ICOM

HF/VHF/UHF ALL MODE TRANSCEIVER
IC-7100

Intuitive Touch Screen, Quick Response, Multi-band Radio

HF/50/70/144/430MHz
Finger Touch Operation with Innovative Design
Intuitive Touch Screen, Quick Response, Multi-band Radio

Finger Touch Operation

Intuitive Touch Screen Interface
The innovative touch screen interface provides quick and smooth operation for setting and editing various functions and memories.

One Touch Selection
For example, if you want to change the operating band, tap the frequency on the display. The band keys will be shown to select the operating band. Touching the multi-function meter indicator for 1 second will quickly change the transmit meter functions.

Straight Forward Operation
Just tap the mode, filter, function etc, you need to change. The touch screen responds naturally, changing your settings.

Software Keypad
Entering frequency, callsign or editing memory channels has never been this easy. The software keypad on the touch screen allows you to input alphanumeric characters incredibly quickly.

Innovative Design

Touch Screen Control Portal
The radio control head features a large, multi-function, “touch screen” dot-matrix LCD display that is positioned for easy view and operation. The controller is compact in size, making it ideal for limited vehicle or desktop space.

Resistive Touch Screen
The 48.6×75.9 mm large resistive touch screen display can be operated even while wearing gloves.

Controller Mounted Speaker and Jacks
The unique remote head design is perfect for providing loud, clear audio as well as jacks for an external speaker/headphones as well as a key and microphone.
HF/50/70/144/430MHz Multi-band, Multi-mode

The IC-7100 fully covers the HF, 50, 70, 144, 430 MHz amateur bands in multiple modes, providing 100W on HF/50MHz bands, 50W on 70/144MHz bands and 35W on 430MHz band.

Digital Features Controlled by the IF DSP

A high-performance 32-bit floating point IF DSP delivers rich digital signal processing features, including digital IF filter, digital twin PBT, noise reduction, CW auto tune, etc. Those digital features work on all bands from HF to V/UHF bands.

DSP Controlled AGC Function Loop

The digital signal processing is incorporated into the AGC function loop. The results of signal processing provide feedback to the AGC function. The AGC function works on the intended signal and produces a constant audio output. The AGC time constants are flexibly adjustable from slow, middle, fast (or AGC off) for each operating mode.

D-STAR Ready (Digital Voice + Data)

The IC-7100 provides D-STAR (Digital Smart Technology for Amateur Radio) DV mode digital voice and low speed data communication.

DR (D-STAR Repeater) Mode Operation

The DR mode operation makes the D-STAR operation simple and straightforward, even if you are new to D-STAR operation.

Near Repeater Function

With an external, 3rd party GPS*, search the internal database based on your location.

* External GPS receiver or manual data input required.

SD Memory Card Slot for Saving Data

When used with an SD card, the SD card can store various contents including voice memory, memory channels, D-STAR repeater memories and other personal settings can be saved to the SD card and can be loaded to the transceiver.

Easy Vehicle Mounting with Optional MBF-1

The combination of the optional MBF-1 suction cup mounting base and MBA-1 controller bracket provides easy tilt and swivel adjustments for mobile operation. The large suction cup can mount to dashboards or other flat surfaces and can be removed easily.

Optional RS-BA1 IP Remote Control Software

The optional RS-BA1 software allows you to operate the IC-7100 from a remote PC over the Internet or local home network.

Built-in RTTY Functions

The built-in RTTY decoder allows you to instantly read an RTTY message on the display. No external TNC or PC required for reading. The eight RTTY memories can memorize and transmit often used RTTY sentences. The RTTY memory is 70 character per memory channel.

Other Features

- CW full break-in, CW receive reverse, CW auto tuning
- Optional multi-function microphone, HM-151
- Band scope and SWR graphic display
- RF speech compressor controlled by the DSP
- Voice memory function
- Multi-function Meter
- 995 regular, 4 call, 6 scan edge and 900 DR mode repeater channels
- 4 channels TX voice memories
- ±0.5ppm frequency stability
- Auto reply function*
- Digital call sign squelch and digital code squelch*
- 12kHz IF output for DRM (Digital Radio Mondiale) receive

* D-STAR DV mode only
HF/VHF/UHF ALL MODE TRANSCEIVER

SPECIFICATIONS

**HF/VHF/UHF ALL MODE TRANSCEIVER**

- **Mode**: USB, LSB, CW, RTTY, AM, FM, WFM, IF and RTTY.
- **No of memory channels**: 450 regular, 4 call. 6 scan edges, 900 D-STAR repeater channels.
- **Antenna connector**: SO-239x2 one each for HF/50/70MHz and 144/443MHz, 50Ω.
- **Operating Temp. range**: -10°C to +60°C
- **Frequency stability** (at 13.8V DC): ±0.025ppm (50/70MHz), ±0.03ppm (144MHz), ±0.05ppm (430MHz)
- **Power supply requirement**: 13.8V DC ±15%
- **Current drain**: 1.6–15W

**SPECIFICATIONS**

**TRANSMITTER**

- **Output power (at 13.8V DC)**: HF/50/70MHz: 150W, 100W, 50W, 5W, 1W, RF through on 144MHz.
- **Frequency coverage (Unit: MHz)**:
  - HF/50/70MHz: 1.8–30MHz
  - 144MHz: 144.000–144.995MHz
  - 430MHz: 430.000–430.995MHz

**RECEIVER**

- **Sensitivity (HF/50/70MHz)**: 0.5μV (28–29.7MHz)
- **IF distortion** (except 1/2 IF through on 50/70MHz, IF through on 144MHz)
- **Spurious and image rejection ratio**: More than 70dB (HF/50/70MHz), More than 65dB (144/430MHz)
- **Unwanted sideband rejection**: More than 50dB
- **Frequency stability** (at 13.8V DC): ±0.025ppm (50/70MHz), ±0.03ppm (144MHz), ±0.05ppm (430MHz)
- **Antenna connector**: SO-239x2 one each for HF/50/70MHz and 144/443MHz, 50Ω.

**SPEAKER**

- **SP-35**

**OPTIONS**

- **PS-126**: DC POWER SUPPLY
  - 13.8V DC, 25A max.

- **AH-740**: HF/50/70MHz AUTOMATIC ANTENNA TUNNER
  - Covers 2.5–50MHz w/ a 7m (23ft) or longer wire antenna.
  - Covers 7.5–45MHz: Use w/ AH-94.

- **AH-4**: AUTOMATIC TUNNING RANGE:
  - Covers 2.5–30MHz: Larmat band, D-STAR is required.

- **AT-180**: HF/50/70MHz AUTOMATIC ANTENNA TUNNER
  - AH-5NV NSIS KIT

- **SP-35 EXTERNAL MICROPHONE**
  - HAND MICROPHONES

- **HM-63**: Compact type
  - HM-103: Remote control microphone
  - HM-107: Same as supplied

- **IC-PW810UF**: HF/50/70MHz HF LINEAR AMPLIFIER

- **Optionals**
  - **PS-126**: DC POWER SUPPLY
  - **AH-740**: HF/50/70MHz AUTOMATIC ANTENNA TUNNER
  - **AH-4**: AUTOMATIC TUNNING RANGE:

- **DESKTOP MICROPHONES**
  - **SM-50**: Dynamic mic
  - **SM-30**: Condenser

- **Mounting Brackets**
  - **MB-62**: Mounting bracket for the main unit
  - **MB-1**: Mounting base for the controller
  - **MBA-1**: Controller bracket

- **Cables**
  - **USB cable**: For use with RS-BAI

- **Hand microphone, HM-19**: DC 18V, 40mA
  - **Control cable, OPC-2253**: 13-pin plug ACC cable
  - **USB cable**: 2A plug
  - **CW keyer plug**: 2A plug

**Accessories**

- **CI-V LEVEL CONVERTER**
- **CI-V remote jack**
- **MOUNTING BRACKETS**
- **MODULAR 8-PIN CABLE ADAPTER**
- **CI-V remote jack**
- **Data 1 Jack (IC-7100) to RS-232C cable**
- **OPC-22B**: USB REMOTE CONTROLLER

**ICOM INC.**

Count on us!

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D-STAR (Digital Smart Technology for Amateur Radio) is a digital radio protocol developed by JARL (Japan Amateur Radio League).

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Some options may not be available in some countries. Please ask your dealer for details.

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