

## Reliable Straight Forward HF Communications



### 100 W Output Power in a Durable Body

Powerful 100 W output provides the talk power you need to reach distant locations. Its one-piece, die-cast aluminum construction provides stability even at high duty cycles.

### Simple Operation with Easy-to-Read LCD

The IC-78 is equipped with a large, easy-to-read LCD screen. A minimum number of buttons and knobs provide direct function access without the need for a secondary key function.

### Prompt Operation with Memory Channels

Operating frequencies can be saved as memory channels. Each memory channel can be named with up to eight characters in the name. Additionally, you can enter frequencies directly or use the VFO mode\*.

\*VFO mode is available, depending on the transceiver version.

### Front Mounted Speaker

With the speaker facing to the operator, you can clearly hear received audio during operation. The IC-78 provides more than 2 W audio output. Received voice can be heard in noisy environments.

### And more

- Five user selectable IF filter widths
- Microphone Compressor increases average talk power
- VOX capability for hands-free operation
- RIT, Preamp and Attenuator functions
- Noise Blanker function reduces pulse type noise
- IF Shift for interference rejection
- CW mode and RTTY mode operation
- Scan function
- Built-in antenna tuner control circuit
- Data cloning between transceivers



## SPECIFICATIONS

| GENERAL                                                                               |                        |                                                                                                                                                                                    |
|---------------------------------------------------------------------------------------|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Frequency range                                                                       | Receiver               | 0.030 ~ 29.999999 MHz*1                                                                                                                                                            |
|                                                                                       | Transmitter            | 1.600 ~ 29.999999 MHz*2                                                                                                                                                            |
| *1 Guaranteed range: 0.5 ~ 29.999999 MHz. *2 Not guaranteed for some frequency bands. |                        |                                                                                                                                                                                    |
| Modes                                                                                 |                        | USB, LSB, CW, RTTY (FSK), AM                                                                                                                                                       |
| Number of memory channels                                                             |                        | 99 (Duplex) +1 (Call channel)                                                                                                                                                      |
| Frequency stability                                                                   |                        | Less than ±200 Hz from 1 min. ~ 60 min. after power ON. Less than ±30 Hz/hour at +25°C (+77°F) 1 hour later after power ON. Less than ±350 Hz between 0°C ~ +50°C (+32°F ~ +122°F) |
| Power supply requirement                                                              |                        | 13.8 V DC ±15 % (Negative ground)                                                                                                                                                  |
| Current drain (at 13.8 V DC)                                                          | Rx Max. audio Stand by | 2.0 A<br>1.3 A                                                                                                                                                                     |
|                                                                                       | Tx Max. power          | 21.0 A                                                                                                                                                                             |
| Operating temperature range                                                           |                        | −10°C ~ +60°C , +14°F ~ +140°F                                                                                                                                                     |
| Antenna connector                                                                     |                        | SO-239 (50 Ω)                                                                                                                                                                      |
| Dimensions (Projections not included)                                                 |                        | 240 (W) × 95 (H) × 239 (D) mm, 9.4 (W) × 3.7 (H) × 9.4 (D) in                                                                                                                      |
| Weight (Approximate)                                                                  |                        | 3.8 kg, 8.4 lb                                                                                                                                                                     |
| TRANSMITTER                                                                           |                        |                                                                                                                                                                                    |
| Output power                                                                          | SSB, CW, RTTY          | 2 ~ 100 W                                                                                                                                                                          |
|                                                                                       | AM                     | 2 ~ 35 W                                                                                                                                                                           |
| Spurious emissions                                                                    |                        | Less than −46 dB below peak output power                                                                                                                                           |
| Carrier suppression                                                                   |                        | More than 40 dB                                                                                                                                                                    |
| Unwanted sideband                                                                     |                        | More than 50 dB                                                                                                                                                                    |
| Microphone connector                                                                  |                        | 8-pin connector (600 Ω)                                                                                                                                                            |
| RECEIVER                                                                              |                        |                                                                                                                                                                                    |
| Sensitivity (10 dB S/N)                                                               | SSB, CW, RTTY          | 0.16 μV (1.600 ~ 29.999999 MHz)<br>(0.5 μV at 12 dB SINAD)                                                                                                                         |
|                                                                                       | AM                     | 13 μV (0.5 ~ 1.599999 MHz)<br>2 μV (1.600 ~ 29.999999 MHz)                                                                                                                         |
| Selectivity                                                                           | SSB, CW, RTTY          | More than 2.1 kHz/−6 dB<br>Less than 4.5 kHz/−60 dB                                                                                                                                |
|                                                                                       | AM                     | More than 6.0 kHz/−6 dB<br>Less than 20 kHz/−40 dB                                                                                                                                 |
| Spurious and image rejection ratio                                                    |                        | More than 70 dB<br>(1.600 ~ 29.999999 MHz)                                                                                                                                         |
| Audio output power (at 13.8 V DC)                                                     |                        | More than 2.0 W at 10% distortion with an 8 Ω load                                                                                                                                 |
| PHONES connector                                                                      |                        | 3-conductor 6.5 (d) mm (1/4")                                                                                                                                                      |
| External speaker connector                                                            |                        | 2-conductor 3.5 (d) mm (1/8") / 8 Ω                                                                                                                                                |

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

## Supplied accessories:

- Hand microphone
- DC power cable
- Spare fuses

## OPTIONAL ACCESSORIES

## DESKTOP MICROPHONES



**SM-50**  
Dynamic microphone. Includes [UP] / [DOWN] switches and low cut function.



**SM-30**  
Compact, lightweight electric microphone.



**SM-27**  
Dynamic microphone with PTT lock switch.

## HAND MICROPHONE



**HM-219**  
Same as supplied.

## EXTERNAL SPEAKER



**SP-41**  
Front mounted headphone jack.

## AUTOMATIC TUNING ANTENNA



**AH-740**  
Covers 2.5 ~ 30 MHz. OPC-2321 is required.

## AUTOMATIC ANTENNA TUNER



**AT-140**  
Covers 1.6 ~ 30 MHz with a 7 m (23 ft) or longer wire antenna. AT-130/E is also available.

## FOLDED DIPOLE ANTENNA



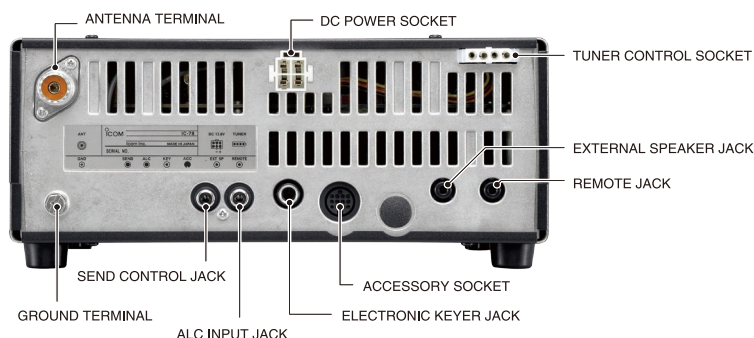
**AH-710**  
Covers 1.9 ~ 30 MHz bands.

## OTHER OPTIONS

- **OPC-599** ACC 13 PIN CABLE ADAPTER
- **OPC-2321** CONTROL CABLE FOR AH-740 6 m (19.6 ft)
- **MB-23** CARRYING HANDLE
- **MB-118** MOBILE BRACKET

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

## REAR PANEL VIEW



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