

OPERATING GUIDE

VHF DIGITAL TRANSCEIVERS

**IC-F1000D**  
series

UHF DIGITAL TRANSCEIVERS

**IC-F2000D**  
series



The photo shows the VHF transceiver.

---

# TABLE OF CONTENTS

## 1. PANEL DESCRIPTION

Front, top and side panels.....	1-2
LED indicator .....	1-3
Programmable function keys .....	1-4

## 2. BASIC OPERATION

Selecting a channel .....	2-2
Receiving and transmitting .....	2-3
◆ Transmitting notes .....	2-3
◆ Receiving a Stun, Kill, and Revive call .....	2-3
Emergency call .....	2-4
About other Emergency calls .....	2-5
◆ Lone Worker Emergency call .....	2-5
◆ Man Down Emergency call .....	2-5
◆ Motion Detection Emergency call .....	2-5

## 3. NXDN™ OPERATION

NXDN™ operation .....	3-2
◆ Conventional mode .....	3-2
◆ Trunking mode .....	3-2
Receiving a call .....	3-3
◆ Receiving a Call Alert .....	3-3
◆ Receiving a Stun, Kill, and Revive call .....	3-3
◆ Receiving a Remote Monitor or Radio Check call .....	3-3
◆ Receiving a Status call .....	3-3
Transmitting a call .....	3-4
◆ Transmitting a Call Alert .....	3-4
◆ Transmitting an Emergency call .....	3-4
◆ Transmitting a Status call .....	3-4
About other Emergency calls .....	3-5
◆ Lone Worker Emergency call .....	3-5
◆ Man Down Emergency call .....	3-5
◆ Motion Detection Emergency call .....	3-5
Encryption function .....	3-6

## 4. MDC 1200 SYSTEM OPERATION

MDC 1200 system operation .....	4-2
Receiving a call .....	4-3
◆ Receiving a PTT ID .....	4-3
◆ Receiving an Emergency call .....	4-3
◆ Receiving a Stun or Revive call .....	4-3
Transmitting a call .....	4-4
◆ Transmitting a PTT ID .....	4-4
◆ Transmitting an Emergency call .....	4-4

## 5. USER SETTINGS

Setting the Beep function .....	5-2
Setting the Beep level .....	5-3
Setting the Ringer level .....	5-4
Setting the microphone gain.....	5-5
Setting the squelch level .....	5-6
Setting the VOX function .....	5-7
Setting the VOX gain .....	5-8

Icom, Icom Inc. and the Icom logo are registered trademarks of Icom Incorporated (Japan) in Japan, the United States, the United Kingdom, Germany, France, Spain, Russia, Australia, New Zealand, and/or other countries. All other products or brands are registered trademarks or trademarks of their respective holders.

# Section 1 PANEL DESCRIPTION

---

Front, top and side panels.....	1-2
LED indicator .....	1-3
Programmable function keys .....	1-4

# 1 PANEL DESCRIPTION

## Front, top and side panels

### ROTARY SELECTOR

Rotate to select the preset memory channels.

### VOLUME CONTROL [VOL]

Rotate to turn the power ON or OFF and to adjust the audio level.

### DEALER-ASSIGNABLE KEY [Emer]

A desired function can be preset by your dealer.

### SPEAKER-MICROPHONE JACK

Connect an optional equipment.

**NOTE:** After turning OFF the transceiver, connect or disconnect the optional equipment.



#### Jack cover

**NOTE:** Attach the jack cover when optional equipment is not used.

### DEALER-ASSIGNABLE KEYS [Upper] or [Lower]

Desired functions can be independently preset by your dealer.

### PTT SWITCH [PTT]

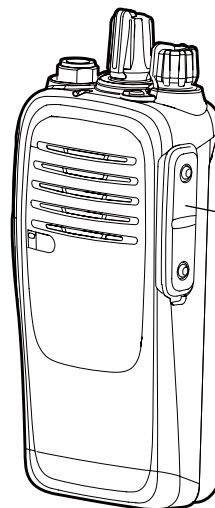
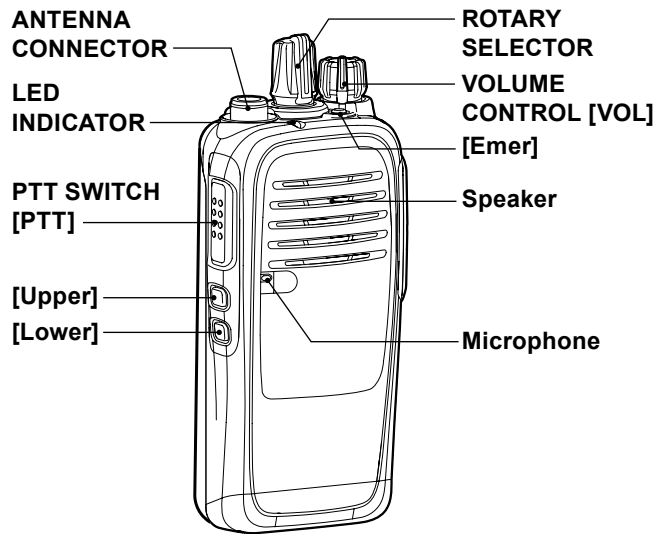
Hold down to transmit, release to receive.

### LED INDICATOR (p. 1-3)

- ☉ Lights red while transmitting.
- ☉ Lights green while receiving a signal, or when the squelch is open.
- ☉ Lights or blinks orange when the matching 2-Tone or 5-Tone is received, depending on the presetting.
- ☉ You should charge the battery when the indicator slowly blinks.
- ☉ You must charge the battery when the indicator blinks fast.

### ANTENNA CONNECTOR

Connects the supplied antenna.



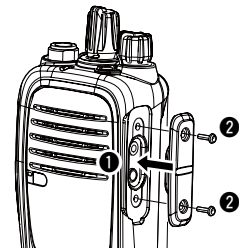
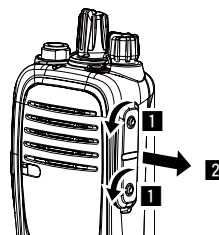
### Detaching and attaching the jack cover

#### Detaching:

Remove the screws (1), then detach the jack cover (2).

#### Attaching:

Attach the jack cover (1), then tighten the screws (2).



# 1 PANEL DESCRIPTION

## LED indicator

The LED indicator indicates the status of various parameters of the transceiver as follows:  
(Reference: R=Red, G=Green, O=Orange)

### • Transmitting



### • Receiving



The following LED indicator patterns are repetitive.  
One cycle is approximately two seconds.

### • Cloning (reading or writing data)



### • Cloning Error (if cloning fails)



### • Inh, Blank CH, Unlocked (when you cannot use the channel)



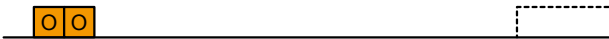
### • TX Low Battery 2 (while transmitting)



### • TX Low Battery 1 (while transmitting)



### • Call LED=ON (when receiving a matching 2-Tone or 5-Tone)



### • Call LED=Blink (when receiving a matching 2-Tone or 5-Tone)



### • Scanning



### • Low Battery 2 (You must charge the battery.)



### • Low Battery 1 (You should charge the battery.)



### • Calling



### • Audible



The following LED indicator patterns light only once.

### • When turning ON the power



### • Lockout, TX Inh, TOT (when transmit is inhibited)



### • Successful



### • Failed, Error



### • Emergency, Siren



# 1 PANEL DESCRIPTION

## Programmable function keys

The following functions can be assigned to [Emer], [Upper], and [Lower].

Consult your Icom dealer or system operator for details concerning your transceiver's presetting.

### **SCAN START/STOP**

Push to start and cancel scanning operation. When a scan started with the Power ON Scan or Auto Scan function, push to cancel the scanning operation. These scans resume after the specified time period, depending on the Auto Reset setting.

### **PRIORITY A CHANNEL, PRIORITY B CHANNEL**

Push to select the Priority A or Priority B channel.

### **PRIORITY A CHANNEL (REWRITE),**

### **PRIORITY B CHANNEL (REWRITE)**

- Push to select the Priority A or Priority B channel.
- Hold down [Prio A (Rewrite)] or [Prio B (Rewrite)] for 1 second to assign the operating channel to Priority A or Priority B channel, respectively.

### **MEMORY CHANNELS 1, 2, 3, 4**

Push to directly select memory channel 1, 2, 3 or 4, if preset.

### **MONI**

// only for the LMR model //

- Hold down to cancel the CTCSS (DTCS) or 2-Tone mute. The transceiver enters "Audible" mode.
- Push to turn OFF the function.

### **MONI (Audi)**

// only for the PMR model //

- Hold down to cancel the CTCSS (DTCS) or 5-Tone mute. The transceiver enters "Audible" mode.
- Push or hold down to activate one or two functions if preset.

### **LOCK**

Hold down this key for 1 second to turn the Key Lock function ON or OFF.

The Key Lock function locks all programmable keys except the followings:

[Moni], [Moni (Audi)], [Lock], [Emergency], [Surveillance], [Siren], [Call], [Call A], [Call B], and [Lone Worker].

### **LONE WORKER**

- Hold down to turn ON the Lone Worker Function.
- Push to turn OFF the Function.

### **HIGH/LOW**

Push to select the transmit output power temporarily or permanently, depending on the presetting. Beeps sound as described below and the beeps indicate which output power you are selecting.

High (5 W for VHF, or 4 W for UHF): Three beeps  
Low2 (2 W): Two beeps  
Low1 (1 W): One beep

### **TALK AROUND**

- Hold down for 1 second to turn ON the Talk Around function.
- Push to turn OFF the Talk Around function.

The Talk Around function equalizes the transmit frequency to the receive frequency, for transceiver-to-transceiver communication.

### **WIDE/NARROW**

(only for the analog mode operation)

Push to select toggle the channel bandwidth between Wide, Middle\*, and Narrow. Beeps sound as described below and the beeps indicate which channel bandwidth you are selecting.

Narrow: One beep  
Middle\*: Two beeps  
Wide: Three beeps

\* Only for the PMR model.  
It is selectable depending on the presetting. Ask your dealer for details.

---

# 1 PANEL DESCRIPTION

## **DTMF AUTODIAL**

Push to transmit the preset DTMF code.

## **CALL**

Push to transmit a 2-Tone or 5-Tone in the operating channel.

## **CALL A (CODE 1)/CALL B (CODE 2)**

(only for the analog mode operation)  
// only for the LMR model //

While in analog mode operation, push to transmit a 2-Tone code as station code, that is set in the channel 1 (Code A) or channel 2 (Code B).

## **CALL A (CODE 30)/CALL B (CODE 29)**

(only for the analog mode operation)  
// only for the PMR model //

While in analog mode operation, push to transmit a 5-Tone code as the station code, that is set in the channel 30 (Code A) or channel 29 (Code B).

## **EMERGENCY**

- Hold down for the set time period\* to turn ON the Emergency function.
  - The countdown for the Emergency call transmission starts. After the countdown, an Emergency call is automatically transmitted once, or repeatedly\*.
- During the first countdown, hold down for the set time period\* to cancel the Emergency function.

\*Depending on the presetting. Ask your dealer for details.

## **SURVEILLANCE**

- Hold down for 1 second to turn ON the Surveillance function.
- Push to turn OFF the Surveillance function.

When this function is turned ON, the beep is not heard and the LED indicator does not light, even when a signal is received, or a key is pushed.

## **SIREN**

- Hold down for 1 second to emit a siren sound.
  - This function can be used for situations other than an Emergency alert, such as a security alarm.
- Turn OFF the transceiver power to stop the siren sound.

## **ENCRYPTION**

(only for the digital mode operation)

- Hold down for 1 second to turn ON the Encryption function.
- Push to turn OFF the Encryption function.

## **ANNOUNCE**

Push to turn the Channel Announce function ON or OFF.

When this function is turned ON, the transceiver announces the position of [ROTARY SELECTOR].

## **CALL ALERT**

(only for the digital mode operation)

Hold down for 1 second to transmit a Call Alert.

## **STATUS**

(only for the digital mode operation)

Hold down for 1 second to transmit a Status call.

# Section 2

# BASIC OPERATION

---

Selecting a channel.....	2-2
Receiving and transmitting .....	2-3
◆ Transmitting notes.....	2-3
◆ Receiving a Stun, Kill, and Revive call .....	2-3
Emergency call .....	2-4
About other Emergency calls .....	2-5
◆ Lone Worker Emergency call .....	2-5
◆ Man Down Emergency call .....	2-5
◆ Motion Detection Emergency call.....	2-5



### Selecting a channel

There are several types of channel selections.  
Methods may differ, depending on the presetting.  
Ask your dealer for details.

#### **NON-ZONE TYPE:**

To select the desired operating channel:

- Rotate [ROTARY SELECTOR].
- Push one of [MR-CH 1] to [MR-CH 4].
- Push [Prio A], [Prio B], [Prio A (Rewrite)] or [Prio B (Rewrite)].

#### **AUTOMATIC SCAN TYPE:**

Channel setting is not necessary for this scan type. When turning ON the power, the transceiver automatically starts scanning. Scanning stops when a signal is received.

### Receiving and transmitting

#### NOTE:

These functions and operations may or may not be available or different, depending on the presetting. Ask your dealer for preset information.

#### CAUTION:

Attach an antenna before transmitting. Transmitting without an antenna may damage the transceiver.

#### Receiving:

- 1) Rotate [VOL] to turn ON the power.
- 2) Select a channel. (p. 2-2)
- 3) When receiving a call, adjust the audio output level to a comfortable listening level.

#### Transmitting:

- 1) Wait until the channel is clear to avoid interference. While holding down [PTT], speak at a normal voice level.
- 2) Release [PTT] to receive.

#### IMPORTANT:

To maximize the readability of your signal:

1. After pushing [PTT], pause briefly before you start speaking.
2. Hold the microphone 5 to 10 cm (2 to 4 inches) from your mouth, then speak at a normal voice level.

#### ◆ Transmitting notes

##### • Transmit inhibit function

The transceiver has several inhibit functions which restrict transmission under the following conditions:

- The channel is busy. However, depending on the presetting, you can transmit when the call includes an unmatching (or matching) CTCSS (DTCS) tone.
- The selected channel is a 'receive only' channel.

##### • Time-out timer (TOT)

If continuous transmission exceeds the preset time-out timer limit, transmission is cut off.

##### • Penalty timer

The time-out timer cuts off transmission, further transmission is inhibited for the preset penalty timer period.

#### ◆ Receiving a Stun, Kill, and Revive call

The dispatcher can send a 2-Tone or 5-Tone that will stun, kill or revive your transceiver.

When the Stun call is received, beeps sound, and you cannot receive or transmit. Receiving a Revive call or cloning the transceiver is necessary to operate the transceiver again.

When the Kill call is received, beeps sound, and the transceiver becomes unusable. Cloning the transceiver is necessary to operate the transceiver again, in this case.

### Emergency call

/// **NOTE:**

/// This function and operations may or may not be available or different, depending on the presetting.  
/// Ask your dealer for preset information.

When holding down [Emergency] for the set time period, the transceiver enters the Emergency mode then the countdown starts.

After the countdown, the transceiver transmits an Emergency call once, or repeatedly, on the specified Emergency channel. Countdown beeps sound for the set timer period.

When no Emergency channel is specified, it transmits the call on the previously selected channel.

If you want to cancel the Emergency call, turn OFF the transceiver, or hold down [Emergency] for the set time period again during the first countdown.

If your transceiver is set for the Silent operation, you can transmit an Emergency call without beeps and the LED indicator lighting.

/// **NOTE:**

/// Depending on the presetting, the following functions are automatically activated. Ask your dealer for details.

• **Auto TX function**

After an Emergency call transmission, the transceiver transmits the audio from the microphone for the set time period.

• **Auto RX function**

After the Emergency call transmission, the transceiver stands by in the audible mode for the set time period.

### About other Emergency calls

**NOTE:**

These functions and operations may or may not be available or different, depending on the presetting.  
Ask your dealer for preset information.

#### ◆ Lone Worker Emergency call

When the Lone Worker function is ON, the transceiver enters the Emergency mode then the countdown for the Emergency call transmission starts when either/ or:

1. No operation occurs for the set time period.
2. The acceleration sensor detects a lower acceleration than the set value for the set time period.

After a set time period has passed, an Emergency call is automatically transmitted once, or repeatedly.

If the user pushes any key during the first countdown, the transceiver exits the Emergency mode, and the Emergency call is cancelled.

You can also cancel the Emergency call by turning OFF the transceiver.

To turn ON the Lone Worker function, see page 1-4.

#### ◆ Man Down Emergency call

When the transceiver leans past the preset angle for a set time period, the transceiver enters the Emergency mode, and then a countdown starts.

After a set time period has passed, an Emergency call is automatically transmitted once, or repeatedly.

If the transceiver is placed again within the preset angle, during the first countdown, the transceiver exits the Emergency mode, and the Emergency call is cancelled.

You can also cancel the Emergency call by turning OFF the transceiver.

#### ◆ Motion Detection Emergency call

When the acceleration sensor keeps detecting a higher acceleration than the preset value for the set time period, the transceiver enters the Emergency mode then the countdown starts.

After the set time period has passed, an Emergency call is automatically transmitted once, or repeatedly. Countdown beeps sound for the set time period.

If the user holds down [Emergency] for the set time period during the first countdown, the Emergency call is canceled.

You can also cancel the Emergency call by turning OFF the transceiver.

- NXDN™ operation ..... 3-2**
  - ◆ Conventional mode..... 3-2
  - ◆ Trunking mode ..... 3-2
- Receiving a call ..... 3-3**
  - ◆ Receiving a Call Alert ..... 3-3
  - ◆ Receiving a Stun, Kill, and Revive call ..... 3-3
  - ◆ Receiving a Remote Monitor or Radio Check call..... 3-3
  - ◆ Receiving a Status call ..... 3-3
- Transmitting a call..... 3-4**
  - ◆ Transmitting a Call Alert ..... 3-4
  - ◆ Transmitting an Emergency call ..... 3-4
  - ◆ Transmitting a Status call ..... 3-4
- About other Emergency calls ..... 3-5**
  - ◆ Lone Worker Emergency call ..... 3-5
  - ◆ Man Down Emergency call ..... 3-5
  - ◆ Motion Detection Emergency call ..... 3-5
- Encryption function ..... 3-6**

### NXDN™ 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.

**NOTE:**

During the NXDN™ system operation, BISS 1200 and MDC 1200 system operations are not usable.

You can use a preset operation type in a zone. Ask your dealer for details.

#### ◆ Conventional mode

The Conventional system enables normal digital mode channel management by manually selecting a channel.

#### ◆ Trunking mode

The Trunk system enables further effective channel management by sharing a minimum number of channels with a large number of users.

**NOTE:**

While in the Trunking mode, you can receive and transmit digital calls in the same way as in the Conventional mode.

## Receiving a call

### NOTE:

These functions and operations may or may not be available or different, depending on the presetting.  
Ask your dealer for preset information.

### ◆ Receiving a Call Alert

- ☞ When a Call Alert is received:
    - The transceiver will automatically transmit the acknowledgement.
    - The LED indicator blinks orange.
    - Release [PTT] to receive a response.
- 1) Hold down [PTT], then speak into the microphone.
  - 2) Release [PTT] to receive a response.

### ◆ Receiving a Stun, Kill, and Revive call

If an individual call with Stun or Kill command is received, the transceiver will automatically transmit the acknowledgement, and then you cannot receive or transmit.

- ☞ When a Stun command is received:
  - You cannot receive, transmit, or change the channel.
  - Receiving a Revive call or cloning the transceiver is necessary to operate the transceiver again.
  
- ☞ When a Kill command is received:
  - The transceiver becomes unusable.
  - The LED indicator alternately blinks red and orange.
  - Cloning the transceiver is necessary to use the transceiver again.

### ◆ Receiving a Remote Monitor or Radio Check call

- ☞ When a Remote Monitor call is received:
  - The transceiver will automatically transmit the acknowledgement
  - Then it transmits the microphone audio for the time set at the caller station.
  
- ☞ When a Radio Check call is received:
  - The transceiver will automatically transmit the acknowledgement.

### ◆ Receiving a Status call

- ☞ When a Status call is received:
  - The transceiver will automatically transmit the acknowledgement.

### Transmitting a call

#### NOTE:

These functions and operations may or may not be available or different, depending on the presetting. Ask your dealer for preset information.

#### ◆ Transmitting a Call Alert

➤ Hold down [Call Alert].

#### ◆ Transmitting an Emergency call

When holding down [Emergency] for the set time period, the transceiver enters the Emergency mode then the countdown starts.

After the countdown, the transceiver transmits an Emergency call (digital command) once, or repeatedly, on the specified Emergency channel. Countdown beeps sound for the set time period.

When no Emergency channel is specified, it transmits the call on the previously selected channel.

Individual or Talkgroup call types of Emergency calls can be preset. If the call type is not preset, a default or selected call type is used.

If you want to cancel the Emergency call, turn OFF the transceiver, or hold down [Emergency] for the set time period again during the first countdown.

If your transceiver is set for Silent operation, you can transmit an Emergency call without beeps and the LED indicator lighting.

The transceiver can also be set to keep the microphone open during an Emergency call, allowing other persons to monitor the situation. Ask your dealer for details.

#### ◆ Transmitting a Status call

➤ A Status call can be transmitted by pushing [Status].

- 1) Rotate [ROTARY SELECTOR] to select a desired Status.
- 2) Hold down [Status] to transmit a Status call.

➤ A Status call can be automatically transmitted when the transceiver is turned ON or OFF.

➤ A Status call can be automatically transmitted after releasing [PTT].



## About other Emergency calls

**NOTE:**

These functions and operations may or may not be available or different, depending on the presetting.  
Ask your dealer for preset information.

### ◆ Lone Worker Emergency call

When the Lone Worker function is ON, the transceiver enters the Emergency mode then the countdown for the Emergency call transmission starts when either/ or:

1. No operation occurs for the set time period.
2. The acceleration sensor detects a lower acceleration than the set value for the set time period.

After a set time period has passed, an Emergency call is automatically transmitted once, or repeatedly.

If the user pushes any key during the first countdown, the transceiver exits the Emergency mode, and the Emergency call is cancelled.

You can also cancel the Emergency call by turning OFF the transceiver.

To turn ON the Lone Worker function, see page 1-4.

### ◆ Man Down Emergency call

When the transceiver leans past the preset angle for a set time period, the transceiver enters the Emergency mode, and then a countdown starts.

After a set time period has passed, an Emergency call is automatically transmitted once, or repeatedly.

If the transceiver is placed again within the preset angle, during the first countdown, the transceiver exits the Emergency mode, and the Emergency call is cancelled.

You can also cancel the Emergency call by turning OFF the transceiver.

### ◆ Motion Detection Emergency call

When the acceleration sensor keeps detecting a higher acceleration than the preset value for the set time period, the transceiver enters the Emergency mode then the countdown starts.

After the set time period has passed, an Emergency call is automatically transmitted once, or repeatedly. Countdown beeps sound for the set time period.

If the user holds down [Emergency] for the set time period during the first countdown, the Emergency call is canceled.

You can also cancel the Emergency call by turning OFF the transceiver.

## **Encryption function**

**NOTE:**

- /// This function and operations may or may not be available or different, depending on the presetting.
- /// Ask your dealer for preset information.

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

- 1) Hold down [Encryption] for 1 second to turn ON the Encryption function.
- 2) Push [Encryption] to turn OFF the Encryption function.

# Section 4

# MDC 1200 SYSTEM OPERATION

---

- MDC 1200 system operation .....4-2
- Receiving a call .....4-3
  - ◆ Receiving a PTT ID .....4-3
  - ◆ Receiving an Emergency call .....4-3
  - ◆ Receiving a Stun or Revive call.....4-3
- Transmitting a call.....4-4
  - ◆ Transmitting a PTT ID.....4-4
  - ◆ Transmitting an Emergency call .....4-4

### MDC 1200 system operation

The MDC 1200 signaling system enhances your transceiver's capabilities. You can receive or transmit PTT ID and Emergency calls. You can also receive Radio Check, Stun, and Revive calls.

An additional feature of the MDC 1200 system included in Icom transceivers is called aliasing. Each transceiver on the system has a unique ID number. Aliasing is a substitute for this ID number and you can set a ringer for each station ID. When you receive a call from the specific transceiver, you can distinguish it by its ringer type.

**NOTE:**

The MDC 1200 system operation may not be available, depending on the presetting. Ask your dealer for preset information.

## **Receiving a call**

**NOTE:**

These functions and operations may or may not be available or different, depending on the presetting. Ask your dealer for preset information.

**◆ Receiving a PTT ID**

- 1) When a PTT ID is received:
  - Beeps sound.
- 2) Hold down [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.
- 2) Turn power OFF or change the channel to stop the beep.

**◆ Receiving a Stun or Revive call**

If a Stun call is received that matches your station ID, you can not receive or transmit. If a Revive call that matches your station ID is received, the transceiver will be revived.

### Transmitting a call

#### NOTE:

These functions and operations may or may not be available or different, depending on the presetting. Ask your dealer for preset information.

#### ◆ Transmitting a PTT ID

- 1) Push [PTT] to make a call.
- 2) Beeps sound, depending on the presetting.
- 3) Your station ID will be transmitted when you push [PTT] (at the beginning of transmission) or release it (at the end of transmission), depending on the presetting.

#### ◆ Transmitting an Emergency call

When holding down [Emergency] for the set time period, the transceiver enters the Emergency mode then the countdown starts.

After the countdown, the transceiver transmits an Emergency call once, or repeatedly, on the specified Emergency channel. Countdown beeps sound for the set time period.

When no Emergency channel is specified, it transmits the call on the previously selected channel.

If you want to cancel the Emergency call, turn OFF the transceiver, or hold down [Emergency] for the set time period again during the first countdown.

If your transceiver is set for Silent operation, you can transmit an Emergency call without beeps and the LED indicator lighting.

The transceiver can also be set to keep the microphone open during an Emergency call, allowing other persons to monitor the situation. Ask your dealer for details.

## **Section 5      USER SETTINGS**

---

<b>Setting the Beep function .....</b>	<b>5-2</b>
<b>Setting the Beep level.....</b>	<b>5-3</b>
<b>Setting the Ringer level .....</b>	<b>5-4</b>
<b>Setting the microphone gain.....</b>	<b>5-5</b>
<b>Setting the squelch level .....</b>	<b>5-6</b>
<b>Setting the VOX function.....</b>	<b>5-7</b>
<b>Setting the VOX gain.....</b>	<b>5-8</b>

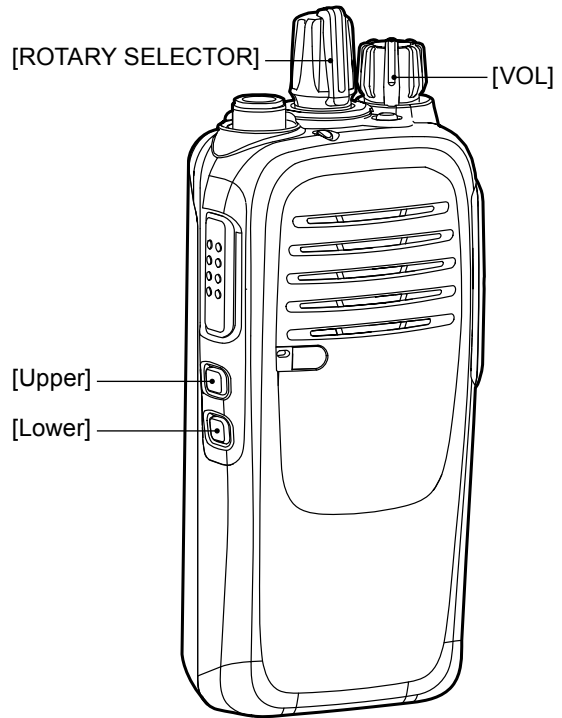
## Setting the Beep function

The Beep function can be turned ON or OFF.

**NOTE:**

You should turn ON the Beep function when you set the Beep level, the Ringer level, the microphone gain, the VOX function, the VOX gain and the squelch level.

- 1) Rotate [VOL] to turn the transceiver power OFF.
- 2) Set [ROTARY SELECTOR] to any channel other than Channel 16.
- 3) While holding down [Lower], rotate [VOL] to turn ON the power to enter the Beep level adjustment mode.
- 4) Push [Lower] to turn the Beep function ON or OFF.
  - When a beep sounds after pushing [Lower], the Beep function is ON. When no beep sounds after pushing [Lower], the Beep function is OFF.
  - The transceiver stores the setting every time you change it.
  - If desired, push [Upper] to adjust the Beep level. See page 5-4 for details.
- 5) Rotate [VOL] to turn OFF the power to exit the Beep level adjustment mode.





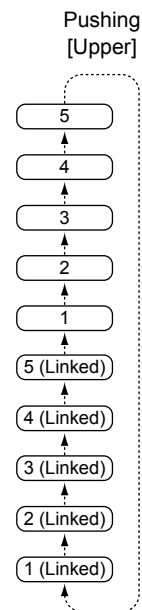
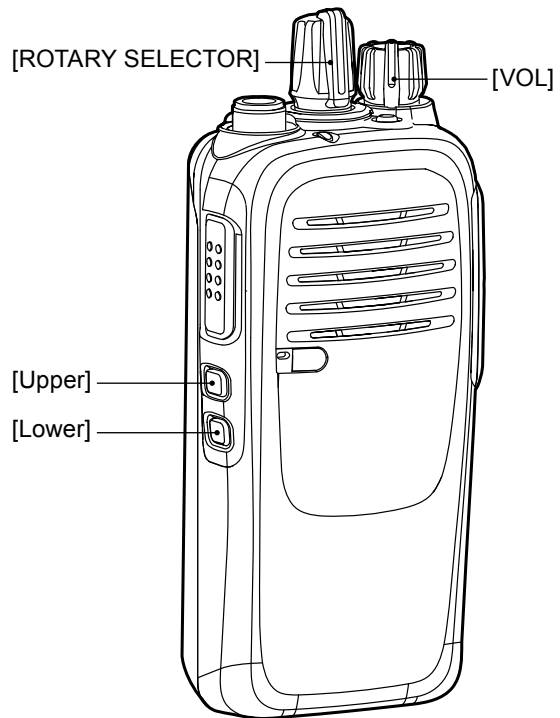
## Setting the Beep level

The Beep level is adjustable between 1 and 5, or 1 (linked) and 5 (linked). When a Linked option is selected, the beep audio level is adjustable by rotating [VOL].

**NOTE:**

You should turn ON the Beep function (p. 5-2) before you start setting the Beep level.

- 1) Rotate [VOL] to turn OFF the transceiver.
- 2) Set [ROTARY SELECTOR] to any channel other than Channel 16.
- 3) While holding down [Lower], rotate [VOL] to turn ON the power and enter the Beep level adjustment mode.
- 4) Push [Upper] to change the Beep level.
  - Repeatedly pushing [Upper] first selects 1 (lowest) to 5 (highest), and then selects the lowest linked level, 1 (Linked) to the highest, 5 (Linked). Repeatedly pushing [Upper] repeats the cycle. See the illustration on the right.
  - The adjustable range is 1 to 5 or 1 (Linked) to 5 (Linked).
  - A beep sounds every time you push [Upper]. Therefore, you can determine the current level setting by the increasing loudness of the beep that sounds.
  - To determine if you have selected a linked level, set [VOL] to minimum, then push [Upper] repeatedly, listening for the loudest beep (level 5). Pushing [Upper] once after the loudest beep will select 1 (Linked). Repeatedly push [Upper] to select the desired linked level.
- 5) Rotate [VOL] to turn OFF the power to exit the Beep level adjustment mode.



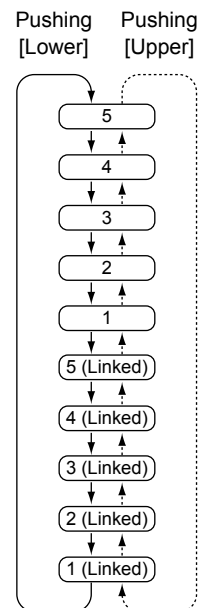
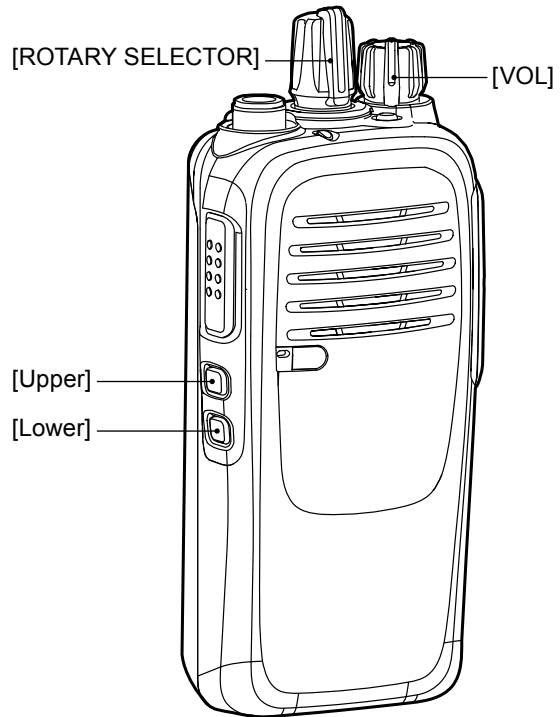
## Setting the Ringer level

The Ringer level can be adjusted between 1 and 5, or 1 (Linked) and 5 (Linked). When a Linked option is selected, the ringer audio level is adjustable by rotating [VOL].

**NOTE:**

You should turn ON the Beep function (p. 5-2) before you start setting the Ringer level.

- 1) Rotate [VOL] to turn OFF the transceiver power.
- 2) Set [ROTARY SELECTOR] to Channel 16.
- 3) While holding down [Lower], rotate [VOL] to turn ON the power and enter the Ringer level adjustment mode.
- 4) Push [Upper] to increase, or push [Lower] to decrease the Ringer level.
  - Repeatedly pushing [Upper] first selects 1 (lowest) to 5 (highest), and then selects the lowest linked level, 1 (Linked) to the highest, 5 (Linked). Repeatedly pushing [Upper] or [Lower] repeats the cycle. See the illustration on the right.
  - The adjustable range is 1 to 5 or 1 (Linked) to 5 (Linked).
  - A beep sounds after pushing [Upper]. Therefore, you can determine the current level setting by the increasing loudness of the beep that sounds.
  - To determine if you have selected a linked level, set [VOL] to minimum, then push [Upper] up to 10 times, listening for the loudest beep (level 5). Pushing [Upper] once after the loudest beep will select 1 (Linked). Repeatedly push [Upper] or [Lower] to select the desired linked level.
- 5) Rotate [VOL] to turn OFF the power to exit the Ringer level adjustment mode.

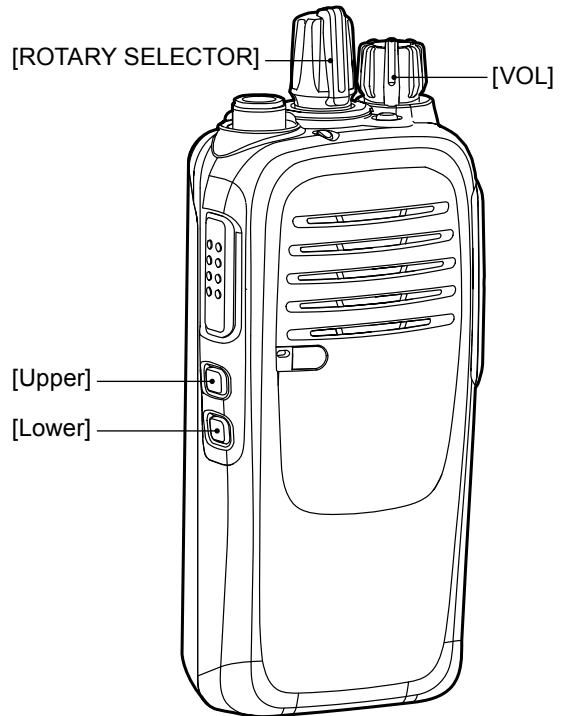


## Setting the microphone gain

Adjust the microphone gain.  
Higher values make the microphone more sensitive to the user voice.

**NOTE:**  
You should turn ON the Beep function (p. 5-2) before you start setting the microphone gain.

- 1) Rotate [VOL] to turn OFF the transceiver power.
- 2) Set [ROTARY SELECTOR] to Channel 16.
- 3) While holding down [Upper], rotate [VOL] to turn ON the power and enter the microphone gain adjustment mode.
- 4) Push [Upper] to increase, or push [Lower] to decrease the microphone gain.
  - The adjustable range is 1 (minimum) to 4 (maximum).
  - A beep sounds after pushing [Upper] or [Lower]. An error beep sounds if you try to exceed the adjustable range.
- 5) Rotate [VOL] to turn OFF the power to exit the microphone gain adjustment mode.



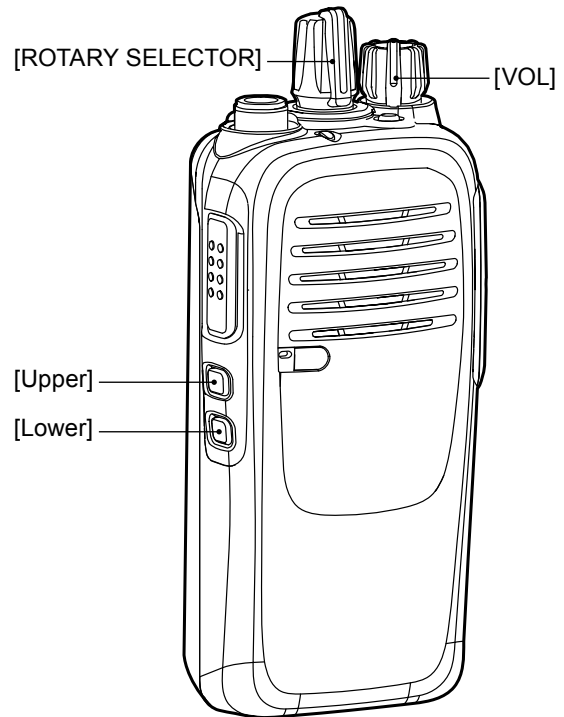
### Setting the squelch level

The squelch circuit mutes the received audio signal, depending on the signal strength.

**NOTE:**

You should turn ON the Beep function (p. 5-2) before you start setting the squelch level.

- 1) Rotate [VOL] to turn OFF the transceiver power.
- 2) Set [ROTARY SELECTOR] to any channel other than Channel 16.
- 3) While holding down [Upper], rotate [VOL] to turn ON the power and enter the squelch level adjustment mode.
- 4) Push [Upper] to increase the squelch level (tight squelch), or push [Lower] to decrease the squelch level (loose squelch).
  - The adjustable range is 0 (loose squelch) to 9 (tight squelch).
  - A beep sounds after pushing [Upper] or [Lower]. An error beep sounds if you try to exceed the adjustable range.
- 5) Rotate [VOL] to turn OFF the power to exit the squelch level adjustment mode.



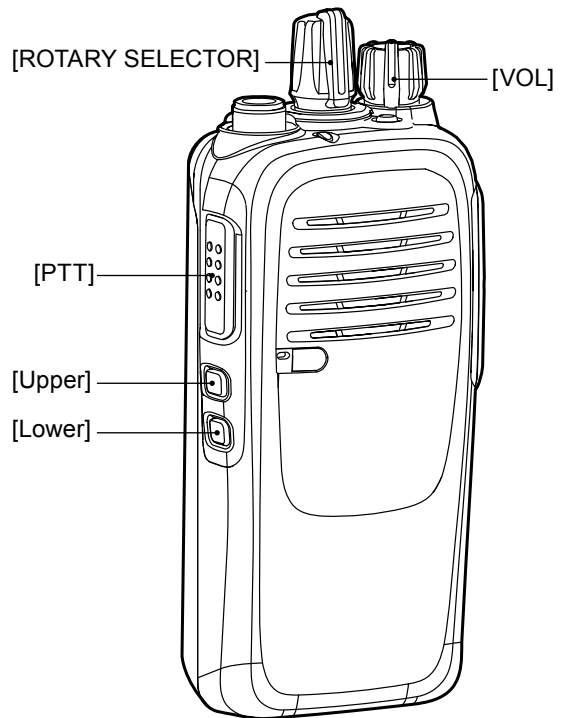
### Setting the VOX function

The VOX function can be turned ON or OFF. The VOX function automatically switches between receive and transmit during voice operation.

**NOTE:**

You should turn ON the Beep function (p. 5-2) before you start setting the VOX function.

- 1) Rotate [VOL] to turn OFF the transceiver power.
- 2) Set [ROTARY SELECTOR] to any channel other than Channel 16.
- 3) While holding down [PTT] and [Upper], rotate [VOL] to turn ON the power, to turn the VOX function ON or OFF.
  - When the VOX function is ON, a beep sounds.
  - When the VOX function is OFF, two beeps sound.
- 4) Rotate [VOL] to turn OFF the power, then turn ON again to restart the normal operation.

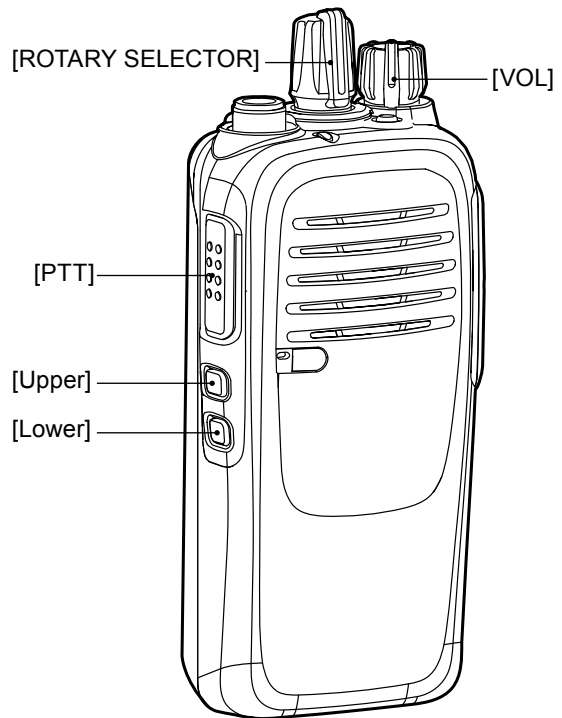


## Setting the VOX gain

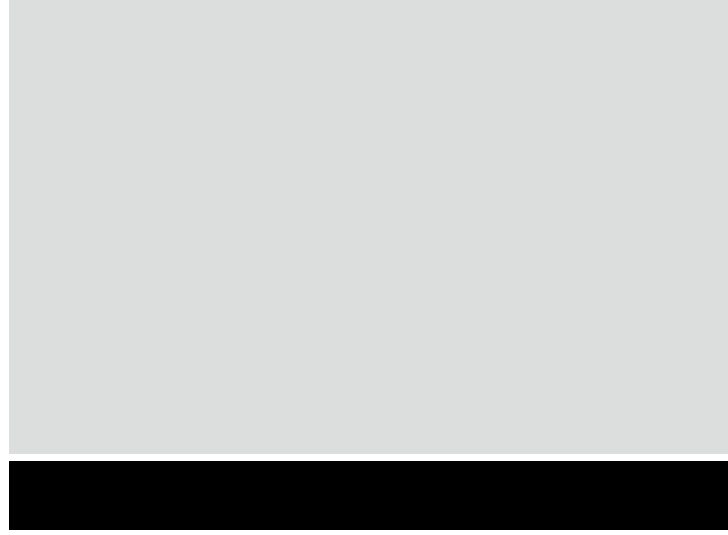
Adjust the VOX gain.  
Higher values make the VOX function more sensitive to the user voice.

**NOTE:**  
You should turn ON the Beep function (p. 5-2) before you start setting the VOX gain.

- 1) Rotate [VOL] to turn OFF the transceiver power.
- 2) Set [ROTARY SELECTOR] to Channel 16.
- 3) While holding down [PTT] and [Upper], rotate [VOL] to turn ON the power and enter the VOX gain adjustment mode.
- 4) Push [Upper] to increase, or push [Lower] to decrease the microphone gain.
  - The adjustable range is 1 (minimum) to 10 (maximum).
  - A beep sounds after pushing [Upper] or [Lower]. An error beep sounds if you try to exceed the adjustable range.
- 5) Rotate [VOL] to turn OFF the power to exit the VOX gain adjustment mode.



**Count on us!**



---

---

---

---

---

---

---

---