

VISTA Navigator™
Users Guide
v1.00

Vista Navigator™
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INTRODUCTION

The Allen Vista Navigator™ is an integrated instrument which combines a MIDI sound module, simple single track MIDI sequence recorder, advanced four-track MIDI sequence recorder and MIDI router all in one complete package. The Vista Navigator™ is the first Allen instrument to contain a Graphical User Interface (GUI) with touchscreen control for easy access to all of the Vista Navigator's features and functions.

The Allen Vista Navigator™ supplies a vast array of sounds from standard General MIDI to an advanced Allen Organ sample sound set. The General MIDI sound set includes 128 different sounds, an additional 127 sounds from the Allen Organ sample library and 8 complete drum kits. The user may adjust individual voice tuning, volume, octave transposition, note limits and various other parameters on a per-voice, per division basis. The Voice Selection section is configured as a six division multi-timbre device. Each division is capable of producing two independent sounds. The unique layout of Vista Navigator's GUI allows control of the MIDI voices in real-time while the organist is playing!

The Vista Navigator contains a capture memory system very similar to that of an organ. The combination action consists of a 40 level capture memory system to include 40 General piston locations and 40 Divisional piston locations within six divisions. The Vista Navigator's capture memory setting will automatically "track" with the organ's capture memory level setting. Combination settings are stored directly on a USB flash memory stick. The Vista Navigator sequencer section may be configured in two different modes; a simple single track MIDI sequence recorder/playback device or a more advanced four-track MIDI sequence record/playback system. The simple sequencer operates similar to a tape recorder, with single pass record and playback operations. With the more advanced four-track MIDI sequencer the organist can record a separate Organ track, two separate MIDI Voice Selection tracks A and B, and a track for an external MIDI sound device connected to MIDI port C of the Vista Navigator. Each of the four tracks can be individually controlled from the Vista Navigator's GUI.

The MIDI router section provides complete MIDI control without having to change MIDI cables in between sequence record or playback. Vista Navigator includes an auxiliary MIDI output to connect an additional external MIDI sound device for even more versatility.

Built in capture utility features, designed to work with the Allen Organ, allow the saving and loading of Capture Memory data and/or piston configuration data directly to and from Vista Navigator's USB flash memory stick.

Congratulations! On your purchase of the Allen Vista Navigator! This guide provides comprehensive instructions on the Vista Navigator's operation. It contains operation examples and illustrations which will help you in using the Vista Navigator.

GETTING TO KNOW VISTA NAVIGATOR

Start-Up

In a normal installation, Vista Navigator will power up automatically when the organ's power switch is turned on. Please wait approx. 60 seconds for the Vista Navigator CPU to "boot" into operation.

Once the Vista Navigator is ready, the GUI will display a windows style icon screen where the organist will be able to select the various programs installed in the Vista Navigator.

Menu Directory: Allen Organ Company

Remove USB Drive: Use this program whenever the USB flash drive is to be removed from the Vista Navigator USB memory port. The program may take several seconds to operate. When completed, the USB flash drive LED (if so equipped) will be turned off and/or the GUI will return to the main menu screen. It is now safe to remove the USB flash drive.

To reinstall a USB flash drive, simply insert the flash drive device into the USB port in the proper orientation. The Vista Navigator will automatically "mount" the USB flash drive.

Important! The Vista Navigator uses a USB flash device for storage of Vista Navigator registrations and other data. **Never** remove the USB flash device from the Vista Navigator USB port without first using this function. To do so will damage the USB flash device and any stored data stored on the device.

Vista Navigator: This menu option starts the main Vista Navigator program.

Menu Directory: System Tools

Calibrate Touchscreen: This program runs a series of calibration settings for the GUI touchscreen. This program should only be used if the touchscreen doesn't seem to be tracking correctly. This may mean the calibration settings need to be reset. The use of a stylus type pointing device is very helpful in setting the calibration points on the touchscreen.

Note: The GUI touchscreen is already calibrated by factory personnel. No further calibration should be required.

Vista Navigator: Voice Selection Screen

Upon starting the Vista Navigator program, the GUI will display a startup screen prompting the organist to press the organ's general CANCEL piston button. Once the general CANCEL has been pressed the Vista Navigator Voice Selection screen will be displayed. The Voice Selection screen is where the organist accesses the MIDI voices of the various divisions. Think of the Vista Navigator as an additional set of divisional stops which are actuated by the MIDI tabs on the organ. From here the organist can select and play MIDI voices from the various divisions and also program and save piston registrations to the Vista Navigator's registration memory.

The Voice Selection GUI can display up to six divisions of voice information; both A and B voice settings as well as the optional MIDI C assignments (if configured in the SETUP menu as such). How your particular Vista Navigator is configured is up to the organist, but only six divisions (total) can be displayed.

Note: More on Vista Navigator's SETUP is located later in this manual.

Each "line" refers to a single division. The division names as well as both A and B voice

settings are displayed. The current capture memory level is displayed too. The capture memory level will actually “track” with the organ's capture memory level setting. The organ's capture memory level is displayed in the organ's Console Controller drawer. For example, try selecting a different capture memory level in the organ's Console Controller. Whatever memory level you have now selected in the Console Controller will be selected in the Vista Navigator. Try it! This configuration allows the Vista Navigator to operate very similar to that of the organ's capture system.

Now, select capture memory #1 in the organ's Console Controller and press General piston #1 on the organ. Whatever capture combination is programmed on General piston #1 will register on the organ. Also notice that the Vista Navigator has responded as well.

Let's look at the Vista Navigator GUI...notice that General piston #1 is now displayed in the General piston indicator bubble, which is located in the upper left corner of the GUI. In addition, all the division and voice selection bubbles have turned blue. The blue color indicates that a **general** piston change was received by the Vista Navigator. Also notice that many of the voice selection bubbles have a solid white line surrounding them. The white line indicates that the selected voice is active and will play when the corresponding divisional MIDI tab is turned on. Try pressing another General piston on the organ and notice how the Vista Navigator responds. The selected General piston number will be displayed in the General piston selection bubble as well as the registration in the voice selection bubbles. In fact, try pressing several General pistons on the organ and see the results!!

Now, press Swell divisional piston #1. Again, the organ will respond by registering the combination programmed on that piston. Notice the Vista Navigator has also responded to the piston press. In this case, the Swell divisional bubbles on the Vista Navigator have turned red, the Swell divisional piston number selected is reflected within the divisional name bubble and also the voice selection and status are different. Now press Great divisional piston #1, the same action occurs; the organ responds the piston press and so does the Vista Navigator. The Great divisional bubbles on the Vista Navigator have also turned red and the divisional piston number selected is reflected within the Great divisional name bubble and the voice selection and status is different. Those divisions which have not been altered will remain blue, but the others have changed to red to indicate they have been changed from the original selected general piston registration.

Now press the organ's general CANCEL piston. The organ's stop controls will all turn off on the organ while the Vista Navigator voice selections select MIDI OFF and both General and Divisional piston number bubbles clear the piston numbers as well as turn the divisional and voice selection bubbles to a gray color. Again, the Vista Navigator has responded very similar to that of an organ's capture system.

OK, now we've seen some of how the organ and Vista Navigator communicates with each other, let's do some more hands-on with the Vista Navigator.

On the Voice Selection screen there is a MENU button located in the upper right corner of the GUI. Using the tip of your fore-finger, gently press this button. A menu selection window will open up and display several menu options.

Remember! The Vista Navigator contains an integrated touchscreen interface. Do not press hard on the screen. A light, but solid touch is all that is required to actuate the buttons displayed on the screen. Too much pressure could damage the touchscreen interface. The tip of your finger or fingernail is all that is required to trigger the screen.

There are several menu options available:

Voice Selection

Recorder
Capture
Setup
Exit

Touch the menu option “RECORDER”. The Vista Navigator will now display the Recorder screen. The actual Recorder screen displayed on the GUI is dependent on the Recorder mode (simple or advanced) currently selected in the SETUP menu. **Note:** More about this setting will be discussed in the SETUP section of this manual.

Press the MENU button located in the upper right hand corner of the GUI. The menu selection window will again open and display several menu options. This time, select the SETUP menu option. The Vista Navigator GUI will display the available setup options and current settings. **Note:** Do not select any options or buttons on this screen at this point, more on this later!

Press the MENU button, and select the Voice Selection menu option. The Vista Navigator GUI will return to the Voice Selection screen. Press General piston #1 on the organ. The Vista Navigator GUI will display the registration settings for General piston #1. The presence of a white line around a voice selection bubble indicates the MIDI voice within the bubble will sound whenever the MIDI tab for that particular division is turned on. The absence of the white line around a voice selection bubble means the MIDI voice will not sound when that particular division's MIDI tab is turned on. You can manually control the on/off status of an individual MIDI voice by touching the corresponding voice selection bubble and the white line will alternately appear and disappear. This may be done in real-time while playing the organ. This is very similar to turning on/off the stops of the organ. Either one or both MIDI voices may be turned on at any time. Remember to turn on the specific division's MIDI tab on the organ to enable MIDI voices to sound.

On the bottom right side of the GUI there is a button labeled CANCEL. Press this button. The Vista Navigator responds just as if you pressed the general cancel piston on the organ. The Vista Navigator voice selections select MIDI OFF and both General and Division piston numbers clear as well as turn to a gray color.

General pistons can be recalled using this screen as well. Press the General piston number bubble, located in the upper left corner of the GUI. A pop-up window will appear on the GUI. This pop-up window is a Recall function which allows you the option of selecting or recalling a General preset from the same or other capture memory level from within the Vista Navigator. Yes, you can actually select a General preset without using the organ's piston buttons. Press piston #1 on the GUI. Notice that General piston #1 is now displayed in the General piston indicator bubble and the voice selection registrations for that specific piston appear just as if you pressed General piston #1 on the organ.

Divisional pistons can also be recalled. Press the Swell divisional bubble. Again, a pop-up window will appear on the GUI. This Recall window function is similar to that of the General piston recall function, but instead allows you the option of selecting or recalling a Swell preset from the same or other capture memory level from within the Vista Navigator. The Recall window function is dependent on whichever divisional piston bubble has been pressed. All available capture memory locations as well as all divisional piston locations are accessible from these Recall window functions. Up to 40 capture memory levels and 40 General or Divisional piston locations may be programmed. This feature is extremely useful when wanting to copy existing registrations from one location to another without having to re-program all the voice selection background settings.

OK, now we're ready to do some minor programming in the Vista Navigator. Let's look at a single registration within the Vista Navigator. Press the General piston number bubble, located in the upper left corner of the GUI. The Recall pop-up window will appear on the GUI. Select capture memory #1 and then piston #1. The registration programmed on General piston #1 will be displayed. At the bottom of the GUI is a button labeled EDIT, press this button. All voice selection bubbles will turn to a green color, while the general piston number, divisional name bubbles and Save/Cancel buttons turn a lighter gray color. The lighter gray color indicates these bubbles and/or buttons are not active or available while in the voice selection edit mode. The green voice selection bubbles are the only buttons which may be selected. Press the Voice A voice selection bubble in the Swell Division. A voice selection editing screen is now displayed on the GUI. From here you can select a different MIDI voice, set a key shift (transpose) value, set MIDI key or note limits, set MIDI voice tuning and adjust the overall volume of the MIDI voice. You can also program the MIDI voice to respond to a preset Velocity setting.

Two methods are available to select a MIDI voice: 1) by MIDI voice number or 2) by MIDI voice name. To select a MIDI voice by number, press the MIDI voice number bubble within the Voice name block. A pop-up window will appear on the GUI prompting you to enter a MIDI voice number. For this example, enter the number 25 on the keypad and then press the ENTER button. The GUI will revert back to the voice selection editing screen and the MIDI voice: AC GUITR-NYL will display in the voice name bubble.

Note: Any number within the range of 1 and 264 may be entered. Any number below 1 or above 264 will prompt the Vista Navigator to flash a "range error" on the GUI. Try it! Enter 0 or any number above 264 on the keypad and look for the range error to appear above the voice number display on the GUI.

OK, let's get back to where we were...press the MIDI voice number bubble within the Voice name block and enter the number 25 on the keypad and then press the ENTER button. Once again the MIDI voice: AC GUITR-NYL will display in the voice name bubble.

To select a MIDI voice by name, press the MIDI voice name bubble in the Voice name block. A pop-up window will appear with a list of MIDI voice names, a large scroll bar and two additional function buttons. The currently selected MIDI voice will be highlighted at the top of the list box. A quick press and release (or tap) of the upper scroll bar arrow will cause the list box to scroll up. The same action occurs when you press the lower scroll bar arrow. However, continuously pressing either scroll bar arrow will cause the list box to scroll much faster in the direction selected. Try it!

For this example, we want to select the Allen sample library MIDI voice: ORGAN FFF. Press and hold the scroll bar down arrow until the MIDI voice: ORGAN FFF appears in the list box.

Remember! The list box will scroll quite fast while continuously holding the down arrow button. You might want to release and "tap" the down arrow button at times during the scroll to get a bearing as to where you are in the MIDI voice list. You can also "drag" the actual scroll bar guide to move even faster through the list. To do this place your finger over the scroll bar guide which is located in between the up and down arrows. Gently press and slide your finger up or down on the GUI within the scroll bar arrows. Try it! Notice the MIDI voice list will move in relation to the direction of your finger.

In this case, we know the MIDI voice: ORGAN FFF is about $\frac{3}{4}$ of the way at the bottom of the list. Continue scrolling until the MIDI voice appears within the list box. Don't worry, if you "over-scroll" past the MIDI voice. Use any of the methods listed above to scroll the list until the MIDI voice appears within the list box. Notice the background color behind the

MIDI voice names is slightly different between them. This difference will help position your finger to select the correct MIDI voice. Place your finger over the voice name and press to select the MIDI voice: ORGAN FFF. The MIDI voice will highlight indicating it is now selected. Press the CLOSE button to close the pop-up window. The Voice name block now indicates the newly selected MIDI voice: ORGAN FFF and also its corresponding MIDI voice number of 215.

Let's take another look at the MIDI voice selection window. Again, press on the MIDI voice name bubble within the Voice name block to open the MIDI voice pop-up window. This time, specifically notice the UNDO button located above the CLOSE button. Select another MIDI voice within the list box, for example select MIDI voice: TIBIA 8, but do **not** press the CLOSE button. Instead, press the UNDO button. Notice the highlight returns to the MIDI voice: ORGAN FFF. The UNDO function returns the MIDI voice selection to the original MIDI voice previously selected by the CLOSE function.

Note: UNDO will only function before the CLOSE button has been pressed.

Press the CLOSE button to select the MIDI voice: ORGAN FFF.

We can also program or adjust several other control parameters while within the MIDI voice editing window.

Key Shift (Transpose): This setting allows the organist to “Transpose” the key at which the selected MIDI voice is played. For example, a value of 3 will cause the selected MIDI voice to play 3 semi-tones higher than the actual key played on the keyboard. A value of -5 will cause the selected MIDI voice to play 5 semi-tones lower than the actual key played on the keyboard. This feature is ideal for doing trick-couplers or for even constructing your own make-shift mutation stops.

To adjust the Key Shift value, press the Key Shift value bubble. Notice the Key Shift value bubble and both the up/down arrow buttons change to a red color. This indicates the up/down arrow buttons has control of the Key Shift value and will only affect the Key Shift value. Any value between plus and minus 12 notes may be selected.

Tuning: This setting allows the organist to adjust the tuning of the selected MIDI voice.

To adjust the Tuning value, press the Tuning value bubble. Notice the Tuning value bubble and both the up/down arrow buttons change to a green color. This indicates the up/down arrow buttons has control of the Tuning value and will only affect the Tuning value. Any value between plus and minus 100 cents may be selected.

Key Limits: This setting allows the organist to set key limitations on the selected MIDI voice. Key Limits is the ideal tool to create a “split” keyboard utilizing two separate MIDI voices. Normal value settings of 0 for the Low key value and 127 for the High key value allow the selected MIDI voice to play over the entire keyboard. However if a value of 59 is entered into the High key value of Voice A, this will cause Voice A to stop playing at B2 (B below middle C) on the keyboard. If the Low key value of Voice B is set to 60, then Voice B will only play from C3 (middle C) up to the end of the keyboard. These values “split” the keyboard allowing Voice A to play only on the lower half of the keyboard (lower 2 octaves) while Voice B will play only on the upper half of the keyboard (upper 3 octaves). This is just one example of how the organist can use this feature. Many different ranges of splits can be created and stored within a registration.

To adjust the Key Limit: Low value, press the Key Limit: Low value bubble. Notice

the Key Limit: Low value bubble and both the up/down arrow buttons change to a dark blue color. This indicates the up/down arrow buttons have control of the Key Limit: Low value and will only affect the Key Limit: Low value. Any value between 0 and 127 may be selected.

To adjust the Key Limit: High value, press the Key Limit: High value bubble. Notice the Key Limit: High value bubble and both the up/down arrow buttons change to an aqua color. This indicates the up/down arrow buttons have control of the Key Limit: High value and will only affect the Key Limit: High value. Any value between 0 and 127 may be selected.

Note: Use the key value chart, located in Appendix A of this manual, as a guide for selecting the proper key value to enter into the Key Limit: Low or High value fields.

Short Cut! Use the corresponding organ keyboard to enter the Key Limit: Low or High values. To do this, first make sure the divisional MIDI tab for the selected MIDI voice is turned on. Then select either the Key Limit: Low or High value bubble (as aforementioned) and press a corresponding key on the organ's keyboard where you want the split to occur (remember to use the correct keyboard!). The value of the key pressed will be displayed in the corresponding High or Low value bubble.

Volume: This setting allows the organist to adjust the overall volume output of the selected MIDI voice.

To adjust the Volume value, press the Volume value bubble. Notice the Volume value bubble and both the up/down arrow buttons change to a purple color. This indicates the up/down arrow buttons has control of the Volume value and will only affect the Volume value. Any value between 0 and 127 may be selected.

Velocity: This setting allows the organist to control how the selected MIDI voice will respond to velocity messages from the organ. How hard an organist plays a key determines the velocity of that key. Similar to that of a piano, the harder a key is played the louder or accented the sound will be. The reverse is also true, if a key is played softly the quieter or less accented the sound will be. Many of the sounds in the Vista Navigator are multi-sampled and contain different attack samples of a given sound.

Important! Not all organs are capable of transmitting velocity key messages. Check your organ's MIDI implementation chart to determine whether it will transmit velocity messages.

It is possible to adjust the velocity to a "fixed" value on organs with or without velocity sensitive keyboards. Non-velocity sensitive keyboards already transmit a fixed value. We can adjust that value to be softer or harder via the Velocity parameter. The normal non-velocity value the organ transmits is 64. Organs with velocity sensitive keying can transmit any value, between 1 and 127, and is dependent of how hard a given key is played. Regardless of this value, the Vista Navigator can change that value. To do this, press the button labeled NORMAL in the Velocity block. The Normal button disappears and two new parameter buttons now appear: A Fixed button and a Velocity value button. Press the Velocity value button. Notice the Velocity Value button and both the up/down arrow buttons change to a dark green color. This indicates the up/down arrow buttons has control of the Velocity value button and will only affect the Velocity value. Any value between 1 and 127 may be selected. On non-velocity organs, values below 64 will cause the MIDI voice to be softer and contain less attack characteristics while values above 64 will be much louder and contain more attack characteristics. Try it! Turn on the Swell MIDI tab

and continuously play a single key while adjusting the Velocity parameter value. Hear the difference?

To revert back to a “Normal” keying response, simply press the Fixed button. The Velocity block will change back to a single “Normal” button.

Once the editing for the selected MIDI voice is completed, press the CLOSE button on the lower right side of the GUI. The GUI will revert back to the Voice Selection screen. Notice any MIDI voice which has been edited is now pink in color. A pink color in any MIDI voice position indicates the MIDI voice parameters have been edited, but have not yet been saved to a piston memory location. Also, notice the General piston number bubble. Specifically, a small asterisk is visible to the right of the General piston number. An asterisk to the right of a piston number within a piston number bubble indicates the current piston registration has been edited and has not yet been saved. This is also true if a Divisional piston button has been pressed and then edited. An asterisk will appear next to a Divisional piston number if it has been edited and not yet saved.

To quit or end the editing session, press the END EDIT button at the bottom of the GUI. Only edited MIDI voices will retain the pink color and unedited MIDI voice positions will return to their previous color states. In addition, the SAVE button at the bottom of the GUI is also pink indicating the current “edited” registration may be saved to a piston memory location.

To save the current registration to a piston memory location, press the pink SAVE button at the bottom of the GUI. A pop-up window will appear requiring the organist to press a General or Divisional piston button on the organ. Any General piston or Divisional piston may be selected. A General piston will store the entire registration while a Divisional piston will store only the selected divisional MIDI voice registrations.

The organist may also use the CANCEL SAVE button at the bottom of the GUI to abort the save action and make additional changes to the registration if required. The CANCEL SAVE button is a “soft” cancel which will simply exit the save action and return to the Voice Selection screen with the previous edits still intact. At this point the organist may complete additional editing to any MIDI voice position including those which have been previously edited. Once editing is complete, use the SAVE button to save to any General or Divisional piston position.

Shortcut! When saving a registration, the organist may also use the Voice Selection GUI instead of the organ pistons. To do this, press the SAVE button at the bottom of the GUI. The pop-up window will appear requiring the organist to press a General or Divisional piston button on the organ. However, notice the small OK button at the bottom right corner of the pop-up window. Press this OK button, and then to save the registration as a General piston, press the General piston number bubble or press one of the Divisional piston number bubbles to save the MIDI voices in that particular Division to a Divisional piston. Pressing either the General or a Divisional piston number bubble will display a pop-up window to allow the organist to save the preset to any capture memory level or General/Divisional piston location. Select a capture memory level and piston location to store the registration.

Important! Not all capture memory levels or piston locations are accessible directly from the organ. If the organ only has 16 capture memory levels available, the organ will not be able to access any capture memory levels above 16. The same goes for the General/Divisional pistons. If the organ only has 10 General pistons, the organ will not be able to access piston locations above 10. Understand, the organist may store registrations in those non-accessible capture memory or General/Divisional piston locations, but the organ will not be able to directly access them from the pistons. The registrations stored in the non-

accessible locations will need to be copied to locations which are accessible by the organ's pistons.

Important! Pressing the General CANCEL piston on the organ at any time before a registration save has been completed will abort the save and cancel any editing changes which may have been made. Any editing changes will be lost if this occurs.

Very Important! Enabled voices that appear on the Voices Selector screen with corresponding divisional MIDI tabs ON will play when keys are pressed. If the voices shown have been modified from those that were called by general and divisional piston presses or recalls, and not specifically saved to general and divisional pistons, they will be lost upon receipt of a new piston or the organ CANCEL. Be sure to SAVE your voice edit work as soon as you are satisfied with voice selections.

Vista Navigator: Copying Piston Registrations

The Vista Navigator is very flexible in its piston copy functions. The organist can copy complete General piston registrations, Divisional piston registrations, Divisional piston registrations within General piston registrations from one piston location to another piston location all while maintaining the underlying registration programming. In addition, the ability to copy a piston registration from one capture memory level location to another capture memory level location may also be done.

For this example, we will copy from one General piston location to another General piston location on a different capture memory level. First, make sure the capture memory level of the organ and Vista Navigator are set to Memory #1. Press General piston #1 on the organ. The Voice Selection screen will respond by displaying the General piston #1 registration. Notice the SAVE button at the bottom of the GUI. Specifically, notice the color scheme. It is a black color. The black color indicates no editing changes have been made to the General piston #1 registration. However, we can still press the SAVE button to save the displayed registration to another piston location within the Vista Navigator memory. Press the SAVE button...a pop-up window will appear requiring an action from the organist to press either a General or Divisional piston on the organ. In this example, using the organ's Console Controller, change the capture memory level to #5. Notice the Vista Navigator's capture memory level has also changed to #5. Now press General piston #10 on the organ. After a few seconds, the Vista Navigator will respond by copying the registration to its new location: capture memory level #5, General piston #10. The Vista Navigator will display the saved registration in its new location on the GUI.

Here is another example...we will copy a Divisional piston registration within a General piston registration to another Divisional piston location. First, reset the organs and Vista Navigator capture memory level to #1. Press General piston #5 on the organ. The Voice Selection screen will respond by displaying the General piston #5 registrations. In this example, we want to copy the Swell Divisional registration from the General piston #5 registration to an actual Swell Divisional piston location. Press the SAVE button at the bottom of the GUI, a pop-up window will appear requiring an action from the organist to press either a General or Divisional piston on the organ. In this example, press Swell Divisional piston #1 on the organ. After a few seconds, the Vista Navigator will respond by copying the registration to its new location, General piston #10. The Vista Navigator will display the saved registration in the Swell Divisional piston #1 location on the GUI.

OK, we've been using the organ pistons and Vista Navigator together to copy pistons and also setup registrations, but did you know you can use just the Vista Navigator's GUI to do exactly the same thing? This way the organist can do everything from the GUI and not even use the organ's piston buttons at all! Let's do the first example once again... Again, first

make sure the capture memory level of the organ and Vista Navigator are set to Memory #1. Press the General piston number bubble on the Vista Navigator GUI. The General piston recall window function will appear on the GUI. Select piston #1 on the keypad. The Voice Selection screen will respond by displaying the General piston #1 registration. Press the SAVE button...a pop-up command window will appear requiring an action from the organist to press either a General or Divisional piston on the organ. However, this time instead of using the organ's piston buttons we will use just the Vista Navigator GUI to save the piston registration. Notice the OK button in the pop-up command window? Press the OK button and the pop-up window disappears. Notice that the voice selection bubbles are all grey in color and also the CANCEL SAVE button is still displayed. This means the save mode is still active and waiting for an action from the organist. Press the General piston number bubble. A pop-up window will appear. This Save window function allows the organist to save the registration to a General piston location and also allows you to enter a different capture memory level. In the Memory block, use the plus button to increase the capture memory level to #5. Now press piston #10. After a few seconds, the Vista Navigator will respond by copying the registration to its new location: capture memory level #5, General piston #10. The only visible difference between using the organ's piston buttons and the Vista Navigator GUI is that the saved registration and location will not be displayed when using the Vista Navigator GUI to initiate the save.

Remember, the organist can do the exact same procedure above on the Vista Navigator GUI when saving from a Divisional preset to another Divisional preset or even a Divisional preset from within a General preset to a separate Divisional preset on any available capture memory level.

Vista Navigator: Recorder

The Vista Navigator contains two different types of MIDI sequence recorders; a "Simple" single track MIDI sequence recorder and an "Advanced" four track MIDI sequence recorder. The major difference between the two recorder modes is the number of available individual tracks the organist can access. Recordings created in the "Simple" single track recorder, can be loaded in the "Advanced" four track recorder for more editing flexibility. The same is also true in reverse; recordings created in the "Advanced" four track recorder can be loaded in the "Simple" single track recorder for ease of playback.

To select a default recorder mode press the MENU button on the Vista Navigator GUI. Select the SETUP menu option. The GUI will display the Setup Mode options. Select the button labeled "Other Settings". One of the listed setup options is Recorder Mode. Pressing the button next to the Recorder Mode text label will toggle the recorder mode between the Simple and Advanced recorder modes. Select the default recorder mode desired.

To enter the Vista Navigator Recorder, press the MENU button on the GUI. Select the RECORDER menu option.

Note: Vista Navigator will "remember" the last known recorder mode selected when power is switched off.

a. Simple Recorder

The "Simple" single track MIDI recorder is as easy to operate as a tape recorder. A single set of record, play and erase controls are all that are required in this mode.

First things first! Before you begin to record **set up your piston combinations using Organ and Vista Navigator voices**. Don't forget to use the MIDI tabs in your organ registrations! To create a MIDI recording in Simple Recorder, press the RECORD button on the Vista Navigator GUI until the button turns red. The red color indicates the

Recorder is in record mode and is ready to record a MIDI sequence.

Important! The Recorder will record all key, stop, piston/toe stud and expression pedal movements on the organ. Therefore, it is a good idea to start the recording with a CANCEL **before** any stops, pistons, expression pedal movements, or keys are pressed on the organ. If any stops are pre-registered before the actual recording starts, those stop settings will not be recorded. Even though keying data may present, the beginning of the recording will be silent if playback begins without any stops registered. The Recorder will only record those stop, piston/toe stud or expression pedal movements when actually recording.

Remember! The organs MIDI controls are not required to be turned on to make a recording using organ stops only. The MIDI controls operate the Vista Navigator MIDI sounds or a MIDI device connected to MIDI port C.

To begin recording, press the PLAY button (▶). The location counter will begin counting up from the zero (0) location. At this point the organist may begin playing the organ. Every stop, piston/toe stud or expression pedal movements are recorded exactly as the organist plays it. To stop the recording, press the STOP button (■) on the GUI.

Note: Buttons on the GUI which are greyed out are inaccessible to the organist during recording or playback.

Once the recording is stopped, notice the Record button has turned black and the Play button has now turned green. This indicates the recording is now ready to be played back. To begin playback, press the PLAY button (▶). The location counter will return to zero (0) and playback will begin automatically from the zero (0) location. The location counter will count up as the recording progresses and will stop automatically when the recorder reaches the end of the recording.

b. Advanced Recorder

The Advanced Recorder contains four independent tracks:

- Organ Track
- Voice A Track
- Voice B Track
- Voice C Track

The Advanced Recorder is much more flexible as the organist can record each track or part individually using multiple passes, or tracks may be recorded at one time in a single pass, just like the Simple Recorder. Multi-track recording allows the organist the ability and flexibility to record more complex tracks.

For example, the organist can record the organ track first, then “overdub” each of the MIDI voice tracks in more detail. Or, the organist can record each of the MIDI voice tracks first and then play along with the recording using the organ. These are just two examples. Flexibility is the key word when using the Advanced Recorder.

Just like the Simple Recorder, there are three main track control buttons: Record, Play and Erase. In the case of the Advanced Recorder, there is a set of track control buttons for each track. This means that while a track(s) is playing, another track(s) may be recorded. The track control buttons operate the exactly same as the Simple Recorder (see Simple Recorder section above for overview).

Before we create a multi-track recording using the Advanced Recorder, there is some important information we need to review.

Quantum Organs with Local Off capabilities:

Quantum organs built since July 2005 have a feature called Organ Local Off. **Organ Local Off** means you have the ability “virtually” disconnect the keyboards, pedalboard, pistons/toe studs and expression shoes from the organ’s tone generation system. In essence, the organist can turn the organ into a very large MIDI keyboard controller. This tool is extremely helpful when making a multi-track recording!

Let’s take a look at this function. Press the Enter/Exit button in the organ’s Console Controller. Using the back/forward buttons scroll through the LCD until the function appears: **Organ Local Off = Disabled**. This indicates the Organ Local Off function is turned off so that the organ’s tone generation will play. To test this setting press a General Piston that has both Organ and MIDI voices in the registration and play the organ. Notice both organ tones and MIDI voices sound. Now, return to the Console Controller and push the ↑ or ↓ button. The LCD will now display: **Organ Local Off = Enabled**. This setting means the keyboards, pedalboard, pistons/toe studs and expression shoes have been disconnected from the organ’s tone generation system. To test this setting, press a General Piston that has both Organ and MIDI voices in the registration and play the organ. Notice the only voices sounding are the MIDI voices even though the organ stops are showing that they registered.

A typical multi-track recording should be recorded in this order:

1. Organ Track
2. MIDI A Track
3. MIDI B Track
4. MIDI C Track (if a MIDI sound device is connected to it)

For this example, make sure **Organ Local Off =Disabled** before leaving this window. Press the Enter/Exit button to return to the Memory level screen.

Early Quantum Organs, Renaissance Organs, and Master Design Series (MDS) Organs without Organ Local Off capabilities:

Since these organs do not have an Organ Local Off function the organist must approach a multi-track recording differently. First, record the MIDI A track, then the MIDI B track, then the MIDI C track (if applicable). Finally, the organist will record the Organ part last. Organs without Organ Local Off will only record volume changes on the Organ track. What this means is if you make the organ louder using the Expression shoe(s) the MIDI voices will also get louder during playback. Now back to recording!

Let’s create a recording using the Advanced Recorder...

First things first! Before beginning to record **set up your piston combinations using Organ and Vista Navigator voices**. In this case, you may not want to use the MIDI tabs in your organ registrations! This is because we are going to make a multi-track recording. The MIDI voices will be recorded at a later time.

To Record the Organ Track

OK, the first track to record is the Organ track. The RECORD (“R”) button is already red to indicate it is ready to record. However the remaining tracks will need to be muted. To mute the Voice A, B and C tracks press the three Record (“R”) buttons which correspond to those tracks. The buttons will turn black to indicate the tracks are muted.

To begin recording, press the PLAY (▶) button on the GUI. Notice the counter begins to count. Next, press a piston and move the organ’s expression shoes up and down. Then, begin to play. When finished press the organ’s cancel piston then press the

STOP (■) button on the GUI. Congratulations! The organ track is now recorded into Vista Navigator memory. To hear what was just recorded, make sure the PLAY button in the Organ track is green and press the PLAY (▶) button. The counter will automatically restart at the zero location and the organ will begin playing the recording exactly as you recorded it with piston, stop, expression and keying movements all in exacting detail. If the recording has mistakes and needs to be re-recorded, press the ERASE button in the Organ track. A pop-up screen will appear prompting the organist to verify the erasure of the track. Press NO to keep the recording or YES to erase the recording. To begin re-recording the Organ track, restart as listed above.

It may be a good time to SAVE the recording at this point. To save the current recording in memory to the USB flash device, press the SAVE button on the GUI, create or select a folder and enter a filename.

To Record the Voice A Track

OK, the Organ track is recorded! The next track to record is the Voice A track. However, in order to record any of the MIDI tracks, the Organ Local Off function in the organ's Console Controller will need to be enabled. This will disconnect the keyboards, pistons/toe studs, expression shoes from the organ. Technically, this setting allows the organ to become a very large MIDI keyboard controller. Pressing the pistons on the organ will no longer trigger the organ's capture system, but will send MIDI program changes to the Vista Navigator. The organist can now control the Vista Navigator preset combinations from the organ's pistons and record those changes and stop movements just like he/she did when recording the organ track!! The Organ track will play back the recording with exacting detail, key/piston/toe/stop and expression movements, all while the organist records the Voice A track.

The PLAY button in the Organ track should be green so that the organ will playback while the organist records the Voice A track. Set the RECORD ("R") button to red on the Voice A track to indicate it is ready to record. However, make sure Voice B and C tracks are muted. To mute the Voice B and C tracks press the corresponding Record ("R") buttons which correspond to those tracks. The buttons will turn black to indicate the tracks are muted.

To begin recording, press the PLAY (▶) button on the GUI. Since the organ track was previously recorded the organ will begin to play and the organist may now play along all the while recording the Voice A track. All key/piston/toe/stop and expression movements are recorded independently of the organ track on the Voice A track. Technically, the Organ track is used as a "click" track so that the organist may play along with organ. Press the STOP (■) button when finished recording the A track. Once the Recorder stops, the Voice A track is now recorded into Vista Navigator memory. To hear what was just recorded, make sure the PLAY buttons in the Organ and Voice A tracks are green and press the PLAY (▶) button. The counter will automatically restart at the zero location and the organ and Vista Navigator will begin playing the recording exactly as you recorded it with key/piston/toe/stop and expression movements all in exacting detail. If the recording has mistakes and needs to be re-recorded, press the ERASE button in the Voice A track. A pop-up screen will appear prompting the organist to verify the erasure of the track. Press NO to keep the recording or YES to erase the recording. To begin re-recording the Voice A track, restart as listed above.

Again, it may be a good time to SAVE the recording at this point. To save the current

recording in memory to the USB flash device, press the SAVE button on the GUI. Since a folder and filename have already been selected simply press the SAVE button.

To Record MIDI Port B

OK, let's move on...the next track to record is the Voice B track. Just like before, the Vista Navigator will playback the Organ and Voice A tracks with exacting detail, key/piston/toe/stop and expression movements, all while the organist records the Voice B track.

The PLAY buttons in the Organ and Voice A track should be green so that the organ and Voice A tracks will playback while the organist records the Voice B track. Set the RECORD ("R") button to red on the Voice B track to indicate it is ready to record. However, make sure the Voice C track is muted. To mute the Voice C track press the corresponding Record ("R") buttons which correspond to that track. The buttons will turn black to indicate the tracks are muted.

To begin recording, press the PLAY (▶) button on the GUI. Since the organ and Voice A tracks were previously recorded the organ and Voice A tracks will begin to play and the organist may now play along all the while recording the Voice B track. Just like before, all key/piston/toe/stop and expression movements are recorded independently of the Organ and Voice A tracks on the Voice B track. Press the STOP (■) button when the recording is complete. Voice B track is now recorded into Vista Navigator memory. To hear what was just recorded, make sure the PLAY button in the Organ and Voice A and B tracks are green and press the PLAY (▶) button. The counter will automatically restart at the zero location and the organ and Vista Navigator will begin playing the recording exactly as you recorded it with key/piston/toe/stop and expression movements all in exacting detail. If the recording has mistakes and needs to be re-recorded, press the ERASE button in the Voice B track. A pop-up screen will appear prompting the organist to verify the erasure of the track. Press NO to keep the recording or YES to erase the recording. To begin re-recording the Voice B track, restart as listed above.

Again, it may be a good time to SAVE the recording at this point. To save the current recording in memory to the USB flash device, press the SAVE button on the GUI. Since a folder and filename have already been selected simply press the SAVE button.

To Record MIDI Port C

Note: The only time the Voice C track is recorded or used is if there is a connected MIDI sound device connected to the MIDI C port of the Vista Navigator.

Just like before, the Vista Navigator will playback the Organ and Voice A/B tracks with exacting detail, key/piston/toe/stop and expression movements, all while the organist records the Voice C track.

The PLAY button in the Organ and Voice A/B track should be green so that the organ and Voice A/B tracks will playback while the organist records the Voice C track. Set the RECORD ("R") button to red on the Voice B track to indicate it is ready to record.

To begin recording, press the PLAY (▶) button on the GUI. Since the organ and Voice A/B tracks were previously recorded the organ and Voice A/B tracks will begin to play and the organist may now play along all the while recording the Voice C track. Just like before, all key/piston/toe/stop and expression movements are recorded independently of the Organ and Voice A/B tracks on the Voice C track. Press the STOP (■) button when the recording is complete. Voice C track is now recorded into

Vista Navigator memory. To hear what was just recorded, make sure the PLAY button in the Organ and Voice A/B and C tracks are green and press the PLAY (▶) button. The counter will automatically restart at the zero location and the organ and Vista Navigator will begin playing the recording exactly as you recorded it with key/piston/toe/stop and expression movements all in exacting detail. If the recording has mistakes and needs to be re-recorded, press the ERASE button in the Voice C track. A pop-up screen will appear prompting the organist to verify the erasure of the track. Press NO to keep the recording or YES to erase the recording. To begin re-recording the Voice C track, restart as listed above.

Again, it may be a good time to SAVE the recording at this point. To save the current recording in memory to the USB flash device, press the SAVE button on the GUI. Since a folder and filename have already been selected simply press the SAVE button.

Congratulations!!! You've just created your first multi-track MIDI recording.

c. Recorder Common Controls:

There are a variety of common controls available in either recorder mode which function the same. There is a Playlist editor, MIDI file control, MIDI volume controls, play speed (tempo) controls and also the recorder transport controls. There are also two instant access playback speed controls.

Let's review several of the other functions available to the organist in the Simple recorder.

Playlist: Allows the organist to select a folder with a list of recordings which will playback sequentially in alpha/numeric order. Playlists can be created by naming the associated recording filenames in alpha/numeric order within a single folder in Vista Navigator OR by using the USB flash device in a computer and a generic file system program.

After entering the Playlist Function, press the Select Folder line at the top of the screen to reveal a file system navigation dialogue box. Locate the directory that contains the sequence files that will be played. Press Open Folder button and the sequence file names will be presented. The highlighted name indicates the first file in the list. Press the PLAY button to begin. Each file will play then the highlight will move to the next file and it begins to play until all files have been played. The system then stops automatically at the end of the list.

Pressing Stop halts the current song. Pressing Continue allows the selected song to begin play and the current counter location. Pressing Play starts the selected piece at counter position 0.

Pressing on any file name in the list moves the highlight to that position to indicate a new starting position. The next Play begins on the selected file and continues through the list.

New: This function clears current memory and returns all tracks to RECORD status start at counter 0. If the system has received new data that has not been saved the system will ask if the current memory should be saved first. A confirmation dialog will appear giving the user choices about the unsaved data.

Load: Load a MIDI recording into memory from USB flash.

Save: Save the current MIDI recording in memory to the USB flash.

Delete: Delete a MIDI recording from the USB flash.

Erase: The Erase function will erase any recorded MIDI data stored in the memory of

the Vista Navigator recorder for the selected track. To use, press the ERASE button. A confirmation pop-up dialogue will appear questioning the organist whether or not they want to actually erase the current recording in memory. Press YES to erase or NO to keep the existing recording intact.

Warning! The ERASE command will erase any MIDI data loaded into the recorder memory. Once this command is initiated, all loaded data will be lost. This command does NOT erase any physical files, only the data stored within the Vista Navigator memory.

Play Speed: The play speed setting adjusts the playback speed of the MIDI recording. When a MIDI recording is made, the play speed should be set to 100%.

Note: Pre-recorded MIDI files are all recorded at 100%

At 100%, the recording will playback at the speed or tempo you recorded the recording at. Increasing the playback speed will increase or speed up the playback tempo while decreasing the playback speed will decrease or slow down the playback tempo.

Note: Pressing the Play Speed Value bubble will open a pop-up window which will allow the organist to enter a Play Speed value directly. Any value between 50 and 200 may be entered.

50%: Pressing and holding this button will decrease the playback speed to the lowest possible playback speed.

200%: Pressing and holding this button will increase the playback speed to the highest possible playback speed.

Volume: Pre-recorded songs sometimes have the potential to playback Vista Navigator's "A" & "B" voices louder than originally recorded. For this reason, Vista Navigator has a secondary set of "master" volume controls to control the "A" & "B" MIDI voices accessible directly from the Recorder control GUI. The secondary set of volume controls will help alleviate this situation, should it occur. Only the volume level of the "A" & "B" MIDI voices (or a connected MIDI sound device to "C" MIDI port) can be adjusted. The organ's overall playback volume will not be affected by any of Vista Navigator's volume controls.

Note: Pressing either the AB or C volume setting bubbles will open a pop-up window which will allow the organist to enter a value directly. Any value between 0 and 127 may be entered.

Important! Volume settings in the Recorder's secondary "master" volume section are only effective while the Recorder mode is active. All volume settings will return to their original stored Preset values when exiting the Recorder.

Expression Limit: This setting allows the organist to create a volume limit "threshold" for any MIDI recordings originally recorded at higher volume levels. Any MIDI volume messages received above the expression limit setting will be ignored.

Note: Pressing the Expression Limit setting bubble will open a pop-up window which will allow the organist to enter a value directly. Any value between 0 and 127 may be entered.

Continue Recording/Playback: The organist can continue recording/playback from a specific point within an existing recording. This can be done by using the location Counter bubble. Press the Counter bubble. A pop-up window will appear on the GUI prompting the organist to enter a location value. Enter a value on the keypad and then

press the Enter button. The location counter will reflect the value entered on the keypad and move the recording to that position. Also, notice the STOP (■) button has now changed to read CONTINUE.

Note: Any time the location counter is not at the zero (0) location of a recording the STOP button (■) will change to a CONTINUE button.

The recorder will automatically begin searching from the beginning of the recording, zero (0) location, up to the location value entered for all stop settings, piston/toe stud changes and expression values. This unique search feature ensures the organ is prepared to record or playback from the entered location value forward.

- To continue recording from this new location, make sure the RECORD button is red and press the CONTINUE button on the GUI.
- To continue playback from this new location, make sure the PLAY button is green and press the CONTINUE button on the GUI.

Note: Pressing the PLAY (▶) button at any time will always start the recording from the beginning or zero (0) location.

Here are just two examples of how this feature may be used:

Example #1: An organist needs to add an additional verse to an existing recording. Instead of re-recording the entire recording again they can append to the end of an existing recording. Enter the location value of the end of the recording using the COUNTER button and then make sure the RECORD button is red for the track(s) and press the CONTINUE button on the GUI.

Example #2: An organist needs to repeat a specific section of a recording during a practice session. Enter the location value of the start of the section to be repeated using the COUNTER button and make sure the PLAY button is green for the track(s) and press the CONTINUE button on the GUI.

Vista Navigator: Capture

Vista Navigator has the ability to save and load the Organ's capture registrations as well as the Vista Navigator preset registrations. To access this function, press the MENU button on the Vista Navigator GUI. Select the CAPTURE menu option. The GUI will display two option buttons: "Manage Organ Capture Memory" or "Manage Vista Presets". Select the button labeled "Manage Organ Capture Memory". Three available functions will display on the GUI:

Load Capture Memory from File: This function allows the organist to load a stored capture memory file to the organ from the USB flash drive. The system will provide menus to locate existing capture memory files to be loaded.

Save Capture Memory to File: This function allows the organist to save the capture memory into a file on the USB flash drive. The organist has several options within this function; the Piston Configuration, a specific capture memory level, a crescendo program (A or B) or ALL capture information may be stored in a single file. The system will provide menus to specify file names and directory locations for the saves.

Delete Capture Memory File: This function allows the organist to delete a specific capture memory file stored on the USB flash drive. The system will provide menus to specify a file to be deleted.

Pressing the CANCEL button will return the GUI to the main capture selection screen.

Now select the button labeled "Manage Vista Presets". Three available functions will display on the GUI:

Load Vista Presets from File: This function allows the organist to load a stored Vista Navigator preset file to the organ from the USB flash drive. The system will provide menus to locate existing files to be loaded.

Save Vista Presets to File: This function allows the organist to save the Vista Navigator presets into a file on the USB flash drive. The system will provide menus to specify file names and directory locations for the saves.

Delete Vista Presets File: This function allows the organist to delete a specific Vista Navigator preset file stored on the USB flash drive. The system will provide menus to specify a file to be deleted

Pressing the CANCEL button will return the GUI to the main capture selection screen.

The configuration data of the Vista Navigator is stored by default in a file called “config.sov” found in the root director of the FLASH drive. This file is listed on the opening Navigator screen before the organ CANCEL is pressed. System configuration data may also be saved to a user specified file after which the system will load from the newly created file. The new name will appear on the opening screen. The user may then change between the default file and any saved files as desired. If the user executes the Restore Factory Defaults function found under the SETUP functions, then the system writes over the existing “config.sov” with system default data, loads the newly updated file, and will use the “config.sov” as the default configuration file until the user loads another file for all future power up cycles.

Vista Navigator: Setup

Vista Navigator has many internal settings which must be setup properly in order for the Vista Navigator to communicate with the organ. There are also master tuning, master volume settings as well as the ability to restore the Vista Navigator’s settings to their factory defaults. To access the Setup function, press the MENU button on the Vista Navigator GUI. Select the SETUP menu option. The GUI will enter Setup Mode.

Divisions:

The Divisions settings enable the internal Allen Ensemble to communicate seamlessly with the organ. From here, the organist can change the MIDI channel, Division name and also the re-transmit the input MIDI channel to another channel for the MIDI C port. The Divisions setup also allows the organist the ability to turn off or disable divisions in the Vista Navigator. For example: a two manual instrument only has two manuals and pedals. In this case, the three unused divisions can be disabled in the Vista Navigator. When a division is disabled, the disabled division will not display in the Voice Selection mode.

Important! Only advanced users should attempt to adjust the MIDI channels in the Vista Navigator. Factory default MIDI settings should suffice for most recordings or operations of the Vista Navigator.

Let’s disable a division...Start by pressing the MIDI channel 6 button. A pop-up window will appear asking for a new MIDI channel number. For this example, press 0 (zero) and then the ENTER button. The number 0 will un-map or disable the division. Notice the division now has dashes in all three division bubbles. To re-assign or enable the division press the MIDI channel bubble in a disabled division. Enter an “**unused**” MIDI channel number between 1 and 16 then press the ENTER button. The division is once again enabled and can be used.

Tuning:

The global tuning of the internal sound module or an external MIDI sound device connected to MIDI Port C can be adjusted. Any tuning value of between minus 100 cents

and plus 100 cents may be entered. Pressing the Tuning button on the left side of the GUI displays two tuning buttons, one for the internal sound module and one for the externally connected MIDI sound device. Pressing either tuning buttons causes a pop-up window to appear prompting the organist to enter a tuning value. Enter a value and press the ENTER button to accept the value.

Note: Tuning values entered must be within minus 100 cents and plus 100 cents or Vista Navigator will display a range error.

Volume:

The master volume of the internal sound module and also the master volume of an external MIDI sound device connected to MIDI Port C may be adjusted. Pressing the Volume button on the left side of the GUI displays two master volume setting, one for the internal Ensemble (A/B voices) and one for the externally connected MIDI sound device on MIDI port C. Use the Up or Down arrows to adjust the master volume value. Pressing the master volume value buttons directly opens a pop-up window which allows the organ to enter a master volume value directly. Any value between 0 and 127 may be entered on the keypad. Enter a value then press the ENTER button.

Note: Master Volume values entered must be within 0 and 127 or Vista Navigator will display a range error.

Other Settings:

There are several other settings within Vista Navigator which need to be discussed.

General Piston MIDI Channel: The General piston MIDI channel is an important setting. This setting is required for Vista Navigator to properly respond to a General preset combination change received from an Allen organ. An incorrect MIDI channel setting would mean Vista Navigator will respond to the organ's Divisional pistons rather than the organ's General pistons. This channel setting is usually set to MIDI channel 8 (for Allen organs) and should be left alone. However, this setting may be different for other manufacturer's organs. Check the specific organs General piston channel and set accordingly.

Recorder Mode: Pressing the button text label will toggle the recorder mode between the Simple and Advanced recorder modes. Select the recorder mode the organist wishes to use. (see the Recorder section above for additional details on Recorder modes)

Show Port C: This setting allows the organist to view the MIDI port C voice settings while within the Voice Selection GUI. Pressing the button text label will toggle between Yes and No.

Port C Voice Names: As the function describes, the organist can choose between several options for the voice names displayed for the MIDI sound device connected to MIDI Port C. Options are: General MIDI, Numbers, Expander II or Ensemble. Pressing the function bubble will cause a drop-down box to appear. Press the appropriate selection in the drop-down box.

Restore Factory Defaults:

This function returns all current Vista Navigator memory settings and preset combinations to factory defaults. A confirmation pop-up window will appear prompting the organist whether or not they want to proceed with the reset.

Important! Once a Factory restore has been initiated, it can't be un-done. All previous loaded preset combination or MIDI settings will be reset to factory settings. This function will overwrite the default system configuration file, "config.sov", stored

on the USB flash device in the root directory. The system loads this file and will use it on future power up cycles until a new file is specified by the user. See Manage Vista Presets section.

Vista Navigator: Remote Control

Vista Navigator comes equipped with a remote control device. The remote control may only be used while the Playlist mode is selected on the Vista Navigator.

To operate the remote control, place the Vista Navigator into Recorder mode, select the Playlist button on the GUI, locate and load a directory that contains sequence files. .

Important! On the rear of the remote is a power switch. Make sure the power switch is in the ON position. Never press the “change ID” button on the rear of the remote control. This will “un-pair” the remote device from the Vista Navigator and the remote will no longer operate. See your local Allen organ representative for details if this occurs.

Press the RESET button on the remote control and watch the bottom of the GUI. If properly paired, once the RESET button is pressed, the GUI will indicate REMOTE. This means the remote is now connected to Vista Navigator and ready to operate. Also, each time a button on the remote control is pressed the word REMOTE on the GUI will briefly flash red in color to indicate a button has been pressed. In addition, the small white indicator, on the upper left side of the remote, will quickly flash when any buttons are pressed on the remote control.

There are several buttons on the remote control:

Reset: This button enters the remote control function when the Playlist mode is operating.

Play+: This button starts playing the current selected recording in the playlist and will continue playing all subsequent files within the playlist. If a recording is paused or stopped, pressing the Play+ button will restart the recording from the zero (0) location.

Play: This button begins playing the currently selected recording from the playlist and will stop at the end of the recording. If a recording is paused or stopped, pressing the Play button will restart the recording from the zero (0) location.

Pause: This button pauses or temporarily stops the recording from playing. Pressing the Pause button again, while the recording is paused, will continue or resume playback from the current numbered location.

Stop: This button stops the recording from playing. Pressing the Pause button after the stop button was pressed places the Recorder into pause mode. Pressing the Pause button a second time will continue or resume playback from the current numbered location.

Plus (+): This button selects the next filename in the playlist.

Minus (-): This button selects the previous filename in the playlist.

Forward (→): This button increases the Play Speed by one percent per press.

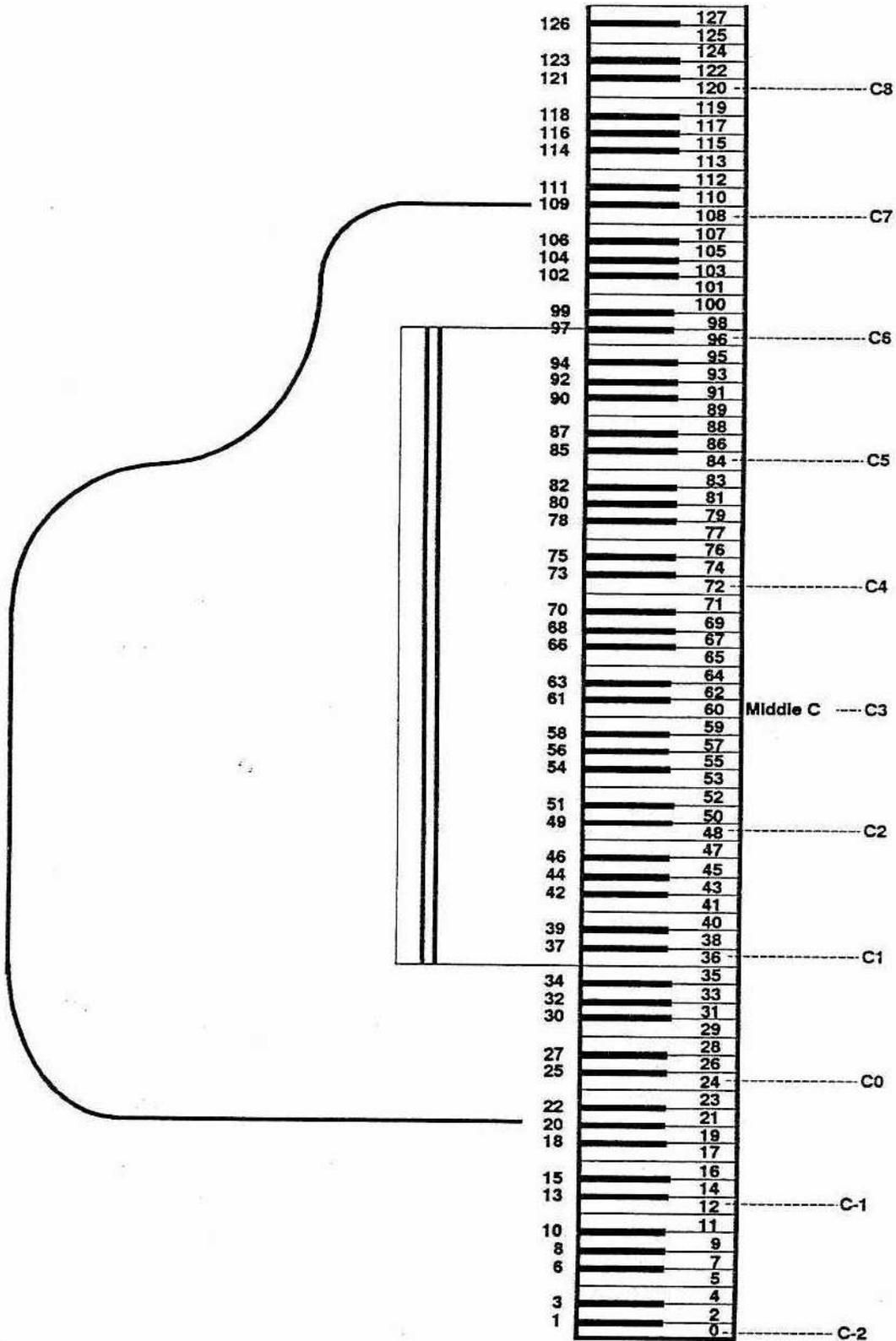
Backward (←): This button decreases the Play Speed by one percent per press.

Note: (SONG, SRCH, and REC buttons have no function in Vista Navigator)

Remember to switch off the remote control when not using it to save battery life.

APPENDIX A: MIDI KEY VALUE CHART

This diagram is provided as a guide to help in identifying note numbers for use in the note limit feature as found in Section 4b.



APPENDIX B: VISTA NAVIGATOR VOICE ASSIGNMENTS

1	Grand Piano
2	Bright Piano
3	El Gnd Piano
4	Honky-Tonk
5	El Piano 1
6	El Piano 2
7	Harpsichord
8	Clavinet
9	Celesta
10	Glockenspiel
11	Music Box
12	Vibraphone
13	Marimba
14	Xylophone
15	Tubular Bell
16	Dulcimer
17	Drawbar Orgn
18	Percuss Orgn
19	Rock Organ
20	Organ
21	Reed Organ
22	Accordion
23	Harmonica
24	Tango Accord
25	Ac Guitr-nyl
26	Ac Guitr-stl
27	El Guitr-jaz
28	El Guitr-Cln
29	El Guitr-Mut
30	Ovrdr Guitar
31	DistorGuitr
32	Guitar Harm

33	Acoustic Bass
34	Finger Bass
35	Picked Bass
36	Frtless Bass
37	Slap Bass 1
38	Slap Bass 2
39	Synth Bass 1
40	Synth Bass 2
41	Violin
42	Viola
43	Cello
44	Contrabass
45	Trem String
46	Pizz String
47	Orch Harp
48	Timpani
49	String En 1
50	String En 2
51	Synth Str 1
52	Synth Str 2
53	Choir Aahs
54	Voice Oohs
55	Synth Voice
56	Orch Hit
57	Trumpet
58	Trombone
59	Tuba
60	Muted Trmpt
61	French Horn
62	Brass Sect
63	Syn. Brass 1
64	Syn. Brass 2

65	Soprano Sax
66	Alto Sax
67	Tenor Sax
68	Baritone Sax
69	Oboe
70	English Horn
71	Bassoon
72	Clarinet
73	Piccolo
74	Flute
75	Recorder
76	Pan Flute
77	Blown Bottle
78	Shakuhachi
79	Whistle
80	Ocarina
81	Lead1-sqr
82	Lead2-saw
83	Lead3-calli
84	Lead4-Chiff
85	Lead5-chrng
86	Lead6-Voice
87	Lead7-5ths
88	Lead8-bass+
89	Fantasia
90	Warm
91	Polysynth
92	Choir
93	Bowed
94	Metallic
95	Halo
96	Sweep

97	Rain
98	Soundtrack
99	Crystal
100	Atmosphere
101	Brightness
102	Goblins
103	Echoes
104	Sci-Fi
105	Sitar
106	Banjo
107	Shamisen
108	Koto
109	Kalimba
110	Bag Pipe
111	Fiddle
112	Shanai
113	Tinkle Bell
114	Agogo
115	Steel Drums
116	Woodblock
117	Taiko Drum
118	Melodic Tom
119	Synth Drum
120	Revrs Cymbal
121	Fret Noise
122	Breth Noise
123	Seashore
124	Bird Tweet
125	Phone Ring
126	Helicopter
127	Applause
128	Gunshot

129	32 Violone
130	16 Diapason
131	16 Diaphone
132	16 Gamba
133	16 Bourdon
134	16 Quintaden
135	10 2/3 Quint
136	8 Principal
137	8 Princ+Trem
138	8 EnglishDia
139	EngDia+Trm
140	8 Bourdon
141	8 Bourd+Trem
142	8 Quintadena
143	Quntadena+Tr
144	8 Gedackt
145	Gedackt+Trm
146	8 Harm Flute
147	Harm Flt+Trm
148	8 VioleCel
149	8 Flute Cel
150	8 DulcinCel
151	5 1/3 Quinte
152	5 1/3 Quint
153	4 Octave
154	4 English Oct
155	4 Harm Flute
156	4 Harm Fl+Tr
157	4 Viole
158	4 Viole+Trm
159	2 Piccolo
160	1 1/3 Larigo

161	1 1/7 Septim
162	1 Fife
163	Zimbel III
164	Cymbale III
165	Mixture IV
166	Grand Mix IV
167	Sesquialt II
168	Sesqll+Trm
169	Cornet V
170	Cornet V+Tr
171	32 Posaune
172	16 Posthorn
173	16 Posaune
174	16 Tuba
175	16 C Trumpet
176	16 Clarinet
177	16 Clarnt+Tr
178	16 Dulzian
179	16 Rankett
180	16 Musette
181	16 Muset+Tr
182	16 Vox Hum A
183	16 Vox Hum B
184	8 Span Trpt
185	8 Posthorn
186	8 Tuba
187	8 Trumpet
188	8 Trmpt+Trm
189	8 Trompette
190	8 Cromorne
191	8 Cromorm+Tr
192	8 Rankett

193	8 Musette
194	8 Musette+Tr
195	8 Krumet
196	8 Krumet+Trm
197	8 CorAnglais
198	8 CorAng+Trm
199	8 French Hrn
200	8 FrHorn+Tr
201	8 Clarinet
202	8 Clarint+Tr
203	8 Schalmei
204	8 Schalmi+Tr
205	Vox Humana8A
206	Vox Humana8B
207	4 Klarine
208	4 Clarion
209	4 Schalmei
210	4 Schalmi+Tr
211	2 Zink
212	Organ – MF
213	Organ – F
214	Organ – FF
215	Organ – FFF
216	8-4 Flute
217	8-4 Flt+Trm
218	8-2 Flute
219	Tibia 8
220	Tibia-Vox 8
221	Tib/Vox 8-4
222	Tiba 16-8-4
223	Brass Ensembl
224	Brass En+Trm

225	Bugle
226	Bugle + Trm
227	StrngEnsembl
228	Cello Ensembl
229	8va Violin
230	S Piano 16-4
231	Piano 16
232	Harpsi 8-4
233	Harpsi 16-8
234	Vibraharp B
235	Chrysoglott
236	Orch Bells
237	Wood Harp 8
238	Wood Harp 4
239	Marimba
240	Chimes
241	Carillon
242	Handbells
243	Bell Tree
244	Snare Roll
245	Cymbal Roll
246	Crash Cymbal
247	Thunder
248	Cannon
249	Ac Bass Sub
250	FngrBass Sub
251	PckdBass Sub
252	FrtlessB Sub
253	SlapBass Sub
254	SynBass1 Sub
255	SynBass2 Sub
256	MIDI OFF

DRUM SET TABLE (MIDI Channel 10)

	Prog 257: (Standard)	Prog 258: (Room)	Prog 259: (Power)	Prog 260: (Electric)
27 - D#1	High Q			
28 - E1	Slap			
29 - F1	Scratch Push			
30 - F#1	Scratch Pull			
31 - G1	Sticks			
32 - G#1	Square Click			
33 - A1	Metronome Click			
34 - A#1	Metronome Bell			
35 - B1	Kick Drum 2			
36 - C2	Kick Drum 1		Power Kick	
37 - C#2	Side Stick			
38 - D2	Snare Drum 1		Gated Snare	
39 - D#2	Hand Clap			
40 - E2	Snare Drum 2			Gated Snare
41 - F2	Low Floor Tom	Room Low Tom 2	Room Low Tom 2	Electric Low Tom 2
42 - F#2	Closed Hi Hat			
43 - G2	High Floor Tom	Room Low Tom 1	Room Low Tom 1	Room Low Tom 1
44 - G#2	Pedal Hi Hat			
45 - A2	Low Tom	Room Mid Tom 2	Room Mid Tom 2	Room Mid Tom 2
46 - A#2	Open Hi Hat			
47 - B2	Low-Mid Tom	Room Mid Tom 1	Room Mid Tom 1	Room Mid Tom 1
48 - C3	Hi-Mid Tom	Room Hi Tom 2	Room Hi Tom 2	Room Hi Tom 2
49 - C#3	Crash Cymbal 1			
50 - D3	High Tom	Room Hi Tom 1	Room Hi Tom 1	Room Hi Tom 1
51 - D#3	Ride Cymbal 1			
52 - E3	Chinese Cymbal			Reverse Cymbal
53 - F3	Ride Bell			
54 - F#3	Tambourine			
55 - G3	Splash Cymbal			
56 - G#3	Cowbell			
57 - A3	Crash Cymbal 2			
58 - A#3	Vibraslap			
59 - B3	Ride Cymbal 2			
60 - C4	Hi Bongo			
61 - C#4	Low Bongo			
62 - D4	Mute Hi Conga			
63 - D#4	Open Hi Conga			
64 - E4	Low Conga			
65 - F4	High Timbale			
66 - F#4	Low Timbale			
67 - G4	High Agogo			
68 - G#4	Low Agogo			
69 - A4	Cabasa			
70 - A#4	Maracas			
71 - B4	Short Whistle			
72 - C5	Long Whistle			
73 - C#5	Short Guiro			
74 - D5	Lone Guiro			
75 - D#5	Claves			
76 - E5	Hi Wood Block			
77 - F5	Low Wood Block			
78 - F#5	Mute Cuica			
79 - G5	Open Cuica			
80 - G#5	Mute Triangle			
81 - A5	Open Triangle			
82 - A#5	Shaker			
83 - B5	Jingle Bell			
84 - C6	Belltree			
85 - C#6	Castanets			
86 - D6	Mute Surdo			
87 - D#6	Open Surdo			

88 - E6				
	Prog 261: (TR-808)	Prog 262: (Brush)	Prog 263: (Orchestra)	Prog 264: (SFX)
27 - D#1			Closed Hi Hat	
28 - E1			Pedal Hi Hat	
29 - F1			Open Hi Hat	
30 - F#1			Ride Cymbal	
31 - G1				
32 - G#1				
33 - A1				
34 - A#1				
35 - B1				
36 - C2	808 Bass Drum			
37 - C#2				
38 - D2	808 Snare Drum	Brush Tap	Snare Drum 2	
39 - D#2		Brush Slap	Castanets	High Q
40 - E2		Brush Swirl	Snare Drum 2	Slap
41 - F2	808 Low Tom 2		Timpani F	Scratch Push
42 - F#2	808 Closed Hi Hat		Timpani F#	Scratch Pull
43 - G2	808 Low Tom 2		Timpani G	Sticks
44 - G#2	808 Closed Hi Hat		Timpani G#	Square Click
45 - A2	808 Mid Tom		Timpani A	Metronome Click
46 - A#2	808 Open Hi Hat		Timpani A#	Metronome Bell
47 - B2	808 Mid Tom 1		Timpani B	Guitar Slide
48 - C3	808 Hi Tom 2		Timpani C	
49 - C#3	808 Cymbal		Timpani C#	
50 - D3	808 Hi Tom 1		Timpani D	
51 - D#3			Timpani D#	
52 - E3			Timpani E	
53 - F3			Timpani F	
54 - F#3				
55 - G3				
56 - G#3				
57 - A3				
58 - A#3				Applause
59 - B3				
60 - C4				
61 - C#4				
62 - D4	808 High Conga			
63 - D#4	808 Mid Conga			
64 - E4	808 Low Conga			
65 - F4				
66 - F#4				
67 - G4				
68 - G#4				
69 - A4				
70 - A#4				Helicopter
71 - B4				
72 - C5				Gun Shot
73 - C#5				
74 - D5				
75 - D#5				
76 - E5				
77 - F5				
78 - F#5				Birds
79 - G5				Rain
80 - G#5				
81 - A5				Wind
82 - A#5				Sea Shore
83 - B5				Stream
84 - C6				
85 - C#6				
86 - D6				
87 - D#6				
88 - E6			Applauses	

APPENDIX C: MIDI IMPLEMENTATION CHART

FUNCTION		TRANSMITTED	RECEIVED
Basic Channel	Default	1 – 16	1 – 16
	Changed	1 – 16	1 – 16
Mode	Default	3	3
	Messages	X	X
	Altered	X	X
Note Number		O (1 – 127)	O (1 – 127)
Velocity	Note ON	9nH, v = 1 – 127	9nH, v = 1 – 127
	Note OFF	9nH, v = 0	9nH, v = 0
Aftertouch	Keys	X	X
	Channels	X	X
Pitch Bend		O	O
Control Change	0 (bank select)	O	O
	7 (volume)	O	O
	64 (sustain)	O	O
Program Change		O (1 – 127)	O (1 – 127)
System Exclusive		O	O
System Common		X	X
System Real Time		X	X
Aux Messages		X	X

Mode 1: Omni On, Poly
 Mode 3: Omni Off, Poly

Mode 2: Omni On, Mono
 Mode 4: Omni Off, Mono

O: Yes
 X: No

APPENDIX D: ORGAN MIDI CHANNEL GUIDE CHART

MIDI CHANNEL	Classical division	Theatre division
1	Swell	Great
2	Great	Accompaniment
3	Pedal	Pedal
4	Choir	Solo (3-man) Orchestral (4-man)
5	Solo	Accompaniment 2 nd Touch
6	String	Solo (4-man)
7		Great 2 nd Touch (4-man)
8	General Pistons	General Pistons

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Reorient the receiving antenna.

Relocate the device with respect to the receiver.

Move the device away from the receiver.

Plug the device into a different electrical outlet, so that the device and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio technician for additional suggestions.

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