

ICOM

# TECH TALK

## Multi-function operation guide

IC-W21A  
IC-W21E

Icom Inc.

## How to expand functions

To activate advanced functions, please learn the operations on this page completely.

### ■ EASY mode and MULTI-FUNCTION mode

The IC-W21A and IC-W21E have an EASY mode and a MULTI-FUNCTION mode.

EASY mode covers all basic functions such as transmitting, receiving, scanning, clock settings, LCD lighting, etc., essential for daily operations.

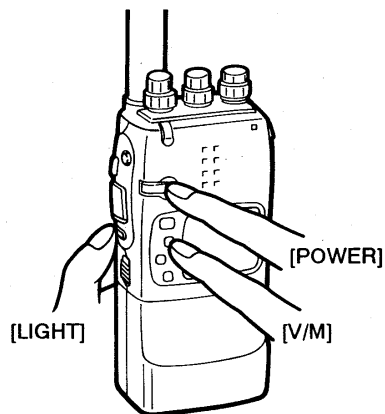
Repeater operation with default settings is also possible. If you program repeater information, including offset frequency and subaudible tone frequency, into memory channels in the MULTI-FUNCTION mode, this information can also be used in the EASY mode.

The MULTI-FUNCTION mode has many advanced functions, such as subaudible tone setting,\* offset frequency setting, timer, memory skip/mask, priority watch, DTMF memories, etc. This Tech Talk gives you information about these functions which is not described in the instruction manual.

\* Optional for non-U.S.A. versions.

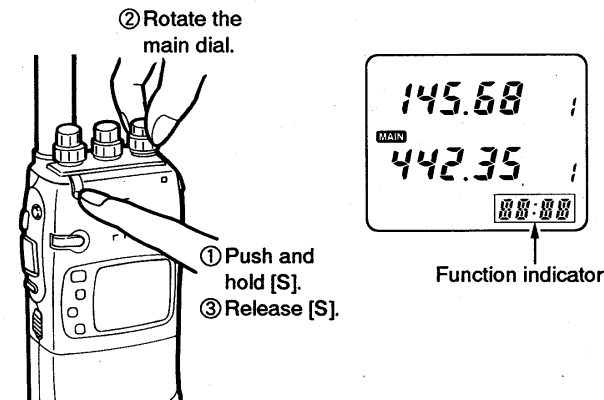
### ■ Entering the MULTI-FUNCTION mode

- ① Turn power OFF.
- ② While pushing [V/M] and [LIGHT], turn power ON.
  - To confirm the transceiver is in the MULTI-FUNCTION mode, the clock indication or "BATT" blinks while pushing and holding [S].



### ■ Selecting a function

- ① Push and hold [S] until the function indicator flashes.
- ② While continuing to push [S], rotate the main dial to select a desired function.
- ③ Release [S].



### ■ Selectable functions

FUNCTION INDICATOR	FUNCTIONS	REF. SECTION
15:00	Time indication	—
SC AN	Scan	1A
DTMF	DTMF memory channels	7
TO NE *	Tone encoder, tone squelch, pocket beep	4, 5
DUP	Duplex set, offset frequency set	6
PGR	Pager, code squelch	15
Pr. W	Priority watch	11
SK IP	Skip channel setting	8, 10
MA SK	Masking a channel	9
TIME	Timer functions	14
SET	SET mode	12
CALL	Call channel	1B
U by U	U by U function	13
BATT	Battery voltage indication	1C

\* An optional UT-63 is necessary for non-U.S.A. versions.

**NOTE:** AI (Artificial Intelligence) in the transceiver automatically memorizes the order of selected functions.

# 1. Different operations in MULTI-FUNCTION mode

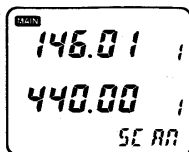
## A Scanning

◇ In the EASY mode:

Push and hold [S] for 1 sec. to start programmed scan or memory scan. See instruction manual for details.

◇ In the MULTI-FUNCTION mode: Select "SCAN" function.

① Select "SCAN" in the function display.



② Select VHF or UHF with [BAND].

③ Select VFO mode for programmed scan; select MEMORY mode for memory scan.

④ Push [S] momentarily to start the scan.

- To change the scanning direction or to skip the paused frequency, rotate [DIAL].

⑤ Push [S] again momentarily to stop the scan.

**NOTE:** In the MULTI-FUNCTION mode, the scan resume condition can be changed using the SET mode. See "12. SET mode" for details.

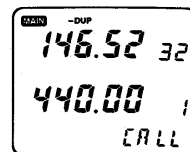
## B Calling up a call channel

◇ In the EASY mode:

Push [S] momentarily to call up a call channel. See instruction manual for details.

◇ In the MULTI-FUNCTION mode: Select "CALL" function.

① Select "CALL" in the function display.



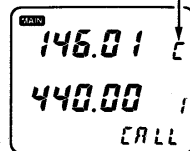
② Select VHF or UHF with [BAND].

③ Push [S] momentarily to call up the call channel.

④ To return to the normal operating mode (VFO or MEMORY), push [S] again momentarily.

Push ↓ [S]

"C" appears.



## C Battery voltage indication

◇ In the EASY mode:

- Push [FUNC] + [S] momentarily if the clock is indicated in the function display.

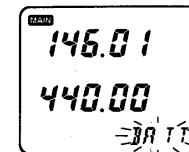
- To reset the reference voltage, push and hold [FUNC] + [S] for 1 sec. while the function display shows the battery voltage.

Select "BATT" function.

◇ In the MULTI-FUNCTION mode:

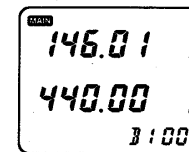
- Select "BATT" in the function display to indicate the battery voltage.

- To reset the reference voltage, push [FUNC] + [S] momentarily while the function display shows the battery voltage.



Release ↓ [S]

Voltage as a % appears.



# 2. Returning to EASY mode

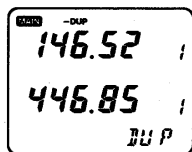
The procedure is the same as for entering the MULTI-FUNCTION mode.

① Turn power OFF.

② While pushing [V/M] and [LIGHT], turn power ON.

- To confirm the transceiver is in the EASY mode, scan starts while pushing and holding [S].

MULTI-FUNCTION MODE



EASY MODE



**NOTE:** When returning to the EASY mode, all modified SET mode contents and VFO conditions (frequency, tuning step) are initialized, however, repeater information programmed in memory channels can be used in the EASY mode.

# 3. Useful functions

## A With an optional HM-75/A

The optional HM-75/A has remote control functions. When using the HM-75/A with the IC-W21A/E, the [A] switch functions as the [BAND] switch, however, the [A] switch can be changed to function as the [S] switch as follows:

◇ Setting the [A] switch as [S]

① Turn power OFF.

② While pushing [FUNC] and [S], turn power ON.

◇ Setting the [A] switch as [BAND] (default setting)

① Turn power OFF.

② While pushing [FUNC] and [BAND], turn power ON.

**NOTE:** The [A] switch setting remains effective even when returning to the EASY mode.

## B Partial resetting

If you want to initialize an operating condition (such as the SET mode contents, etc.) without clearing the memory contents, timer setting or clock, a partial resetting function is available for the IC-W21A/E.

① Turn power OFF.

② While pushing [H/L], turn power ON.

After partial resetting, the transceiver's condition is as follows:

OPERATING CONDITION or MEMORY CONTENTS	AFTER PARTIAL RESETTING
Operating mode	VFO mode
VFO frequency and VFO settings (tuning steps, subaudible tone and offset frequencies)	Initialized
Memory and call channel contents	Unchanged
SET mode contents	Initialized
Clock and timer settings	Unchanged
Pager, code squelch and tone squelch	Cancelled
U by U function	Cancelled

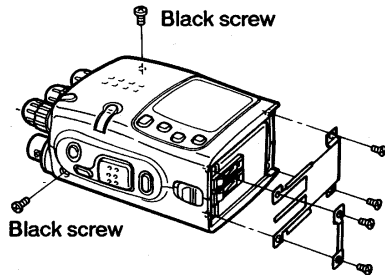
## 4. Optional unit installation

An optional UT-63 TONE SQUELCH UNIT is available for the IC-W21A/E. The UT-63 provides pocket beep, tone squelch and programmable tone encoder functions. The U.S.A. version already includes an equivalent unit.

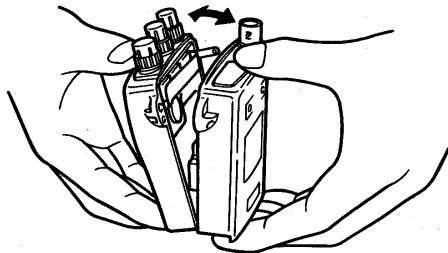
- Turn power OFF, then remove the battery pack or DC power cable.
- Unscrew the 6 screws; then, remove the bottom plates as shown below.

### CAUTION:

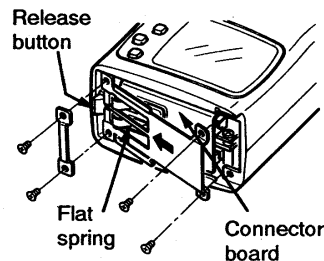
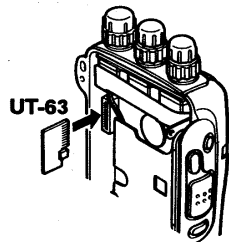
Use a Phillips screw driver that matches the screw size. Otherwise, you may strip the screw head.



- Carefully open the front and rear panels as shown below.
  - DO NOT lose the battery pack release button.



- Plug in the UT-63.
- Be sure not to unplug the connector board.
- Insert the flat spring onto the release button; then, reassemble the bottom plates with the 4 remaining screws.



- Reassemble the front and rear panels; then, tighten the 2 black screws as shown in step ②.

## 5. Subaudible tone operations

An optional UT-63 is required for non-U.S.A. versions.

### Pre-operation

While pushing [S], rotate the main dial to select "TONE"; then, select VFO mode for the desired band. To activate pocket beep, be sure to turn pager or code squelch OFF.



### Tone frequency set

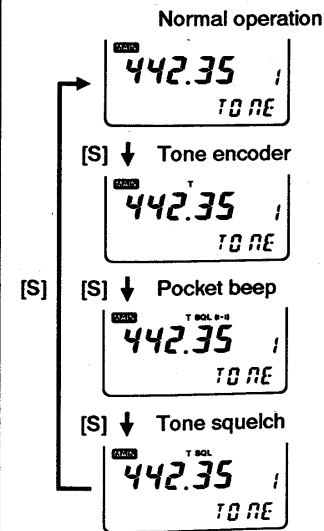
- Push [FUNC] + [S].
  - "T" blinks and a subaudible tone frequency appears.
- Rotate the main dial to select the desired subaudible tone frequency.
- Push [S] or [PTT] to exit the condition.

### Tone function set

- Set a subaudible tone frequency. (See left.)
- Push [S] momentarily to select programmable tone encoder, tone squelch, or pocket beep.

### SUBAUDIBLE TONE FREQUENCIES

67.0 Hz	107.2 Hz	167.9 Hz
71.9 Hz	110.9 Hz	173.8 Hz
74.4 Hz	114.8 Hz	179.9 Hz
77.0 Hz	118.8 Hz	186.2 Hz
79.7 Hz	123.0 Hz	192.8 Hz
82.5 Hz	127.3 Hz	203.5 Hz
85.4 Hz	131.8 Hz	210.7 Hz
88.5 Hz	136.5 Hz	218.1 Hz
91.5 Hz	141.3 Hz	225.7 Hz
94.8 Hz	146.2 Hz	233.6 Hz
97.4 Hz	151.4 Hz	241.8 Hz
100.0 Hz	156.7 Hz	250.3 Hz
103.5 Hz	162.2 Hz	—



### What is the subaudible tone encoder?

Used for accessing a repeater that requires a subaudible tone.

### What is the pocket beep?

When the transceiver receives a subaudible tone that matches the programmed frequency, the transceiver beeps for 30 sec. Even if you are away from the transceiver, "(•)" blinks continuously to alert you on return.

### What is the tone squelch?

Used for quiet standby. The squelch opens only when the transceiver receives a subaudible tone that matches the programmed frequency.

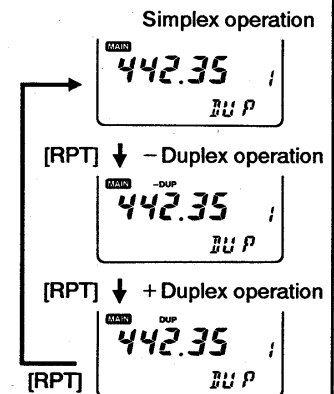
## 6. Duplex operation

### Duplex set

- Push [RPT] to select – duplex or push it again for + duplex.

- When the UT-63 is installed or for the U.S.A. version, "T" appears along with "– DUP" or "DUP." "T" indicates the subaudible tone encoder is ON.

- Push [RPT] until "DUP" disappears to cancel duplex and select simplex.



### NOTE:

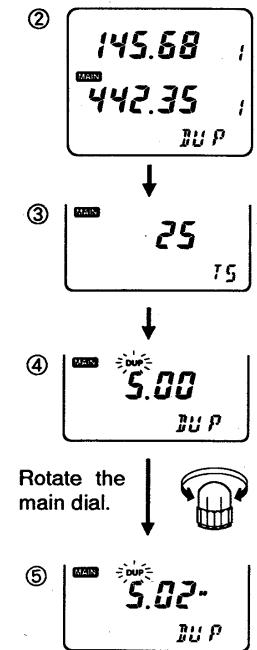
- "– DUP" or "DUP" appears to indicate a minus or a plus shift in the transmit frequency, respectively.
- When "DUP" is selected in the function indicator, the [S] switch also selects the duplex direction. In this case, the subaudible tone encoder is not turned ON or OFF.

### Offset frequency set

- While pushing [S], rotate the main dial to select "DUP."
- Select VFO mode for the desired band.
- Set the tuning step to the repeater tuning step for your area in advance.

- Push [FUNC] + [H/LTS].
- Rotate the main dial to select the tuning step.
- Push [H/LTS] to set the tuning step.

- Push [FUNC] + [S].
  - "DUP" blinks and an offset frequency appears.
- Rotate the main dial to set an offset frequency.
  - Rotating the main dial while pushing [FUNC] changes the frequency in 100 kHz steps.
- Push [S] or [PTT] to exit the setting condition.



## 7. DTMF memory channels

DTMF codes are used for autopatching, accessing repeaters, controlling other equipment, etc. The transceiver has 4 DTMF memory channels (t1~t4) for storage of often-used DTMF codes of up to 15 digits.

### ■ Pre-operation

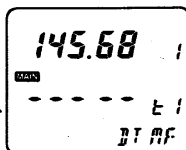
While pushing [S], rotate the main dial to select "DTMF."



### ■ DTMF memory channel selection

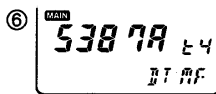
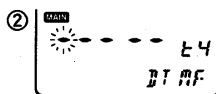
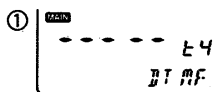
- 1 Push [S].
- 2 Rotate the main dial to select a DTMF memory channel.

**NOTE:** The memory channels are for common use on both bands.



### ■ DTMF code programming

- 1 Select a DTMF memory channel as above.
- 2 Push [FUNC] + [S].
  - The 1st digit blinks.
- 3 Rotate the main dial to select a digit.
  - "E" stands for "\*" and "F" stands for "#."
- 4 Push [S] to set the next digit.
- 5 Repeat ③ and ④ until the last digit is entered.
- 6 Push [FUNC] to program the DTMF code.
- 7 To program another DTMF memory channel, repeat ①~⑥.
- 8 Push [PTT] or [S] to exit the setting condition.
  - When [S] is pushed, the code is displayed and emitted.



### ■ Transmitting a DTMF code

- 1 Select a DTMF memory channel as in "DTMF memory channel selection" above.
- 2 Push [PTT] to exit the condition.
- 3 While pushing [PTT], push [S] to transmit the DTMF code.

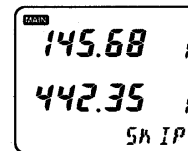
## 8. Skip channel setting

Memory channels can be specified to be skipped for memory skip scan. This is useful to speedup the memory skip scan interval. These skip channels are also skipped during priority watch (memory scan watch) and the frequencies of the channels are skipped during programmed scan.

This setting is effective when the frequency skip function is ON. See "12. SET mode" for details.

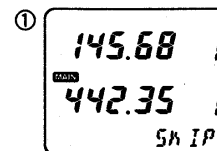
### ■ Pre-operation

While pushing [S], rotate the main dial to select "SKIP."



### ■ Skip channel set

- 1 Select VHF or UHF with [BAND].
- 2 Push [V/M] to select MEMORY mode.
  - "MR" appears.
- 3 Rotate the main dial to select the desired memory channel.
- 4 Push [S] to set or cancel skip information.
  - "SKIP" appears for a skip channel.



**NOTE:** Scan edge channels PA and PB cannot be specified as skip channels.

### ■ Operation after set

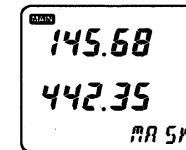
- The skip channels are skipped during memory scan. The skip channel setting is effective when returning to the EASY mode.
- The frequencies of the skip channels are skipped during programmed scan when the frequency skip function is ON. This function cannot use when returning to the EASY mode.

## 9. Masking a channel

Unwanted memory channels can be masked (hidden). A masked memory channel cannot be selected for normal use. The contents of the masked memory, however, can be recalled. See "Recalling a masked channel" below.

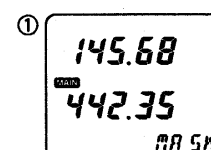
### ■ Pre-operation

While pushing [S], rotate the main dial to select "MASK."



### ■ Mask channel set

- 1 Select VHF or UHF with [BAND].
- 2 Push [V/M] to select MEMORY mode.
- 3 Rotate the main dial to select the memory channel to be masked.
- 4 Push [S] to mask the memory channel.

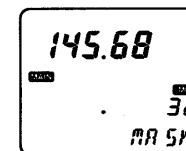


**NOTE:** Memory channel 1 cannot be masked. Scan edge channels PA and PB can be masked, however, these channels are valid for scan edges.

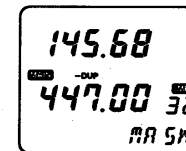


### ■ Recalling a masked channel

- 1 Select VHF or UHF with [BAND].
- 2 Push [V/M] to select MEMORY mode.
- 3 Rotate the main dial while pushing [FUNC] to select a masked memory channel to be recalled.
- 4 Push [S] to recall the memory channel.



Push ↓ [S]



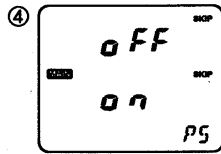
## 10. Frequency skip function

Unwanted frequencies can be skipped during programmed scan. This function is useful, for example, when you wish to skip a repeater frequency which is always accessed.

Turn the frequency skip function ON in SET mode in advance, otherwise the function does not operate. See "12. SET mode" for details.

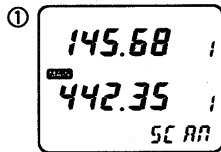
### ■ Pre-operation

- While pushing [S], rotate the main dial to select "SET."
- Push [S] several times until "PS" appears.
- Push [BAND] to select the desired band.
- Rotate the main dial clockwise to turn the frequency skip function ON.
- Push [PTT] to return to the frequency display.



### ■ Skip frequency programming

- While pushing [S], rotate the main dial to select "SCAN."
- Select VHF or UHF with [BAND]; then, select VFO mode.
- Push [S] to start the programmed scan.
- Push [FUNC] + [V/M/MW] for 1 sec. to program the pausing frequency as a skip frequency.
  - The pausing frequency is programmed into a masked channel and the scan resumes.
  - Masked memory channels 32~11 are used in reverse sequence.



Programming memory channel number appears.

#### NOTE:

After programming, the frequencies are skipped during programmed scan or memory scan. If you wish to scan the skip frequencies, cancel the skip information in the memory channel or mask the memory channel. Refer to "8. Skip channel setting" or "9. Masking a channel" for details.

## 11. Priority watch

The priority watch checks for signals on a memory or call channel every 5 sec. while operating on a VFO frequency. The transceiver has 3 priority watch types to suit your needs. You can transmit on the VFO frequency while the priority watch operates.

When receiving a signal, priority watch pauses for 5 sec. (if the signal disappears within 5 sec., the watch resumes).

### ■ Operation

- Select VHF or UHF with [BAND].
- Select VFO mode; then, set an operating frequency.
- Set the watching channel(s).

#### For memory channel watch:

Select the desired memory channel.

#### For memory scan watch:

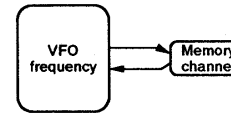
Push [V/M] to select MEMORY mode. While pushing [S], rotate the main dial to select "SCAN"; then, push [S] to start the memory scan.

#### For call channel watch:

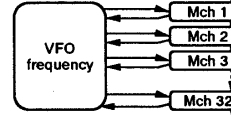
While pushing [S], rotate the main dial to select "CALL"; then, push [S] to select the call channel.

- While pushing [S], rotate the main dial to select "PRIO."
- Push [S].
  - The transceiver receives the memory or call channel frequency every 5 sec.
- Push [S] to return to normal operation.

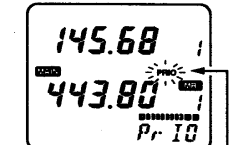
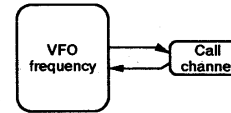
#### Memory channel watch



#### Memory scan watch



#### Call channel watch



While pausing on a memory channel, "PRIO" blinks.

#### NOTE:

- Priority watch does not operate when:
  - The selected memory channel is a masked channel.
  - An optional pager or code squelch function is activated.
- If an optional pocket beep function is activated, the transceiver automatically selects the tone squelch function when priority watch starts.
- A memory channel with skip information can be watched.

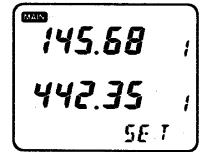
## 12. SET mode

The SET mode is used for programming infrequently changed values or conditions of functions. This transceiver's SET mode has 11 items.

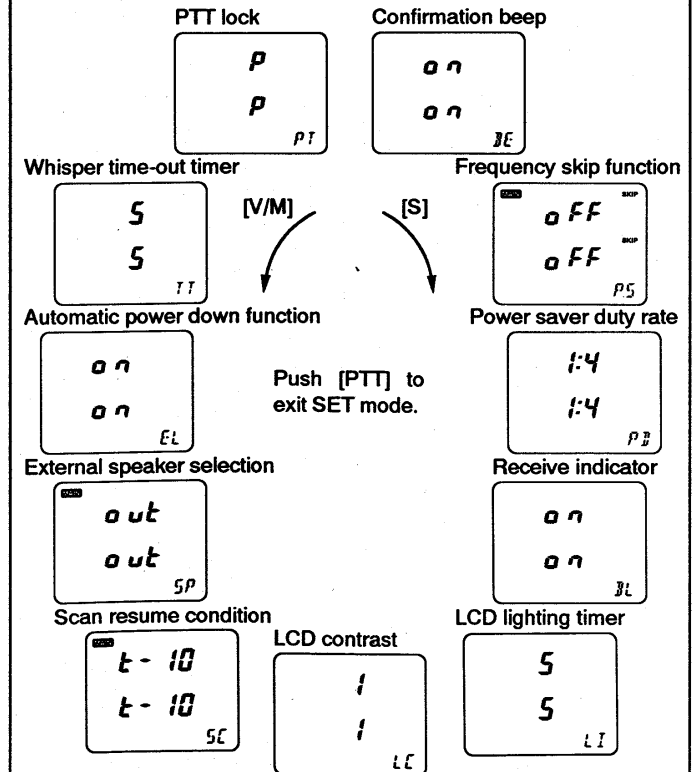
Even if you have set items to your desired values, all settings are reset to the initial values or conditions once you enter the EASY mode. Set the items again when re-entering the MULTI-FUNCTION mode from the EASY mode.

### ■ Pre-operation

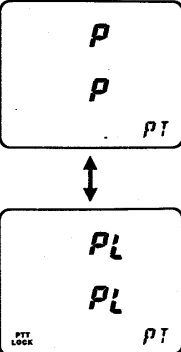
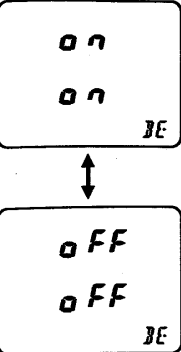
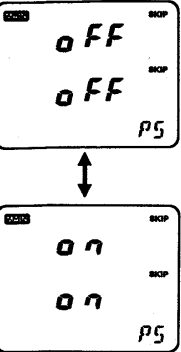
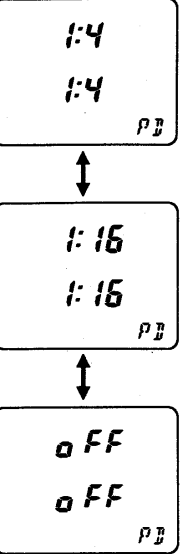
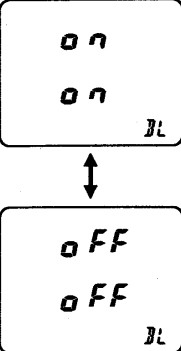
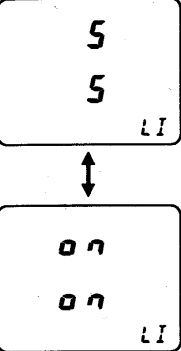
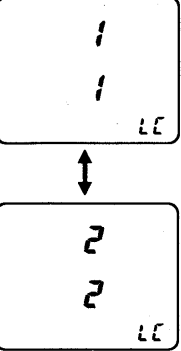
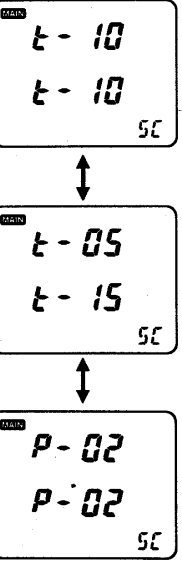
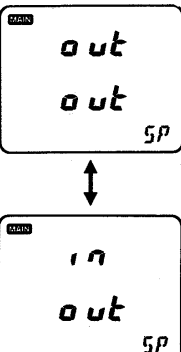
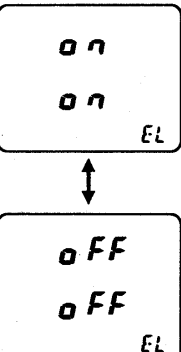
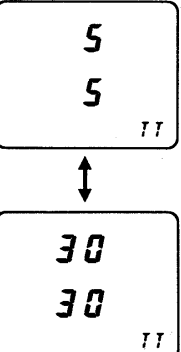
While pushing [S], rotate the main dial to select "SET"; then, push [S] to enter SET mode.



### ■ SET mode construction



NOTE: Some items can be set independently on both bands. Push [BAND] to select the desired band.

<p><b>■ PTT lock</b></p> <p>The PTT lock function locks the PTT switch electronically to prevent accidental transmission.</p> <p>When PTT is pushed with the PTT lock ON, a beep tone sounds to indicate transmission is impossible. The whisper function can be used even when the PTT lock function is in use.</p> <p>"PT" appears.</p> 	<p><b>■ Confirmation beep</b></p> <p>A beep sounds each time a switch is pushed to confirm it. This confirmation beep can be turned OFF for silent operation.</p> <p>"BE" appears.</p>  <p><b>NOTE:</b> Even if the confirmation beep is OFF, the auto power-off, timer and pager/code squelch beeps still sound.</p>	<p><b>■ Frequency skip function</b></p> <p>The frequency skip function can be ignored even when skip channels are programmed.</p> <p>This item can be set separately for each band.</p> <p>"PS" appears.</p> 	<p><b>■ Power saver duty rate</b></p> <p>The power saver function reduces the current flow for battery conservation. The duty rate can be selected from 1:4, 1:16 or OFF.</p> <p>"PD" appears.</p>  <p>◇ <b>Duty cycle 1:4</b> The function repeatedly turns the receiver circuit ON and OFF as follows: • Circuit on : 125 msec; Circuit off : 500 msec.</p> <p>◇ <b>Duty cycle 1:16</b> The function repeatedly turns the receiver circuit ON and OFF as follows: • Circuit on : 125 msec; Circuit off : 2 sec.</p>
<p><b>■ Receive Indicator (busy lamp)</b></p> <p>The receive indicator lights up in green when the squelch opens. This receive indicator can be turned OFF to save battery power.</p> <p>"BL" appears.</p>  <p><b>NOTE:</b> The transmit indicator lights while transmitting even when the receive indicator is turned OFF.</p>	<p><b>■ LCD lighting timer</b></p> <p>The LCD lighting has a 5 sec. timer. This timer can be turned OFF for continuous lighting such as during nighttime external power operation.</p> <p>"LI" appears.</p>  <p><b>NOTE:</b> Continuous lighting remains activated even when the power is turned OFF and ON again.</p>	<p><b>■ LCD contrast</b></p> <p>The LCD contrast can be selected from 2 levels (1 and 2) for your preference.</p> <p>Select a suitable level depending on the ambient light.</p> <ul style="list-style-type: none"> <li>• Level 2 is higher contrast.</li> </ul> <p>"LC" appears.</p> 	<p><b>■ Scan resume condition</b></p> <p>The scan resume condition can be selected as a pause scan or timer scan. This item can be set separately for each band.</p> <ul style="list-style-type: none"> <li>• This setting is not related to priority watch.</li> </ul> <p>"SC" appears.</p>  <p>◇ <b>Timer scan (t-05, t-10, t-15)</b> When the operating scan detects a signal, the scan resumes after pausing on the frequency for 5, 10 or 15 sec.</p> <p>◇ <b>Pause scan (P-02)</b> When the operating scan detects a signal, the scan pauses on the frequency until the signal disappears and resumes 2 sec. later.</p>
<p><b>■ External speaker selection</b></p> <p>When an external speaker is connected, audio of each band can be selected to external speaker or the internal speaker.</p> <ul style="list-style-type: none"> <li>• "in" appears for internal audio output; "out" appears for external audio output.</li> </ul> <p>This item can be set separately for each band.</p> <p>"SP" appears.</p> 	<p><b>■ Automatic power down function</b></p> <p>The automatic power down function automatically selects "ELOW (15 mW)" as the output power just before the battery becomes exhausted.</p> <p>This function can be turned OFF if desired.</p> <p>"EL" appears.</p> 	<p><b>■ Whisper time-out timer</b></p> <p>To prevent continuous transmission with the optional whisper function, the transceiver has a time-out timer.</p> <p>This timer can be selected from 3 periods (5, 15 and 30 min.) or can be turned OFF if desired.</p> <p>"TT" appears.</p> 	

## 13. U by U function

The transceiver can receive 2 frequencies simultaneously on the UHF band using the U by U function.

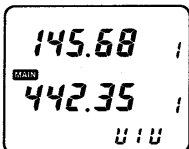
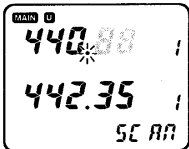
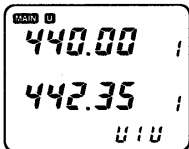
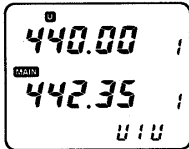
### ■ Pre-operation

While pushing [S], rotate the main dial to select "U/U."



### ■ Operation

- Push [S] to activate the U by U function.
  - "U" appears.
  - VHF band frequency display shows a UHF band frequency.
- Push [BAND] to select the transmit frequency.
  - "MAIN" appears for the transmit frequency display.
  - The receive frequency of the sub band display is muted during main band transmitting.
  - The U by U function still functions even when other functions are activated. (e.g. "SCAN")
- Push [S] after selecting "U/U" display to cancel the U by U function.



### NOTE:

- The optional whisper function cannot be used.
- The upper frequency display cannot use 5 and 15 kHz tuning steps.
- UHF band memory channels and repeater memory are used for both frequency displays.
- Repeater memory cannot be changed while it is indicated on the sub band frequency display.

## 14. Timer functions

### ■ Pre-operation

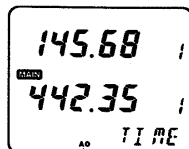
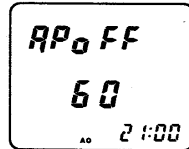
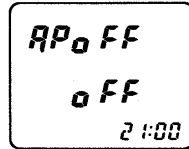
While pushing [S], rotate the main dial until "TIME" appears.



### ■ Auto power-off

When no operation is performed for a specified time, the transceiver automatically turns OFF.

- Push [S] one or more times until "APoFF" appears, to select auto power-off.
  - Pushing [V/M] changes the display in reverse.
- Rotate the main dial to select a power OFF interval time.
  - 20 min., 40 min., 60 min. and oFF can be selected.
- Push [PTT] to return to normal operation.



After a specified time, the transceiver emits 5 beep tones and automatically turns the power OFF.

"AO" appears while the auto power-off function is in use.

**NOTE:** The selected period is retained even after the transceiver is turned OFF by the auto power-off function. To cancel the function, select "oFF" in step ② above.

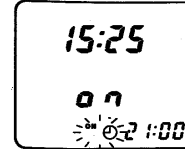
### ■ 3 kinds of timers

The transceiver has an auto power-off, power-on timer and power-off timer. By combining both power-on and power-off timers, the transceiver operates only for a specified period.

### ■ Power-on timer

The power-on timer automatically turns power ON at a specified time.

- Push [S] one or more times until "ON" blinks, to select the power-on timer.
- Rotate the main dial to turn the function ON and OFF.
- Push [FUNC] + [S].
- Rotate the main dial to set the hour. (24-hour system)
- Push [S].
- Rotate the main dial to set the minutes.
- Push [FUNC] to enter the power-on time.
- Push [POWER] to turn the power OFF.



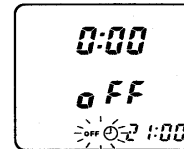
At a specified time, the transceiver automatically turns ON.

**NOTE:** Once power is turned ON by this timer, the power-on timer is automatically cancelled.

### ■ Power-off timer

The power-off timer automatically turns power OFF at a specified time.

- Push [S] one or more times until "OFF" blinks, to select the power-off timer.
- Rotate the main dial to turn the function ON and OFF.
- Push [FUNC] + [S].
- Rotate the main dial to set the hour. (24-hour system)
- Push [S].
- Rotate the main dial to set the minutes.
- Push [FUNC] to enter the power-off time.
- Push [PTT] to return to normal operation.



At a specified time, the transceiver automatically turns OFF.

**NOTE:** Once power is turned OFF by this timer, the power-off timer is automatically cancelled.

# 15. Pager and code squelch operations

## What is the pager function?

The pager function is a selective calling system using DTMF codes. You can call or receive any one or all stations in your group. Use the pager function for calling and the code squelch for communication.

## What is code squelch?

The code squelch function allows communication with quiet standby. You only receive calls from stations which know your ID or group code.

## What are code numbers?

The pager and code squelch functions require 3-digit ID codes and a group code. Before operation, program these 3-digit DTMF codes into the code channels.

## Code channel assignment

ID OR GROUP CODE	CODE CHANNEL NUMBER	RECEIVE ACCEPT OR RECEIVE INHIBIT
Your ID code	C0	"Receive accept" only.
Other party's ID code	C1~C5	"Receive inhibit" should be programmed in each channel.
Group code	One of C1~C5	"Receive accept" must be programmed.
Memory space	CP*	"Receive inhibit" only.

\*When a pager call is received, code channel CP automatically memorizes the ID code of the transmitting station. The contents of the channel cannot be changed manually.

## Receive accept and receive inhibit channels

Code channels C1~C5 should be effectively programmed as receive accept or receive inhibit channels.

### Receive accept channel ("SKIP" is not indicated.)

Accepts calls when the transceiver receives a signal with a code that is the same as that in the code channel.

The code channel that stores the group code should be programmed as receive accept. Otherwise, you cannot receive group calls.

### Receive inhibit channel ("SKIP" is indicated.)

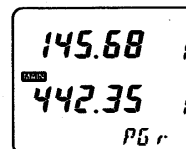
Rejects calls when the transceiver receives a signal with a code that is the same as that in the code channel.

The code channels that store other parties' ID codes should be programmed as receive inhibit. Otherwise, personal calls for other parties are received.

Separate code channels can be programmed for each band.

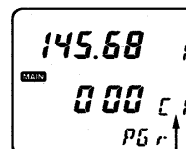
## Pre-operation

While pushing [S], rotate the main dial to select "PGR."



## Code channel selection

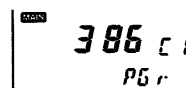
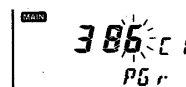
- Select VHF or UHF with [BAND].
- Push [FUNC] + [S].
  - Code memory channel appears.
- Rotate the main dial to select the desired memory channel.
- Push [S] to exit the condition.



Code channel number

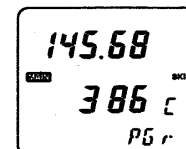
## Code channel programming

- Select the desired code channel as above.
- Push [FUNC] + [S].
  - The 1st digit blinks.
- Rotate the main dial to program a blinking digit.
- Push [S] to select next digit.
- Repeat steps ③ and ④ until the last digit is programmed.
- Push [FUNC] to program the code channel.
- Repeat steps ① ~ ⑥ to program other code channels.
- Push [S] to exit the condition.



## Receive accept/inhibit setting

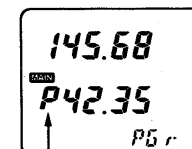
- Select the desired code channel as above.
- Push [V/M] to set the code channel as "receive accept" or "receive inhibit."
  - "SKIP" appears for receive inhibit channels.
- Push [S] to exit the condition.



"SKIP" appears for receive inhibit channels.

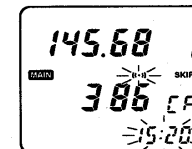
## Calling a specific station

- Select the desired code channel as described at left.
- Push [S] one or more times until "P" appears, in place of the 100 MHz digit, to turn the pager function ON.
- Push [PTT] to transmit the pager code.
- Wait for an answer back.
  - When the transceiver receives an answer back code, the function display shows the other station's ID or group code.
- Push [S] to display the operating frequency. After confirming a connection, push [S] twice to return to normal operation.



"P" appears in place of the 100 MHz digit.

When receiving an answer back call:

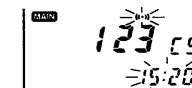


Receiving time blinks.

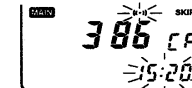
## Waiting for a call from a specific station

- Push [S] one or more times until "P" appears, in place of the 100 MHz digit.
- Wait for a call from specific station.
- When receiving a call, your ID or group code appears and the receiving time blinks.
- Push [PTT] to transmit an answer back call.
- Push [S] twice to return to normal operation.

When called with your group code:  
Group code appears.

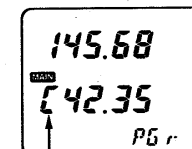


When called with your ID code:  
Other station's ID code appears.



## Code squelch operation

- Select the desired code channel as described at left.
- Push [S] one or more times until "C" appears, in place of the 100 MHz digit.
- Operate the transceiver in the normal way.
- Push [S] once to return to normal operation.



"C" appears in place of the 100 MHz digit.