

144, 430/440, 1200 MHz ALL MODE TRANSCEIVER



## Direct Sampling Now Enters the VHF/UHF Arena

All mode, tri-band transceiver covering the 144, 430/440 as well as 1200 MHz

Real-time, high-speed spectrum scope for the 144, 430/440, 1200 MHz bands

New PA provides a powerful 100 W (144 MHz), 75 W (430/440 MHz) and 10 W (1200 MHz) output

Dualwatch operation and full-duplex operation in the satellite mode

Follows Icom's center display design style with a 4.3 inch touch screen color TFT LCD

D-STAR provides digital clear audio and Internet capable communication

Smooth satellite operation with normal/reverse tracking and 99 satellite channels

Digital Data (DD) mode provides 128 kbps data communication

# IC-9700

## GENERAL

Frequency coverage:	<USA version> 144.000–148.000, 430.000–450.000, 1240.000–1300.000 MHz
	<EUR version> 144.000–146.000, 430.000–440.000, 1240.000–1300.000 MHz
Mode:	SSB, CW, RTTY, AM, FM, DV, DD
Number of channels:	107 (99 Simplex + 6 Program scan edges + 2 CALL) × 3 bands, 99 (Satellite), 2000 (DR function)
Antenna connectors:	144 MHz SO-239 (50 Ω), 430/440, 1200 MHz Type-N (50 Ω)
Power supply requirement:	13.8 V DC ±15% (Negative ground)
Power consumption:	TX Less than 18 A (High power) RX 1.2 A typical (Standby), Less than 1.8 A (Maximum audio)
Operating temperature range:	–10 °C to +60 °C; 14 °F to 140 °F
Frequency stability:	Less than ± 0.5 ppm (–10°C to +60°C; 14°F to 140°F)
Frequency resolution:	1 Hz
Dimensions:	240 × 94 × 238 mm, 9.4 × 3.7 × 9.4 in (W × H × D, projections not included)
Weight:	4.7 kg, 10.4 lb (approximate)

## TRANSMITTER

Output power:	<SSB/CW/FM/RTTY/DV/DD> <AM>	
	144 MHz 0.5–100 W	0.125–25 W
	430/440 MHz 0.5–75 W	0.125–18.75 W
	1200 MHz 0.1–10 W	0.025–2.5 W
Modulation system:	SSB Digital PSN modulation FM Digital Reactance modulation AM Digital Low Power modulation DV Digital GMSK Reactance modulation DD Digital Quadrature modulation	
Spurious emissions:	<Harmonics>	<Out-of-band emission>
	144 MHz Less than –63 dB	Less than –60 dB
	430/440 MHz Less than –61.8 dB	Less than –60 dB
	1200 MHz Less than –53 dB	Less than –50 dB
Carrier suppression:	More than 50 dB	
Unwanted sideband:	More than 50 dB	
Microphone impedance:	600 Ω	

## RECEIVER

Receiver system:	144, 430/440 MHz RF Direct Sampling 1200 MHz Down Conversion IF Sampling	
Intermediate frequency:	311–371 MHz (1200 MHz)	
Sensitivity (Preamp: ON, Filter: SOFT):	SSB/CW (10 dB S/N) Less than 0.11 μV AM (10 dB S/N) Less than 1.0 μV FM (12 dB SINAD) Less than 0.18 μV DV (1% BER) (PN9) Less than 0.35 μV DD (1% BER) (PN9) Less than 1.59 μV	
Selectivity (Filter: SHAPE):	SSB (BW=2.4 kHz) More than 2.4 kHz/–3 dB, Less than 3.6 kHz/–60 dB CW (BW=500 Hz) More than 500 Hz/–3 dB, Less than 700 Hz/–60 dB RTTY (BW=500 Hz) More than 500 Hz/–3 dB, Less than 700 Hz/–60 dB AM (BW=6 kHz) More than 6 kHz/–3 dB, Less than 15 kHz/–60 dB FM (BW=15 kHz) More than 12 kHz/–6 dB, Less than 20 kHz/–60 dB DV (12.5 kHz spacing) More than –50 dB DD (300 kHz spacing) More than –40 dB	
Spurious and image rejection ratio:	SSB/CW 144, 430/440 MHz More than 70 dB, 1200 MHz More than 50 dB AM/FM/DV 144, 430/440 MHz More than 60 dB, 1200 MHz More than 50 dB DD 1200 MHz More than 50 dB	
Audio output power:	More than 2.0 W (1 kHz, 10% distortion) into an 8 Ω load	

## OPTIONS



**HM-219**  
Hand microphone with UP/DOWN switches (Same as supplied)



**PS-126**  
DC power supply (13.8 V DC, 25 A maximum output)



**RS-BA1 (Version 2)**  
IP remote control software



**SM-50**  
Dynamic desktop microphone including [UP/DOWN] switches and a low cut function



**SP-38**  
High quality audio and matching height  
Maximum input: 7 W



**RS-MS1A**  
Remote control application for Android™. Download free from Google Play™.

- **MB-118** Mobile mounting bracket
- **MB-123** Carrying handle
- **OPC-2350LU** PC/Android™ data cable
- **SM-30** Compact, lightweight electret desktop microphone
- **SP-35** External speaker (2 m, 6.6 ft cable)
- **SP-41** External speaker with two input lines
- **CS-9700** Programming software

## SUPPLIED ACCESSORIES

- HM-219, hand microphone
- DC power cable

## REAR PANEL



- |                                    |  |
|------------------------------------|--|
| <b>A</b> 144 MHz Antenna Connector | <b>B</b> 430/440 MHz Antenna Connector |
| <b>C</b> DC Power Socket           | <b>D</b> 1200 MHz Antenna Connector    |
| <b>E</b> LAN Port                  | <b>F</b> 10 MHz reference signal input |
| <b>G</b> Accessory Socket          | <b>H</b> Data Jack                     |
| <b>I</b> USB/B Port                | <b>J</b> CI-V Remote Control Jack      |
| <b>K</b> KEY Jack                  | <b>L</b> External Speaker Jack MAIN    |
| <b>M</b> External Speaker Jack SUB | <b>N</b> Ground Terminal               |

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