INFINITYBOX™ inVIRONMENT Heat & A/C Controller Module for Vintage Air Gen-IV

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Overview

To step up your level of control in your car, INFINITYBOX has developed the inVIRONMENT Control Module. This is specifically engineered to give you complete control of the blend position, fan speed and temperature settings on your Vintage Air Gen-IV™ System. You now have complete freedom to control your heat and air-conditioning with the INFINITYBOX Intelligent Multiplex System through your choice of buttons or switches. You also have the flexibility to control your Vintage Air Gen-IV through our INFINITYBOX inTOUCH NET touch screen controller. Your phone, tablet of head unit can be the complete control over the heating and air-conditioning in your car.

If you have a very specific look-and-feel for the switches in your car, and you want to keep that theme consistent for your heat & A/C controls, you can use any push buttons or toggle switches with inVIRONMENT. These inputs to the MASTERCELL can be used to increase and decrease the fan speed and temperature plus set the blend position.

For a higher-end installation, you can control all of the heat & A/C settings right off of our touch screens like iPhones, iPads, Galaxy tablets or specific Kenwood head units using our inTOUCH NET. This allows you to completely eliminate the controls for the Vintage Air Gen-IV and de-clutter your dash.

The INFINITYBOX inVIRONMENT control module interfaces directly with the controller on the Vintage Air Gen-IV evaporator unit. It plugs directly into their connectors to take commands from your switches or touch screen and control the heat & A/C settings. inVIRONMENT also plugs into the INFINITYBOX CAN network to easily pass commands from the MASTERCELL. Power is supplied to inVIRONMENT from the cable plugged into the Gen-IV unit so installation is easy.

Kit Includes

1- inVIRONMENT Heat & A/C Controller Module
1- inVIRONMENT Interface Cable for Vintage Air Gen-IV 3-Pot Series 204 ECU
1- Modular INFINITYBOX™ CAN Jumper Harnesses
6- 22-AWG Butt Splice Terminals
6- Pieces of Heat Shrink Tubing
1- Instruction Manual

Note

The Vintage Air Gen-IV version of inVIRONMENT is designed to interface directly with evaporator units using the 3-pot series 204 ECU. Check with your Vintage Air manual to confirm the version of the evaporator that you have. inVIRONMENT will not work with their GEN-II systems.

Installation Steps

Connect the inVIRONMENT module to the Vintage Air Gen-IV ECU.

1) Completely remove the main power feed from the positive terminal from your battery or batteries before installing any electrical components.
2) Connect and plumb your Vintage Air system per the instructions that came with your Gen-IV.
    a. Splice the Violet wire in the wire harness that plugs into the ECU to the ignition output on your POWERCELL. This is the ignition feed that energizes their system.
3) Mount the inVIRONMENT Module on or near the ECU on the Vintage Air Gen-IV evaporator unit.
4) Plug the rectangular 12-position connector on the INFINITYBOX interface cable into the mating connector on the Vintage Air Gen-IV ECU. This is the socket for the control panel harness.
5) Plug the 4-position rectangular connector into the Power/Ground socket on the inVIRONMENT module.
6) Plug the 5-position rectangular connector into the Output socket on the inVIRONMENT module.

Connect the inVIRONMENT module to the INFINITYBOX CAN network.

1) Pick a convenient place in the INFINITYBOX CAN cable to splice into for inVIRONMENT.
2) Remove the convolute looming from the area where you will make the splice.
3) Cut and strip the 6 wires in the inVIRONMENT CAN jumper harness to the right length to splice into your existing INFINITYBOX CAN harness.
4) Locate the pair of blue* 22-AWG wires in the CAN harness. Pick one of the blue wires and cut it. Both of the blue wires are electrically the same so you may choose either blue wire.
5) Strip back the insulation on both sides of the cut blue 22-AWG wire.
6) Slip one piece of heat-shrink tubing on each end of the cut blue 22-AWG wire in the existing CAN harness.
7) Crimp one end of the included butt-splice terminals to each of the cut ends in the existing CAN harness.
8) Crimp the other ends of the butt-splice terminals to the blue wires in the inVIRONMENT CAN jumper harness. These wires are electrically the same so it does not matter which of the blue wires connect to the blue wires in your existing CAN harness.
9) Locate the pair of green* 22-AWG wires in the CAN harness. Pick one of the green wires and cut it. Both of the green wires are electrically the same so you may choose either green wire.
10) Strip back the insulation on both sides of the cut green 22-AWG wire.
11) Slip one piece of heat-shrink tubing on each end of the cut green 22-AWG wire in the existing CAN harness.

12) Crimp one end of the included butt-splice terminals to each of the cut ends in the existing CAN harness.
13) Crimp the other ends of the butt-splice terminals to the green wires in the inVIRONMENT CAN jumper harness. These wires are electrically the same so it does not matter which of the green wires connect to the green wires in your existing CAN harness.
14) Locate the black* 22-AWG wire in the CAN harness.
15) Strip back the insulation on both sides of the cut black 22-AWG wire.
16) Slip one piece of heat-shrink tubing on each end of the cut black 22-AWG wire in the existing CAN harness.
17) Crimp one end of the included butt-splice terminals to each of the cut ends in the existing CAN harness.
18) Crimp the other ends of the butt-splice terminals to the black wires in the inVIRONMENT CAN jumper harness. These wires are electrically the same so it does not matter which of the black wires connect to the black wires in your existing CAN harness.
19) Slide the pieces of heat-shrink tubing over the butt-splices in the harness.
20) Use a heat-gun to shrink the tubing over the splices.
21) Re-loom the CAN cable.
22) Plug the 3-position rectangular connector into either of the sockets labeled CAN on the inVIRONMENT module.

* Note: Some generations of INFINITYBOX CAN cable may have different wire colors. Please contact INFINITYBOX Power technical support if your wire colors do not match the ones described above.

Powering Up the System

1) Reconnect the battery to the system.
2) Wait 5 seconds for the INFINITYBOX system to boot up.
3) Check to see if the INFINITYBOX inVIRONMENT module is in system inventory.
    a. From a MASTERCELL with the inSIGHT LCD
        i. Press the "HOME" button
        ii. Press the "SCROLL DOWN" button
        iii. inVIRONMENT is installed correctly if you see "AF DA-4 CH" in the system inventory.

Operating the System

Your inVIRONMENT Module can be controlled two way different ways. The section below describes the buttons and the sliders for inTOUCH NET. You also have the option to control the system through switches to the MASTERCELL. See below for more information.

inTOUCH NET Operation

See Figure 1 for a picture of the Heat & A/C screen on inTOUCH NET.

The 5 buttons on the top of the screen control the blend position. Press and release these buttons to change air flow between the Vent, Floor and Defrost. There are also buttons that blend the Vent/Floor and the Floor/Defrost.

The slider for Temp controls the temperature of the air coming out of the system. Drag the slider to set the temperature. The Vintage Air Gen-IV automatically controls the heater control valve and the air conditioning clutch based on the setting on this slider.

The Fan slider controls the speed of the fan on the Vintage Air Gen-IV unit. Drag the slider to set the fan speed. To shut off the fan, move the slider all the way to the left. .
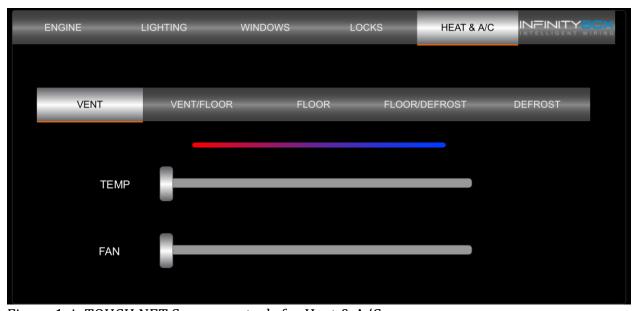

Figure 1: inTOUCH NET Screen controls for Heat & A/C

Switch Control from the MASTERCELL

In addition to the inTOUCH MAX and inTOUCH Mobile control, you can use any switch connected to the MASTERCELL to control the functions of your Vintage Air Gen-IV system. There are no specific inputs defined for this in the base configuration so please contact INFINITYBOX technical support for more information on this advanced feature.

Mode Position

The mode position for the Vintage Air Gen-IV can be controlled two different ways. One option is to assign specific buttons to each mode: Floor, Vent & Defrost. You can also assign buttons that blend the Floor/Vent and Floor/Defrost. Another option is to connect a potentiometer to one of the MASTERCELL analogue inputs to give you variable control of the mode ranging from Vent-Vent/Floor-Floor-Floor/Defrost-Defrost.

Temperature

You can use switches to increment and decrement the temperature of the air coming from the Vintage Air Gen-IV.

Fan Speed

Like temperature, you can use switches to increment and decrement the fan speed. You can also use discrete switches to set specific fan speeds. For example you could have 4 buttons that would set the fan speed as low, medium, high and off.

Warranty for INFINITYBOX ™ Intelligent Multiplex System™

Infinitybox, LLC ("Infinitybox") warrants against any defects in materials and workmanship to the Product's INFINITYBOX™ modules, wiring harnesses and accessory modules for a period of one (1) year from the first date of purchase. Subject to the terms of this warranty described below, Infinitybox will replace any such defective Product that is returned to Infinitybox within the one (1) year period from initial purchase. Replacement of any defective part or Product will not extend the applicable warranty period.

The warranty does not apply to: (i) any Product that is not installed in compliance with the applicable Product documentation; (ii) any defect in, or failure of, the Product resulting from an accident, shock, negligence, water immersion or misuse; (iii) any Product that has been modified, adjusted, repaired, or disassembled by any party other than Infinitybox; or (iv) any defect other than in materials and workmanship.

This warranty covers only the original purchaser of Product purchased from an Infinitybox authorized dealer in the United States. In order to receive warranty service, purchaser must provide Infinitybox with a copy of the receipt stating the dealer name, product purchased and date of purchase. Products found to be defective during the warranty period will be replaced (with a product deemed to be equivalent or better) at the discretion of Infinitybox.

Infinitybox's sole liability for any defective Product is limited solely to the replacement of Product pursuant to this warranty. Infinitybox reserves the right to replace any repairable parts with new or refurbished parts.

INFINITYBOX DISCLAIMS ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, SUCH AS WARRANTIES OF MERCHANTABILITY AND FITNE SS FOR PURPOSE. IN NO EVENT SHALL INFINITYBOX BE LIABLE FOR ANY PUNITIVE, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION, LIABILITY FOR LOSS OF USE, LOSS OF PROFITS, LOSS OF PRODUCT OR BUSINESS INTERRUPTION HOWEVER THE SAME MAY BE CAUSED, INCLUDING NEGLIGENCE.

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