

HAM RADIO PRODUCTS



RMDR (Reciprocal Mixing Dynamic Range) of 110 dB*

High-speed, High-resolution Spectrum Waterfall Scope

Crystal Clean, High-purity
Local Oscillator

Dual Scope for Watching Both Receivers Separately

1.2 kHz Optimum Roofing Filter Greatly Improves In-band Adjacent Signal Performance

Audio Scope and Oscilloscope for Watching Receive and Transmit Audio

* At a 1kHz offset frequency. Receiving frequency: 14.2 MHz Mode: CW, IF BW: 500 Hz, Roofing Filter: 1.2 kHz





HF/50MHz TRANSCEIVER 1C-7851

RMDR: 110dB Raising the Bar

Design advances developed by the Icom HF engineers for the Local Oscillator (LO) enable the IC-7851 to set a new benchmark for amateur radio receivers. The goal was to dramatically reduce the phase noise that degrades the target signal due to the sum of the entire signal present. The result was a RMDR of 110dB*. Below is a comparison of the improvement over the IC-7800.

* At a 1kHz offset frequency

Receiving frequency: 14.2 MHz Mode: CW, IF BW: 500 Hz Roofing Filter IC-7800 = 3 kHz, IC-7851 = 1.2 kHz

RMDR Comparison

| RMDR(dB) | | | | | | | | | | |
|-----------------------|-----|-----|-----|-----|--|--|--|--|--|--|
| 1kHz 2kHz 10kHz 20kHz | | | | | | | | | | |
| IC-7851 | 110 | 116 | 121 | 124 | | | | | | |
| IC-7800 | 78 | 87 | 106 | 112 | | | | | | |

RMDR

RMDR (Reciprocal Mixing Dynamic Range) is the relative level of an undesired signal, offset "n" kHz from the RX passband, which will raise noise floor by 3 dB. The local oscillator phase noise will mix with strong unwanted signals and unavoidably generate noise which masks a wanted signal.

1.2kHz Optimum Roofing Filter

Despite the trend to switch to a down conversion or a hybrid conversion receive design, lcom believes in the solid performance of the up-con-



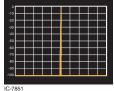
Optimum Roofing Filter

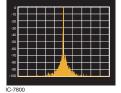
version design. The IC-7851 introduces a new 1.2kHz Optimum Roofing Filter, greatly improving the in-band adjacent signal performance. This newly developed filter overcomes the gap of a narrower roofing filter in an upconversion receiver.

Crystal Clear LO Design

Breaking the boundaries of traditional designs, the IC-7851 employs a Direct Digital Synthesizer (DDS) along with a Phase Locked Oscillator for the LO (Local Oscillator). The C/N ratio excels beyond the IC-7800 and other similar class HF transceivers. This design significantly reduces noise components in both receive and transmit signals.

■ LO C/N Characteristics Comparisons
Receiving Frequency: 14.2 MHz. Mode: CW 1st LO frequency: 78.655 MHz
SPAN = 20 kHz, RBW = 30 Hz, VBW = 10 Hz

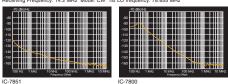




Improved Phase Noise Characteristics
Phase noise is coherent in radio circuit design

Phase noise is coherent in radio circuit design and the new LO design introduced in the IC-7851 makes some major breakthroughs while utilizing the 64MHz, up-conversion receiver design introduced in the IC-7800. An impressive 20dB improvement is seen with the IC-7851's 10 kHz measurement and more than 30dB improvement at a 1 kHz measurement in comparison to the IC-7800.

■ Phase Noise Characteristics Comparisons
Receiving Frequency: 14.2 MHz Mode: CW 1st LO frequency: 78.655 MHz



Improved Spectrum Scope

Following the design linage of the IC-7800, the IC-7851 uses a dedicated DSP unit for the Fast Fourier Transform (FFT) spectrum. The 2250 MFLOPS DSP processor enables a new dual scope function and significantly faster sweep speeds and better accuracy than in the IC-7800.

Scope Comparison

| Scope Companson | | |
|-----------------------|--------------------|----------------------|
| | IC-7851 | IC-7800 |
| Span Width | 5kHz-1000kHz | 5kHz-500kHz |
| Resolution *1 | 1 pixel minimum *2 | 20 pixels minimum *4 |
| Sweep Speed | 29.3 frames/Sec *3 | 4 frames/Sec *3 |
| Display Dynamic Range | 100dB | 80dB |
| Noise Floor Level | −30dBµ | −19dBµ |

Number of dots shown at the 60 dB level, when receiving a

² SPAN = More than 20 kHz, SPEED = Slow ³ SPAN = Less than 20 kHz, SPEED = Fast

Base Station Transceivers



+40dBm IP3 (3rd Order Intercept Point)

The IC-7851 continues the +40dBm, 3rd order intercept point and 110dB receiver dynamic range benchmark set by the IC-7800. To achieve this superb receiver performance, the entire analog circuitry and components have been re-engineered to match the DSP units. A newly designed LO amplifier generates high output while keeping flat frequency characteristics over a 60MHz wide range.

Dual Spectrum Scope with Waterfall Function

The IC-7851 introduces the new dual scope – the ability of watching both receivers in separate spectrum scopes. The dual scope function is vital for watching for multipliers or band openings in contests, or working all bands/modes on a DXpedition. The waterfall display captures signal strengths over time. This allows you to see signals that may not be apparent on a normal scope.



Dual scope example (Horizontally aligned)

Full Duty 200W Output Power

The push-pull power amplifiers using power MOS-FETs work on 48V DC. They provide a powerful 200W output power at full duty cycle. An effective cooling system maintains internal temperatures within a safe range and prevents thermal runaway.

Digital IF Filter

Icom's digital IF filters give you performance that is not possible with crystal or mechanical filters. They allow the operator to adjust filter shape (sharp or soft), filter bandwidth, and center frequency characteristics, without missing the action.

Other Outstanding Features

[Antenna and receiver] • Two completely independent receivers • 15kHz, 6kHz, 3kHz and 1.2kHz four 1st IF Roofing filters • Four antenna connectors with automatic antenna

selector • Automatic antenna tuner • 50MHz special preamp and mixer circuit • Digital manual notch • Digital twin PBT eliminates interference from adjacent signals • New auto digital noise blanker • ± 0.05 ppm High Stability OCXO Unit

[CW mode] • DSP-controlled CW keying waveform shaping • Multi-function electronic keyer with adjustable keying speed, dot-dash ratio and paddle polarity • Audio Peak Filter selection (soft/sharp)

[Operation] • High-quality digital voice recorder memory • Built-in RTTY, PSK31 and PSK63 without the use of a computer • Message memory for CW, RTTY and PSK31/63 • Digital video interface (DVI-I) • SD memory card slot • Audio scope function • Click control spectrum scope • AGC control • Microphone equalizer and adjustable transmit bandwidth • FFT scope averaging function for PSK and RTTY decode • Screen saver function



+40dBm Third-order Intercept Point (in the HF Bands)

> 2nd Order Intercept Point Higher than +110dBm

Excellent Inband IMD Specifications

Three Hi-spec 1st IF Filters (Roofing Filters)

Spectrum Waterfall Display

Audio Scope Function

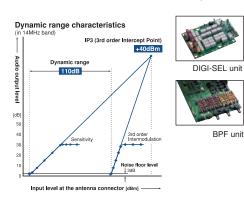
200W Output Power and High-stability Transmitter



HF/50MHz TRANSCEIVER

+40dBm IP3 (3rd order Intercept Point) and 110dB Dynamic Range

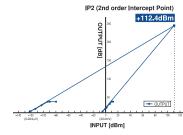
The IC-7700 employs mechanical relay BPF switching, a digitally tuned pre-selector, and three hi-spec 1st IF filters (roofing filters) in a clean and simple double conversion superheterodyne design. By balancing the analog and DSP functions, the IC-7700 provides superior sensitivity simultaneously with a superb dynamic range of 110dB, and +40dBm IP3 (even in USB mode with 2.4kHz filter bandwidth).



More than +110dBm IP2 (2nd order Intercept Point)

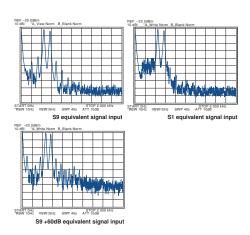
An IP2 point of more than +110dBm* means 2nd order distortion from strong broadcast stations will be completely eliminated. The continuous pursuit of leading analog circuit engineering makes it possible to achieve this leading edge level of performance.

- * The IP2 figure is a typical value.
- ** Measurements were made using custom equipment, due to the limits of normal signal generators (SG) and duplexers to +85dBm.



High Specification Inband IMD

Inband IMD (Intermodulation Distortion) creates undesired spurious signals as a consequence of non-linear processing of multiple signals. All (2nd, 3rd or even higher) orders of IMD performance are superior in the IC-7700. The improvement will be especially evident in CW mode. You'll notice the difference as you copy weak signals without internal distortion or noise.



Three Hi-spec 1st IF Filters (Roofing Filters)

Now a proven formula, the IC-7700 employs custom three hi-spec 1st IF filters (roofing filters) to

achieve approximately 134dB*1 of blocking dynamic range.

*1 At 14.1MHz receive, with 5kHz separation of interference signal.



Hi-spec 1st IF filters (Roofing filters)

USB Connectors on the Front Panel

Two USB connectors on the front panel allows you to easily connect a USB keyboard or USB flash drive to save transceiver settings, update firmware, or transfer settings to another IC-7700.

Base Station Transceivers



Other Outstanding Features

[Antenna and receiver] • 4 antenna connectors with automatic antenna selector • BNC type RX IN/OUT connectors • Automatic antenna tuner • Preamp for 50MHz band • 3-step manual notch filter • Digital twin PBT eliminates interference from adjacent signals • 16-step noise reduction

[CW mode] • DSP-controlled CW keying waveform shaping • Multi-function electronic keyer with adjustable keying speed, dot-dash ratio and paddle polarity • APF selection (soft/sharp) • Double key jack system

[Operation] • Two AGC loops • 7-inch wide color TFT LCD • Real-time spectrum scope • Built-in power supply • High quality digital voice memory • Message memory for CW, RTTY and PSK31 • Built-in RTTY and PSK31 modulator and demodulator • Twin peak audio filter for RTTY operation • Triple band stacking register • 101 memory channels • AGC control for fine tuning of the AGC time constant • Microphone equalizer and adjustable transmit bandwidth • FFT scope averaging function for PSK and RTTY decode • Screen saver function

Firmware Upgrade Functions

Spectrum Waterfall Display

Review RF and AF characteristics on the

IC-7700's impressive 7-inch color LCD. Includes a wide screen setting.



Spectrum scope with waterfall (wide screen setting)

PC Mouse Operation

Connect a mouse via USB to select operating frequency and control the spectrum scope.

Audio Scope Function

Review the FFT scope with waterfall and oscilloscope. In CW mode, observe mic compressor level and other attributes.



Mini spectrum scope and audio scope

Simplified Remote Control Operation

Connect directly to an IP network using Icom's optional RS-BA1 software and the IC-7700's internal base station function.

Digital Voice Recorder

Automatically capture incoming/outgoing calls onto an external memory card or flash drive.

Other New or Enhanced Functions

• Waveform outline in spectrum scope (ON/OFF)
• Voice TX function transmits the recorded audio repeatedly • Increase APF volume level up to 6dB (Adjustable by 1dB step) • TX delay function sets the transmission timing to control a connected external linear amplifier • Added RIT and ⊿TX commands for CI-V remote control

Firmware Update Available (Free Download) http://www.icom.co.jp/world/support/index.html





HF/50MHz TRANSCEIVER IC-7600



+30dBm Third-order Intercept Point (IP3)

Improved Inband IMD

5.8 Inch Ultra-wide Viewing Angle TFT Display

Dual DSP for Transmitter/Receiver and Spectrum Scope

Two separate 32-bit DSP units power the transmitter/receiver and spectrum scope. These processors give the IC-7600 high performance comparable to our top-of-the-

line IC-7800 and IC-7700, thanks to the combination of dual DSP and our analog RF design expertise.



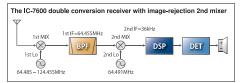
Dual DSP

104dB Dynamic Range and +30dBm IP3 (3rd order Intercept Point)

An astonishing 104dB receiver dynamic range and +30dBm IP3 in the 14MHz band without sacrificing receiver sensitivity is a standard specification befitting the IC-7600. Even a weak signal adjacent to strong signals is clearly received by the IC-7600.

Double Conversion Superheterodyne Improves Inband IMD

The IC-7600 employs a double conversion superheterodyne system which has an image rejection mixer for the 2nd mixer stage. The double conversion system dramatically reduces signal distortion and provides a high-linearity RF signal to the DSP processor.



5.8-inch Wide Viewing Angle TFT

The 5.8-inch ultra-wide viewing angle display has excellent color rendering and high contrast ratio with fast response time. These features provide accurate spectrum scope and simulated analog meters to move smoothly and naturally.

Three Built-in 1st IF (Roofing) Filters, Including 3kHz

The IC-7600 has three built-in 1st IF (roofing) filters ahead of the 1st IF amplifier stage. The 3kHz filter is especially effective in CW and SSB modes, eliminating overloading caused by strong signals just outside the passband.

Other Features

[Antenna and receiver] • Automatic antenna tuner • Two TX/RX plus RX antenna connectors • Digital twin PBT • Auto and manual notch filters • 16-step noise reduction • Dual watch [Transmitter] • TX monitor function • VOX operation • All mode power control [CW mode] • DSP-controlled CW keying waveform shaping • Adjustable keying speed, dot-dash ratio and paddle polarity • APF selection (soft/sharp) • Double key jack system [Operation] • Two AGC loops • USB connectors on the front and rear panels • RTTY/PSK31 operation with a USB keyboard • High quality digital voice memory • Message memory for CW, RTTY and PSK31 • 101 memory channels • Microphone equalizer and adjustable transmit bandwidth • FFT scope averaging function • Programmable band edge beep

Firmware Upgrade Functions

Spectrum Waterfall Display

The waterfall display captures signal strengths over time. This allows you to see signals that may not be apparent on a normal scope.

PC Mouse Operation

By connecting a PC mouse to the USB port, you can control the spectrum scope and operating frequency with mouse operations.

Other New or Enhanced Functions

• Increase APF volume level up to 6dB (Adjustable by 1dB step) • TX delay function sets the transmission timing to control a connected external linear amplifier • Added RIT, ⊿TX, sub band and external antenna control commands for CI-V remote control • Wake up from standby mode via CI-V remote jack

Firmware Update Available (Free Download) http://www.icom.co.jp/world/support/index.html

Base Station Transceivers



HF/50MHz TRANSCEIVER IC-7410

Excellent DSP Performance

Double-conversion Superheterodyne

+30dBm Class Third-order Intercept Point (IP3)

Excellent DSP Performance

Icom brings out the best DSP performance, combining more than ten years of DSP technical know-how and much faster DSP processors. Icom's in-house DSP experts have developed a IC-746PRO series replacement that every operator will be proud to own. In addition to the higher speed DSP, the AD/DA converter, AK4620, provides a higher dynamic range and superior S/N ratio.

Other Features

• Double-conversion superheterodyne • +30dBm class IP3 (3rd order intercept point) • Three first IF filters (3/6/15kHz) • Digital twin PBT • AGC loop management with programmable AGC time constant • Auto/manual notch filter provide more than 70dB attenuation • Noise reduction • RF speech compressor • User programmable tone control • Built-in voice synthesizer • User programmable band edge beep • VSC (Voice Squelch Control) function • Two preamplifier

types: Preamp 1: Improving IMD characteristics, Preamp 2: High gain preamplifier • 20dB built-in attenuator • Built-in automatic antenna tuner • CTCSS tone encoder and decoder • Triple band stacking register • Quick split and frequency lock functions • RIT and Δ Tx variable up to ± 9.999 kHz • SSB/CW synchronous tuning • 1Hz pitch tuning and display • ± 0.5 ppm of high frequency stability • Program, memory, select memory, mode select and Δ f scans • Automatic tuning steps



HF/50MHz TRANSCEIVER IC-7200

Rugged Design for Outdoor Use

IF DSP

100W Output Power

Rugged Design for Outdoor Use

The rugged design of the IC-7200 means your enjoyment of this rig is not limited only to your shack. Waterproof protection technologies used in Icom's marine radios are applied to the buttons and knobs on the front panel to provide a basic measure of protection against water intrusion*.

* IC-7200 is NOT waterproof.

IF DSP

The latest IF DSP technology is employed in the IC-7200. While the IC-7200 is an entry-class transceiver, advanced digital features such as flexible filter width and shape setting, digital noise reduction and auto notch filter are comparable to higher class models.

Other Features

• AGC loop management • Digital twin PBT
• Manual notch filter • RIT • VOX • ±0.5ppm frequency stability • Backlit LCD • CI-V interface • 201 memory channels • Built-in 20dB attenuator • Preamplifier • Auto tuning step function • Band stacking register • Built-in voice synthesizer • Quick split • Front-facing speaker • USB connector for PC control



HF TRANSCEIVER



Simple, Straightforward Operation with Keypad

General Coverage Receive with Superior Performance

Optional DSP Capability

Simple Operation

The IC-718 is equipped with a minimum number of buttons and controls for simple feature selection. The 10-key pad on the front panel allows direct entry of an operating frequency or a memory channel number. The auto tuning step function is activated when turning the dial quickly and helps speed up tuning. The band stacking register is convenient when changing operating bands.

Other Features

Front mounted loud speaker
 Optional DSP capability, UT-106
 General coverage receiver
 Built-in electronic keyer
 Built-in

microphone compressor • Combined squelch and RF gain control • Preamplifier and attenuator • 101 memory channels • CW full break-in • IF shift interference rejection • 1Hz tuning • VOX function for hands-free operation • Optional automatic antenna tuner • Digital S/RF meter





IC-7100

Intuitive Touch Screen Interface

Controls at Your Fingertips with an Angled Display

HF, 50/70/144/430MHz Multi-band

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.



IStraightforward Operation

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



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



Built-in RTTY Functions

The built-in RTTY decoder allows you to instantly read an RTTY message on the display. Your RTTY operating log, both TX and RX, is recorded on an SD card. The eight RTTY memories can memorize and transmit often used RTTY sentences.

D-STAR DV Mode (Digital Voice + Data)
The IC-7100 provides D-STAR DV mode digital voice and low-speed data communication.

IDR (D-STAR Repeater) Function Operation

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

Repeater Search Function

With an external GPS receiver*, this function searches the nearby D-STAR repeaters from the internal database based on your location.

* External GPS receiver or manual position data input required.

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, key and microphone.



SD Memory Card Slot for Saving Data

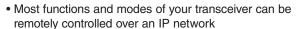
When used with an SD card, the SD card can store various contents including voice memory, memory channels, D-STAR repeater memories and other personal settings can be saved to the SD card and can be loaded to the transceiver.

Other Features

• DSP controlled AGC function loop • Easy vehicle mounting with optional MBF-1 · RS-MS1A remote control software for an Android™ device (Not all functions are usable with the IC-7100.) • Optional RS-BA1 IP remote control software • 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 • 495 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 callsign squelch (DSQL) and digital code squelch (CSQL)* • 12.5kHz IF output for DRM (Digital Radio Mondiale) receive * D-STAR DV mode only

IP REMOTE CONTROL SOFTWARE RS-BA1





- Low voice latency, high quality audio
- Waterfall spectrum scope can be observed (only for IC-7850, 7851 single band)
- New slider control screen (e.g. RF power, CW pitch, twin PBT)
- Wake-up from standby mode via the RS-BA1 (for IC-7850, 7851, 7700, 7600 and 7100)
- Optional RC-28 provides a hardware dial/transmit function

Software Update Available (Free Download) http://www.icom.co.jp/world/support/index.html





Waterfall spectrum scope

Multi-Band Transceivers



HF/VHF/UHF TRANSCEIVER C - 9100

HF to 1200MHz Multi-band, **Dual Independent Receiver**

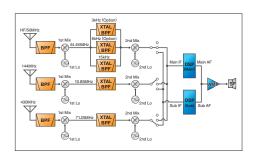
+30dBm Class Third-order **Intercept Point (IP3)**

Satellite Mode Operation

HF to 1200MHz Multi-band, **Dual Independent Receiver**

The IC-9100 covers 100W on HF, 50MHz and 144MHz, 75W on 430MHz bands and 10W on the 1200MHz band.* The radio has 3 independent receiver circuits from the antenna connector to the second IF mixer (image rejection mixer) and simultaneously receives two different bands (1. HF/50MHz + 144/430/ 1200MHz, 2. 144MHz + 430/ 1200MHz, 3. 430MHz + 1200MHz) at a time.

* Optional UX-9100 1200MHz band unit required.



+30dBm Class IP3

Using receiver design techniques introduced in Icom's highest grade HF transceivers, the IC-9100 has an IP3 of +30dBm* in the HF band. Even a weak signal adjacent to strong signals is clearly received by the IC-9100.

* Typical in 14MHz band. Spacing=100kHz

Satellite Mode Operation

The IC-9100 has a top class receiver performance in the VHF/UHF bands, indispensable for obtaining weak signals in the satellite communication. The satellite mode synchronizes the uplink (transmitting) and downlink (receiving) frequencies, and tracks the frequencies in the same tuning step. 20 satellite memory channels store frequencies, mode and tone settings for quick setup.

Optional 1200MHz Band Unit

By installing the optional UX-9100 1200MHz

band unit, the IC-9100 extends the coverage to the 1200MHz band. You can also enjoy L/V or L/U mode satellite operation.



UX-9100 1200MHz band unit

Optional D-STAR DV Mode

The optional UT-121 provides D-STAR DV mode digital voice and low speed data communication. Linking of D-STAR repeaters over



the Internet allows you to communicate virtually anywhere. The D-STAR repeater (DR) function makes it easy to access D-STAR repeaters.

Three First IF Filters (3/6/15kHz) for HF/50MHz Band

The IC-9100 comes with a built-in 15kHz 1st IF filter and can accept up to two optional filters (3kHz FL-431 and 6kHz FL-430). By changing

the first IF filter width according to the operating mode, the desired is protected from adjacent inband signals at the later stages for better receiver performance.



USB Connector for PC Control

The IC-9100 has a standard type B USB connector and can be connected to a PC. Modulation input, audio output, RTTY demodulator output and CI-V command can be controlled via the USB cable.

Other Features

• 32-bit DSP and double conversion superheterodyne system • AGC loop management • Digital IF filter • Digital twin PBT and IF shift • Noise reduction • Noise blanker • RF speech compressor • Adjustable transmit bandwidth • RTTY demodulator and decoder • Ample CW functions • Built-in antenna tuner for HF/50MHz band • Digital notch filter • Large, multi-function LCD • Optional CS-9100 programming software • Optional RS-BA1 IP remote control software

DIG/TAL

Handheld Transceivers

Lightweight & Compact Body

The ID-51E PLUS has a compact 58 × 105.4×26.4 mm body, and weighs only

255g (approx.) with battery pack and antenna. In this slim body, the ID-51E PLUS contains 5W output power, VHF/UHF dual band, D-STAR and integrated GPS receiver.



V/V, U/U, V/U Dualwatch

The dualwatch function monitors VHF/VHF, UHF/UHF and VHF/UHF bands simultaneously.* The audio and squelch levels can be set separately for the main and sub-

*DV/DV. AM/AM. FM-N/FM-N and DV/FM-N modes dualwatch not available.





V/V. U/U Dualwatch example

Integrated GPS Receiver

The integrated GPS receiver provides fast start-up time and accurate position. Your current position and altitude are shown on

the display and offers a position reporting function in DV mode. The GPS-A mode assists in easy D-PRS GPS receiver transparen operation.



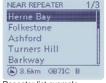
DV Fast Data Mode*

By using data in place of voice frames, the ID-51E PLUS transfers data 3.5 times faster (3480 bps) than in the conventional DV mode (with voice). Pictures taken by an Android™ device can be quickly transmitted in the DV Fast Data mode.

* The DV Fast Data mode is not compatible with the DV mode low-speed data communication.

DV/FM Repeater Search Function

The repeater search function searches for nearby analog FM repeaters as well as DV repeaters using the repeater memories and the integrated Repeater list example GPS*.



* To use the repeater search function, the position data of the repeater is required.

Independent AM/FM Receiver

FM and AM broadcast and VHF airband stations can be listened to while using the dualwatch function to monitor the ham bands.



AM + dualwatch receive

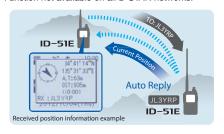
microSD Card Slot

When used with a microSD card (Up to 32GB), various contents including voice memory, DV auto reply message, TX voice message, QSO log, RX history log and GPS log data can be stored. The microSD card can also be used to update firmware and edit memories.

Automatic Reply Function (DV Mode)

When receiving a call addressed to your callsign, the ID-51E PLUS can automatically reply your current position information*. Between ID-51E PLUS's communication, replied position information can pop up on the caller's display.

*Function not available on all D-STAR networks



IPX7 Waterproof Construction

The ID-51E PLUS has superior IPX7 waterproof protection (1m depth of water for 30 minutes). It

can be used in harsh outdoor environments, or when hiking, mountain biking, touring and doing mountain sports.



RS-MS1A Remote Control Software

The RS-MS1A allows you connect to the ID-51E and remotely set DR functions, link with a map application and send/receive messages over the DV mode.

* Optional OPC-2350LU USB cable is required.

Other Features

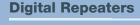
• 5W output power • 3 hours rapid charging with supplied wall charger (BP-271) • Long lasting battery pack • CS-51 PLUS cloning software supplied • Dplus Reflector link commands

Independent AM/FM Receiver Integrated GPS Receiver

VHF/UHF DUAL BAND DIGITAL TRANSCEIVER

V/V, U/U, V/U Dualwatch

45,000







PLUS











Mobile Transceivers

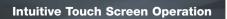


VHF/UHF DUAL BAND DIGITAL TRANSCEIVER









DV/DV Dualwatch

Integrated GPS Receiver

Intuitive Touch Screen Operation

The intuitive touch screen interface provides quick and smooth operation. The large 5.5 inch

display (320 × 128 pixels) responds naturally to the touch allowing you to change settings, enter frequencies and edit memory channels with ease.



(Using optional MBF-1 mount base and MBA-2 controller bracket)

DV/DV Dualwatch

The ID-5100E can receive both FM/FM and FM/DV mode signals simultaneously. Two DV mode signals can be monitored for receive on either channel. You can check other

repeaters or other channel activities while waiting for the main repeater.



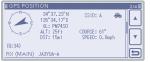
DV/DV dualwatch (DR function) example

* Main band audio has priority if two DV signals come in at the same time.

Integrated GPS Receiver

The ID-5100E has an integrated GPS receiver in the controller and shows own position, course, speed and altitude on the display. The GPS position information can be used for exchanging position reports,

tracing the EGPS POSITION GPS log and searching for nearby repeater sites.



Received position information example

DV/FM Repeater Search Function

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

* To use the repeater search function the position data of the repeater is required.



Repeater list example

RS-MS1A Remote Control (Free Download Application from Google Play™)

The RS-MS1A allows you wirelessly connect to the ID-5100E and remotely set DR functions, link with a map application and send/receive messages over the DV mode. In addition, pictures taken by the Android™ device can be transmitted in the DV Fast Data mode or DV mode.

* Optional UT-133 Bluetooth® unit must be installed in the ID-5100F

Some functions may not work properlv. depending on Android™ phones and devices used.





DV Fast Data Mode*

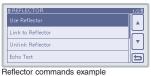
By using data in place of voice frames, the ID-5100E can transfer data 3.5 times faster (3480 bps) than in the conventional DV mode (with voice).

* The DV Fast Data mode is not compatible with the DV mode low-speed data communication.

Dplus Reflector Linking

Dplus reflector link commands are added to the DR function to allow easy reflector operation. Use Reflector, link/unlink to Reflector,

echo test and repeater information commands are selectable.



SD Card Slot for Voice and Data Storage

When used with an SD card, the SD card can store various contents including voice memory, DV auto reply message, TX voice message, QSO log, RX history log and GPS log data.

Memory channels, repeater memories and other personal settings can be saved to the SD card and can be loaded to the transceiver.



SD card slot

VS-3 Bluetooth® Headset

The optional Bluetooth® headset, VS-3, provides hands-free communication and can remotely control the ID-5100E with three programmable buttons. This provides convenient communication in a vehicle.

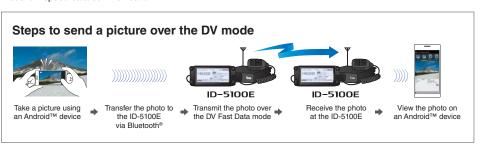
* Optional UT-133 Bluetooth® unit must be installed in the ID-5100E.



Other Features

• 50W output power • Repeater memory channels increased to 1500 • CTCSS and DTCS with Split tone function • Sub band mute auto • Enhanced D-PRS functions • Convenient memory contents management using CSV format • Speech function announces operating frequency, mode and received call sign (DV mode) • Independent main, volume and SQL knobs for A/B bands • AM airband dualwatch • CS-5100, cloning software supplied • 1750Hz tone burst

Firmware Update Available (Free Download) http://www.icom.co.jp/world/support/index.html



Mobile Transceivers



VHF/UHF DUAL BAND TRANSCEIVER

IC-2730E



50 Watts of Output Power on Both VHF and UHF Bands

> VHF/VHF. UHF/UHF Simultaneous Receive

Optional Wireless Remote Control Bluetooth® Headset VS-3

VHF/VHF, UHF/UHF **Simultaneous Receive**

The IC-2730E provides VHF/VHF, UHF/UHF simultaneous receive capability as well as VHF/UHF receive. Simple one-touch of a button allows you to change between the main (transmit) band and sub band.

Independent Controls for Each Band

Main dials, volume, squelch knobs and primal buttons are symmetrically laid out. Various operation including frequency tuning can be made smoothly and straight-forwardly.

Optional VS-3 Bluetooth® Headset

The optional VS-3 Bluetooth® headset can wirelessly control the IC-2730E with three programmable keys and a PTT button. It also provides VOX operation for hands-free communi- Optional VS-3 Bluetooth® headset cation.



* Optional UT-133 Bluetooth® unit must be installed in the IC-2730E.

Easy Controller Mounting with the Optional MBF-1

The combination of the optional MBF-1 suction cup mounting base and MBA-5 controller bracket provides easy tilt and swivel adjust-

ments. The large suction cup can be mounted on flat surfaces and can be removed easily.



Photo includes optional MBF-1 and MBA-5

Controller Attachment to the Main Unit with Optional MBA-4

With the optional MBA-4 combination bracket, the controller can be attached to the main unit. The microphone jacks are mounted on both the controller and main unit.

50W of Output on VHF and UHF

The IC-2730E employs a durable PA module and delivers 50 watts of high power operation on both VHF and UHF bands.

Built-in 50 CTCSS and 104 DTCS Tones with Split Tone Function

The CTCSS and DTCS tones are built-in for quiet stand-by and repeater access. The split tone function allows you to set CTCSS/ DTCS tones separately for repeater uplink and downlink on a per channel basis.

Wideband Receiver

The IC-2730E covers 118-174 and 375-550 MHz*. You will be able to listen to aviation, marine channels and other utility communications.

* Receiver range differs depending on version.

Easy-to-See Large White Backlit LCD

The display size of the IC-2730E is 1.5 times larger than its predecessor, the IC-E2725. Frequency indications become larger and the white backlight provides higher contrast.

Other Features

- HM-207 remote control microphone CS-2730 Free download PC programming
- software . Versatile scanning capability
- Squelch delay and squelch attenuator Sub band auto mute function • Sub band busy beep function • Auto power off • Time-outtimer • 16 DTMF auto dial memories • CI-V remote control capability (through the OPC-478UC)



NOISE CANCELING MICROPHONE

HM - 209

Active Noise Canceling Microphone, HM-209 Shuts Out Annoying Background Noise

- Built-in DSP automatically reduces background noise
- Transmits clear audio in both analog and digital modes
- Compatible with ID-5100E and IC-2730E

Experience in video http://www.icom.co.jp/r/e_HM-209/



Noise Canceller OFF



Noise canceller ON

OPTIONS FOR BASE STATION TRANSCEIVERS

| | | HAND MICI | ROPHONES | | DESK | TOP MICROPH | IONES | EXTERNAL | SPEAKERS |
|------------|--------------------|-----------|----------|--------|--------------------|--------------------|-------|--|----------|
| MODEL NAME | HM-36 | HM-103 | HM-151 | HM-198 | SM-30 | SM-50 | SM-27 | SP-23 | SP-33 |
| | • | 6 | 8 | 8 | | | | 10 mag 10 | la . |
| IC-7851 | ✓ | | | | V | V | | | V |
| IC-7700 | V | | | | V | ✓ | | | ~ |
| IC-7600 | V | | | | V | V | | / | |
| IC-7410 | V | | | | V | V | | ✓ | |
| IC-7200 | V | | | | V | V | V | ~ | |
| IC-718 | V | | | | V | V | ~ | ✓ | |
| IC-7100 | (Use with OPC-589) | V | V | V | (Use with OPC-589) | (Use with OPC-589) | | | |
| IC-9100 | V | | | | ' | V | | V | |

| | EXTERNAL | SPEAKERS | DC POWER SUPPLY | ANTENNA ELEMENT | ANTENNA | ATUNERS | AUTO TUNING ANTENNA | NVIS KIT | CONTROL CABLE |
|------------|----------|-------------------|-----------------------------------|----------------------------|-----------------------------|-------------------------------|---------------------|--|---------------|
| MODEL NAME | SP-34 | SP-35 2m cable | PS-126 13.8V/25A 4-pin type | AH-2b Covers 7–54MHz | AH-4 Covers 3.5–54MHz | AT-180 Covers 1.8–54MHz | | AH-5NV Fiberglass antenna element for use with AH-70 Covers 2.2–30MHz (amateur band) with AH-740. | with AH-740 |
| IC-7851 | V | | | | | | | | |
| IC-7700 | V | | | | | | | | |
| IC-7600 | | | ~ | V | ~ | | (Use with OPC-2321) | V | / |
| IC-7410 | | | ~ | V | ~ | | (Use with OPC-2321) | ~ | ~ |
| IC-7200 | | | ~ | V | V | V | (Use with OPC-2321) | ~ | V |
| IC-718 | | | (Depending on version) | ~ | V | ~ | (Use with OPC-2321) | ~ | ~ |
| IC-7100 | | ~ | V | V | V | ~ | (Use with OPC-2321) | ~ | V |
| IC-9100 | | | ✓ | ✓ | ✓ | | (Use with OPC-2321) | ✓ | ✓ |

| | FOLDED DIPOLE ANTENNA | FILT | ERS | HIGH STABILITY CRYSTAL UNIT | DSP UNIT | CI-V CONVERTER | LINEAR AMPLIFIER | CARRYING HANDLES | HANDLE |
|------------|--|--|--|--|----------------------------------|----------------|--------------------|---|--------|
| MODEL NAME | AH-710 Covers 1.9–30MHz 30 m; 98.4 ft | FL-430 6kHz 1st IF FILTER (For HF/ 50MHz band) FL-431 3kHz 1st IF FILTER (For HF/ 50MHz band) | FL-53A 250Hz/-6dB FL-222 1.8kHz/-6dB FL-257 3.3kHz/-6dB | CR-338 Frequency stability: ±0.5ppm | UT-106 | CT-17 | IC-PW1EURO | MB-23 MB-106 MB-117 MB-121 MB-123 | MB-116 |
| IC-7851 | | , | | | | V | ~ | | |
| IC-7700 | | | | | | ~ | ~ | | |
| IC-7600 | | | | | | V | ~ | (Use MB-121) | |
| IC-7410 | | ~ | | | | ~ | (Use with OPC-599) | (Use MB-123) | |
| IC-7200 | V | | | | | ~ | (Use with OPC-599) | (Use MB-117) | ~ |
| IC-718 | V | | (Accepts only one filter) | ~ | (Installed depending on version) | ~ | (Use with OPC-599) | (Use MB-23) | |
| IC-7100 | | | | | | V | (Use with OPC-599) | (| |
| IC-9100 | | ~ | | | | / | (Use with OPC-599) | (Use MB-123) | |

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: Applicable : Not applicable

OPTIONS FOR BASE STATION TRANSCEIVERS

| | MOBILE MOUNT | TING BRACKETS | MOUNTING BASE | CONTROLLER BRACKET | SEPARATION CABLES | MIC ADAPTER CABLE | ADAPTER CABLE | DC POWER CABLES | 1200MHz BAND UNIT |
|------------|--------------|---------------|------------------|--------------------|---|--|---|---|-------------------|
| MODEL NAME | MB-62 | MB-118 | MBF-1 | MBA-1 | OPC-2253 3.5m OPC-2254 5.0m | OPC-589 8-pin connector microphone to 8-pin modular | OPC-599 13-pin ACC socket to 7-, 8-pin ACC sockets | OPC-025A 20A cable OPC-1457 30A cable OPC-2095 30A cable | UX-9100 |
| IC-7851 | | | | | | | | | |
| IC-7700 | | | | | | | | | |
| IC-7600 | | | | | | | | (Use OPC-1457) | |
| IC-7410 | | | | | | | V | (Use OPC-2095) | |
| IC-7200 | | V | | | | | / | (Use OPC-1457) | |
| IC-718 | | V | | | | | / | (Use OPC-025A) | |
| IC-7100 | V | | (Use with MBA-1) | V | V | V | V | (Use OPC-2095) | |
| IC-9100 | | | | | | | ✓ | (Use OPC-2095) | ' |

| | CLONING S | SOFTWARE | REMOTE CONTROL SOFTWARE | IP REMOTE CONTROL SOFTWARE | USB REMOTE ENCODER | DIGITAL UNIT | DATA CO | MMUNICATION | CABLES |
|------------|---|----------|-------------------------|----------------------------|---------------------------------|--------------|----------|---|--------|
| MODEL NAME | CS-9100 A USB cable (A-B type) is required for programming. | CS-7100 | RS-MS1A*1 | RS-BA1 | RC-28 For use with RS-BA1 | UT-121 | | OPC-2350LU USB cable for an Android™ device or a PC | |
| IC-7851 | | | | V | V | | | | |
| IC-7700 | | | | / | / | | | | |
| IC-7600 | | | | / | / | | | | |
| IC-7410 | | | | / | ✓ | | | | |
| IC-7200 | | | | / | / | | | | |
| IC-718 | | | | | | | | | |
| IC-7100 | | | (Use with OPC-2350LU) | / | / | | / | ~ | |
| IC-9100 | / | | | / | ✓ | ✓ | ✓ | | |

 $^{^{\}star 1}$ Free download Android $^{\rm TM}$ app. Download from Google Play $^{\rm TM}.$





AUTOMATIC TUNING ANTENNA

AH-740

High Performance, Automatic High-speed Tuning Antenna

- Relay-driven compact automatic tuning antenna
- Compact and lightweight (3.5kg)
- 150mS typical high-speed tuning (while memory tuning)
- Low power consumption (0.4A typical)
- Optional AH-5NV NVIS (Near Vertical Incidence Skywave) kit



OPTIONS FOR HANDHELD TRANSCEIVERS

| | BATTERY CASES | BATTER | Y PACKS | DESKTOP CHARGER | AC ADAPTER | WALL CHARGER | CIGARETTE LIC | GHTER CABLES | DC POWER CABLES |
|-------------|---------------------------|--|--|-------------------------|--------------------|-----------------------|-------------------|-----------------------------------|-----------------|
| MODEL NAME | BP-273 LR6(AA)×3 cells | BP-271 (Li-ion) 7.4V/1150mAh(min.), 1200mAh(typ.) | BP-272 (Li-ion) 7.4V/1880mAh(min.), 2000mAh(typ.) | BC-202 Rapid charger | BC-1235E 12V/1A | BC-1675D 12V/500mA | with noise filter | CP-19R with DC-DC converter | OPC-254L/LR |
| ID-51E PLUS | | ✓ | V | (Use with BC-123SE) | V | V | V | V | ~ |

| | SPEAKER-M | ICROPHONES | EARPHONE-MICROPHONES | | | | HEADSETS | | |
|-------------|-----------|------------|----------------------|---------------------|----|---------------------|-----------------------------------|----------------------------------|------------------------------------|
| MODEL NAME | HM-75LS | HM-186LS | HM-153LS | HM-153 | J. | HM-166 | Earhook type with boom microphone | HS-95 Behind-the-head type | HS-97 Throat microphone type |
| ID-51E PLUS | V | | | (Use with OPC-2144) | | (Use with OPC-2144) | (Use with OPC-2006LS) | (Use with OPC-2006LS) | (Use with OPC-2006LS) |

| EARPHONE | PLUG ADAPT | ER CABLES | CARRYING CASE | SILICONE JACKET CASE | DATA CABLE | PROGRAMMING SOFTWARE | REMOTE CONTROL SOFTWARE |
|---------------------------------|------------|-----------|---------------|---------------------------------|---|----------------------|-------------------------|
| MODEL NAME | OPC-2006LS | OPC-2144 | LC-179 | SJ-1 For use with BP-271 | OPC-2350LU USB cable for an Android™ device or a PC | CS-51 PLUS*1 | RS-MS1A*2 |
| ID-51E PLUS (Use with OPC-2144) | V | | ~ | ✓ | V | / | (Use with OPC-2350LU) |

^{*}¹ CS-51 PLUS is available for free download from: http://www.icom.co.jp/world/support/index.html *² Free download Android™ app. Download from Google Play™.



OPTIONS FOR MOBILE TRANSCEIVERS

| | HAN | ID MICROPHO | NES | BLUETOOTH® HEADSET | MOUNTING BASE | MOUNTING BRACKET | CONTROLLE | R BRACKETS | COMBINATION BRACKET |
|------------|---|-------------|----------|--------------------|------------------|------------------|-----------|----------------|---------------------|
| MODEL NAME | HM-209 Noise canceling microphone | HM-207 | HM-154 | VS-3 | MBF-1 | MBF-4 | MBA-2 | ○ () () | MBA-4 |
| ID-5100E | V | V | / | (Use with UT-133) | (Use with MBA-2) | / | / | | |
| IC-2730E | ~ | ~ | | (Use with UT-133) | (Use with MBA-5) | | | ~ | ✓ |

| | EXTERNAL | SPEAKERS | MICROPHONE CABLES | MIC ADAPTER CABLE | CONTROLLER CABLE | DATA (| CABLES | PROGRAMMING CABLE | CLONING CABLE |
|------------|-----------------------------|---|-------------------|-------------------------------|----------------------|---------------------------|-----------------------------------|-------------------|------------------------------------|
| MODEL NAME | SP-35 2m cable SP-35L | SP-30 4 inch (102.5mm) diameter speaker | | 8-pin connector microphone to | OPC-1156 3.5m | OPC-1529R RS-232 cable | USB cable for an Android™ or a PC | | OPC-474 Between transceivers |
| | 6m cable | | 9 | 8-pin modular | | | 19 | 99 | 8 |
| ID-5100E | / | V | / | / | ~ | ~ | V | V | |
| IC-2730E | | ~ | ~ | ✓ | | | | ~ | ✓ |

| | PROGRAMMING SOFTWARES | BLUETOOTH® UNIT | REMOTE CONTROL SOFTWARE | CI-V LEVEL CONVERTER |
|------------|------------------------|-----------------|---------------------------------|----------------------|
| MODEL NAME | CS-2730*1 CS-5100*1 | RS-MS1A+2 CT-17 | | |
| ID-5100E | (Use CS-5100) | ✓ | (Use with UT-133 or OPC-2350LU) | V |
| IC-2730E | (Use CS-2730) | | | |

- *1 CS-5100 and CS-2730 are available for free download from: http://www.icom.co.jp/world/support/index.html
- *2 Free download Android™ app. Download from Google Play™.

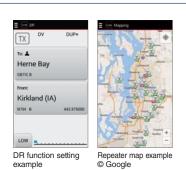
: Applicable : Not applicable

RS-MS1A Remote Control Software

(Free Download Android™ Application from Google Play™)

The RS-MS1A allows you to connect the ID-5100E, ID-51E PLUS and IC-7100 with an AndroidTM device and remotely control various functions and settings from the AndroidTM device. Pictures taken by the AndroidTM device can be transmitted over the DV mode.

- * Optional UT-133 Bluetooth® unit or OPC-2350LU cable is required. Not all functions are usable with the IC-7100.
- * Some functions may not work properly, depending on Android $^{\text{TM}}$ phones and devices used.



SPECIFICATIONS FOR BASE STATION TRANSCEIVERS

| | | IC-7851 | IC-7700 | IC-7600 | IC-7410 |
|-------------|---|--|--|---|--|
| General | Frequency coverage (Differs according to version) | Tx:135kHz, 1.8, 3.5, 7, 10, 14, 18, 21, 24, 28, 50MHz bands Rx: 30kHz–60MHz* * Some frequency ranges are not guaranteed. | Tx:1.8, 3.5, 7, 10, 14, 18, 21, 24, 28, 50MHz bands Rx:30kHz-60MHz* * Some frequency ranges are not guaranteed. | Tx:1.8, 3.5, 7, 10, 14, 18, 21, 24, 28, 50MHz bands Rx: 30kHz–60MHz* * Some frequency ranges are not guaranteed. | Tx:1.8, 3.5, 7, 10, 14, 18, 21, 24, 28, 50MHz bands Rx: 30kHz-60.000MHz* * Some frequency ranges are not guaranteed. |
| | Modes | USB, LSB, CW, RTTY, PSK31/63, AM, FM | USB, LSB, CW, RTTY, PSK31, AM, FM | USB, LSB, CW, RTTY, PSK31, AM, FM | USB, LSB, CW, RTTY, AM, FM |
| | Frequency stability | Less than ±0.05ppm (0°C to +50°C; @ 54MHz, after warm up) | ±0.05ppm (0°C to +50°C, after warm up) | ±0.5ppm (0°C to +50°C, after warm up) | Less than ±0.5ppm (0°C to +50°C) |
| | Maximum current drain | 800VA | 800VA | 23A at 13.8V DC | 23A at 13.8V DC |
| | Power supply requirement | 85–265V AC (Auto sensing) | 85–265V AC (Auto sensing) | 13.8V DC ±15% | 13.8V DC ±15% |
| | Antenna connector | SO-239 × 4 + BNC × 2 (50Ω) | SO-239 × 4 + BNC (50Ω) | SO-239 × 2 + phono [(RCA) 50Ω] | SO-239 × 2 (50Ω) |
| | Number of memory channels | 101 (99 regular, 2 scan edges) | 101 (99 regular, 2 scan edges) | 101 (99 regular, 2 scan edges) | 101 (99 regular, 2 scan edges) |
| | Dimensions (WxHxD; Projections are not included) | 425×149×435 mm | 425×149×437 mm | 340×116×279.3 mm | 315×116×343 mm |
| | Weight (approx.) | 23.5kg | 22.5kg | 10.0kg | 10.2kg |
| nitter | Output power | SSB, CW, RTTY, PSK, FM: 5–200W AM: 5–50W | SSB, CW, RTTY, PSK31, FM: 5–200W AM: 5–50W | SSB, CW, RTTY, PSK31, FM: 2–100W AM: 1–30W | SSB, CW, RTTY, FM: 2–100W AM: 2–27W |
| | Spurious emissions | Less than -60dB (HF) Less than -70dB (50MHz) | Less than -60dB (HF) Less than -70dB (50MHz) | Less than -50dB (HF) Less than -63dB (50MHz) | Less than -50dB (HF) Less than -63dB (50MHz) |
| Transmitter | Carrier suppression | More than 63dB | More than 63dB | More than 40dB | More than 40dB |
| | Unwanted sideband | More than 70dB | More than 80dB | More than 55dB | More than 55dB |
| | Microphone connector | 8-pin connector (600Ω) | 8-pin connector (600Ω) | 8-pin connector (600Ω) | 8-pin connector (600Ω) |
| Receiver | Sensitivity (typical) Preamp ON SSB, CW, RTTY, AM: at 10dB S/N FM, WFM: at 12dB SINAD | SSB, CW, RTTY, PSK (2.4kHz): 0.1–1.799MHz 0.5µV 1.8–29.990MHz 0.16µV 50–54MHz 0.13µV AM (6kHz): 0.1–1.799MHz 6.3µV 1.8–29.990MHz 2.0µV 50–54MHz 1.0µV FM (15kHz): 28–29.9MHz 0.5µV 50–54MHz 0.32µV | SSB, CW, RTTY, PSK31 (2.4kHz): 0.1–1.799MHz 0.5µV 1.8–29.999MHz 0.16µV 50–54MHz 0.13µV AM (6kHz): 0.1–1.799MHz 6.3µV 1.8–29.999MHz 2.0µV 50–54MHz 1.0µV FM (15kHz): 28–29.999MHz 0.5µV 50–54MHz 0.32µV | SSB, CW, RTTY (2.4kHz): 1.8–29.995MHz 0.15µV 50–54MHz 0.12µV AM (6kHz): 0.5–1.799MHz 6.3µV 1.8–29.995Hz 2.0µV 50–54MHz 1.6µV FM (15kHz): 28–29.7MHz 0.5µV 50–54MHz 0.3µV | SSB, CW: 1.8–29.999MHz 0.16µV 50–54MHz 0.13µV AM: 0.5–1.8MHz 12.6µV 1.8–29.999MHz 2.0µV 50–54MHz 1.6µV FM: 28–29.7MHz 0.5µV 50–54MHz 0.32µV |
| | Selectivity | SSB: 2.4kHz/–3dB (2.4kHz) 3.6kHz/–60dB CW/RTTY/PSK:500Hz/–3dB (500Hz) 700Hz/–60dB AM: 6.0kHz/–3dB (6kHz) 15kHz/–60dB FM: 12kHz/–6dB (15kHz) 20kHz/–60dB * Variable between 50Hz and 3.6kHz. | SSB: 2.4kHz/–3dB (2.4kHz) 3.6kHz/–60dB CW: 500Hz/–3dB (500Hz) 700Hz/–60dB RTTY, PSK31: 360Hz/–6dB (350Hz) 650Hz/–60dB AM: 6.0kHz/–3dB (6kHz) 15kHz/–60dB FM: 12kHz/–6dB (15kHz) 20kHz/–6dB (15kHz) 20kHz/–6dB *Variable between 50Hz and 3.6kHz. | SSB: 2.4kHz/-6dB (2.4kHz) 3.8kHz/-60dB CW: 500Hz/-6dB (500Hz) 900Hz/-60dB RTTY: 350Hz/-6dB (350Hz) 650Hz/-60dB AM: 6.0kHz/-6dB (6kHz) 15kHz/-6dB FM: 12kHz/-6dB (15kHz) 20kHz/-6dB | SSB: 2.4kHz/-6dB (2.4kHz) 3.4kHz/-40dB CW: 500Hz/-6dB (500Hz) 700Hz/-40dB RTTY: 500Hz/-6dB (350Hz) 800Hz/-40dB AM: 6.0kHz/-6dB (6kHz) 10kHz/-40dB FM: 12kHz/-6dB (15kHz) 22kHz/-40dB * Variable between 50Hz and 3.6kHz. |
| | Spurious and image rejection | More than 70dB | More than 70dB | More than 70dB* (* Except IF point on 50MHz band) | More than 70dB |
| | Audio output power (at 10% distortion with an 8Ω load) | More than 2.6W | More than 2.6W | More than 2.0W | More than 2.0W |
| | External speaker connector | 2-conductor 3.5 (d) mm (¹/s")/8Ω×2 (for main and sub bands) | 2-conductor 3.5 (d) mm (1/6")/8Ω | 2-conductor 3.5 (d) mm (1/s")/8Ω | 2-conductor 3.5 (d) mm (1/e")/8Ω |

The LCD display may have cosmetic imperfections that appear as small or dark spots. This is not a malfunction or defect, but a normal characteristic of LCD displays.

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

SPECIFICATIONS FOR BASE STATION TRANSCEIVERS

| | | IC-7200 | IC-718 | IC-7100 | IC-9100 |
|-------------|---|--|---|--|---|
| | Frequency coverage (Differs according to version) | Tx: 1.8, 3.5, 7, 10, 14, 18, 21, 24, 28, 50MHz bands Rx: 30kHz–60.000MHz* * Some frequency ranges are not guaranteed. | Tx: 1.8, 3.5, 7, 10, 14, 18, 21, 24, 28MHz bands Rx: 30kHz–29.999MHz* * Guaranteed range 0.5–29.999MHz. | Tx:1.8, 3.5, 7, 10, 14, 18, 21, 24, 28, 50, 70*1, 144, 430MHz bands Rx: 30kHz–199.999MHz, 400–470MHz*² *1 Depending on version. *2 Some frequency ranges are not guaranteed | Tx: 1.8, 3.5, 7, 10, 14, 18, 21, 24, 28, 50, 144, 430, 1200MHz bands Rx: 30kHz=60MHz**, 144–146MHz, 430–440MHz, 1240–1300MHz** *1 Some frequency ranges are not guaranteed. *2 With optional UX-9100. |
| | Modes | USB, LSB, CW, RTTY, AM | USB, LSB, CW, RTTY, AM | USB, LSB, CW, RTTY, DV, AM, FM, WFM* (*Rx only) | USB, LSB, CW, RTTY (FSK), AM*,FM, DV (with UT-121) * Transmit HF/50MHz only. Cannot receive on 1200MHz band. |
| | Frequency stability | ±0.5ppm (–10°C to +60°C) | Less than ±200Hz (From 1 min. to 60 min. after power ON) | ±0.5ppm (0°C to +50°C @ 430MHz) | ±0.5ppm (0°C to +50°C, after warm up) |
| | Maximum current drain | 22A at 13.8V DC | 20A at 13.8V DC | 22A (HF/50/70MHz), | 24A at 13.8V DC |
| ral | Power supply requirement | 13.8V DC ±15% | 13.8V DC ±15% | 16A (144/430MHz) at 13.8V DC 13.8V DC ±15% | 13.8V DC ±15% |
| General | Antenna connector | SO-239 (50Ω) | SO-239 (50Ω) | SO-239 \times 2 (for HF/50/70MHz and 144/430MHz bands: 50Ω) | HF/50MHz SO-239 (50Ω)× 2 144MHz SO-239 (50Ω) 430MHz Type-N (50Ω) 1200MHz Type-N (50Ω)(With UX-9100) |
| | Number of memory channels | 201 (199 regular, 2 scan edges) | 101 (99 regular, 2 scan edges) | 495 regular, 4 call, 6 scan edges | 396* (99 for each HF/50, 144, 430, 1200MHz band) 4 Call* (1 for each band) 24 Scan edges* (6 for each band) 20 satellite * With optional UX-9100. |
| | Dimensions (WxHxD; Projections are not included) | 241×84×291 mm | 240×95×239 mm | Main unit 167×58×225 mm Controller 165×64×78.5 mm | 315×116×343 mm |
| | Weight (approx.) | 5.5kg | 3.8kg | Main unit 2.3 kg Controller 0.5 kg | IC-9100: 11kg UX-9100: 950g |
| Transmitter | Output power | SSB, CW, RTTY: 2–100W AM: 1–25W | SSB, CW, RTTY: 2–100W AM: 2–35W | SSB, CW, RTTY, FM, DV: 1.8–50MHz 2–100W 70/144MHz 2–50W 430MHz 2–35W AM: 1.8–50MHz 1–30W 70MHz 1–15W | SSB, CW, RTTY, FM, DV*1: HF/50MHz 2–100W 144MHz 2–100W 430MHz 2–75W 1200MHz*2 1–10W AM: HF/50MHz 2–30W *1 With UT-121*2 With UX-9100. |
| | Spurious emissions | Less than -50dB (HF) Less than -63dB (50MHz) | Less than –50dB | Less than –50dB (HF) Less than –63dB (50MHz) Less than –60dB (70/144/430MHz) | 1.8–29.7MHz Less than –50dB 50,144MHz Less than –63dB 430MHz Less than –61.8dB 1200MHz Less than –53dB (With UX-9100) |
| | Carrier suppression | More than 50dB | More than 40dB | More than 50dB | More than 40dB |
| | Unwanted sideband | More than 50dB 8-pin connector (600Ω) | More than 50dB 8-pin connector (600Ω) | More than 50dB 8-pin modular (600Ω) | More than 55dB 8-pin connector (600Ω) |
| Receiver | Sensitivity (typical) Preamp ON SSB, CW, RTTY, AM: at 10dB S/N FM, WFM: at 12dB SINAD DV: at 1% BER | SSB, CW: 1.8–29.999MHz 0.16μV 50–54MHz 0.13μV AM: 0.5–1.8MHz 13μV 1.8–29.995MHz 2.0μV 50–54MHz 1.0μV | SSB, CW, RTTY: 1.8–29.999MHz 0.16μV AM: 0.5–1.799MHz 13μV 1.8–29.999MHz 2.0μV | SSB, CW: 1.8–29.995MHz 0.15µV 50–54MHz 0.12µV 70MHz 0.15µV 144/430MHz 0.11µV AM: 0.5–1.8MHz 13µV 1.8–29.995MHz 2.0µV 50/70/144/430MHz 1.0µV FM: 28–29.7MHz 0.5µV 50/70MHz 0.25µV 144/430MHz 0.18µV DV: 28–29.7MHz 1µV 50/70MHz 0.63µV 144/430MHz 0.35µV WFM: 76–108MHz 10µV | SSB, CW: 1.8–29.999MHz 0.16µV 50–54MHz 0.13µV 144/430MHz 0.11µV*1 AM: 0.5–1.8MHz 12.6µV 1.8–29.999MHz 2.0µV 50–54MHz 1.6µV 1.44/430MHz 0.5µV 50–54MHz 0.5µV 50–54MHz 0.52µV 144/430MHz 0.18µV 1200MHz 0.18µV*1 DV*2: 28–29.7MHz 1.0µV 50–54MHz 0.63µV 144/430MHz 0.63µV 144/430MHz 0.35µV 1200MHz 0.35µV 1200MHz 0.35µV 1200MHz 0.35µV*1 |
| | Selectivity | SSB: 2.4kHz/–6dB (2.4kHz) 3.6kHz/–60dB CW: 500Hz/–6dB (500Hz) 900Hz/–60dB RTTY: 360Hz/–6dB (350Hz) 650Hz/–6dB AM: 6.0kHz/–6dB (6kHz) 15.0kHz/–60dB * Variable between 50Hz and 3.6kHz. | SSB, CW, RTTY: 2.1kHz/–6dB 4.5kHz/–60dB AM: 6.0kHz/–6dB 20kHz/–40dB | SSB: 2.4kHz/-6dB (2.4kHz) 3.4kHz/-40dB CW: 500Hz/-6dB (500Hz) 700Hz/-60dB RTTY: 500Hz/-6dB (500Hz) 800Hz/-40dB AM: 6.0kHz/-6dB (6kHz) 10kHz/-40dB FM: 12kHz/-6dB (15kHz) 22kHz/-4ddB DV: -50dB | SSB: 2.4kHz/-6dB (2.4kHz) 3.4kHz/-40dB CW: 500Hz/-6dB (500Hz) 700Hz/-40dB RTTY: 500Hz/-6dB (500Hz) 800Hz/-40dB AM: 6.0kHz/-6dB (6kHz) 10.0kHz/-40dB FM: 12kHz/-6dB (500Hz) 22kHz/-40dB DW (With UT-121): -50dB (12.5kHz spacing) 1200MHz (With UX-9100) SSB,CW 2.3kHz/-6dB FM: 15.0kHz/-6dB |
| | Spurious and image rejection (except IF) | More than 70dB* (* Except ½ IF point on 50MHz band) | More than 70dB (1.8–29.999MHz) | More than 70dB (HF/50/70MHz) More than 65dB (144/430MHz) (except ½ IF through on 50MHz, IF through on 144MHz) | HF/50MHz More than 70dB 144,430MHz More than 60dB 1200MHz More than 50dB (With UX-9100) |
| | Audio output power (at 10% distortion with an 8Ω load) | More than 2.0W | More than 2.0W | More than 2.0W | More than 2.0W |
| | External speaker connector | 2-conductor 3.5 (d) mm (1/8")/8Ω | 2-conductor 3.5 (d) mm (1/8")/8Ω | 2-conductor 3.5 (d) mm (1/8")/8Ω | 2-conductor 3.5 (d) mm (1/8")/8Ω×2 (for main and sub bands) |

SPECIFICATIONS FOR HANDHELD AND MOBILE TRANSCEIVERS

| | ID-51E PLUS | ID-5100E | IC-2730E |
|---|--|--|---|
| Frequency coverage (Differs according to version) | Europe version: Tx 144–146, 430–440MHz Rx (A) 144–146, 430–440MHz (B) 144–146, 430–440MHz (BC) 0.52–1.71, 76–108MHz UK version: Tx 144–146, 430–440MHz Rx (A) 137–174, 380–479MHz*1 (B) 108–174, 380–479MHz*1 (BC) 0.52–1.71, 76–108MHz | Europe version: Tx 144–146, 430–440MHz Rx 118–174, 375–550MHz*1 Italia version: Tx 144–146, 430–434, 435–438MHz Rx 118–136.975, 144-146, 430–434, 435–438MHz*2 | Europe version: Tx 144–146, 430–440MHz Rx 118–174, 375–550MHz*1 Italia version: Tx 144–146, 430–434, 435–438MHz Rx 118–136.991, 144–146, 430–434, 435–438MHz*2 |
| Modes | DV, FM, FM-N, AM (Rx only), WFM (Rx only) | DV, FM, FM-N, AM (Rx only), AM-N (Rx only) | FM, FM-N, AM (Rx only), AM-N (Rx only) |
| Max. current drain | 2.5A | VHF/UHF 13A | 13A |
| Number of memory channels | 554 (500 regular, 50 scan edges and 4 call channels) | 1054 (1000 regular, 50 scan edges and 4 call channels) | 1052 (1000 regular, 50 scan edges and 2 call channels) |
| Dimensions (WxHxD; Projections are not included) | 58×105.4×26.4 mm | Main unit: 150×40×172.6 mm Controller: 182.2×81.5×24.7 mm | Main unit: 150×40×151 mm Controller: 150×50×27.2 mm |
| Weight (approx.) | 255g with antenna and BP-271 | Main unit: 1.3kg Controller: 260g | Main unit: 1.2kg Controller: 140g |
| Output power (typical values) | High: 5W Mid: 2.5W Low2: 1.0W Low1: 0.5W S-Low: 0.1W (at 7.4V DC) | High: 50W Mid: 15W Low: 5W (at 13.8V DC) | High: 50W Mid: 15W Low: 5W (at 13.8V DC) |
| Sensitivity (FM: at 12dB SINAD DV: at 1% BER Guaranteed range) | DV Less than 0.28μV FM/FM–N Less than 0.18μV (144, 430 MHz bands) | DV Less than 0.28µV FM/FM–N Less than 0.18µV (144, 430 MHz bands) | FM/FM-N Less than 0.18μV (144, 430 MHz bands) |
| Audio output power (at 10% distortion) | More than 400mW (Internal SP, 16Ω load) More than 200mW (Internal SP, 8Ω load) | More than 2.0W (8 Ω load) | More than 2.0W (8 Ω load) |

^{*}¹ Guaranteed range 144–146 and 430–440MHz. *² Guaranteed range 144–146, 430–434 and 435–438MHz.
(A) means VFO A receiver, (B) means VFO B receiver, (BC) means broadcast radio.

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



Applicable U.S. Military Specifications

lcom makes rugged products that have been tested to and passed the MIL-STD requirements and strict environmental standards for shock and vibration.













IC-756PRO (1999)



IC-7800 (2003)

IC-7851 (2015)

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