Enjoy D-STAR Communication
More Actively and More Comfortably

Terminal Mode and Access Point Mode
Flexible Installation
Intuitive User Interface

Full dot-matrix LCD  Bluetooth®  GPS  iOS™/Android™ Apps
Compact, User-Friendly VHF/UHF Dual Bander
Offers a Variety of Operating Styles

**DV GATEWAY FUNCTIONS**

Terminal Mode and Access Point Mode
Expand Communication Coverage and Fun

Terminal and Access Point modes* enable you to enjoy long-distance D-STAR (Digital Smart Technology for Amateur Radio) communication through the Internet. You can access the D-STAR repeater network through the Internet, regardless of locations and conditions of nearby repeaters.

By connecting the ID-4100A to the Internet through a Windows® PC or Android™ device, the Terminal mode enables you to use a D-STAR repeater to make D-STAR gateway calls.

Access Point Mode
The Access Point mode enables another D-STAR transceiver to make D-STAR gateway calls through the ID-4100A connected to the Internet. 50 watts of output power can be used for a D-STAR access point.

Flexible Installation
Compact, Detachable Controller for Flexible Installation

The controller can be attached or detached from the main unit for flexible installation. By using the supplied OPC-837 control-cable, you can install the controller up to 3.5 meters (11.5 ft) away from the main unit.

User Friendly

**DR (D-STAR Repeater) Function**

The DR function makes D-STAR communications simple. By simply selecting a destination call sign in “To”, and your access repeater in “From”, you can talk with other D-STAR users. In addition, using the reflector function, you can talk through several repeaters at once.

**Easy-to-Read Full Dot-Matrix Display**

To increase the amount of display information, a full dot-matrix display is used in the ID-4100A. For example, Repeater list or GPS position information are clearly arranged and easy to read.

**DV/FM Near Repeater Search Function**

The DV/FM near repeater search function assists you in accessing nearby repeaters, even in areas you are visiting for the first time. The function searches for nearby repeaters using the repeater memories with the GPS position information.

Smart Operation
Advanced Operation with a Smart device and Bluetooth®

**Applications for iOS™ and Android™ devices**

The RS-MS11 (for iOS® devices) and RS-MS1A (for Android™ devices) enable you to wirelessly connect to the ID-4100A and remotely set the DR functions, link with a map application, and send/receive messages over the DV mode. In addition, pictures taken by a smart device can be transmitted via the DV Fast Data mode or DV mode.

* The optional UT-137 Bluetooth® unit must be installed in the ID-4100A. Some functions may not work properly, depending on smart devices used.

**Wireless Operation with VS-3 Bluetooth® Headset**

The ID-4100A includes the VS-3 Bluetooth® headset with three programmable buttons. The headset provides convenient wireless communication away from the transceiver. The VS-3 remotely controls the ID-4100A with three programmable buttons.

**Selectable LCD and Key Backlight Color**

The backlight color of the LCD and keys is selectable from white, green, amber or blue. Using the backlight night time setting function, the display backlight brightness can be automatically changed when the designated time comes.

Select microSD Card Slot for Voice and Data Storage*

When used with a microSD card, you can store various information including voice memory, TX voice message, QSO log, RX history log and GPS log data. Memory channels and other settings can be saved and loaded into the transceiver.

* A microSD card is required separately.

**Integrated GPS Receiver**

The integrated GPS receiver shows your own position, course, speed and altitude on the display and can be used for exchanging position reports, D-PRS and searching for nearby repeaters.

**Wideband Receiver**

The ID-4100A receives 118–174 and 230–550 MHz. You can listen to air band, marine, weather channels* and other VHF and UHF utility communications.

* Working range not guaranteed. * USA version only.

**Other Features**

- The QUICK key allows instant access to menus listing dedicated functions depending on mode
- Multiple scan functions for Memory/Blank scan, Full scan, Band scan, Program scan, Program link scan, Duplex scan Tone scan and DR scan
- 16 channels of DTMF memory (24-digit)
- CTCSS/DTCS signaling with the split tone functions (analog mode)
- 8.33 kHz air band channel reception
- Auto repeater function (USA version only)
- HM-207S remote-control hand microphone (supplied as standard)
Compact, User-Friendly VHF/UHF Dual Bander Offers a Variety of Operating Styles

DV GATEWAY FUNCTIONS

Terminal Mode and Access Point Mode Expand Communication Coverage and Fun

Terminal and Access Point modes* enable you to enjoy long-distance D-STAR (Digital Smart Technology for Amateur Radio) communication through the Internet. You can access the D-STAR repeater network through the Internet, regardless of locations and conditions of nearby repeaters.

* An optional free-download software, RS-MGW is required to be installed in the PC. An optional free-download application, RS-MISA is required to be installed in the Android™ device.

Terminal Mode

By connecting the ID-4100A to the Internet through a Windows® PC or Android™ device, the Terminal mode enables you to use a D-STAR repeater to make D-STAR gateway calls.

Access Point Mode

The Access Point mode enables another D-STAR transceiver to make D-STAR gateway calls through the Internet 50 watts of output power can be used for a D-STAR access point.

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Compact, Detachable Controller for Flexible Installation

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User Friendly

DR Function with the Latest Icom User Interface

DR (D-STAR Repeater) Function

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DV/FM Near Repeater Search Function

The DV/FM near repeater search function assists you in accessing nearby repeaters, even in areas you are visiting for the first time. The function searches for nearby repeaters using the repeater memories with the GPS position information.

* To use the near repeater search function, the position data of the repeater is required. The ID-4100A will be shipped with the D-STAR repeater memories preprogrammed, but the position data of some D-STAR repeaters may not be entered or used.

Smart Operation

Advanced Operation with a Smart device and Bluetooth®

Applications for iOS™ and Android™ devices*

The RS-MS11 (for iOS® devices) and RS-MS1A (for Android™ devices) enable you to wirelessly connect to the ID-4100A and remotely set the DR functions, link with a map application and send/receive messages over the DV mode. In addition, pictures taken by a smart device can be transmitted via the DV Fast Data mode or DV mode.

* The optional UT-137 Bluetooth® unit must be installed in the ID-4100A. Some functions may not work properly, depending on the smart device used.

Wireless Operation with VS-3 Bluetooth® Headset*

The optional VS-3 Bluetooth® headset provides convenient wireless communication away from the transceiver. The VS-3 remotely controls the ID-4100A with three programmable buttons.

* An optional free download software, RS-MS3W is required to be installed in the PC. An optional free download application, RS-MS3A is required to be installed, in the Android™ device.

Selectable LCD and Key Backlight Color

The backlight color of the LCD and keys is selectable from white, green, amber or blue. Using the backlight night time setting function, the display backlight brightness can automatically be changed when the designated time comes.

Other Features

* The QUICK key allows instant access to menus listing dedicated functions depending on mode.
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VHF/UHF DUAL BAND DIGITAL TRANSCEIVER

ID-4100A

**SPECIFICATIONS**

**GENERAL**

- **Frequency coverage:**
  - **Version**
    - USA: 144–148, 430–450 MHz
    - Export: 136–174, 400–470 MHz
  - **Guaranteed range:** 144–148, 430–450 MHz
- **Type of emission:** F2D, F3E, F7W
- **Mode:** DV, FM, FM-N, AM (RX only), AM-N (RX only)
- **Operating temperature range:** –10°C to +60°C, 14°F to +140°F
- **Frequency stability:** ±2.5 ppm (–10°C to +60°C on the basis of 25°C)
- **Antenna impedance:** 50 Ω (SO-239)
- **Number of memory channels:** 1000 regular channels, 4 call channels, 50 program scan edges, 1500 repeater memories and 300 GPS memory
- **Power supply requirement:** 13.8 V DC ±15%

**TRANSMITTER**

- **Current drain (approximate) Tx/Rx:** 13.0 A
- **Dimensions:**
  - Main unit + Controller: 150 × 40 × 171.9 mm; 5.9 × 1.6 × 6.8 in
  - Controller: 120 × 22 × 29.9 mm; 4.7 × 0.8 × 1.2 in

**RECEIVER**

- **Intermediate frequencies:** 46.35 MHz/1450 kHz (1st/2nd)
- **Sensitivity FM, FM-N, DV:** Less than 0.18 μV (amateur bands at 12 dB SINAD), Less than 0.22 μV (at 1% BER)
- **Selectivity FM-FM/N, DV:** More than 60 dB/55 dB, More than 50 dB
- **Audio output power:** More than 2 W (10% distortion, 8 Ω load)
- **External speaker connector:** 2 conductor 3.5 (d) mm (1/8 inch), (WxHxD. Projections are not included.)

**Recevier sensitivity (Except amateur bands.)**

<table>
<thead>
<tr>
<th>Frequency Range</th>
<th>Sensitivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>137–159.995 MHz</td>
<td>Less than 0.32 μV</td>
</tr>
<tr>
<td>160–174.000 MHz</td>
<td>Less than 0.32 μV</td>
</tr>
<tr>
<td>230–259.995 MHz</td>
<td>Less than 1.8 μV</td>
</tr>
<tr>
<td>320–374.995 MHz</td>
<td>Less than 0.56 μV</td>
</tr>
<tr>
<td>400–499.995 MHz</td>
<td>Less than 0.56 μV</td>
</tr>
<tr>
<td>500–550.000 MHz</td>
<td>Less than 0.56 μV</td>
</tr>
<tr>
<td>118–136.991 MHz</td>
<td>Less than 1.0 μV</td>
</tr>
<tr>
<td>260–321.995 MHz</td>
<td>Less than 1.8 μV</td>
</tr>
</tbody>
</table>

**SOFTWARES FOR Android/PC**

- **RS-MS1A:** Remote control application for Android™
- **RS-MS1A:** Remote control application for iOS™
- **RS-MS3W:** Terminal/AP mode software for Windows® PC
- **CS-4100:** Programming software for Windows® PC

**SOFTWARES FOR Android/PC**

- **CS-4100:** Programming software for Windows® PC

**Software/Application Comparison Chart**

<table>
<thead>
<tr>
<th>Software/App</th>
<th>OS</th>
<th>Function</th>
<th>Required option</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS-MS1A</td>
<td>Android™ 4.0 or later</td>
<td>Terminal/AP mode software for Windows® PC</td>
<td>MBA-8</td>
</tr>
<tr>
<td>CS-4100</td>
<td>Windows® 7 or later</td>
<td>Terminal/AP mode software for Windows® PC</td>
<td>MBA-8</td>
</tr>
<tr>
<td>OPC-1516</td>
<td>Windows® 7 or later</td>
<td>Programming</td>
<td>MBA-8</td>
</tr>
</tbody>
</table>

**Options**

- **Hand microphones:**
  - HM-232: Noise canceling
  - HM-209: Active noise canceling
  - HM-207S: Voice activated noise canceling

- **Controller extension cable:**
  - OPC-1516: 3.5 m (11.4 ft) with a modular connector

- **Microphone extension cables:**
  - OPC-440: 5 m (16.4 ft)
  - OPC-447: 2.5 m (8.2 ft)

- **Data communication cables:**
  - OPC-23S0LU: USB cable for connection with an Android™ device or a PC.

**Other options**

- **RS-2S2:** 232 data communication cable for PC.
- **OPC-1528R:** Microphone adapter cable for use with a 8-pin microphone.

**All stated specifications are subject to change without notice or obligation.**

**Supplied Accessories**

- Hand microphone, HM-207S
- DC power cable, OPC-354B
- Microphone hanger
- Spare fuse

**Note for the Terminal mode and Access point mode:**

- An Internet IP connection is necessary for a PC (Windows®) or Android™ device. (Either a dynamic or static IP address can be used.) Before you set up the Access point, check any regulations or laws in your country.
- Only one D-STAR transceiver can transmit through an Access point at a time. For the Access point or Terminal mode operation, you must register your MY and Access point call signs with a Gateway operator/server that has the RS-PSIP installed.

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