

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)



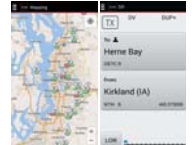
**RS-BA1 (Version 2)**  
IP remote control software



**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



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

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