The IC-78 is a high performance HF transceiver. Innovative features such as 99 memory channels, high C/N ratio, direct channel entering, data communication capabilities and more, offer easy operation for anyone. All these features come in a compact, rugged package that can be conveniently used in a base station or in a vehicle, as you prefer.

**Reliable straightforward HF communications**

**Durable, powerful construction**
The IC-78 delivers a powerful 100 W of output power, providing the talk power you need to reach the most distant locations. Its one-piece, die-cast aluminum construction combined with a large heat sink, helps keep internal temperatures down and ensures that operation is stable at high duty cycles. And its compact size of 240(W)×95(H)×239(D) mm makes installation easy.

**Ample 99 channels with 8-digit channel name capability**
An affordable 99 duplex memory channels are available for storing individual transmit and receive frequencies, operating mode, filter setting, as well as 8-character channel names. You can enter channel assignments easily from the 10-key pad. In addition, an extra 1 call memory is available for storing the most often used, or most important frequency. An independent, one-touch recall switch is available.

**Front mounted loud speaker**
With the speaker facing the operator, audio sounds can be clearly heard without impediment during operation. It is no longer necessary to manually increase the volume to try and capture audio sounds.

**High frequency stability**
When the optional CR-338 HIGH STABILITY CRYSTAL UNIT is installed, it allows up to ±0.5 ppm of extremely high stable operation.

**Flexible filter selection**
An optional IF filter can be installed into the transceiver, providing 5 passband widths selectable in SSB, CW or RTTY modes.

**Superior basic performance**
A 4-element system is employed for the 1st receive mixer, providing superior receive IMD, especially from in-band, nearby interfering signals. A well-designed double-conversion system to help minimize image and spurious responses for better signal fidelity, is also built-in. A newly designed PLL circuit has been adopted to improve C/N ratio characteristics. The combination of the 4-element system mixer and new PLL circuit allows superior basic performance.

**VFO mode operation**
For continuous frequency operation, VFO mode operation capability is available. It is convenient when searching for signals, around the programmed frequencies, such as short wave broadcasts, etc.

*depending on version

**Simple operation**
The IC-78 is equipped with a large easy-to-read LCD. A minimum number of switches and controls allow for superior feature selectability. Keys access functions directly—there’s no secondary function key. You can enter your operating frequency*, or memory channel number directly from the 10-key pad.

*depending on version

**HF TRANSCEIVER**

IC-78
Direct channel selection

A 10-key pad has been adopted on the front panel. A channel number, or an operating frequency*, can be entered from the keypad directly. Also, memory channel editing is possible. A large channel selector and up/down keys are available to suit your operating style for your convenience. Total and simple operation is provided!

*depending on version

Cloning capability

Programmed data cloning capability between transceivers is available, so that an identical transceiver setting can be made immediately.

Built-in 2-tone alarm*

The 2-tone alarm for an emergency signal transmission is built-in*. Independent tone switch is adopted for quick and simple emergency calls.

*depending on version

Data communications

In addition to the current voice and key operation, FSK (First Shift Keying) type RTTY mode is available. By connecting a terminal unit or terminal node controller to the ACC socket on the rear panel, data acquisition and text-base file transfers and other data communication can be made. On RTTY, shift width, tone frequencies and polarization are also selectable.

Noise blanker

To reduce pulse-type noise, a level adjustable noise blanker is built-in. Various levels of pulse-type noise, such as from car ignitions, etc., can be reduced.

Pre-amp. and attenuator

A pre-amplifier and an RF attenuator are adopted for more pleasant reception. Convenient when weak signals or extremely strong signals are received, to present better quality readability.

SQL/RF gain controller

In addition to the squelch control, an RF gain control is available, and the controller is combined with the squelch control. The RF gain adjusts minimum response receiver gain, and ignores signals weaker than the pre-set level— providing pleasant stand-by, or scanning. The SQL/RF GAIN controller action is selectable from squelch only, RF gain only or combined, in the SET mode according to your operating style and mode.

Other features

- Built-in mic. compressor increases average talk power
- Complete CW features
- Variety of scanning function types
- IF shift interference rejection
- Built-in antenna tuner control circuit and selectable antenna tuner
- Hand microphone is supplied
- VOX capability, and more...
**SPECIFICATIONS**

**GENERAL**
- Frequency range: Rx 0.030–29.99999 MHz* 1
- Guaranteed range: 0.5–29.99999 MHz
- Not guaranteed for some frequency bands
- Mode: USB, LSB, CW, RTTY (FSK), AM
- Number of memory Ch.: 99 (Duplex) + 1 (Call channel)
- Frequency stability: Less than ±500 Hz from 1 min. to 60 min. after power ON. After that rate of stability less than ±300 Hz/24 hr. at +25°C (+77°F). Temperature fluctuations 0°C to +50°C (+32°F) to +122°F less than ±50 Hz
- Power supply requirement: 13.8 V DC ± 15 % (negative ground)
- Current drain (at 13.8 V DC) with an 8 Ohm load
  - Stand-by: 3.8 Amps
  - Transmit: 20.0 A
- Transmit max. power
  - Short-term: 150 W
  - Long-term: 120 W
- Receive Stand-by: 1.3 A
- Antenna connector: SO-239 (50 Ω)
- Microphone connector: 8-pin connector (600 Ω)
- ALC connector: 2-conductor 3.5 (d) mm (1/4")
- ACC connector: 13-pin
-REMOTE connector: 2-conductor 3.5 (d) mm (1/4")

**TRANSMITTER**
- Modulation system
  - SSB: Balanced modulation
  - AM: Low level modulation
- Output power
  - SSB, CW, RTTY: 2–100 W
  - AM: 2–40 W
- Carrier suppression: More than 40 dB
- Unwanted sideband: More than 50 dB
- Microphone connector: 8-pin connector (600 Ω)
- Key connector: 3-conductor 6.5 (d) mm (1/4")
- Send connector: Phono (RCA)
- ALC connector: Phono (RCA)

**RECEIVER**
- Receiver system: Double-conversion superheterodyne
- Sensitivity (10 dB S/N)
  - SSB, CW, RTTY: 0.16 µV (1.600–29.99999 MHz)
  - AM: 13 µV (0.5–1.999999 MHz)
  - 2 µV (1.600–29.999999 MHz)
- SQL sensitivity: Less than 5.2 µV (SSB)
- Selectivity: Less than 6.6 kHz/–60 dB
- Carrier suppression: More than 40 dB
- Spurious and image: More than 70 dB
- Audio output power
  - From 1.38 V DC: More than 2.0 W
- PHONES connector: 3-conductor 6.5 (d) mm (1/4")
- EXT SP connector: 2-conductor 3.5 (d) mm (1/4")/8 Ohm

**OPTIONS**
- PS-125 DC POWER SUPPLY
  - Compact power supply with high current capability.
  - Output: 13.8 V DC (25 A max.)
- AT-140 HF AUTOMATIC ANTENNA TUNER
  - Covers 1.6–30 MHz with a 7 m (23 ft) or longer wire antenna.
- AT-130/E MICROPHONE
  - Covers from 1.9 to 30 MHz. Has a built-in heater for improved frequency stability.
- AH-2b Antenna Element
  - Covers 3.5–30 MHz with a 7 m (23 ft) or longer wire antenna.
- MN-100 ANTENNA MATCHER
  - Match the transceiver to a dipole antenna without applying DC power. 8 m wire antenna wires come attached.
- MN-100L ANTENNA MATCHER
  - Match the transceiver to a long-wire antenna without applying DC power. 15 m antenna wire comes attached.
- Flash Filters
  - Have good shape factor and provide you with better reception.

**Cómo hacer más cosas con tu radio.**

**Les spécifications et informations données dans ce document peuvent être modifiées sans préavis.**

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