# O NAVIGATION GUIDE

# VHF AIR BAND TRANSCEIVERS

Thank you for choosing this Icom product. **READ ALL INSTRUCTIONS** carefully and completely before using this product.

## Bluetooth<sup>®</sup> OPERATION

## ♦ Operating Bluetooth<sup>®</sup>

The IC-A25N and IC-A25NE have a built-in Bluetooth unit. You can connect Bluetooth headsets, or other Bluetooth devices to use some of navigation functions.

The communication range of Bluetooth is approximately 10 meters (33 ft).



## NOTE:

- The Bluetooth communication range may vary, depending on the environment where you operate the device.
- The key beep sound may distorts when using the transceiver with a Bluetooth headset. Reduce the key beep level to prevent the distortion.
   (MENUL > Sounds Settings > Beep)
- ([MENU] > Sounds Settings > Beep)
- You cannot switch the optional VS-3 Bluetooth headset to other devices, if the VOX level is set to 6. ([MENU] > Radio Settings > VOX Level)

## ♦ Electromagnetic Interference

When you use a Bluetooth device, pay attention to the following:

Bluetooth devices operate in the 2.4 GHz band. The 2.4 GHz band is also used by other devices, such as Wireless LAN products, microwave ovens, RFID systems, amateur radio stations, and so on.

When using this device near such devices, interference may occur, causing a decrease in communication speed, and an unstable connection.

In such cases, use this device away from the other devices, or stop using those devices.

## ♦ Pairing with a device

You can pair Bluetooth headsets and data devices to the transceiver, as shown below:

- A maximum of 5 Bluetooth headsets and data devices.
- A maximum of 2 Low Energy (LE) devices.

 ${\rm \textcircled{O}}$  These instructions describe pairing with the VS-3 Bluetooth  ${\rm \textcircled{B}}$  HEADSET, as an example.

## 1. Turning ON the transceiver's Bluetooth function

- 1. Push [MENU].
- Select "Bluetooth Set," and then push [ENT]. (Bluetooth > Settings > Bluetooth Set)
- 3. Select "ON," and then push [ENT].
- 4. Push [MENU] to return to the Main screen.

## 2. Entering the VS-3 Pairing mode

Refer to the VS-3's instruction manual for details.

## 3. Pairing and connecting the Bluetooth headset

- 1. Push [MENU].
- Select "Search Device," and then push [ENT]. (Bluetooth > Pairing/Connect > Search Device)
   The transceiver cannot search for a new headset or device if it is connected with more than 2 headsets or devices.
- 3. Select "Headset."
- The transceiver searches for a headset.
   ①Push [CLR] to cancel searching.
- 4. Select the headset to pair, and then push [ENT].
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  - ①A passkey or PIN code may be required to pair, depending on the headset or device. Refer to your headset or device's instructions for details.
  - The headset or device name changes to its Bluetooth device address in 5 seconds.



Push [MENU] to return to the Main screen.
 "\$" is displayed if the headset or device is correctly connected.

## ♦ Pairing with a Low Energy device

Pair a Low Energy (LE) device, as shown below.

- 1. Push [MENU].
- Select "LE Device," and then push [ENT]. (Bluetooth > Pairing/Connect > Search Device > LE Device)
- Perform pairing from the LE device within 2 minutes.
   The remaining time is displayed.



## Oisconnecting a paired device

You can disconnect a paired Bluetooth device if it is not used.

- 1. Push [MENU].
- Select "Pairing/Connect." (Bluetooth > Pairing/Connect)
   Paired devices are displayed.
   ① "(Connect)" is displayed, if a device is connected.

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Search Device	•
ICOM BT-002 (Connect)	Þ
pills, Phone	•

 Select a device to disconnect, and then push [ENT].
 The screen as shown to the right is

Ξ	ICOM BT-002	Ξ
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4. Push [ENT].\*

displayed.

- \*A confirmation dialog is displayed.
- 5. Push [MENU] to return to the Main screen.

## ♦ Unpairing a device

Before unpairing a connected headset or device, disconnect it.

- 1. Push [MENU].
- Select "Pairing/Connect." (Bluetooth > Pairing/Connect)
   Paired devices are displayed.
- Select a device to disconnect, and then push [ENT].
   The screen as shown to the right is displayed.



- 4. Select "Unpair," and then push [ENT].\* \*A confirmation dialog is displayed.
- 5. Push [MENU] to return to the Main screen.

## ♦ Bluetooth settings

You can customize the Bluetooth settings on the "Settings" screen. Refer to The FULL MANUAL for details. ([MENU] > Bluetooth > **Settings**)



## **KEYS USED FOR NAVIGATION FUNCTION**

Push [F], and then push another key to use the secondary functions listed below.



OMNI BEARING SELECTOR [1]/[OBS] Push to enter the Omni Bearing Selector (OBS) mode, to

2 TO/FROM SELECTOR KEY [2]/[TO FROM]

- Push to change the "TO/FROM" indicator and invert the OBS setting on the Course Deviation Indicator (CDI) screen.
- WAYPOINT NAVIGATION KEY [4]/[WPT NAV] Push to display the Waypoint Navigation screen.\* \*Only when a waypoint or a flight plan is selected.
- ④ DIRECT-TO KEY [5]/[→→] Push to display the "Direct-To WPT" screen, to enter a waypoint.
- FLIGHT PLAN KEY [6]/[FPL] Push to display the current flight plan.\* \*Only when a flight plan is selected.

## ♦ Course Deviation Indicator (CDI) screen

The transceiver displays the CDI screen when the NAV band frequency is selected.



- COMPASS ROSE
- **O** COURSE DEVIATION NEEDLE
- Displayed when a VOR signal is received.
- **O** DEVIATION MARKS
- OBS VALUE INDICATOR
  - Displays the course heading.
- **6 VOR VALUE INDICATOR** Displays the heading to or from a VOR.
- **G** TO/FROM INDICATOR

## ♦ Using the Omni Bearing Selector (OBS)

Use the Omni Bearing Selector, as shown below, to set the course heading.

 Push [F], and then push [OBS] to enter the OBS mode.
 The OBS value is highlighted.



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2. Rotate [DIAL], or push keypad keys to set the course heading.



## ♦ Flying to a VOR station

Select a VOR station's frequency.
 The CDI screen is displayed.



- Push [F], and then push [OBS] to enter the OBS mode.
   The OBS value is highlighted.
  - The Course deviation is displayed, as shown to the right.



- 3. Push [ENT].
- Confirm the TO/FROM indicator displays "TO."
   ①If "FROM" is displayed, push [F],
  - ① If "FROM" is displayed, push [F], and then push [TO FROM] to display "TO."



5. Maintain the heading that the Course Deviation Needle comes to the center of CDI.

**NOTE:** The IC-A25N and IC-A25NE's VOR Navigation features are supplemental aids to navigation only, and are not intended to be a substitute for primary VOR navigation equipment.

## WAYPOINT NAVIGATION

The transceiver assists you to navigate to the selected destination, or follow your flight plan.

The function works only when the transceiver's GPS receiver is receiving valid GPS signals from satellites.

## ♦ Waypoint Navigation screen

The transceiver has 2 types of Waypoint Navigation screens, as shown below. You can change the screen type on the "Navigation Style" screen.

([MENU] > WPT Navigation > Settings > Navigation Style).



······Navigation area ·····

#### O Icon Area

Refer to the BASIC MANUAL for details.

#### **O** Navigation Area

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Displays the waypoint name.

- () "mu" is displayed, when a waypoint is selected from a flight plan.
- () "D' Manual WPT " is displayed, when the waypoint is manually
- selected.

#### ETE INDICATOR 18:08

Displays the Estimated Time Enroute (ETE).

#### 

Displays the Speed Over Ground (SOG).

#### DISTANCE INDICATOR DEST 25km

Displays the distance to the destination.

RANGE INDICATOR [and 601m] (For only the Normal screen) Displays the display range.

#### GPS ICON 🛧

- · Displayed when valid position data is received.
- Blinks while searching for satellites or calculating position data.

#### HEADING INDICATOR 342 (For only the Normal screen) Displays your heading.

DESTINATION ICON ■ (For only the Normal screen) Displays the destination.

## ♦ Selecting a waypoint

The transceiver assists you to navigate to a selected waypoint.

Select a waypoint to use as a destination, as shown to the right.

## O Selecting a waypoint from the memory

- 1. Push [F], and then push [-→] to display the "Direct-To WPT" screen.
- Select "Select Memory," and then push [ENT].
   The "Group List" screen is displayed.
- Select a group, and then push [ENT].
   Waypoints saved in the selected group are listed.
- 4. Select a waypoint, and then push [ENT].
   The "Course To" screen is displayed.\*
- Enter the course, and then push [ENT].\*
   The Waypoint Navigation screen is displayed.

#### O Selecting a waypoint from a flight plan

- 1. Push [F], and then push [-→-] to display the "Direct-To WPT" screen.
- Select "Flight Plan," and then push [ENT].
   The "Flight Plan" screen is displayed.
- Select a flight plan, and then push [ENT].
   Waypoints included in the selected flight plan are displayed.
- Select a waypoint, and then push [ENT].
  The "Course To" screen is displayed.\*
- Enter the course, and then push [ENT].\*
   The Waypoint Navigation screen is displayed.

## O Selecting a waypoint near your position

- 1. Push [F], and then push [-→-] to display the "Direct-To WPT" screen.
- Select "Near Waypoint," and then push [ENT].
   The transceiver searches for waypoints.
   The "Near Waypoint" screen is displayed, if waypoint
  - The "Near Waypoint" screen is displayed, if waypoints are found.
- Select a waypoint, and then push [ENT].
   The "Course To" screen is displayed.\*
- Enter the course, and then push [ENT].\*
   The Waypoint Navigation screen is displayed.

#### O Setting a waypoint manually

- 1. Push [F], and then push [→) to display the "Direct-To WPT" screen.
- Select "Manual Entry," and then push [ENT].
   The "Latitude" screen is displayed.
- Enter the latitude, and then push [ENT].
   The "Longitude" screen is displayed.
- 4. Enter the longitude, and then push [ENT].
   The "Magnetic Vari" screen is displayed.
- Enter the magnetic variation, and then push [ENT].
   The "Course To" screen is displayed.\*
- Enter the course, and then push [ENT].\*
   The Waypoint Navigation screen is displayed.

#### O Selecting a waypoint from history

- 1. Push [F], and then push [-→] to display the "Direct-To WPT" screen.
- Select "History," and then push [ENT].
   The "History" screen is displayed.
- Select a waypoint, and then push [ENT].
   The "Course To" screen is displayed.\*
- Enter the course, and then push [ENT].\*
   The Waypoint Navigation screen is displayed.

\*The course entry is required only when the CDI type Navigation screen is selected.

**NOTE:** IC-A25N and IC-A25NE's Waypoint Navigation features are supplemental aids to navigation only, and are not intended to be a substitute for primary Waypoint Navigation equipment.

## Count on us!