[CH Down]** to select a different message to edit, if desired.
⑤ Push **[∗]** or **[#]** to enter the message editing mode.
  • The first character blinks when **[#]** is pushed; the last character blinks when **[∗]** is pushed.
⑥ Push the appropriate digit key, **[0]** to **[9]**, until the desired character is selected.
  • See the table to the right for the selectable characters.
  • Pushing **[CH Up]** enters a space; pushing **[CH Down]** deletes the selected character.
⑦ Push **[#]** to move the cursor to the right, push **[∗]** to move the cursor to the left.
⑧ Repeat steps ⑤ and ⑥ to enter the desired text message.
⑨ Hold down **[Digital Button]** for 1 second to overwrite the entered message into the message memory.
  • Push **[Digital Button]** momentarily to cancel the editing and return to the original message display.

• **Selectable characters**

Key	Characters
[0]	0 , ! ? ' " ; : _ ( ) < > [ ]
[1]	1 (sPace) # ∗ / + − = \ & % $ @ ^
[2]	2 A B C a b c
[3]	3 D E F d e f
[4]	4 G H I g h i
[5]	5 J K L j k l
[6]	6 M N O m n o
[7]	7 P Q R S p q r s
[8]	8 T U V t u v
[9]	9 W X Y Z w x y z

◇ Transmitting a Status Polling Call

The transceiver can send a signal that causes the targeted station to automatically transmit its current status.

① Push **[Digital Button]** to enter the application selection mode.
  • "**VOICE**" appears.
  • To change the call type, hold down **[Digital Button]** for 1 second during standby operation. After changing, the transceiver automatically enters the application selection mode.
② Push **[CH Up]** or **[CH Down]** to select "**STAT POL**".
③ Push **[Digital Button]** again to enter the Individual ID selection mode.
  • A preprogrammed ID name is displayed.
  • When an ID name is not programmed, an ID code is displayed.
  • The primarily ID can be preset to display first.
   This function is usable in transceivers whose revision number is 2.9 or later. Ask your dealer for details.
④ Push **[CH Up]** or **[CH Down]** to select the desired ID name or ID code.
  • Depending on the presetting, you may be able to directly input the ID. (The optional HM-152T is required.) See page 43 for details.

```
▼
STAT POL
STATION 1
```
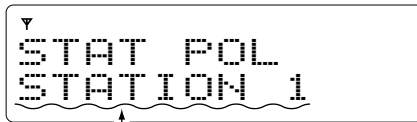
The individual ID name is displayed.

⑤ Push **[PTT]** to transmit the status polling to the selected station.
  • "**STAT POL**" is displayed.
⑥ Release **[PTT]**.
  • The status message is displayed if an acknowledgement and the current status is received from the targeted station.
  • "**POL FAIL**" is displayed if no acknowledgment and status is received from the targeted station.
⑦ After a specified time period has passed, your transceiver will return to the standby mode.

5

◊ Direct ID input

Depending on the presetting, you may be able to directly input the desired ID. The optional HM-152T is required.

① Push **[Digital Button]** to enter the Individual or Talkgroup ID selection mode, then push the appropriate digit key, **[0]** to **[9]**, to input the desired ID (up to 5 digits).
• Push **[∗]** to delete an input digit.

```
Y
VOICE
12345
       ↑
```
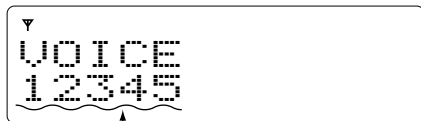
The entered Individual or Talkgroup ID

② After inputting, push **[PTT]** to transmit to the station or talkgroup.

◊ Transmitting an Emergency Call

When **[Emergency]** (described in the instruction manual) is held down for a specified time period, the emergency signal (digital command) is transmitted once or repeatedly* on the emergency channel. When no emergency channel is specified, the signal is transmitted on the operating channel.

*When the Repeat Cancel function is ON, the transceiver cancels repeating after receiving an acknowledgement.
When the Repeat Cancel function is OFF, the transceiver repeats calling according to the number of repeat cycles, even after receiving an acknowledgement.
This function is usable in transceivers whose revision number is 3.0 or later. Ask your dealer for details.

Individual or Talkgroup type of emergency calls can be preset. If the call type is not preset, the default or selected call type is used.
This function is usable in transceivers whose revision number is 2.9 or later. Ask your dealer for details.

If you want to cancel the emergency call, hold down the key again before transmitting the call.

The emergency call can be transmitted without a beep sounding, and the LCD lighting, depending on the presetting. (Silent operation)

The transceiver can also be programmed to keep the microphone open during an emergency call, allowing monitoring of the situation.

Ask your dealer for details.

IMPORTANT: It is recommended to setup a separate emergency channel to provide reliable emergency call operation.

NOTE:
When the Digital Request ACK function is activated, the transceiver transmits the emergency call with a request to send back an acknowledgment.
This function is usable in transceivers whose revision number is 2.9 or later for the Individual call, and 3.0 or later for the Talkgroup or All Call. Ask your dealer for details.

■ Transmitting Position data

When a GPS receiver is connected to the transceiver, the position (longitude and latitude) data can be automatically transmitted when:

- The GPS request status message is received
- A voice message is sent.
  - Set the 'Send with Login' and 'Send with Logoff' items as 'Enable.'
- A status message is sent.
  - Set the 'Send with Status Call' item as 'Enable.'
- A message is sent.
  - Set the 'Send with SDM Call' item as 'Enable.'
- A Call Alert is sent.
  - Set the 'Send with Call Alert' item as 'Enable.'
- An Emergency call is sent.
  - Set the 'Send with Emergency' item as 'Enable.'
- An Emergency call with Man Down is sent.
  - Set the 'Send at Man Down' item as 'Enable.'

Ask your dealer or system operator for connection details.

■ Sending a Status message

Status message can be automatically transmitted.

The status message is transmitted when:
- • The transceiver is turned ON or OFF
  - Set the status message to be transmitted in 'Power ON Status' or 'Power OFF Status' item, respectively.
  - Set the target station ID in 'Power Status ID'.
- • A voice message is sent.
  - Set the 'Send with Voice Call' item to 'Enable.'
  - Set the status message to be transmitted in the 'Send Status Number' item.

■ Sounding a Horn

An automatic honking function can be used if a horn is connected to the D-Sub 25-pin connector of the transceiver.
When a status message is received, the transceiver honks the vehicle's horn for the specified time period to indicate a status message is has been received.

This function is convenient when the operator is away from the transceiver.

Ask your dealer or system operator, or refer to the IC-F5061/F6061 series service manual for connection and setting details.

■ Connecting a Printer

When a printer is connected to the D-sub 25-pin of the transceiver, the received SDM content and the caller station ID can be printed out.
Ask your dealer or system operator for connection details.

■ Encryption function

The encryption function enables voice scrambling, which provides private digital communication between stations.

① Push **[Scrambler/Encryption]** to turn ON the encryption function.
  • "⚷" appears.
② Push **[Scrambler/Encryption]** again to turn OFF the encryption function.
  • "⚷" disappears.

■ **ATB Ring Back function**

If enabled, this feature is effective when a subscriber attempts to push **[PTT]** while the site is in an "All Trunks Busy" status, and/or is still "Receiving a Downlink" at the time the **[PTT]** is pushed.

In the event of an "All Trunks Busy" condition, and/or a condition of "Receiving a Downlink," a quick **[PTT]** push results in the transceiver going into a waiting for an open repeater mode. When an open repeater signal is received by the transceiver, the transceiver handshakes and holds the channel for the pre-programmed time period. After receiving a handshake beep, the transceiver will hold the channel for this period before it releases it. The operator must then key up their transceiver to communicate. Failure of the operator to push **[PTT]** before this timer expires results in a loss of the channel grant and another push of the **[PTT]** will be required.

When the pre-programmed CH Reserve Timeout timer elapses, the transceiver returns to its default state.

• This function is usable in transceivers whose revision number is 4.4 or later. Ask your dealer for details.

Count on us!