



HF ALL BAND TRANSCEIVER

# IC-718



### Front mounted loud speaker

The IC-718 has a speaker mounted on the front panel. 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.

### Superior basic performance

The IC-718 has 0.03–29.999999 MHz\* general coverage receive capability. A 4-element system is employed for the 1st receive mixer, providing superior receive IMD, especially from in-band near-by 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 as that of a commercial grade transceiver.

\*Guaranteed range: 0.5–29.999999 MHz

### Optional DSP capability

With the optional UT-106\* installed you gain AF DSP capabilities. The DSP includes the following to give you superior receive quality in your shack.

\* Already installed with some versions.

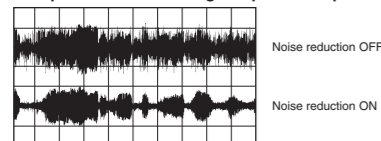


### Noise reduction:

Pulls desired AF signals from noise. Outstanding S/N ratio is achieved, providing clean audio in SSB and AM.

### Automatic Notch filter:

Comparison of receive signal speaker output



This automatically minimizes beat signals and heterodynes while preserving the receive signal. Also, the notch frequency is automatically adjusted to follow interfering beat signals— for example, reducing interference from RTTY signals during SSB operation.

### Interference rejection— IF shift

To reject interference, the IC-718 has an IF shift function which shifts the center frequency of the IF passband electronically to reduce adjacent interference.

### Microphone compressor

The IC-718 has a low distortion microphone compressor. This feature compresses microphone audio input to increase average audio output level. The result is, that talk power is increased. This function is effective for long distance communication, or when propagation conditions are poor.

### RF gain control

RF gain control 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.

### Ample CW features

An electronic keyer with a variable dot/dash ratio (2.8:1 to 4.5:1) control is built-in. By simply connecting a paddle, easy CW operation can be made. The CW pitch and the key speed are also variable from 300–900 Hz, 6–60 wpm, respectively. Of course, full break-in capability is available with the adjustable break-in delay.

### VOX operation

A VOX (voice operated transmission) is included with the IC-718. It provides hands-free operation by detecting audio signals from the microphone. It's easy!

# THE ORIGIN OF THE HF TRANSCEIVER

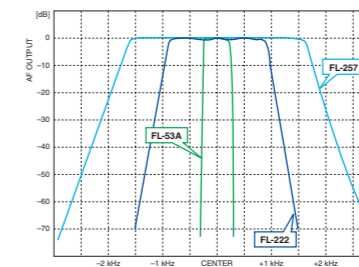
The HF bands allow you to communicate over long distances covering many km even to the other side of the world. With the superior performance found in the IC-718 such as wide dynamic range, high C/N ratio, and full duty operation you will find making these contacts easy. Experience the combination of the latest RF and digital technology, along with the size and simplified operation. You will see the IC-718 will be the most practical rig you will ever own.

## HF TRANSCEIVER IC-718



### Flexible filter selection

An optional IF filter can be installed into the transceiver to suit your operating preference.



### High frequency stability

When the optional CR-338 High Stability Crystal Unit is installed, you get a very high frequency stability of  $\pm 0.5$  ppm.



### Selectable antenna tuner

Either the AT-180 or AH-4 optional antenna tuner can be used with the IC-718 to suit your installing conditions, or operating style. Of course, the AH-4 control circuit is built into the IC-718.

### Simple operation

The IC-718 is equipped with a minimum number of switches and controls for superior feature selectability. The 10-key pad on the front panel to directly enter an operating frequency, or a memory channel number. The auto tuning steps function helps quick tuning activates when turning the dial quickly. And the band stacking register is very convenient when changing operating bands.

### Digital S/Rf meter

Built-in multi functional digital S/Rf meter indicates signal strength level while receiving, and either transmit output power, ALC level or VSWR ratio while transmitting.

### Optional automatic tuning antenna

The optional vehicle mount automatic tuning antenna, AH-740 provides relay-driven high-speed tuning covering from 2.5 to 30 MHz. Its IP55 dust-protection and water jet resistance ensures reliable operation in harsh weather conditions.

### Other features

- USB, LSB, CW, RTTY (FSK) and AM modes are built-in
- Level adjustable noise blanker
- RF attenuator and Pre-amplifier
- Variety of scanning function types
- Total 101 memory channels are available
- Hand microphone is supplied, and more...





**SPECIFICATIONS**

GENERAL		
Frequency coverage	Receiver	0.030–29.999 MHz*1
	Transmitter	1.800–1.999*2, 3.500–3.999*2, 7.000–7.300, 10.100–10.150, 14.000–14.350, 18.068–18.168, 21.000–21.450, 24.890–24.990, 28.000–29.700 MHz
*1 Guaranteed range: 0.500–29.999 MHz. *2 Varies according to version.		
Mode	USB, LSB, CW, RTTY (FSK), AM	
Number of channels	101 (99 regular, 2 scan edges)	
Frequency resolution	1 Hz	
Frequency stability	Less than ±200 Hz from 1 min. to 60 min. after power ON. Less than ±30 Hz/hour at +25°C (+77°F) after that. Less than ±350 Hz between 0°C to +50°C (+32°F to +122°F)	
Antenna connectors	SO-239 (50 Ω unbalanced)	
Power supply requirement	13.8 V DC ±15%	
Power consumption	Tx	20 A (at 100 W output power)
	Rx	1.3 A (Standby), 2.0 A (Maximum audio)
Operating temperature range	–10 °C to +60 °C; 14 °F to 140 °F	
Dimensions (W × H × D) (projections not included)	240 × 95 × 239 mm; 9.4 × 3.7 × 9.4 in	
Weight (approximately)	3.8 kg; 8.4 lb	
TRANSMITTER		
Output power	SSB/CW/RTTY	2–100 W
	AM	2–35 W
Modulation system	SSB	Balanced modulation
	AM	Low level modulation
Spurious emissions	Less than –50 dB below peak output power	
Carrier suppression	More than 40 dB	
Unwanted sideband	More than 50 dB	
Microphone impedance	8-pin connector 600 Ω	

RECEIVER		
Receiver system	Double-conversion superheterodyne	
Sensitivity (at 10 dB S/N)	SSB/CW/RTTY	0.5– 1.799999 MHz
	AM	1.8– 29.999999 MHz
Sensitivity for RED versions (#43, #63) (at 12 dB SINAD)	SSB (BW= 2.4 kHz)	0.16 μV
	AM (BW=6 kHz, Mod=60%)	2 μV
Selectivity	SSB, CW, RTTY	1.8–2.999999 MHz
	AM	3.0–29.999999 MHz
Spurious and image rejection	SSB, CW, RTTY	10 dBμV emf
	AM	0 dBμV emf
Audio output power	16 dBμV emf	
External speaker connector	2-conductor 3.5 (d) mm (1/8") / 8Ω	
Squelch sensitivity (Threshold)	Less than 5.6 μV (SSB)	
Selectivity	SSB, CW, RTTY	More than 2.1 kHz/–6 dB
	AM	4.5 kHz/–60 dB
Spurious and image rejection	SSB, CW, RTTY	6.0 kHz/–6 dB
	AM	20 kHz/–40 dB
Audio output power	More than 2.0 W (at 10% distortion with an 8 Ω load)	
External speaker connector	2-conductor 3.5 (d) mm (1/8") / 8Ω	

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

**Supplied accessories:** (May differ depending on version)  
 • Hand microphone • DC power cable • Spare fuses

**Applicable U.S. Military Specifications**

Standard	MIL 810 F	
	Method	Procedure
Temperature Shock	503.4	I
Rain Drip*	506.4	III
Vibration	514.5	I
Shock	516.5	I, IV

\* Rain Drip test was performed on the front panel only.  
 Also meets equivalent MIL-STD-810-C, -D and -E.

**OPTIONS**

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

<p><b>DESKTOP MICROPHONES</b></p>  <p><b>SM-30</b> Compact, lightweight microphone.</p> <p><b>SM-50</b> Dynamic microphone with [UP/DOWN] switches and a low cut function.</p> <p><b>SM-27</b> Dynamic microphone with PTT lock switch.</p>	<p><b>HM-219 HAND MICROPHONE</b></p>  <p>Same as supplied. (May differ, depending on version.)</p>	<p><b>SP-23 EXTERNAL SPEAKER</b></p>  <p>Four audio filters, front mounted headphone jack. (Not available for EU countries)</p>	<p><b>AH-4 HF+50 MHz AUTOMATIC ANTENNA TUNER</b></p>  <p>Covers 3.5–54 MHz with a 7 m (23 ft) or longer wire antenna.</p>	<p><b>AH-2b ANTENNA ELEMENT</b></p>  <p>Covers 7–54 MHz. For use with AH-4.</p>	<p><b>AH-740 AUTOMATIC TUNING ANTENNA</b></p>  <p>Covers 2.5–30 MHz (amateur band). OPC-2321 is required.</p>
<p><b>IC-PW1/PW1EURO HF+50 MHz 1 kW HF LINEAR AMPLIFIER</b> (Optional OPC-599 is required.)</p> 	<p><b>PS-126 DC POWER SUPPLY</b></p>  <p>13.8 V DC, 25 A max. output.</p>	<p><b>CR-338 HIGH STABILITY CRYSTAL UNIT</b></p>  <p>POC type crystal oscillator. Frequency stability: ±0.5 ppm</p>	<p><b>AT-180 AUTOMATIC ANTENNA TUNER</b></p>  <p>Covers 1.8–54MHz amateur band (Except for 5MHz band).</p>	<p><b>AH-710 FOLDED DIPOLE ANTENNA</b></p>  <p>Covers 1.9–30 MHz bands.</p>	<p><b>AH-5NV NVIS KIT</b></p>  <p>Fiberglass mobile mounting antenna element for use with AH-740. Covers 2.2–30 MHz (amateur band) with AH-740.</p>
<p><b>UT-106 DSP UNIT</b></p>  <p>Provides AF DSP functions, such as noise reduction and auto notch. Already installed with some versions.</p>	<p><b>455 kHz FILTERS</b></p>  <p><b>FL-53A</b> CW narrow; 250Hz/–6 dB  <b>FL-222</b> SSB narrow; 1.8kHz/–6 dB  <b>FL-257</b> SSB wide; 3.3 kHz/–6 dB</p>	<ul style="list-style-type: none"> <li>• <b>OPC-599 ACC 13 PIN CABLE ADAPTER</b></li> <li>• <b>OPC-2321: CONTROL CABLE</b> for use with AH-740 (6 m)</li> <li>• <b>MB-23 CARRYING HANDLE</b></li> <li>• <b>MB-118 MOBILE BRACKET</b></li> <li>• <b>HM-36 HAND MICROPHONE</b></li> </ul>			

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