



OPERATING GUIDE

**OPERATING GUIDE FOR
IC-F3160/F4160 SERIES
BIIS 1200/MDC 1200 SYSTEM/
LTR[®]/DIGITAL OPERATION**

**MDC 1200
Compatible**

**BIIS 1200
Compatible**

Icom Inc.


IMPORTANT


Thank you for purchasing this Icom transceiver.
The BIIS 1200/MDC 1200/LTR®/Digital system functions are available to your IC-F3160/F4160 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-F3161T, IC-F3161S, IC-F3161DT, IC-F3161DS, IC-F3162T, IC-F3162S, IC-F3163T, IC-F3163S**
VHF TRANSCEIVERS
- **IC-F4161T, IC-F4161S, IC-F4161DT, IC-F4161DS, IC-F4162T, IC-F4162S, IC-F4163T, IC-F4163S**
UHF TRANSCEIVERS

 **NOTE:** In this operating guide, the LCD illustration is described using the 2 lines indication mode.

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■ Programmable function keys

The following functions can be assigned to [EMR], [Side1], [Side2], [Side3], [P0], [P1], [P2] and [P3] 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 depends on the programming.

◇ For BIIS 1200 operation only

BIIS BUTTON KEY “BIIS”

- Push to toggle the call ID list, transmit message and standby condition.
- Push to toggle between queue channel and received message record indication after queue channel is selected.
- Push and hold for 1 sec. to select queue channel indication.

STATUS UP/DOWN KEYS “STUP”/“STDN”

- While in the standby condition, push to display the transmit status indication and select a status number.
- When a received SDM (Short Data Message) is displayed, push to cancel the automatic scroll and scroll the message manually.
- When an SDM that contains more than 12 characters is displayed, push to scroll the message manually.

◇ For MDC 1200 system operation only

MDC CALL KEY “CALL”

- Push to enter the MDC menu selection mode. Then select the desired MDC menu from “SELCALL,” “CALALERT,” “STUN,” “REVIVE,” “RADIOCHK,” “STATUS,” “MSG” and “CALL LOG” using [CH Up] or [CH Down].
After selection, push this key again to enter the transceiver alias selection mode.
 - No operation is performed for about 15 sec., the transceiver returns to the normal operation condition.
- While in the transceiver alias selection mode, push to return to the MDC menu selection mode.

MDC SELCALL KEY “SC”

Push to enter the transceiver alias selection mode for SelCall.

- After the desired alias selection, push [PTT] to transmit a SelCall.
- No operation is performed for about 15 sec., the transceiver returns to the normal operation condition.

MDC CALLALERT KEY “CA”

Push to enter the transceiver alias selection mode for CallAlert.

- After the desired alias selection, push [PTT] to transmit a Call Alert.
- No operation is performed for about 15 sec., the transceiver returns to the normal operation condition.

◇ For LTR® operation only**PHONE KEY** “PHN”

Push to connect or disconnect the telephone network connection.

◇ For Digital mode operation only**DIGITAL BUTTON KEY** “DIGI”

- Push to enter the application selection mode.
- Push and hold for 1 sec. to toggle the call type between Individual and Talkgroup, then enter the application selection mode automatically.
 - Select the desired application from “VOICE,” “CALALERT,” “STUN,” “KILL,” “REVIVE,” “REM MON,” “RADIOCHK,” “STATUS,” “MSG,” “STAT POL” and “CALL LOG” using [CH Up] or [CH Down].
- During 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. After the desired message is selected using [CH Up] or [CH Down], push again to enter the Individual or Talkgroup ID selection mode. (pgs. 34, 35)
- During the application selection mode, push and hold for 1 sec. to return to the normal operation condition.

STATUS UP/DOWN KEYS “STUP”/“STDN”

- When a received SDM is displayed, push to cancel the automatic scroll and scroll the message manually.
- When an SDM that contains more than 12 characters is displayed, push to scroll the message manually.

■ Setting example

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

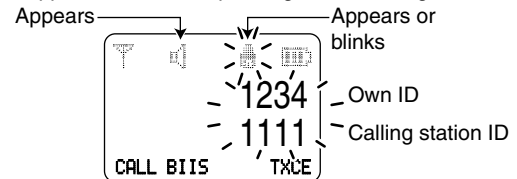
NOTE: During BIIS 1200 system operation, Digital mode, MDC 1200 system and LTR® system operations are not available.

- [Call] : Push to transmit a BIIS call when the selected channel is an MSK channel.
- “CALL” is displayed on the key indicator.
- [BIIS Button] : Push to select the call list ID/transmit message, or push to display the receive message record for selection.
- “BIIS” is displayed on the key indicator.
 - When this key is pushed, “BIIS” is inverted as “**BIIS**”.
- [TX Code Enter] : Push to enter the ID code edit mode directly.
- “TXCE” is displayed on the key indicator.
- [Moni(Audi)] : Push this key after the communication to send a ‘Clear down’ signal during MSK channel operation.
- [CH Up]/[Down] : While in the standby condition, push to select the operating channel.
- After pushing [BIIS Button] or [TX Code CH Enter], push to select call list or TX code channel, respectively.

■ Receiving a call



◇ Individual call

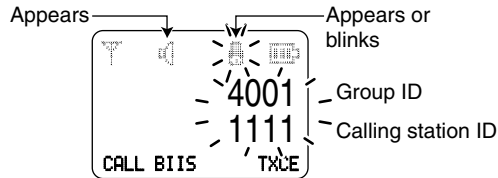
- When an individual call is received;
 - Beeps sound.
 - “**CALL**” appears and the mute is released.
 - The programmed text message (e.g. “CALLING”) and the calling station ID (or text) is displayed when the indication mode is 2 lines.
 - The programmed text message (e.g. “CALLING”) and the calling station ID (or text) is displayed alternately when the indication mode is 1 line, depending on the setting.
 - “**CALL**” appears or blinks depending on the setting.




- Push and hold [PTT], then speak into the microphone at a normal voice level.
 - TX indicator lights red.
- Release [PTT] to return to receive.
 - BUSY indicator lights green while receiving a signal.
- To finish the conversation, push [Moni(Audi)] to send the ‘Clear down’ signal.
 - Either station can send a ‘Clear down’ signal.
 - “CLR DOWN” is displayed for 2 sec. (approx.).
 - “**CALL**” disappears and the transceiver returns to the standby condition.

◇ **Group call**

- ① When a group call is received;
 - Beeps sound.
 - “” appears and the mute is released.
 - The programmed text message (e.g. “GROUP”) and the calling station ID (or text) is displayed when the indication mode is 2 lines.
 - The programmed text message (e.g. “GROUP”) and the calling station ID (or text) is displayed alternately when the indication mode is 1 line, depending on the setting.
 - “” appears or blinks depending on the setting.



- ② Push and hold **[PTT]**, then speak into the microphone at a normal voice level.
 - TX indicator lights red.

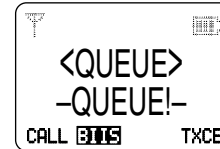
/// **NOTE:** Only one station is permitted to speak.
- ③ Release **[PTT]** to return to receive.
 - BUSY indicator lights green while receiving a signal.
- ④ To finish the conversation, push **[Moni(Audi)]** to send the ‘Clear down’ signal.
 - Either station can send a ‘Clear down’ signal.
 - “CLR DOWN” is displayed for 2 sec. (approx.)
 - “” disappears and the transceiver returns to the standby condition.

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

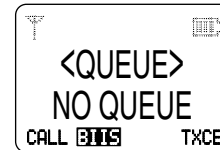
The transceiver memorizes the calling station ID in the memory. Up to 3 calls can be memorized, and the oldest call record is erased when a 4th call is received. However, once the transceiver is powered OFF, the all records are cleared.

- ① Push and hold **[BIIS Button]** for 1 sec.
 - Displays following indication.

When a record is available



When no record is available




- ② Push **[CH Up]** or **[CH Down]** to select the desired call.
- ③ Push and hold **[BIIS Button]** for 1 sec. again to return to the standby condition.
 - When no operation is performed for 30 sec., the transceiver returns to the standby condition automatically.

■ Transmitting a call

A total of 3 ways for code selection are available—selecting the call code from memory, entering the call code from the keypad and calling back from the queue channel record.

◇ Using call memory

- ① While in the standby condition, push [**BIIS Button**] to enter the call code memory channel selection mode.
 - “

The diagram shows a rectangular display with a speaker icon at the top left and a keypad icon at the top right. The text on the display reads "STATION1" on the first line, "0001" on the second line, "CALL BIIS" on the third line, and "TXCE" on the fourth line. An arrow points from the word "Appears" to the "BIIS" button area on the display.

- ② Push [**CH Up**] or [**CH Down**] to select the desired call code.
- ③ Push [**Call**] or [**PTT**]* to call.

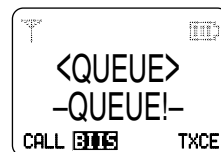
*PTT call can be made only when PTT call capability is permitted.

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

- ④ Push [**PTT**] to transmit; release to receive.
- ⑤ Push [**Moni(Audi)**] to send the ‘Clear down’ signal.

◇ Calling back from the queue channel

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



- ② Push [**CH Up**] or [**CH Down**] to select the desired record.
- ③ Push [**Call**] or [**PTT**]* to call.

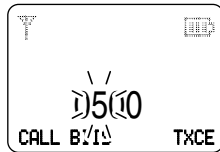
* PTT call can be made only when PTT call capability is permitted.

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

- ④ Push [**PTT**] to transmit; release to receive.
- ⑤ Push [**Moni(Audi)**] to send the ‘Clear down’ signal.

◇ Direct code entry

- ① While in the standby condition, push **[TX Code Enter]** to enter the TX code edit mode.
 - Code digit for editing blinks.



- ② Push **[TX Code Enter]** to select the desired digit to be edited.
 - Digit for editing differs according to the setting.
- ③ Set the desired digit using **[CH Up]/[CH Down]** or 10-key-pad*.
 - * 10-key version only
- ④ Push **[TX Code Enter]** to set the digit, then the digit to the right will blink automatically.
 - When the 10-keypad is used for setting, the digit to the right will blink automatically without pushing **[TX Code Enter]**.
- ⑤ Repeat ③ and ④ to input all allowable digits.

- ⑥ Push **[Call]** or **[PTT]*** to call.

* PTT call can be made only when PTT call capability is permitted.

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

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

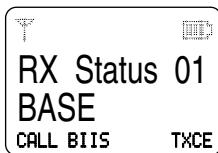
For your information

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 calling station ID (or text) and the status message is displayed alternately when the indication mode is 1 line, depending on the setting.



- ② Push **[Moni(Audi)]** to return to the standby condition.

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

◇ Receiving an SDM (Short Data Message)

- ① When an SDM is received;
 - Beeps sound.
 - The calling station ID (or text) and the SDM is displayed alternately when the indication mode is 1 line, depending on the setting.



- ② When the received SDM includes more than 12 characters, the message scrolls automatically, when the automatic scroll function is activated.
 - Push [Status Up]/[Status Down] to scroll the message manually.



- ③ Push **[Moni(Audi)]** to return to the standby condition.

◇ Received message selection

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 Push and hold **[BIIS Button]** for 1 sec.
 - Displays queue memory.
- ② Push **[BIIS Button]** momentarily.
 - Displays message memory.

When a message is available



When no message is available



- ③ Push **[CH Up]** or **[CH Down]** to select the desired message.
 - When selecting the SDM that includes more than 12 characters, the message scrolls automatically when the automatic scroll function is activated.
 - Push **[Status Up]/[Status Down]** to scroll the message manually.
- ④ Push and hold **[BIIS Button]** for 1 sec. again to return to the standby condition.
 - When no operation is performed for 30 sec., the transceiver returns to the standby condition automatically.

■ Transmitting a status

◇ General

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

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

Status 22: Emergency*

Status 24: GPS request

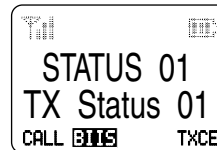
*The status 22 can also be used as a normal status message by disabling the designated meaning. However, the status 24 is fixed.

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

◇ Transmitting a status

- ① While in the standby condition, 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.

Or, you can select the desired status message using **[Status Up]/[Status Down]** key directly.



Status message is displayed.

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

■ 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 available and the messages can be edited via PC programming.

◇ Transmitting an SDM

- ① While in the standby condition, 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.

Or, you can select the desired SDM using **[Status Up]/[Status Down]** key directly.

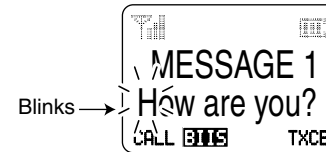


SDM is displayed.

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

◇ Programming an SDM memory (10-key version only)

- ① During standby condition, push **[BIIS Button]** twice, then push **[CH Up]** or **[CH Down]** to select the desired SDM to be edited.
- ② Push **[*]** or **[#]** to enter the message editing condition.
 - The first character blinks when **[#]** is pushed, the last character blinks when **[*]** is pushed.



When **[#]** is pushed.

- ③ Push the appropriate digit key, **[0]** to **[9]**, to enter the desired character.
 - See the table at the next page for the available characters.
 - Pushing **[CH Up]** also enters 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 set the desired text message.
- ⑥ Push and hold **[BIIS Button]** for 1 sec. to overwrite the set content into the memory.
 - Push **[BIIS Button]** momentarily to cancel the editing and return to the original message indication.

2 BIIS 1200 OPERATION

• Available 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 the optional cable (OPC-966) and a GPS receiver is connected to the transceiver, the position (longitude and latitude) data can be transmitted automatically.

Ask your dealer or system operator for connection details.

The position data is transmitted when;

- Status 24 message is received
*When the status 24 message, GPS request, is received.
- Fully automatic
When automatic position transmission is enabled, send 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'
- After sending a status message
When 'Send with Status' is enabled.
- After sending an SDM
When 'Send with SDM' is enabled.
- After sending status 22 (Emergency)
When 'Send with Emergency' is enabled.

■ Printer connection

When the optional cable is connected to the transceiver, a printer can be connected to print out the received SDM content and the ID of the station who sent the message.

Ask your dealer or system operator for connection details.

■ BIIS ANI

The own ID can be transmitted each time the PTT is pushed (log-in) or released (log-off) during individual or group call communications.

By receiving the ANI, the communication log can 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 performed.

■ Auto emergency transmission

When [Emergency Single (Silent)] or [Emergency Repeat (Silent)] is pushed, an emergency signal is automatically transmitted for the specified time period.

The status 22 (Emergency) is sent to the selected ID station, and the position data is transmitted after the emergency signal when a GPS receiver is connected to the transceiver.

The emergency transmission is performed on the emergency channel, however, when no emergency channel is specified, the signal is transmitted on the previously selected channel.

There is no change in the function display or beep emission during automatic emergency transmission.

■ Stun function

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

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

■ BIIS indication

The following indications are available for the BIIS operation on a BIIS channel.

CONNECT : Individual/group call is successful.

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

FAILED : No answer back is received.

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

CLR DOWN: End the communication.

BUSY : Operating channel is in the busy condition.

■ Priority A channel selection

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

Priority A is selected when;

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

■ 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 MDC 1200 system found in Icom transceivers is called aliasing. Each transceiver on the system has a unique ID number. Aliasing allows the substitution of an alphanumeric name for this ID number. 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.

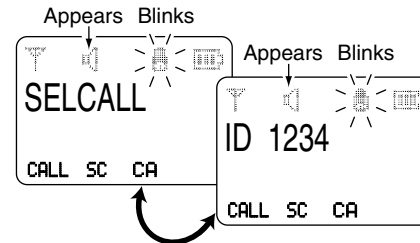
Please note that your dealer has set one of the programmable keys ([EMR], [Side1], [Side2], [Side3], [P0], [P1], [P2] and [P3]) for MDC 1200 system operation.

NOTE: During MDC 1200 system operation, BIIS 1200 system and Digital mode operations are not available.

■ Receiving a call

◇ Receiving a SelCall

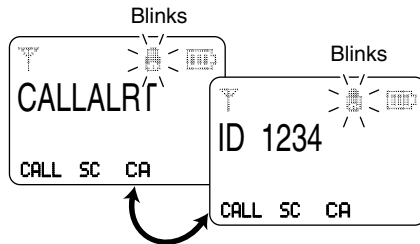

- ① When a SelCall is received;
 - Beeps sound.
 - “PTT” appears.
 - “PTT” blinks.
 - The calling station ID (or alias) and “SELCALL” are displayed alternately.



- ② Push and hold [PTT] and speak into the microphone.
- ③ Release [PTT] to receive a response.

3 MDC 1200 SYSTEM OPERATION

◇ Receiving a Call Alert

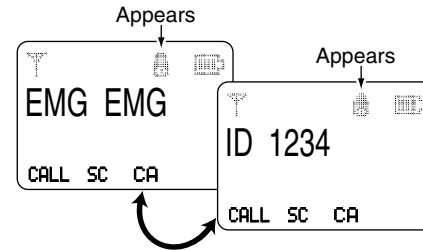
- ① When a Call Alert is received;
 - Beeps sound.
 - “

The diagram illustrates the sequence of displays for a call alert. It shows two rectangular display boxes. The first box displays 'CALLALRT' in large letters, with 'CALL SC CA' in smaller letters below it. Above the 'CALLALRT' text, there is a small icon of a speaker with radiating lines, labeled 'Blinks'. An arrow points from this box to a second box. The second box displays 'ID 1234' in large letters, with 'CALL SC CA' in smaller letters below it. Above the 'ID 1234' text, there is a small icon of a speaker with radiating lines, also labeled 'Blinks'. A curved arrow at the bottom indicates the alternation between the two displays.

- ② Push and hold **[PTT]** and speak into the microphone.
- ③ Release **[PTT]** to receive a response.

◇ Receiving an Emergency Call

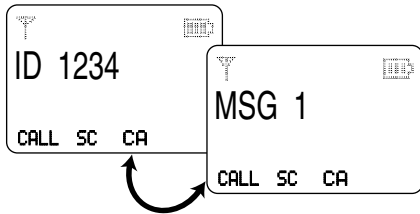
- ① When an emergency call is received;
 - Beeps sound.
 - The calling station ID (or alias) and “**EMG EMG**” are displayed alternately until turning power OFF, the channel changing, etc.



- ② When the automatic acknowledgement function is turned ON, the transceiver automatically transmits an acknowledgement call to the station.
 - The calling station stops calling.
- ③ Turn power OFF, change the channel, etc. to stop the beep and display indication.

◇ **Receiving a Message**

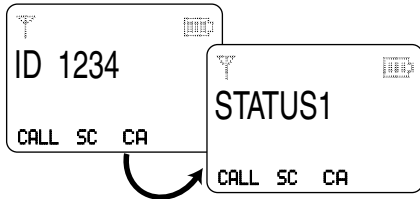
- ① When a Message is received;
 - Beeps sound.
 - The calling station ID (or alias) and the message are displayed alternately.



- ② Turn power OFF, push [PTT], change the channel, etc. 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.



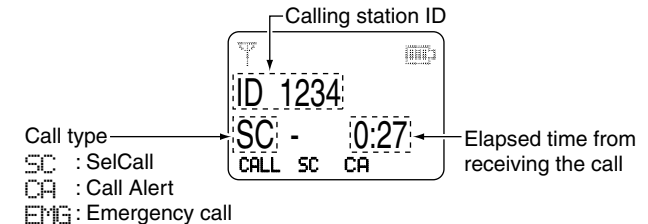
◇ **Receiving a Stun or Revive**

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 are displayed (depends on the setting.) 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 Select “CALL LOG” using [CH Up] or [CH Down].
- ③ Push [MDC Call] again to indicate the call logs.
 - When no call is received, error beep is emitted.



- ④ Push [CH Up] or [CH Down] to select the desired call log memory.

▨ **NOTE:** 1000 hours has passed from receiving the call, the elapsed time is reset to 0:00.

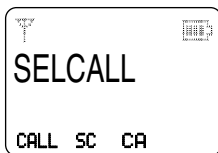
3 MDC 1200 SYSTEM OPERATION

■ Transmitting a call

◇ Transmitting a SelCall

SelCall allows you to make a call to a specific station or to a particular group. Other MDC 1200 system transceivers on the channel will not receive 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.

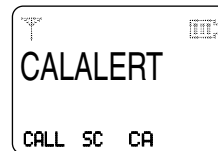


- ② Push **[MDC Call]** again to enter the transceiver alias selection mode.
- ③ Select the desired alias using **[CH Up]** or **[CH Down]**.
- ④ Push and hold **[PTT]** to transmit the SelCall to the selected station, then speak into the microphone.
 - “**1**” appears.
- ⑤ Release **[PTT]** to receive.

◇ Transmitting a Call Alert

Call Alert allows you to notify another user who may be away from the 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 Select “**CALALERT**” using **[CH Up]** or **[CH Down]**.

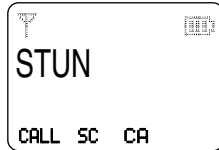


- ③ Push **[MDC Call]** again to enter the transceiver alias selection mode.
- ④ Select the desired alias using **[CH Up]** or **[CH Down]**.
- ⑤ Push **[PTT]** to transmit the Call Alert to the selected station.
 - “**CA CALL**” is displayed.
- ⑥ Release **[PTT]**.
 - “**CA OK**” is displayed after receiving an acknowledgement from the targeted station.
 - “**CA FAIL**” is displayed if the targeted station does not receive the signal or 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 Select **"STUN"** using **[CH Up]** or **[CH Down]**.

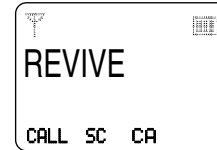


- ③ Push **[MDC Call]** again to enter the transceiver alias selection mode.
- ④ Select the desired alias using **[CH Up]** or **[CH Down]**.
- ⑤ Push **[PTT]** to transmit the stun call to the selected station.
 - **"STN TX"** is displayed.
- ⑥ Release **[PTT]**.
 - **"STN ACK"** is displayed after receiving an acknowledgement from the targeted station.
 - **"STN FAIL"** is displayed if the targeted station does not receive the signal or 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 the targeted (stunned) station.

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



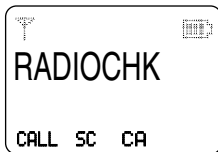
- ③ Push **[MDC Call]** again to enter the transceiver alias selection mode.
- ④ Select the desired alias using **[CH Up]** or **[CH Down]**.
- ⑤ Push **[PTT]** to transmit the revive call to the selected station.
 - **"REV TX"** is displayed.
- ⑥ Release **[PTT]**.
 - **"REV ACK"** is displayed after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

3 MDC 1200 SYSTEM OPERATION

◇ Transmitting a Radio Check Call

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 Select **"RADIOCHK"** using **[CH Up]** or **[CH Down]**.

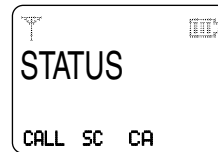


- ③ Push **[MDC Call]** again to enter the transceiver alias selection mode.
- ④ Select the desired alias using **[CH Up]** or **[CH Down]**.
- ⑤ Push **[PTT]** to transmit the radio check call to the selected station.
 - **"RDO CHK"** is displayed.
- ⑥ Release **[PTT]**.
 - **"CHK ACK"** is displayed after receiving an acknowledgement from the targeted station.
 - **"CHK FAIL"** is displayed if the targeted station does not receive the signal or send back an acknowledgement.
- ⑦ After a specified time period has passed, the transceiver will return to receive.

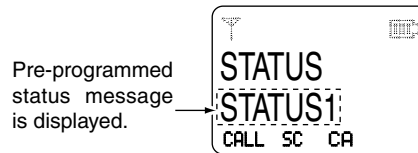
◇ Transmitting a Status Message

Status Messaging allows you to send a pre-programmed 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 Select **"STATUS"** using **[CH Up]** or **[CH Down]**.



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



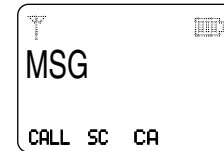
- ④ Select the desired status message using **[CH Up]** or **[CH Down]**.
- ⑤ Push **[PTT]** to transmit the selected status message.
 - **"STAT TX"** is displayed.

- ⑥ Release **[PTT]**.
- “**STAT OK**” is displayed after receiving an acknowledgement from the base station.
 - “**STA FAIL**” is displayed if there is no acknowledgment from the base station.
- ⑦ After a specified time period has passed, the transceiver will return to receive.

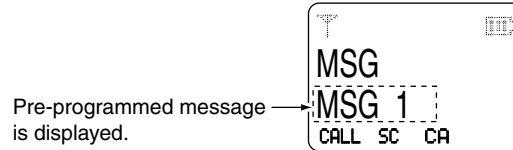
◇ Transmitting a Message

The transceiver can send a pre-programmed message. There are 16 messages that can be sent on a channel.

- ① Push **[MDC Call]** to enter the MDC menu selection mode.
- ② Select “**MSG**” using **[CH Up]** or **[CH Down]**.



- ③ Push **[MDC Call]** again to enter the pre-programmed message selection mode.



- ④ Select the desired message using **[CH Up]** or **[CH Down]**.
- ⑤ Push **[PTT]** to transmit the selected message.
 - “**MSG TX**” is displayed.
- ⑥ Release **[PTT]**.
 - “**MSG OK**” is displayed after receiving an acknowledgement from the base station.
 - “**MSG FAIL**” is displayed if there is no acknowledgment from the base station.
- ⑦ After a specified time period has passed, the transceiver will return to receive.

3 MDC 1200 SYSTEM OPERATION

◇ **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 will display the calling station ID (or alias) and emit a beep*.

*Depends on the setting.

◇ **Emergency Calls**

The MDC 1200 system Emergency feature can be accessed using the **[Emergency]** key (described in the instruction manual). The transceiver will repeatedly send an Emergency MDC 1200 system command for a programmed length of time until it receives the acknowledgement signal.

The emergency call can be transmitted without a beep emission, and the LCD indication depends on how emergency is programmed.

With MDC 1200 system Emergency, 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.


■ Receiving a call

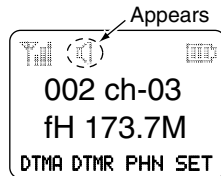
NOTE: During LTR[®] system operation, BIIS 1200 system and Digital mode operations are not available.

◇ Group call



- ① Push **[CH Up]** or **[CH Down]** to select the LTR[®] system channel or talk group.
 - ② When a call is received;
 - LED indicator lights green.
 - ③ Push and hold **[PTT]**, then speak into the microphone at a normal voice level.
 - ④ Release **[PTT]** to return to receive.

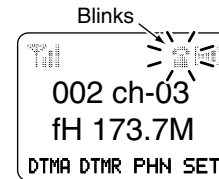
◇ Selective call (DTMF call)


- ① Push **[CH Up]** or **[CH Down]** to select the LTR[®] system channel or talk group.
 - ② Push **[Call]** to mute the channel.
 - ③ When receiving a call, the calling station name appears and a beep is emitted. Then the mute is released.
 - “” appears.



◇ Phone call

- ① Push **[CH Up]** or **[CH Down]** to select the phone channel of LTR[®] system channel.
 - “” appears.
- ② When a phone call is received (transceiver rings), push **[Phone]** (or push **[PTT]**).
 - “” blinks.



- ③ Push and hold **[PTT]**, then speak into the microphone 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.

4 LTR® OPERATION

■ Transmitting a call

◇ Group call

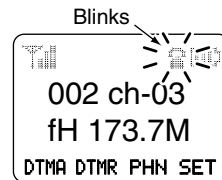
- ① Push [**CH Up**] or [**CH Down**] to select the LTR® system channel or talk group.
 - If an error beep is emitted, release [**PTT**]. After a while, repeat step ②.
 - The beep can be turned OFF in User set mode.

◇ Selective call (DTMF call)

- ① Push [**CH Up**] or [**CH Down**] to select the LTR® system 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 selected DTMF code in the selected DTMF channel.
 - Push [**DTMF Autodial**] to cancel the DTMF transmission.

◇ Phone call

- ① Select the phone channel of LTR® system channel.
 - “☎” appears.
- ② Push [**Phone**] (or push [**PTT**]).
 - “☎” blinks.



- ③ Push [**DTMF Autodial**] to make a phone call.
- ④ After conversation is finished, push [**Phone**] to disconnect the phone call.
 - “☎” stops blinking.

■ Digital mode operation

The IC-F3161D and IC-F4161D provides 6.25kHz digital communication that meets the 6.25kHz emission mask requirements for narrow banding, and increases efficiency of channel allocation and use of spectrum.

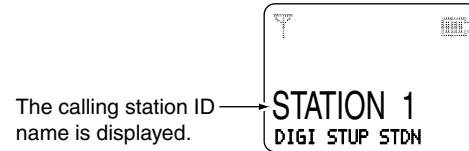
The optional UT-119H/UT-126H provides 6.25kHz digital mode operation for the transceiver that does not support digital communication.

/// **NOTE:** During digital mode operation, BIIS 1200 system, MDC 1200 system and LTR® operations are not available.

■ Receiving a call

◇ Receiving a Voice Call

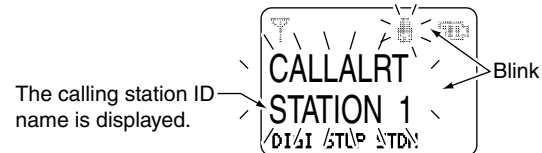
- ① When a Voice call is received;
 - Mute is released.
 - The calling station ID name (or code) is displayed while receiving the signal. (Depending on the pre-setting.)
 - When All Call is received, "All Call" is displayed.



- ② Push and hold **[PTT]**, then speak into the microphone.
- ③ Release **[PTT]** to receive a response.

◇ Receiving a Call Alert

- ① When a Call Alert is received;
 - Beeps sound.
 - "📞" blinks.
 - The calling station ID name (or code) and "CALLALRT" blink.

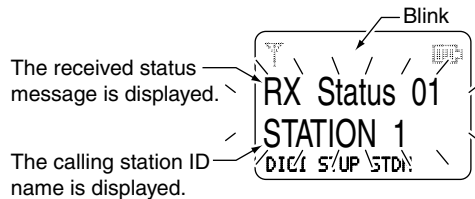


- ② Push and hold **[PTT]**, then speak into the microphone.
- ③ Release **[PTT]** to receive a response.

5 DIGITAL OPERATION

◇ Receiving a Status Message

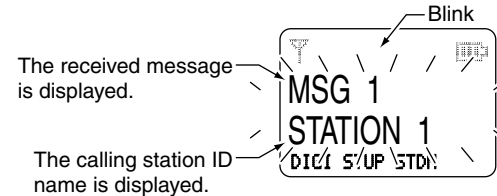
- ① When a Status Message is received;
 - Beeps sound.
 - The calling station ID name (or code) and the status message blink.



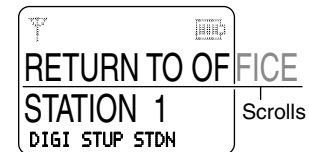
- ② Turn power OFF, push **[PTT]**, change the channel, etc. to stop the display indication.

◇ Receiving a Message

- ① When a Message is received;
 - Beeps sound.
 - The calling station ID name (or code) and the message blink.



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



- ② Turn power OFF, push **[PTT]**, change the channel, etc. to stop the display indication.

◇ Receiving a Stun, Kill or Revive

If an individual call with Stun or Kill command is received (RAN code matching is not necessary depending on the pre-setting), the transceiver will display “SORRY” and you can not receive* or transmit.

* Depending on the received Stun command setting.

- When a Stun command is received;
 - The transceiver cannot be operated until the individual call with Revive command is received (RAN code matching is not necessary depending on the pre-setting) or input a password.
- When a Kill command is received;
 - The transceiver cannot be operated until the data cloning is performed. Ask your dealer for details.

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

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

- 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 transmit the acknowledgement call.
- When a Status polling command is received;
 - The transceiver automatically transmit the status call.

5 DIGITAL OPERATION

◇ Displaying the received call log

The transceiver stores a log of all calls in memory, if activated.

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, push and hold [**Digital Button**] for 1 sec. during stand-by mode. After changing, the transceiver enters the application selection mode automatically.
- ② Select “**CALL LOG**” using [**CH Up**] or [**CH Down**].

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

When a log information is displayed



When no log information is available



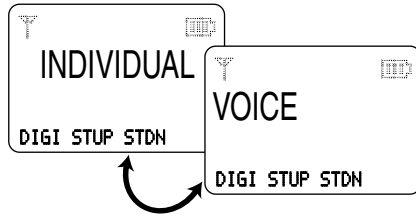
- ④ Push [**CH Up**] or [**CH Down**] to select the desired log.
- ⑤ Push and hold [**PTT**] to send the voice call.
 - The voice call can be performed with the logged station.

■ Transmitting a call

Digital mode operation allows you to make a call to a specific station (Individual call) or to a particular group (Talkgroup call). Other digital mode 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.

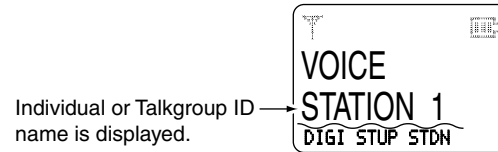
◇ Transmitting a Voice Call

- ① Push **[Digital Button]** to enter the application selection mode.
 - “**VOICE**” appears.
 - To change the call type, push and hold **[Digital Button]** for 1 sec. during stand-by mode. After changing, the transceiver enters the application selection mode automatically.



* This illustration is described with Individual call type.

- ② Push **[Digital Button]** again to enter the Individual or Talkgroup ID selection mode.
 - The pre-programmed ID name is displayed.
 - When ID name is not programmed, ID code is displayed.
 - When you want to send a voice message to all transceivers within the communication range, use the ‘All Call’ function—select the ID code “65535”.
- ③ Push **[CH Up]** or **[CH Down]** to select the desired ID name (or ID code).



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

5 DIGITAL OPERATION

◇ Transmitting a Call Alert

Call Alert allows you to notify 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, push and hold **[Digital Button]** for 1 sec. during stand-by mode. After changing, the transceiver enters the application selection mode automatically.
- ② Push **[CH Up]** or **[CH Down]** to select “**CALALERT**.”
- ③ Push **[Digital Button]** again to enter the Individual or Talkgroup ID selection mode.
 - The pre-programmed ID name is displayed.
 - When ID name is not programmed, ID code is displayed.
- ④ Push **[CH Up]** or **[CH Down]** to select the desired ID name (or ID code).

Individual or Talkgroup ID name is displayed.



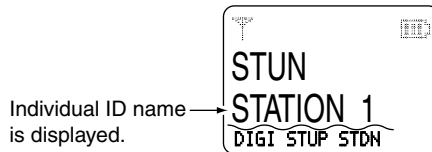
- ⑤ Push and hold **[PTT]** to transmit the Call Alert to the selected station or talkgroup.
 - “**CA CALL**” is displayed.

- ⑥ Release **[PTT]**.
 - “**CA OK**” is displayed after receiving an acknowledgement from the targeted station.
 - “**CA FAIL**” is displayed if the targeted station does not receive the signal or send back an acknowledgement.
- ⑦ After a specified time period has passed, the transceiver will return to receive.

◇ Transmitting a Stun Call

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

- ① Push **[Digital Button]** to enter the application selection mode.
 - “**VOICE**” appears.
 - To change the call type, push and hold **[Digital Button]** for 1 sec. during stand-by mode. After changing, the transceiver enters the application selection mode automatically.
- ② Push **[CH Up]** or **[CH Down]** to select “**STUN.**”
- ③ Push **[Digital Button]** again to enter the Individual ID selection mode.
 - The pre-programmed ID name is displayed.
 - When ID name is not programmed, ID code is displayed.
- ④ Push **[CH Up]** or **[CH Down]** to select the desired ID name (or ID code).



- ⑤ Push **[PTT]** to transmit the Stun call to the selected dispatcher.
 - “**STN TX**” is displayed.

- ⑥ Release **[PTT]**.
 - “**STN ACK**” is displayed after receiving an acknowledgement from the targeted station.
 - “**STN FAIL**” is displayed if the targeted station does not receive the signal or send back an acknowledgement.
- ⑦ After a specified time period has passed, the transceiver will return to receive.

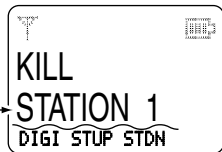
5 DIGITAL OPERATION

◇ 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, push and hold **[Digital Button]** for 1 sec. during stand-by mode. After changing, the transceiver enters the application selection mode automatically.
- 2 Push **[CH Up]** or **[CH Down]** to select “**KILL.**”
- 3 Push **[Digital Button]** again to enter the Individual ID selection mode.
 - The pre-programmed ID name is displayed.
 - When ID name is not programmed, ID code is displayed.
- 4 Push **[CH Up]** or **[CH Down]** to select the desired ID name (or ID code).

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 after receiving an acknowledgement from the targeted station.
 - “**KIL FAIL**” is displayed if the targeted station does not receive the signal or send back an acknowledgement.
- 7 After a specified time period has passed, the transceiver will return to receive.

◇ Transmitting a Revive Call

A Revive call allows you to send a signal that will revive the (stunned) station.

- 1 Push **[Digital Button]** to enter the application selection mode.
 - “**VOICE**” appears.
 - To change the call type, push and hold **[Digital Button]** for 1 sec. during stand-by mode. After changing, the transceiver enters the application selection mode automatically.
- 2 Push **[CH Up]** or **[CH Down]** to select “**REVIVE.**”
- 3 Push **[Digital Button]** again to enter the Individual ID selection mode.
 - The pre-programmed ID name is displayed.
 - When ID name is not programmed, ID code is displayed.
- 4 Push **[CH Up]** or **[CH Down]** to select the desired ID name (or ID code).

Individual ID name
is displayed.

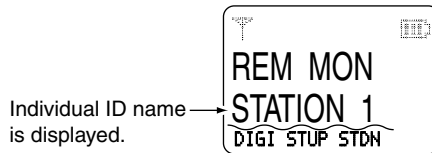


- 5 Push **[PTT]** to transmit the Revive call to the selected station.
 - “**REV TX**” is displayed.
- 6 Release **[PTT]**.
 - “**REV ACK**” is displayed after receiving an acknowledgement from the targeted station.
 - “**REV FAIL**” is displayed if the (stunned) station does not receive the signal or send back an acknowledgement.
- 7 After a specified time period has passed, the transceiver will return to receive.

◇ Transmitting a Remote Monitor Call

A remote monitor call allows you to send a signal that require the targeted station to transmit the microphone audio.

- ① Push [**Digital Button**] to enter the application selection mode.
 - “**VOICE**” appears.
 - To change the call type, push and hold [**Digital Button**] for 1 sec. during stand-by mode. After changing, the transceiver enters the application selection mode automatically.
- ② Push [**CH Up**] or [**CH Down**] to select “**REM MON.**”
- ③ Push [**Digital Button**] again to enter the Individual ID selection mode.
 - The pre-programmed ID name is displayed.
 - When ID name is not programmed, ID code is displayed.
- ④ Push [**CH Up**] or [**CH Down**] to select the desired ID name (or ID code).



- ⑤ Push and hold [**PTT**] to transmit the Remote monitor call to the selected station.
 - “**REM TX**” is displayed.

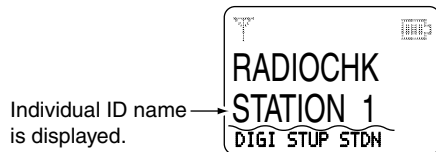
- ⑥ Release [**PTT**].
 - “**REM ACK**” is displayed after receiving an acknowledgement from the targeted station.
 - “**REM FAIL**” is displayed if the targeted station does not receive the signal or send back an acknowledgement.
- ⑦ After a specified time period has passed, the transceiver will return to receive.

5 DIGITAL OPERATION

◇ 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 **[Digital Button]** to enter the application selection mode.
 - “**VOICE**” appears.
 - To change the call type, push and hold **[Digital Button]** for 1 sec. during stand-by mode. After changing, the transceiver enters the application selection mode automatically.
- ② Push **[CH Up]** or **[CH Down]** to select “**RADIOCHK.**”
- ③ Push **[Digital Button]** again to enter the Individual ID selection mode.
 - The pre-programmed ID name is displayed.
 - When ID name is not programmed, ID code is displayed.
- ④ Push **[CH Up]** or **[CH Down]** to select the desired ID name (or ID code).



- ⑤ Push and hold **[PTT]** to transmit the Radio check call to the selected station.
 - “**RDO CHK**” is displayed.

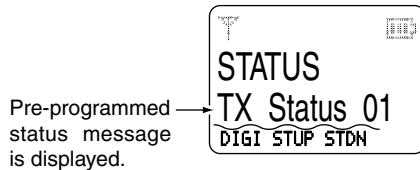
- ⑦ Release **[PTT]**.
 - “**CHK ACK**” is displayed after receiving an acknowledgement from the targeted station.
 - “**CHK FAIL**” is displayed if the targeted station does not receive the signal or send back an acknowledgement.
- ⑧ After a specified time period has passed, the transceiver will return to receive.

◇ Transmitting a Status Message

The transceiver has the ability to send a pre-programmed status message.

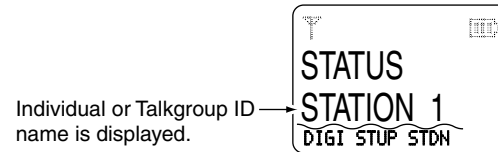
There are 100 status messages that can be sent.

- ① Push **[Digital Button]** to enter the application selection mode.
 - “VOICE” appears.
 - To change the call type, push and hold **[Digital Button]** for 1 sec. during stand-by mode. After changing, the transceiver enters the application selection mode automatically.
- ② Push **[CH Up]** or **[CH Down]** to select “STATUS.”
- ③ Push **[Digital Button]** again to enter the status message selection mode.
 - The pre-programmed status message is displayed.
- ④ Push **[CH Up]** or **[CH Down]** to select the desired message.



- ⑤ Push **[Digital Button]** again to enter the Individual or Talkgroup ID selection mode.
 - The pre-programmed ID name is displayed.
 - When ID name is not programmed, ID code is displayed.

- ⑥ Push **[CH Up]** or **[CH Down]** to select the desired ID name (or ID code).



- 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 after receiving an acknowledgement from the base station.
 - “STA FAIL” is displayed if there is no acknowledgement from the base station.
- ⑨ After a specified time period has passed, the transceiver will return to receive.

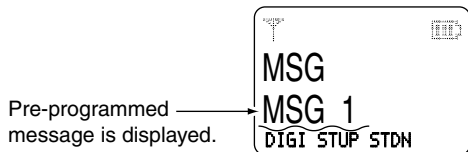
5 DIGITAL OPERATION

◇ Transmitting a Message

The transceiver has the ability to send a pre-programmed message.

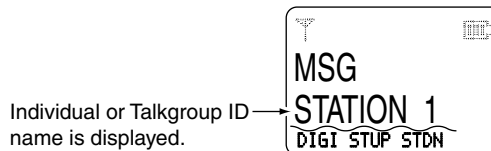
There are 10 messages that can be sent on a channel.

- ① Push [**Digital Button**] to enter the application selection mode.
 - “**VOICE**” appears.
 - To change the call type, push and hold [**Digital Button**] for 1 sec. during stand-by mode. After changing, the transceiver enters the application selection mode automatically.
- ② Push [**CH Up**] or [**CH Down**] to select “**MSG.**”
- ③ Push [**Digital Button**] again to enter the message selection mode.
 - The pre-programmed message is displayed.
- ④ Push [**CH Up**] or [**CH Down**] to select the desired message.
 - You can rewrite the contents of the message. See the next page for details.



- ⑤ Push [**Digital Button**] again to enter the Individual or Talkgroup ID selection mode.
 - The pre-programmed ID name is displayed.
 - When ID name is not programmed, ID code is displayed.

- ⑥ Push [**CH Up**] or [**CH Down**] to select the desired ID name (or ID code).



- ⑦ Push [**PTT**] to transmit the message to the selected station or talkgroup.
 - “**MSG TX**” is displayed.
- ⑧ Release [**PTT**].
 - “**MSG OK**” is displayed after receiving an acknowledgement from the base station.
 - “**MSG FAIL**” is displayed if there is no acknowledgment from the base station.
- ⑨ After a specified time period has passed, the transceiver will return to receive.

◇ Direct message input

(10-key version only)

- ① Push **[Digital Button]** to enter the application selection mode.
 - “VOICE” appears.
 - To change the call type, push and hold **[Digital Button]** for 1 sec. during stand-by mode. After changing, the transceiver enters the application selection mode automatically.
- ② Push **[CH Up]** or **[CH Down]** to select “MSG.”
- ③ Push **[Digital Button]** again to enter the message selection mode.
 - The pre-programmed message is displayed.
- ④ Push **[*]** or **[#]** to enter the message editing condition.
 - The first character blinks when **[#]** is pushed, the last character blinks when **[*]** is pushed.
- ⑤ Push the appropriate digit key, **[0]** to **[9]**, to enter the desired character.
 - See the table at right for the available characters.
 - Pushing **[CH Up]** also enters space, pushing **[CH Down]** deletes the selected character.
- ⑥ Push **[#]** to move the cursor to the right, push **[*]** to move the cursor to the left.
- ⑦ Repeat steps ⑥ and ⑦ to set the desired text message.
- ⑧ Push and hold **[Digital Button]** for 1 sec. to overwrite the set message into the message memory.
 - Push **[Digital Button]** momentarily to cancel the editing and return to the original message indication.

• Available 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

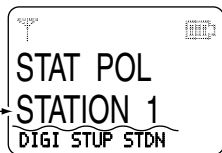
5 DIGITAL OPERATION

◇ 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, push and hold **[Digital Button]** for 1 sec. during stand-by mode. After changing, the transceiver enters the application selection mode automatically.
- ② Push **[CH Up]** or **[CH Down]** to select “**STAT POL.**”
- ③ Push **[Digital Button]** again to enter the Individual ID selection mode.
 - The pre-programmed ID name is displayed.
 - When ID name is not programmed, ID code is displayed.
- ④ Push **[CH Up]** or **[CH Down]** to select the desired ID name (or ID code).

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 when the targeted station send the status.
 - “**POL FAIL**” is displayed if there is no acknowledgment from the station.
- ⑦ After a specified time period has passed, the transceiver will return to receive.

◇ Transmitting an Emergency Call

The digital emergency feature can be accessed using the **[Emergency]** key (described in the instruction manual).

When **[Emergency]** is pushed and held for the specified time period, the transceiver transmits a digital emergency command once or repeatedly. A repeat emergency signal transmits for a programmed time period until it receives the acknowledgement signal.

The emergency call can be transmitted without a beep emission and the LCD indication depends on how emergency is programmed.

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

■ Position data transmission

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

Ask your dealer or system operator for connection details.

The position data is transmitted when;

- The GPS request status message is received
- After sending a voice message
 - Set the 'Send Data' item as 'GPS.'

■ Status message transmission

The status message can be transmitted automatically.

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'.
- After sending a voice message
 - Set the 'Send Data' item as 'Status.'
 - Set the status message to be transmitted in 'Send Status Number' item.

5 DIGITAL OPERATION



■ Printer connection

When the optional OPC-966 INTERFACE CABLE is connected to the transceiver, a printer can be connected to print out the received SDM content and the ID of the station who sent the message.

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 the encryption function ON.
 - “” appears.
- ② Push [**Scrambler/Encryption**] again to turn the encryption function OFF.
 - “” disappears.

Count on us!