



VHF AIR BAND TRANSCEIVER

IC-A120

Top Performance Mobile Airband Radio
with Active Noise Cancelling and Bluetooth® Wireless Connectivity



High Visibility, Simple Operation

The full dot-matrix LCD allows for high visibility and clearly shows alphanumeric characters and icons. Programming memory channels and other radio settings can be simply made from the front panel by radio users. These customizing functions can also be restricted, depending on the radio settings.

Optional Bluetooth® Headset Connectivity

With the optional UT-133A Bluetooth® unit, the IC-A120 can be used with a third-party wireless Bluetooth® headset. Also, using the optional VS-3 Bluetooth® headset, the side tone function is available.

Active Noise Cancelling (ANC)

The newly added built-in ANC reduces background noise in the received and transmitting signals. This function is effective in extremely noisy airport environments full of aircraft noise. The automatic noise limiter (ANL)* reduces pulse-type noise such as engine ignition.

* The ANL and ANC functions cannot be used at the same time.

IP54 Dust-Protection and Water Resistance

The IC-A120 has IP54 dust-protection and water resistance. This construction allows for use in open-air vehicles.

Dualwatch and ON-Hook Scan Functions

The dualwatch function checks the priority and operating channels alternatively. The ON-Hook scan function automatically starts scanning when the hand microphone is hooked on the microphone hanger. When you take the microphone OFF hook, the scanning stops at the priority channel or displayed channel (according to the preprogramming).

Side Tone Function

When using a third-party headset with the optional OPC-871A headset adapter, the side tone function allows you to monitor your own transmitted voice via the connected headset. Even when using a hand microphone, your voice can be monitored from the headset.

Optional Speaker-Microphone, HM-217

Listen to received audio through the HM-217's built-in speaker. From the speaker-microphone's front panel, access up/down buttons and two programmable buttons (P1/P2) which can be used as a shortcut to activate frequently used functions.

Other Features

- A total of 200 memory channels with 12-character channel names
- Both 12- and 24- volt systems compatible
- 8.33 kHz* and 25 kHz channel spacing
* Use of 8.33 kHz channel spacing is prohibited in Canada
- 36W (P.E.P.) RF output power
- Dualwatch and priority scan functions
- Power on password protection
- PC programming capability
- CI-V Commands for external control
- VE-PG3 RoIP gateway for interconnect with other radio devices

OPTIONS



SPECIFICATIONS

GENERAL	IC-A120
Frequency coverage (Tx/Rx)	118.000–136.992MHz
Channel spacing	25kHz/8.33kHz
Type of emission	6K00A3E, 5K60A3E (FCC/EXP) 6K00A3E (Industry Canada)
Operating temperature	–30°C to +60°C; –22°F to +140°F
Frequency stability	±5ppm (–30°C to +60°C; –22°F to +140°F)
Antenna connector	SO-239 (50Ω)
Number of memory channels	200 channels
Power supply requirement	13.75V/27.5V DC
Current drain (at 13.75V)	
Transmitting	5.0A (maximum)
Receiving	4.0A (at AF max.), 0.5A (at stand-by)
Dimensions (W×H×D, Projections not included)	161×45×175 (mm); 6.34×1.77×6.89 (in) (approximately)
Weight (approximately)	1.5kg; 3.3lb (main unit)
TRANSMITTER	
Output power (at 13.75V) (Carrier Power)	9.0W typical 10.0W maximum
Spurious emissions	Less than –60dBc
Modulation capability	70% to 100%
Microphone impedance	600Ω
RECEIVER	
Intermediate frequencies	38.85MHz/450kHz (1st/2nd)
Sensitivity (at 6dB S/N)	Less than 1μV
Selectivity	8.33kHz 2.778/7.37kHz (6dB/60dB) 25kHz 8/25kHz (6dB/60dB)
Spurious response	More than 74dBμ
Audio output power	(10% distortion, 60% modulation)
Internal SP (8Ω load)	1.5W typical
External SP (8Ω load)	More than 10W
Headphone (500Ω load)	More than 100mW

Measurements made in accordance with FCC Part 87 and Industry Canada for USA version. All stated specifications are subject to change without notice or obligation.

Applicable U.S. Military Specifications

Standard	MIL 810 G	
	Method	Procedure
Low Pressure	500.5	I, II
High Temperature	501.5	I, II
Low Temperature	502.5	I, II
Temperature Shock	503.5	I-C
Solar Radiation	505.5	I
Humidity	507.5	II
Vibration	514.6	I
Shock	516.6	I, IV

Also meets equivalent MIL-STD-810-C, -D, -E and -F.

Applicable IP Rating

Ingress Protection Standard	
Dust & Water	IP54 (Dust-protection and water resistance)

Supplied Accessories

- Hand microphone, HM-216
- DC power cable
- Mounting bracket kit
- Microphone hanger kit
- Fuses