Peterson ICS-4000™ Control System with an Allen Vista Navigator II[1] Sound Module

MIDI Cable Hookup

Plug a standard MIDI cable from the Instrument Out port of the ICS-4000 control system into the MIDI In port of a MIDI Thru box. Connect a MIDI cable between one of the two outputs of the MIDI Thru box and the Allen Vista Navigator II ®'s MIDI In port labeled "P1731". Plug another MIDI cable between the other output of the MIDI Thru box and the Vista's MIDI In port labeled "P1728".

Note: The Allen Vista Navigator II ® cannot be used as a MIDI sequencer for Record/ Playback. It does not record the Peterson MIDI SysEx (System Exclusive) codes for organ stops.

Peterson ICS-4000 Control System Combination Action Setup

The ICS-4000 must be configured for "MIDI pistons" rather than "MIDI preset stops". The organ's general and/or divisional pistons may then be used to send MIDI patches to the Allen Vista sound module.

Allen's procedure for activating Allen Vista Navigator II ® sound files is for the user to press the organ's General Cancel piston which must cancel organ stops, send a patch of ***Manual 1, Channel 8 and Program Change 128*** to the Vista via a different organ piston configured for MIDI purposes, and lock that piston to prevent resetting while GC is being pressed.

To accomplish this, the installer should have Peterson EMP configure an extra piston input in the ICS just for this purpose. Program it with the same patch, in bold above, on every memory level that the ICS-4000 has available (usually 100 or 256 levels depending on the spec of the Peterson ICS-4000 control system).

This piston will need to be locked once programmed. This is done by getting into the ICS system's "Organ Builder Menu", then scrolling down to "Lock Piston" and following the prompts.

Next, wire that piston input pin to the organ's General Cancel circuit (Some of these may have already been wired together prior to the Vista installation). Confirm that pressing the organ's General Cancel piston places Organ Positive Voltage on the piston input pins above.

Allen Vista Navigator Setup

Turn on the power to the Vista. Note that it may take up to 60 seconds to boot up. Then from its main power-up screen, press the icon for the "Vista Navigator". Once the program loads, it will prompt you to press the organ's General Cancel piston to begin. Having wired the piston inputs as described in the section above and programmed one ICS-4000 piston to send the patch Manual 1, Channel 8, Program 128, a new screen should appear. Once in this screen, the MIDI channels will need to be set on the Vista to match the channel assignments of the ICS-4000. This is done by pressing the MENU button and then the SETUP button on the Vista. Each line should be set up as follows:

Channel	Division
9	Swell
11	Great
12	Choir
13	Pedal
14	Solo

NOTE, The MIDI channels for a 2 Manual and a 3 Manual organ may be different. Call the factory for more information.

Once these settings have been entered, press MENU, then EXIT on the Vista. This will return you to the Main Screen. At this point, press the Vista Navigator icon to re-enter the Voice Mode. Press the organ's General Cancel piston when prompted to do so.

Programming the Allen Vista Navigator II[1] Pistons

The Allen Vista Navigator II[1] has memory for up to 40 separate groups of digital voices which may be accessed by pressing various organ general or divisional pistons. This section describes how to program the Vista for the desired groups.

Once in the Vista's "Voice Mode" programming screen, press the screen button in the Voice A column and Swell row until it becomes highlighted with a line around that button. (Note: You may choose to press the screen buttons for other rows in the Voice A column at the same time as the Swell row if you wish). Then press the EDIT button. The voice button will turn green when ready for editing. Press the now-green Swell Voice A button; the screen will change to an edit screen. Next press the "Voice" button, then select a voice for the Swell division by scrolling through available voices in the list that appears. Press the Close button. Press the next Close button (to the right) to get back to Voice Setup, then repeat the steps in this paragraph for Voice A on the other divisions as desired.

Note that each of the 40 presets on the Allen Vista can be programmed with a different voice on each line. This allows "layered" patches consisting of a different voice for each manual and/or multiple voices on one manual.

After the Vista has been programmed to select all of the voices for one of the 40 available Vista Preset Pistons" as desired, press END EDIT, then press SAVE. A screen will pop up telling you to press an organ piston, but instead, just press OK. Look for the button labeled General in the upper left hand corner of the screen, then press the button next to it which will cause a keypad to pop up. Type in the general piston number this will be added to. Once the Vista Preset Piston number is entered it will save the voice changes to that number.   NOTE: To save piston 11 and up you will need to press the +10 first then the piston number.

Using a Peterson ICS-4000 MIDI System™ with an Allen Vista NavigatorII ® Sound Module after Wiring and Configuring

Note that the ICS-4000 Control System's Instrument Out port will need to be connected to a MIDI Thru box and the two outputs will need to be connected to the Allen Vista Navigator II ® MIDI In ports labeled "P1731 and P1728" with standard MIDI cables.

Programming and Using the Allen Vista[1] Pre-Sets

Programming piston (patch) changes into the ICS-4000 MIDI System to operate an Allen Vista Navigator II ® sound module is accomplished as follows:

Program the Allen Vista Navigator II ® "preset pistons" with the desired voices for each organ keyboard as explained above in "**Programming the Allen Vista Navigator II[1] Pistons**".

Program the ICS-4000 Control System[TM] MIDI pistons as follows:

1. Begin by pressing the MIDI button on the lower right corner of the ICS-4000 CDU (main control panel). The LED will come on above that button. Then press the MENU button, scroll down to MIDI Menu, then press "ENTER". Once there, press the "MENU" button.

2. Once in this menu, move the cursor to "Program Presets", then press "ENTER". The next screen will ask you to "Activate Piston To Be Edited". Press the piston, move the cursor to "Add To Preset", then press "ENTER". Select "PATCH", then press "ENTER".

Note: if the pistons have been programmed for a different sound module, it may be best to clear all the presets before starting.

3. Next, touch/play a key on the desired organ keyboard to set the manual number, then turn the knob on the Peterson ICS-4000 CDU to select the desired channel number. Use channel   9 for Swell, 11 for Great, 13 for Pedal, 12 for Choir and 14 for Solo as applicable. Then press the button labeled "CHAN" and turn the knob to set the program number to any number except zero. (In our example, we'll use program number 1).

4. Once the Division, Channel, and Program have been selected, press "ADD". At this point if this is the only keyboard that will play the Vista, one more patch will be added as described below. However, if more than one keyboard is to be played from this preset, press the "MORE" button, then select "PATCH", then press "ENTER. Repeat the above steps for each keyboard that will be used. Use a different MIDI channel number for each keyboard; Channel 9 for Swell, 11 for Great, 13 for Pedal, 12 for Choir and 14 for Solo.

NOTE, The MIDI channels for a 2 Manual and a 3 Manual organ may be different. Call the factory for more information.

5. Finally, one last layer must be programmed to select the Allen[1] preset. Press the "MORE" button, then "ENTER" under "PATCH" to add this last patch. Any keyboard number can be used here (in our example we have used the Swell keyboard). The channel number must be set to 8 and the program number selects the Allen Vista Navigator II ® preset. Once this has been entered and added to the preset piston, you can press "DONE" to exit the programming function of the ICS-4000 MIDI.

As an example, a layered piston could be set:

Man#	Ch#	Prg#	
1	9	1	Swell playing on MIDI channel 9
2	11	1	Great playing on MIDI channel 11
3	12	1	Choir playing on MIDI channel 12
4	13	1	Pedal playing on MIDI channel 13
1	8	5	Allen[1] preset #5 selected on channel 8

6. Repeat this process for each of the desired organ pistons.