

VHF AIR BAND TRANSCEIVER









# High-Quality Panel Mount Radio with Clear Visibility OLED Screen

# **High Visibility OLED Screen**

The OLED (Organic Light Emitting Diode) emits light from itself, so a display back-



light is not required. It provides higher contrast, wider viewing angle of almost 180 degrees and faster response time than a conventional LCD. The IC-A220's display has a wide active area, operating frequencies' characters can be maximized in the display, while operating status can be shown on both top and bottom of the display.

# **Large Switch Buttons**

The IC-A220 has large switch buttons on the front panel. The most frequently used FLIP-FLOP (Frequency exchange) switch button is designed large enough to be pushed with ease. All switch buttons and knobs are illuminated with pure-white back-lighting which are the same color as the OLED display.

# **TSO/ETSO Certification**

The IC-A220 TSO version can be used as a primary VHF radio in general aviation (part 23) aircraft\*. The IC-A220 TSO version is also accepted as an ETSO radio under the TSO/ ETSO reciprocal acceptance policy.

## Auto Squelch Function

The squelch sensitivity is automatically adjusted in accordance with the noise level to eliminate annoying background noise and unwanted signals.

## **Quick Squelch Adjustment**

The auto and manual squelch including squelch level can be quickly accessed with the Volume knob. The squelch test function temporarily opens the squelch and allows you to monitor signals.

## Auto Dimmer

The auto dimmer function sets display and key backlighting brightness. The IC-A220's high sensitivity light sensor covers a wide illumination range.

## **External Dimmer Control**

By connecting to an external dimmer control system on the aircraft, the IC-A220's dimmer function can be linked with the aircraft dimmer level. The external dimmer control can be used on either 13.8 V or 27.5 V electrical systems.

## **Intercom Function**

The IC-A220 has a built-in voice activated intercom function allowing the pilot to talk with the copilot via the headset. The IC-A220 has adjustable audio level and squelch control functions.

# **Memory Channels**

The IC-A220 has 20 memory channels and 20 history memory channels respectively. Often used memory channels can be instantly recalled. Group memory channels are organized into 10 memory channels by 5 groups (total 50 channels). Weather channel scanning function searches for weather channel signals.

## 8.33 kHz Channel Spacing

The IC-A220 allows switching between 8.33 kHz and 25 kHz frequency steps in the menu mode.

\* Use of 8.33 kHz channel spacing may be prohibited depending on country.

# **Remote Control Capability**

You can remotely control the FLIP-FLOP (frequency exchange), intercom and recall switches via the rear panel connector.

## **9 V Power Supply Operation**

As the TSO specifications require, the radio continues to work with the reduced power supply voltage.

# **Configuration Menu**

To improve operability, menu items are divided into two modes, a settings menu and a configuration menu. Seldom-changed settings can be set in the configuration menu, while normal settings can be made in the settings menu.

## **Other Features**

- Dualwatch and priority watch functions
- One touch access to 121.5 MHz emergency frequency
- Both 13.8 V and 27.5 V electrical systems compatible
- Side tone function for monitoring your voice with a headset
- ANL (Automatic noise limiter) function reduces pulse type noise
- D-SUB 25-pin connector and MIL-Spec M39029/63-368 compliant socket pins
- Slim 33 mm (1.3 inch) height can be installed in a limited panel space

installed in a limited panel space

\* For more details, please see the Environmental Qualification Form on www.icomamerica.com. The IC-A220 TSO version is manufactured and serviced by Icom America Inc. All repairs or adjustment information will be provided from Icom America. (http://www.icomamerica.com)

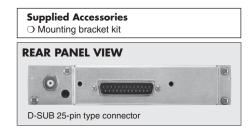
# **SPECIFICATIONS**

C-A220 TSO version

GENERAL		
Frequency coverage		
Tx/Rx 8.33 kHz spacing	118.000–136.992 MHz	
25 kHz spacing	118.000–136.975 MHz	
Rx Weather channel	161.650–163.275 MHz	
Frequency spacing	8.33 kHz/25 kHz	
Mode	AM (6K00A3E, 5K60A3E)	
Frequency stability	±5 ppm	
Operating temperature	-20°C to +55°C; -4°F to +131°F	
Antenna impedance	50 Ω	
Number of memory channels	20 regular, 50 group memory, 20 history, 10 weather channels	
Power supply requirement	13.8 V/27.5 V DC (Negative ground)	
Dimensions (W×H×D,	160×34×271 mm;	
Projections not included)	6.3×1.34×10.67 in	
Weight	1.2 kg; 2.65 lb ±10%	
Certification	TSO-C128a, TSO-C169a	
TRANSMITTER		
Output power	8 W (Carrier power)	
Spurious emission	-60 dBc	
Modulation limiting	70% (Maximum 98%)	
Microphone impedance	600 Ω	
RECEIVER		
Intermediate frequencies	38.85 MHz/450 kHz (1st/2nd)	
Sensitivity AM (6 dB S/N)	Less than 2 µV	
FM (12 dB SINAD)	Less than 1.4 µV	
Selectivity 25 kHz spacing	±3 kHz/±22 kHz (6 dB/60 dB)	
8.33 kHz spacing	±2.778 kHz/±7.37 kHz (6 dB/60 dB)	
Spurious response	More than 74 dBµ	
Audio output power		
External SP	5 W with a 4 $\Omega$ load	
Headphone	60 mW with a 500 $\Omega$ load	
Measurements made in accordance with RTCA DO-186E for USA version.		

#### 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
Also meets equivalent MIL-STD-810-C -D -F and -F		



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