## COM

# TEGH TALK

Multi-function operation guide

IC-P2A/E

Icom Inc.

## **How to expand functions**

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

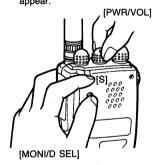
#### STAR SELECTION mode

Icom's sophisticated IC-P2A/E and IC-P4A/E are equipped with a variety of functions that are not described in the instruction manual. This Tech Talk gives you information about them.

When your operating knowledge increases, according to the number of star marks, you can increase the number of available functions. Using STAR SELECTION mode, you can select the operating level, " $\star$ "  $\sim$  " $\star$   $\star$   $\star$   $\star$   $\star$ ," manually.

#### Select STAR SELEC-TION mode

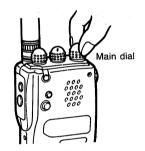
- 1) Turn power OFF.
- 2) While pushing [MONI/D SEL] and [S], turn power ON.
  - "StAr" and "SELECT ME" appear.





## 2 Select the number of star marks

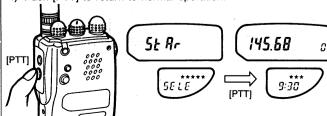
3) Rotate the main dial to select the desired operating level.



**NOTE:** The table at the above right shows the functions available according to the number of star marks.

#### 3 Return to normal operation

4) Push [PTT] to return to normal operation.

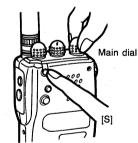


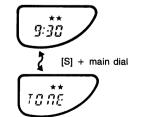
Selectable	e functions	· · · · · · · · · · · · · · · · · · ·
Number of star marks	Small function display	Functions
*	0:00	Time indication
*	SE AN	Scan
*	IUP	Duplex set
**	7.5	Tuning steps
**	TONE	Tone encoder, tone squelch
**	PSr	Pager and code squelch
***	Pr IO	Priority watch
***	Sh IP	Skip/mask set
****	DI ME	DTMF code channels
****	TIME	Timer set
****	5 E T	SET mode
****	5E AN	Frequency skip function

<sup>\*</sup>Appears only when an optional unit is installed.

#### ■ Multi function operations

 To select a desired function in the small function display, while pushing [S], rotate the main dial.





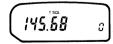
**NOTE:** Al (Artificial Intelligence) in the transceiver automatically memorizes the order of selected functions in the small function display.

2) Push [S] to activate the displayed function.



**Examples:** When "TONE" appears in the small function display,

[S]: Selects optional tone functions.



[FUNC] + [S]: Selects an optional subaudible tone frequency.

**88.5** 10

## Optional unit installation

The following optional units are available for the IC-P2A/E and IC-P4A/E.

- UT-49 DTMF DECODER UNIT
   Provides the pager and code squelch functions.
- UT-50 TONE SQUELCH UNIT
   Provides the pocket beep, tone squelch and programmable tone encoder functions.
- UT-51 PROGRAMMABLE TONE ENCODER UNIT Allows you to access a repeater that requires a subaudible tone.
- 1) Turn power OFF, then remove the battery pack or DC power cable.
- 2) Remove the 4 screws from the rear panel and 2 screws from the bottom.



CAUTION: Use a Phillips screwdriver that matches the screw size. Otherwise, the screws may be damaged.

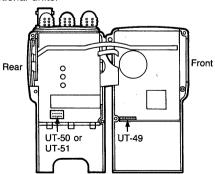
3) Carefully open the transceiver.



CAUTION: BE CAREFUL not to damage flexible cables, as they are fragile.

Support the rear and top panels with one hand while removing the front panel with the other hand.

4) Install optional units.



Reasemble the transceiver.

## Subaudible tone operations

#### Pre-operation

While pushing [S], rotate the main dial unitil "TONE" appears.

Select VFO mode.



An optional UT-50 or UT-51 is required.

#### Tone frequency set

- 1) While pushing [FUNC], push [S].
  - "TO" and a subaudible tone frequency appear.

[ 88.5 TO]

2) Rotate the main dial to select a subaudible tone frequency.

Subaudit	ole tone free	quencies
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	138.5 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	

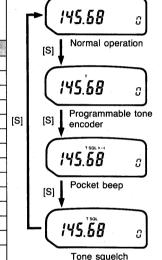
\*For the UT-51 only.

3) push [S] or [PTT].

Set a subaudible tone frequency as described at left.

Tone function set

Push [S] to select programmable tone encoder, tone squelch,\* or pocket beep.\*
 \* An optional UT-50 is required.



– 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. This is not possible with an optional UT-51.

- 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. This is not possible with an optional UT-51.

## Tuning step set

#### ■ Pre-operation

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



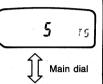
Select VFO mode.

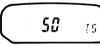
#### Tuning step set

- 1) Push [S].
  - "TS" and a tuning step appear.
- 2) Rotate the main dial to select a tuning step.
  - 5, 10, 12.5, 15, 20, 25, 30 or 50 kHz steps are selectable.
- Push [S] or [PTT] to return to normal operation.

**NOTE:** The selected tuning step is also effective for offset frequency setting.







## Offset frequency set

#### Pre-operation 💮 💮 🥕

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

Select VFO mode.



#### Offset frequency set

- 1) While pushing [FUNC], push [S].
  - "OW" and an offset frequency appear.
- 2) Rotate the main dial to select an offset frequency.
  - While pushing [FUNC], rotate the main dial to select in 100 kHz steps.
- Push [S] or [PTT] to return to normal operation.

**NOTE:** The selected tuning step is effective for offset frequency setting.

Memory channels  $0\sim 9$  independently memorize offset frequencies. Memory channels  $10\sim 99$  use the same offset frequency as the VFO.

.**60** cu





04

60.00

## Pager and code squelch operations

An optional UT-49 DTMF ENCODER/DE-CODER UNIT is required for pager and code squelch functions.

#### 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 squeich?

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 group codes. Before operation, write these 3-digit DTMF codes into the code channels.

Code channel assignment		
ID or group code	Code chan- nel number	Receive accept or receive inhibit
Your ID code	Со	Receive accept only.
Other stations'	C1~C5	Should be programmed as receive inhibit channels.
Group code	One of C1 ~ C5	Should be programmed as a receive accept channel.
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 — Without "SKIP" indicator
 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 — with "SKIP" indicator
 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 stations' ID codes should be programmed as receive inhibit. Otherwise, personal calls for other stations are received.

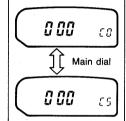
#### Pre-operation

While pushing [S], rotate the main dial until "PGr" appears in the small function display.



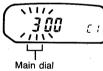
#### Code channel selection

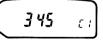
- 1) While pushing [FUNC], push [S].A code channel appears.
- Rotate the main dial to select a desired code channel.
- 3) Push [PTT] to return to normal operation.



#### Code set

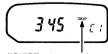
- 1) Select a code channel as above.
- 2) Push [S].
  - The 1st digit blinks.
- Rotate the main dial to program the blinking digit.
- 4) Push [S] to select the next digit.
  - Repeat until all 3 digits are programmed, then push [FUNC].
- 5) Repeat steps 1)~4) for other code channels.
- 6) Push [PTT] to return to normal operation.





#### Receive accept/inhibit set

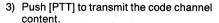
- 1) Select a code channel as above.
- Push [V/M/MW] to set the code channel as receive accept or receive inhibit.
  - Without "SKIP" indicator: Receive accept channel.
  - With "SKIP" indicator. Receive inhibit channel.



"SKIP" appears for a receive inhibit channel.

#### Making a selective call using the pager

- Select a code channel as described at left.
- Push [S] several times until "PGR" appears in the large function display to select the pager function.



- Group code + "\*" + Your ID code are transmitted.
- When an answer back from the standby station is received, push [PTT] to indicate operating frequency.
- Push [S] 2 times to return to normal operation.





- Waiting for a selective call using the pager
- Push [S] several times until "PGR" appears in the large function display to select the pager function.
- 2) When receiving a call:
  - When your ID code is received, channel CP appears.
  - When a group code is received, the group code channel appears.
- 3) Push [PTT] to transmit an answer back.
  - Operating frequency appears.
- 4) Push [S] 2 times to return to normal operation.

## OO I CP

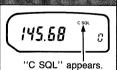
When your ID code isreceived, the other station's ID code appears.



When a group code is received, the receive code appears. The other station's ID code is stored in channel CP.

#### Code squelch operation

- 1) Select a code channel as described at left.
- Push [S] several times until "C SQL" appears to select the code squelch function.
- 3) Operate the transceiver in the normal way.
  - Each time [PTT] is pushed, the selected code is transmitted.
- 4) Push [S] 1 time to return to normal operation.

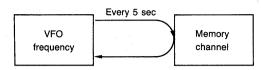


Squelch opens when the following codes are received:

- Code channel C0; your ID code.
- Code channels C1 ~ C5 without "SKIP" indicator; receive accept channels.

## **Priority watch**

The priority watch checks for signals in a memory channel every 5 sec, while operating on a VFO frequency.



#### I Pre-operation

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



#### Priority watch operation

- 1) If "MR" appears, push [V/M/MW] to select VFO mode.
- 2) Select a desired frequency.
- 3) Push [V/M/MW] to select MEMORY mode.
  - · "MR" appears.
- 4) Rotate the main dial to select the desired memory channel to be watched.
- 5) Push IS1.
  - The transceiver receives the selected memory channel frequency every 5 sec.
- 6) Push [S] to return to normal operation.

NOTE: Priority watch does not operate under following conditions:

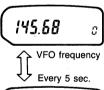
- When the selected memory channel is a masked channel
- When an optional pager or code squelch function is activated.

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 specified.

145 68

144 80



144.80

Memory frequency

## Skip/mask channel setting

#### Skip channel

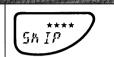
During memory scan, memory channels that inconveniently pause scanning are skipped.

#### Masked channel

For fast recall of often-used channels, seldom-used memory channels can be temporarily hidden.

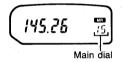
#### Pre-operation

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



#### l Skip channel se

- 1) Push [V/M/MW] to select MEMORY mode.
  - · "MR" appears.
- 2) Rotate the main dial to select a memory channel.



- 3) Push [S] to set or cancel skip information.
  - For a skip channel, "SKIP" appears.



Non-skip channel

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

- 1) Push [M/W/MW] to select MEMORY mode.
  - · "MR" appears.

Mask channel s

2) Rotate the main dial to select a memory channel.



3) While pushing [FUNC], push [S] to mask or unmask the memory channel.



Non-masked channel

NOTE: Memory channel 0 cannot be masked.

#### Operation after set

- Skip and masked channels are skipped during memory scan.
- Selected skip and mask information is effective for "★"~ " $\star \star \star \star \star$ " conditions.

#### **DTMF** code channels

The transceiver has 16 DTMF code channels for autopatching, etc. Each DTMF code channel stores up to a 15-digit code.

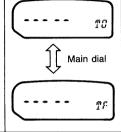
#### ■ Pre-operation

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



#### DTMF code channel selection

- 1) Push [S].
- 2) Rotate the main dial to select a DTMF code channel.
  - 16 DTMF code channels, T0~T9 and TA~TF are available



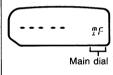
#### DTMF code programming

- 1) Select a DTMF code channel as above
- 2) While pushing [FUNC], push [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 select the next digit.
  - . Once [S] is pushed, the previous digit cannot be changed.
- 5) Repeat steps 3) and 4) until the last digit blinks.
- 6) After the last digit is selected, push [FUNC] to write the DTMF code.
- 7) Push [PTT] to return to normal operation.

#### ■ DTMF code transmitting

- 1) Select a DTMF code channel as above.
- 2) Push [PTT] to return to normal operation.
- 3) While pushing [PTT], push [S] to transmit a DTMF code.

NOTE: When the transceiver begins DTMF code transmission, you need not hold [PTT] continuously.









## Timer functions

#### Pre-operation

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



#### 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.

#### ■ Timer selection \*\*

Push [S] to select a desired timer function.

- · Timer functions appear in the following order.

"AO" → "ON" →

"OF" → "AO"...

Power-on timer

o FF

Auto power-off

nn

an

ΩF

Power-off timer

#### Auto power-off

When no signal is received and no operation is performed, after a specified time, the transceiver automatically turns OFF.

- 1) Push [S] several times until "AO" appears to select auto power-off.
- 2) Rotate the main dial to select a power OFF interval time.
- 3) Push [PTT] to return to normal operation.

After a specified time. the transceiver emits 4 beep tones and auto matically turns the power OFF.

a FF





"AO" appears.

20. 40 or 60 min. are selectable. Select "oFF" to cancel auto power-off.

#### Power-on timer

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

0:00

° (1) \*\*\*\*

t ĭ me

'ON" appears.

an

an

- 1) Push [S] several times until "ON" appears to select the power-on timer.
- 2) Rotate the main dial clockwise.
- 3) While pushing [FUNC], push IV/M/MW1.
- 4) Rotate the main dial to select the hour digits.
- 5) Push [S].
- 6) Rotate the main dial to select the minute digits.
- 7) While pushing [FUNC], push [S] to start the power-on timer.
  - The transceiver turns OFF.

At a specified time, the transceiver automatically turns ON.

145.68

Main dial

NOTE: To turn the transceiver ON after the power-on timer is activated, turn the power OFF, then ON using [PWR/VOL].

To cancel the power-on timer setting, rotate the main dial counterclockwise in step 2) above.

#### Power-off timer

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

0:00

ĬME

"OFF" appears.

Main dial

Main dia

- 1) Push [S] several times until "OF" appears to select the power-off timer.
- 2) Rotate the main dial clockwise.
- 3) While pushing [FUNC], push [V/M/MW].
- 4) Rotate the main dial to select the hour digits.
- 5) Push [S].
- 6) Rotate the main dial to select the minute digits.
- 7) Push [FUNC] to confirm the power-off timer.
- 8) Push [PTT] to return to normal operation.

At a specified time, the transceiver automatically turns OFF.

NOTE: When the transceiver automatically turned OFF as above, turn the power OFF, then ON using [PWR/VOL].

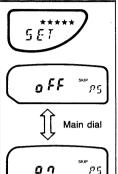
To cancel the power-off timer setting, rotate the main dial counterclockwise in step 2) above.

## Frequency skip function

This function allows you to skip unwanted frequencies that inconveniently pause scanning.

#### ■ Pre-operation

- 1) While pushing [S], rotate the main dial until "SET" appears.
- 2) Push [S] several times until "PS" appears.
- 3) Rotate the main dial to select "on" to activate the skip function.
  - "on" : Frequency skip function is activated.
  - "oFF": Frequency skip function is inhibited.
- 4) Push [PTT] to return to normal operation.



SE AN

Skip frequencies can be programmed while full scan or programmed scan is pausing.



- described above.
- 2) While pushing [S], rotate the main dial until "SCAN" appears.
- 3) Start full scan or programmed scan.
  - Push [S] to start full scan.
  - While pushing [FUNC], push [S] to start programmed scan.
  - · "SKIP" blinks.
- 4) When scanning pauses on an unwanted frequency, while pushing [FUNC], push [V/M/MW] until the transceiver emits 3 beep tones.

NOTE: The unwanted frequencies are programmed as skip channels into memory channels 99~10.

#### ■ Cancelling of skip information

If you wish to scan the skip frequencies again, cancel the skip information in the memory channels.

Refer to "skip/mask channel setting" for details.



## SET mode



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

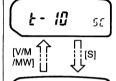
Select VFO mode.



#### Content selection

- 1) If "MR" appears, push [V/M/MW] to select VFO mode.
- 2) Push [S] several times to select the desired SET mode content.
- 3) When a SET mode content appears, push [V/M/MW] to select the previous SET mode content.
  - · SET mode contents appear in the large function display in the following order.
  - "PT"  $\leftrightarrow$  "BE"  $\leftrightarrow$  "PS"  $\leftrightarrow$  "PD"  $\leftrightarrow$ "BL" ↔ "LI" ↔ "LC" ↔ "SC" ↔
  - "PT"...

## 145.68



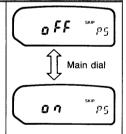
27

## nn $g_F$ Main dial

"BE" appears.

#### Condition selection

Rotate the main dial to select the desired condition for the content.



#### Content confirmation

Push [PTT] to confirm the content and return to normal operation.

145.68

#### Operation after settings

Using SET mode, select desired settings as shown at right. Specified conditions are effective for 1 ~ 5 star marks, "\dagger" ~ "\dagger \dagger \dagger \dagger \dagger ."

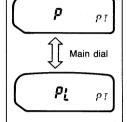
#### SET mode contents

Upper conditions are the default settings before shipping from from

#### PTT Lock "PT" appears.

To prevent accidental transmission, [PTT] can be electronically locked.

: Transmission is possible. "PL" : Transmission is inhibited.

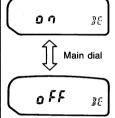


#### Beep tone ON/OFF

The transceiver emits a beep tone each time a switch is pushed. For silent operation. beep tone can be turned OFF.

"on" : Emits beep tones.

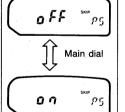
"oFF": Does not emit beep tones.



#### Frequency skip function ON/OFF "PS" appears.

The frequency skip function can be inhibited even when you program skip channels.

"on" : Frequency skip function is effective. "oFF": Frequency skip function is inhibited.

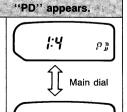


#### Power saver duty cycle

To conserve battery power, the power saver function alternately switches from standby to circuit OFF conditions. The ratio of the duty cycle for standby and circuit-off conditions can be selected. For packet radio operation, cancel the power saver function.

"1:4" : Standby : Circuit-off = 1 : 4 "1:16": Standby: Circuit-off = 1:16

"oFF": Cancels the power saver function.



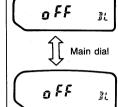
1:15

#### Receive indicator (busy light)

The receive indicator can be turned OFF to conserve battery power, if you prefer.

"on" : Receive indicator lights up.

"oFF": Receive indicator does not light up.



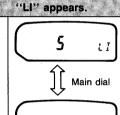
"BL" appears.

#### Light switch function

The function display lighting is selectable: automatically turning OFF with a 5 sec. timer, or continuously lighting up until manually turned OFF.

: 5 sec. timer.

: Continuously lights up.



o o

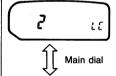
"LC" appears.

#### **Function display contrast**

The function display contrast level can be changed in 4 steps.

: Lightest.

: Heaviest.





#### Scan resume condition

While receiving a signal, the scan or priority watch pauses according to the following conditions:

"t-10": Pauses 10 sec. while receiving a signal. "t-05": Pauses 5 sec. while receiving a signal.

"P-02": Pauses until the signal disappears and then resumes 2 sec. after that.



"SC" appears.



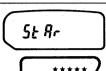
50

## Operation example

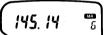
According to your convenience, a variety of operations are possible.

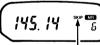
Even when 1 star mark, "\*" is selected, you can perform memory scan effectively using the memory skip function.

- 1) While pushing [S] and [MONI/D SEL], turn power ON to select STAR SELEC-TION mode.
  - . "StAr" and "SELECT ME" appear.
- 2) Rotate the main dial to select 4 or 5 star marks, " $\star$   $\star$   $\star$   $\star$ " or " $\star$   $\star$   $\star$   $\star$   $\star$ ."
- 3) Push [PTT] to return to normal operation.
- 4) While pushing [S], rotate the main dial until "SKIP" appears.
- 5) Push [V/M/MW] to select MEMORY mode.
  - "MR" appears.
- 6) Rotate the main dial to select a memory channel.
- 7) Push [S] to specify the memory channel as a skip channel.
  - · "SKIP" appears.
- 8) Repeat steps 6) and 7) to specify other skip channels.
- 9) Turn power OFF.
- 10) While pushing [S] and [MONI/D SEL], turn power ON to select STAR SELEC-TION mode.
- 11) Rotate the main dial to select 1 star mark. "★."
- 12) Push [PTT] to return to normal operation.
- 13) While pushing [S], rotate the main dial until "SCAN" appears.
- 14) Push [S] to activate the memory scan function.
  - · During memory scan, skip channels are skipped.









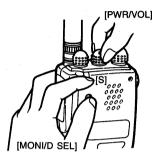
"SKIP" appears for a skip channel.

## 1 star mark selection

There are 2 ways to select 1 star mark, "★."

#### Lising STAR SELECTION mode

- 1) Turn power OFF.
- 2) While pushing [S] and [MONI/D SEL], turn power ON.



- 3) Rotate the main dial counterclockwise to select 1 star mark, "★."
- 4) Push [PTT] to return to normal operation.



NOTE: All settings are effective even when 1 star mark. "+" is selected.

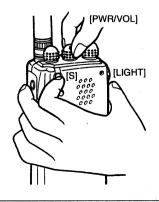
When an optional UT-49, UT-50 or UT-51 is installed, the lowest selectable level is 2 star marks, "★ ★."





#### While turning power ON

- 1) Turn power OFF.
- 2) While pushing [S] and [LIGHT], turn pow-
  - 1 star mark, "★" appears.



#### **CAUTION:** When this operation is performed:

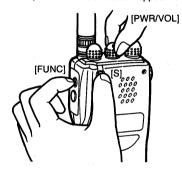
- Memory channels 10~99 become masked channels, and cannot be recalled.
- All SET mode contents return to default values.
- Tuning step returns to default value.
- Optional UT-49, UT-50 and UT-51 functions cannot be used.



### **Previous star marks**

When 1 star mark, "★" is selected while turning power ON, the previously-selected number of star marks. "\* \* "~" \* \* \* \* \* " can be selected easily.

- 1) Turn power OFF.
- 2) While pushing [S] and [FUNC], turn power ON.
  - . The previously-selected number of star marks, " $\star$  \*"~" $\star$  \*  $\star$  \* \* " appear.



number of star marks.

Previously-selected



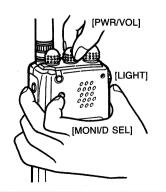
NOTE: Previous SET mode contents and tuning step cannot be revived.

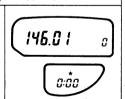
## **CPU** reset

**CAUTION:** Resetting the CPU clears all programmed contents such as memory channels, time, etc.

If you cannot operate advanced functions, before attempting CPU reset, select 1 star mark, "\*" using star selection mode as described at left. Then, try again from the beginning of Tech Talk.

- 1) Turn power OFF.
- 2) While pushing [LIGHT] and [MONI/D SEL], turn power ON.





VFO frequency after resetting

IC-P2A/E			
U.S.A., Australia	146.01 MHz		
Others	145.00 MHz		
IC-P	4A/E		
USA	440.00 MHz		



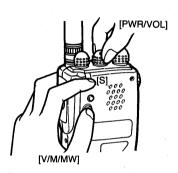
## Automatic level selection using TRIAL mode

#### I What is TRIAL mode?

The transceiver can automatically evaluate your operating level through a series of questions listed at right. Select TRIAL mode for automatic level evaluation.

#### 11 How to select TRIAL mode

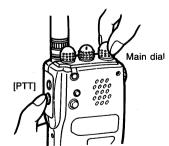
- 1) Turn power OFF.
- 2) While pushing [V/M/MW] and [S], turn power ON to select TRIAL mode.
  - "Q01" appears and "triAL" blinks.



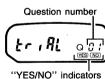


#### 2 YES/NO entry

- 3) Rotate the main dial to answer "YES" or "NO" for the trial mode questions as shown at right.
  - "YES" : Counterclockwise.
  - "NO" : Clockwise.



- 4) Push [PTT] to enter your answer.
  - · Next question number appears.
- 5) Repeat steps 3) and 4) until all 15 questions are answered.



NOTE: Either "YES" or "NO" appears.

When IPTTI is pushed after Q15, the transceiver automatically evaluates your operating level, "★"~



#### Amateur radio knowledge evaluation

Let the transceiver evaluate your operating knowledge through the following questions.

Based on your operating knowledge and preference, the number of star marks, "\*"~"\*\*\*\*," is automatically selected. Functions that are not considered necessary for you are hidden.

Do you agree with the following statements? (Yes or No.)

- Frequency is measured in Hz.
- You usually use a transceiver for contact with your friends only.
- You often use a repeater.
- You usually use less than 10 memory channels.
- You like to be punctual.
- You have to read p. 2 of the instruction manual for this transceiver.
- Transmit power is measured in µV.
- You are not confident of your memory.
- Q10 You usually keep an "operating guide" together with your transceiver
- Q11 YL in amateur radio language means a young lady.
- Q12 Your operating frequency is usually fixed.
- Q13 You often participate in scheduled QSO's.
- Q14 This is your first experience using 2~5 star mark, "★★"~ " $\star \star \star \star \star$ ," functions.
- Q15 You have a small-head Phillips screwdriver which can open the rear panel of this transceiver.

The number of star marks shows your amateur radio level.

**NOTE:** Please understand this is a kind of game. The results may differ from your actual operating level.

When an optional UT-49, UT-50 or UT-51 is installed, the lowest level becomes 2 star marks, "★★."

#### Operating style evaluation

This is just a game. You may learn something about your operating style through the following questions.

Do you agree with the following statements? (Yes or No)

- Do you watch a frequency before transmitting?
- Do you usually operate in FM mode only?
- Do you QSO at your leisure?
- Are you afraid of pileups?
- Are you well known on your local ham net?
- If a frequency you select is occupied, do you move to another?
- Do you prefer local rag chew to DX QSO?
- Do you think that HF operations are basic to the ham world?
- Is it difficult to operate most functions in your transceiver without reading the instruction manual?
- Q10 Do you wish to own a ham shack for operation?
- Q11 If an emergency call is received, do you guit ordinary QSO?
- Q12 Do you get nervous when transmitting CQ?
- Q13 In SSB mode, can you hear voice signals easily?
- Q14 Do you have less than 2 antennas in your home?
- Q15 Is your limit for Morse code copy more than 16 words/min.?

****	Try to be a DXCC honor role member and the highest-class DX'er.
***	You are a domestic award hunter.
***	Portable operation on a mountain or on a beach with many transceivers and antennas is suitable for you.
**	You should try mobile operation on VHF and UHF bands.
*	You should begin from ham world "ABC" using a handheld.

**NOTE:** After you enjoyed the game, the number of star marks is changed. Select previous number of star marks using STAR SELECTION mode.

Check out the game leaflet named "Self evaluation using trial mode" for the IC-P2AT/ET and IC-P4AT/ET. The game leaflet is available from your Icom Dealer.