I.C.E.

Integrated Cabin Entertainment

Operation Manual

Avionics Innovations

Breaking The Sound Barrier

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General Information

The purpose of this operation manual is to provide information to ensure proper operation of this product.

It is the responsibility of those installing this item on or within a specific type or class of certified aircraft to document and obtain approval for an acceptable installation from the administrator.

General Description

The ICE system consists of three main components:

- Passenger Control Unit (PCU)
- DVD Player (DVD)
- Remote Satellite receiver (SAT)
- Video Amplifier

The PCU will normally be mounted in an area accessible to the passengers. It contains all of the controls and display for the system. All of the functions can be operated from the PCU. There is an infrared remote controller that can control the most frequently used functions such as volume, etc.

The SAT is mounted in a remote location not necessarily readily accessible to the passenger. There are no passenger controls on the SAT unit.

The DVD player should be mounted in an area that passengers have access for changing discs. This can be in a cabinet or entertainment equipment bay. The only direct passenger operation on the DVD is "Eject" when the PCU is off. When the system is on, the eject feature is controlled at the PCU.

The Video Amp is a remote-mounted video amp with 2 video inputs and 6 video outputs. Each of the 6 video outputs is selected between Video 1 or 2 input. Six individual 12 VDC power supplies at 0.75 amps each.

Unpacking & Inspecting

Exercise extreme care when unpacking the ICE System. Make a visual inspection of the unit for evidence of damage incurred during shipment. If a claim for damage is to be made, the unit must be returned in the original packaging.

Precautions

Thermal Protection Circuit
Be sure the temperature inside the aircraft is between –10°C (14°F) and +60°C (140°F) and before attempting to use this system. If the temperature is over +60°C (140°F), the protection circuit functions to stop operation of the system, and "HI TEMP" is displayed.

Damaged Discs
Do not attempt to play cracked, warped, or damaged discs. Playing a bad disc will cause skipping and could cause severe damage to the playback mechanism

Irregular Shaped Discs
Make sure the discs you use in this unit do not have any irregularities. The outer and inner edges should be round and smooth. Use of irregular shaped discs may cause damage to the mechanism.

Proper Disc Handling
Handle your disc as carefully as possible. Do not drop the disc while handling. Hold the disc so you will not leave fingerprints on the surface. If the surface is scratched, it may cause the pickup to skip. Do not affix tape, paper, or gummed labels on the disc. Do not write on the disc.

Caution for New Discs
When a newly-purchased disc is inserted into the disk slot, the disc may fail to play after initial loading. This is caused by small bumps around the center hole and the outside of the disc, which prevent stable loading into the correct position. To remove the bumps, rub the inside edge of the hole and the outside edge with a ball point pen or other such instrument, and then insert the disc again.

Initial System Setup

Immediately after installing or applying power to the unit, it should be initialized. The DVD system does a self-test and should become usable within 30-45 seconds. During this time avoid pressing any buttons on the PCU.

PCU Controls & Operation

The PCU contains all of the necessary controls and displays for the operation of the ICE System. The controls are as follows:

> PWR: This switch turns the power on to the PCU. Cycling this switch turns the power from on to off and back to on.

> Up: This button increments the SAT channel up or the track / chapter of the CD / DV

> DWN: This button increments the SAT channel down or the track / chapter of the CD / DVD.

> DISP: This button changes the SAT display from channel to chapter or title. This button ejects the DVD / CD during DVD mode.

> MEM: This button is used for presetting the memorized favorites. There are 18 presets available.

> Arrow: This button is the play pause button for the DVD / CD.

> SRC: This button changes the mode from SAT to DVD to AUX.

> Rotary / Push-button: This knob is used to increment and decrement the volume and other features such as bass, treble and audio selections. The knob is pushed to select the function to change (Main Volume, Bass, Treble, Secondary Output Source, Secondary Volume, and Sirius ID). When a menu item is displayed, rotating the knob will change the value. Pushing the knob will move to the next menu item.

Secondary Output

When it is desired to have another audio output enabled for a flight attendant or flight crew, simply enter the sub menu with the rotary knob until Secondary source is displayed. You can then select which source the listener can listen to.

The next selection will be secondary volume. Here the listener can adjust the desired volume.

> **NOTE: The secondary output does not mute with the External mute system.**

DVD Operation

Initial System Setup

Immediately after installing or applying power to the unit, it should be initialized. The DVD system does a self-test and should become usable within 30-45 seconds. During this time avoid pressing any buttons on the PCU.

Preparation For Playback

1. Insert the DVD / CD with the label up.

2. Slide the DVD / CD in the slot located on the front of the DVD player until the unit grabs the DVD / CD and loads it.

> **Note: Some DVD / CDs may auto play.**

To Play DVDs & CDs

1. Press the *POWER* button on the PCU.

2. Press the *SRC* button to select "DVD."

3. Press the *PLAY / PAUSE* button.

   There is a slight delay as the DVD processes the commands slowly.

> **Note: During play you can use the "UP" and "DOWN" keys on the PCU to advance or reverse in the track or chapters of the DVD / CD.**

To Adjust Volume / Bass / Treble

1. On the PCU, push the rotary knob to display the modification menu.

2. When the desired menu item is displayed, rotate the knob to change the value.

Note: Pushing the knob will move to the next menu item.

To Pause Playback

1. Press the *PLAY / PAUSE* button.

   Press the *PLAY / PAUSE* button again to resume playback.

To Stop Playback

1. Press the *DISP* button.

To Eject DVDs

1. Push the *DISP* Button.

AUX (External Input Mode)

This unit is equipped with an external input mode capable of accepting a low—level input from another audio device. Devices like an MP3 player or other porta-ble music device will work for this input. After the unit is turned on, press the *SRC* button to change to the external input mode. "AUX" will be displayed on the PCU display. Use the controls on the external device to set volume.

Note: The PCU volume will adjust the overall volume.

Satellite Operation

After power has been applied to the system, "Avionics Innovations" will display during the self-test and initiation. The display will then go blank until the *PWR* button on the PCU is pressed.

The system will turn on in SAT mode and display the current channel tuned.

Note: "SAT" will not be displayed if the Sirius Satellite Radio (SSR) unit is not installed.

Note: If Sirius service has not been subscribed to, the unit will only display and play channel 184 (weather / preview channel).

To Subscribe To Sirius Satellite Radio

The Sirius Satellite Radio Receiver holds a Sirius ID number for user identification. You can find the number by pushing the rotary knob until "SIRIUS ID" and an 11 digit number is displayed. This number is your Sirius electronic serial number.

To obtain a subscriber contract and enable reception of Sirius Satellite Radio, call the Sirius Service Center (888-539-7474) or visit Sirius on the web at www.sirius.com. You will need to provide the Sirius ID number from your unit and your credit card information.

Note: Pushing any button will restore normal operation.

To Select A Channel

1. Press the *UP* or *DOWN* button.

   The channel number is displayed.

To Fast Tune

1. Press and hold the *UP* or *DOWN* button for 3 or more seconds.

   The channels change rapidly until the button is released.

To Set Presets

1. Tune the desired channel.

2. Push and hold the *Play / Pause* button for 2 seconds.

   A preset number (0-18) will be displayed. This is the next available preset.

3. Press the *UP / DOWN* button to navigate to another preset if desired.

   Note: If you select an existing preset, it will be overwritten.

4. Press the *ARROW* buttons.

   The channel is now set to that preset number.

To Listen To Presets

1. Press the *MEM* button until the display says "Preset."

2. Press the *UP / DOWN* button to cycle through presets.

Display Change

Pushing the *DISP* button will change what is displayed (channel with name, artist, song, category, or presets and number).

Pushing the *SRC* button will change the way the unit cycles through the channels (Channel, Presets, and Category).

The *UP* and *DOWN* arrow keys will navigate through only the channels within these selections.

If no presets are setup, the display will say "NO PRESETS" and navigation will not be possible in that sub menu.

If you have selected the "POP" category, the *UP* arrow key will increment up through all of the channels within that category. When you reach the highest channel, the unit will loop back to the lowest channel.

To Cycle The Category Modes

1. Press the *DISP* button.

    The category will be displayed.

2. Press the *UP* or *DOWN* button to navigate to the desired category.

3. Push the *DISP* button again.

    Now the *UP* and *DOWN* buttons will change the channel within the category.

Remote Control Functions

MUTE: This mutes all of the output channels until the Mute is pushed again.

PWR: Turns System On / Off

ENT: This is the PLAY / PAUSE button for DVD operation

CD-CHG: This is the eject button for DVD operation

BAND PROG: No function at this time

SOURCE: Selects between "SAT", "DVD", OR "AUX".

A.PROC: Accesses sub menu to set secondary functions.

UP / DOWN / LEFT / RIGHT: Provides Up / Down for Satellite Radio Channel and Up / Down for DVD Chapters. Left / Right has no function.

In Case of Difficulty

No Sound

The volume level is too low.

    - Turn up the volume

Bad connection to headphone.

    - Check the headphone connection.

Volume / Balance controls are not set to the proper positions.

    - Adjust the Volume / Balance.

The PA system has activated "Mute."

    - Switch off the PA.

No Function

The operating temperature is outside of the allowable range (-10°C {14°F} and +60°C {140°F}).

- Adjust the cabin temperature. Allow time for the unit temperature to adjust.

Moisture or condensation in the CD / DVD module.

- Allow enough time for the condensation to evaporate (about one hour).

Faulty connection of power or ground lead.

- Check the Wiring.

No Play

The unit is set to the "Pause" mode.

- Press the *PLAY / PAUSE* button to resume playback.

Scratched, warped, or bad disc.

- Insert a clean disc.

Music Skips Excessively

The CD player unit has not been mounted securely.

- Check the Mounting of the unit.

The disc is scratched or damaged.

- Replace the damaged disc with a clean disc.

Warranty

Avionics Innovations warrants the ICE components against material or manufacturing defects for a period of one year from the date of installation. Avionics Innovations will, upon receipt of the failed unit, repair or replace the unit at our discretion. Avionics Innovations will pay UPS ground shipping charges for warranty returned items. Charges for express shipping will be the responsibility of the sender. This warranty will be void if the unit has been tampered with or opened by unauthorized personnel. To validate warranty you must return the enclosed warranty registration form to Avionics Innovations with the following information:

1. Date of installation
2. Model and serial number of the unit
3. Make and model of aircraft
4. Registration number
5. Owner's name and address
6. Name of installing agency

Ship to:

Avionics Innovations, Inc.
2450 Montecito Road
Ramona, CA 92065
(760) 788-2602 (760) 789-7098 fax

This warranty is not transferable. Any implied warranties expire at the expiration date of this warranty. WE SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES. This warranty does not cover a defect that has resulted from improper or unreasonable use or maintenance of the unit as determined by us. This warranty is void if there is any attempt to disassemble the unit without factory authorization. During the warranty period, the unit must be returned to Avionics Innovations; if it is found to be under warranty, it will be repaired or replaced at no charge.

IMPORTANT: Any labor charges associated with the removal of the unit or related troubleshooting by any firm other than Avionics Innovations will not be covered.

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