SOLID STATE

Organist Palette
Guide

December 2016

Contents

Background

The Organist Palette was conceived as a way to provide sophisticated control in an easy to understand format without taking up large spaces on the console. We designed the Palette to be used to set up the organ before playing and to provide some useful feedback during the performance. It is not intended to replace critical controls on the console used when playing.

Although the Palette offers a large choice of controls, almost all of the settings are available on the console without it. Many artists said to us during the design reviews that they must be able to play the organ if the Palette got left at home. You can.

When a console only had a few memory levels it was easy to keep track of what was where and access it. With more memory came the sticky notes "levels `51-63 reserved for visitors" etc.

It was time to do something so we created libraries and divided them up into books and then made space for sequences within the books that could be recalled by name. The memory levels are still there but to make it easier to navigate each library has its own set.

Some Technical Stuff:

The Organist Palette currently uses Apple iPads and iPods. The Palette App is stored in the 1602 MicroServer and may be downloaded onto new devices if you wish. The iPad communicates with the Palette server using a wireless network. Nothing is stored on the iPad, all the changes you make are immediately stored in the organ processor.

The security of this system is based on the wireless network password. Other people will be able to see the wireless network but without the password will not be able to control the organ. Call us if we can help change the password or if you lose it.

If the iPad loses wireless connection a red warning message will appear. Please don't install other wireless network access on the iPad used for the Palette as it can hop onto that network and you will lose control of the organ until the link is re-established.

Installation - Connecting the 1602MicroServer

Power

The microServer comes with a detachable AC power supply that must be switched with Organ power. The microServer can either be installed in the Console or the Organ Chamber. If you have more than one Console be sure to fit the microServer in the Organ Chamber so it powers ON regardless of which console is in use.

The microServer can take a minute to start, after which the Palette will be ready to use.

Network

Using the network cable supplied, connect the Ethernet RJ45 port on the microServer to the network switch for the MultiSystem II Network.
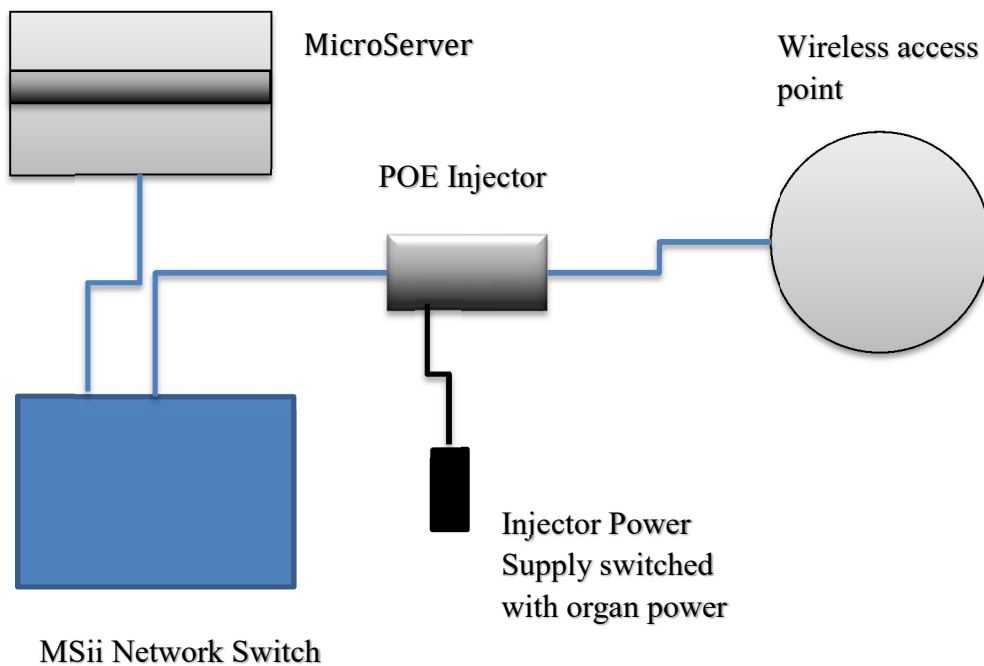
Wireless access points

The wireless network is now provided by independent wireless access points, these give you the freedom to mount the wireless antennae in the best point for communications and also to add more than one point to boost the signal if required. The system can also be connected to another network to access the wireless but please do not do this without consulting our engineers as reliability of the organ control system may be compromised without the proper setup.

Positioning the access points

The access point needs to be able to communicate with the iPad in the building. Unfortunately, organ pipes are a very effective RF shield and so do not mount the access point behind the façade pipes as the range will be very limited. The signal will travel easily through fabric and thin wood, less easily through bricks and not at all through steelwork. Try to avoid placing the access point near (less than 2 feet) from large metal objects because of reflections to the signal.

The wireless access point must be switched with organ power. To add convenience for the installer we provide remote power called POE which sends the power over the network cable to the access point using a device called a PEO injector.

Installing Access points that come with the system

If the wireless access point is supplied with the system, it will be configured for you. Simply plug it in as shown above. An additional access point can also be added to any part of the organ control network.

The instructions in the box describe setting up the access point, please ignore these as we have done it. However, the section on installation is helpful.

If you wish to use your own access points they will need to be configured for DHCP in their setup before using with the system. If you have questions on this, please contact us as the options are too great to be included in this manual.

Connecting to the Wireless

The access point is set by Solid State to appear on your network as *Portal* use the iPad settings to connect to wireless networks and choose Portal. The password is set to be Remote567. We strongly recommend you change the password after everything is setup.

Setting up the Wireless Access Points

It is not necessary to make any changes to the wireless access points unless the default settings need to be changed by the facility management to fit into their wireless system. It is a good idea to use this opportunity to change the wireless access password though.

Once the iPad is successfully connected to the system open Safari and browse to 192.168.1.1:86/access-points.php

A mostly blank screen with the phrase:

"Each access point should be configured with the same settings"

Beneath this a list of the access points which may be simply a star. Tap on the star, if you have multiple access points there will be multiple names in the list.

At the login screen for the access point the username is admin and the password is Remote123. Watch out for iPad idiosyncrasies here, it will try and capitalize the admin and not try and capitalize the Remote, also the keyboard does not change to tell you the case of what you are typing.

The main status screen of the access point will be shown. The access point supports both 2.4GHz and 5GHz wireless systems both of which are enabled by us.

To change the settings touch the "Wireless Network" menu choice on the left for either 2.4G or 5G and edit the SSID called Portal.

The main status screen of the access point will be shown. The access point supports both 2.4GHz and 5GHz wireless systems both of which are enabled by us.

To change the settings touch the "Wireless Network" menu choice on the left for either 2.4G or 5G and edit the SSID called Portal.

The factory settings are shown below in case you need to go back to them. Here you can change the password but remember to change it in the 5G version as well to allow your iPad to hop between networks.

2.4GHz / SSID Profile

Wireless Setting

SSID	Portal	(1 to 32 characters)
Suppressed SSID	☐	
Client Isolation ⓘ	○ Enable	● Disable

Wireless Security

Security Mode	WPA2-PSK ▼
Encryption	Both(TKIP+AES) ▼
Passphrase	Remote567 (8 to 63 characters) or (64 Hexadecimal characters)
Group Key Update Interval	3600　seconds(30~3600, 0: disabled)

Fast Roaming ⓘ

Enable Fast Roaming	○ Enable	● Disable

[Save] [Cancel]

iPad

The software for the iPad is pre-installed and the iPad set up to operate on the network. If an iPad is supplied with the system, it will be setup to run the app and connect to the server. The app is called Palette and appears at the bottom of the screen as shown below.

Adding another iPad

The software for the iPad is a WebbApp. This avoids needing to upload a specific version of the app to Apple and wait for approval. It also adds a layer of security as it is not possible to have an unauthorized copy of the app on another device.

A new iPad will need to be setup as follows:

Setup the wireless network

In setup on the iPad connect to wireless networks and choose Portal. The password is set to be Remote567. We strongly recommend you change the password after everything is setup.

Capture the link to the WebbApp

Open Safari and browse to 192.168.1.1 It should open a slightly distorted view of the app.

If so, then hit the icon to the right of the toolbar with an arrow coming out of the top of a box.

Choose Add to Home Screen

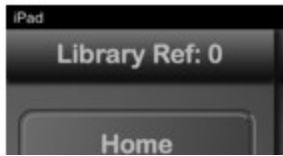Close Safari and look for the Palette icon on the screen

Open the Palette app and a default screen will show.

Libraries – how to access 10,000 levels

The Palette system accesses the capture system from Libraries. A Library can have any number of memory levels and this is allocated by the system manager. Typically, a Library has between 50 and 500 memory levels, beyond that navigation becomes more of a challenge.

The Libraries are named in whatever way makes sense to your organization, maybe names of artists or events. There is always a Public Library which is accessed when the organ is switched on. Although the Public Library cannot be locked all the other Libraries have access using a PIN number typed in on the general pistons.

Library number and PIN.

 Although the Libraries have friendly names the system assigns each one a number between 1 and 99. 0 is reserved for the Public Library as shown in the screen shot beside. Each Library has a preassigned PIN number of 3 digits. The number is shown on the Palette screen in the pull out menu bar for each Library.

The PIN number provides access to the system without the Palette. This relies on either a Library piston if fitted or sometimes this is linked to the General Cancel. If so, to access a Library without the Palette, hold in the Library piston or General Cancel piston and press the Library number followed by its PIN to access a new Library. The memory level display on the console will respond with a brief message saying LIB 03 or the appropriate number. If you get the PIN wrong the system will return the Public Library.

Library Structure

Each Library is divided into as many books as you wish to choose, the books are mainly used to store piston sequences by useful subgroups.

To keep compatibility with the console controls the sequences use memory levels and general pistons. The palette has a duplicate of the memory level display to allow you to keep track. The Palette keeps track of the sequences for you, for example a sequence on levels 11-17 can be named and then recalled so there is no need to keep a bunch of yellow sticky notes on the console. Sequences always start on general 1 of a level.

Palette Screens

Home Screen

The Home Screen provides quick access to features through small panels called Modules. The choice of modules is defined by your organ builder to suit the design of the organ.

Some of the modules operate directly from this screen such as the Transposer or the Pedal Divide. However, some modules only have a quick access version on the home screen. For more features press the menu button (|||) on the toolbar to pull in the menu.

At the top left of the screen is a menu button (|||) that allows you to display any of the Palette Screens.

The Home Screen gives you quick access to useful Palette controls.

The Sequencer Edit Screen has all the controls you need for adding and editing sequences.

The Sequencer Matrix Screen gives you quick access to any setting in any sequence.

The Sequence View Screen allows you to view and rename your books and sequences.

The MIDI and Recorder modules have additional screens which are accessed from here.

Setup allows you to configure and add Modules on the Home Screen and choose the language.

Reload provides a way to restart the palette link if you go out of wireless range.

Sequence Editor

The Editor Screen

Tap the menu button when you want to change screens.

Tapping the Home button takes you straight to the Home Screen

Tap the Library display to choose which Library to work from. The default library (Public) is accessible to anybody. Other libraries may be protected by a PIN.

Each Book allows you to store a number of related Sequences. Tap the Book display to select the Book you want to work with or choose Add Book.

Tap on the sequence display to choose the Sequence you want to use. If you want to create a new sequence choose Add Sequence.

Start and Stop are the Memory Levels where the Pistons will reside. Each level contains the same number of general Pistons as you have on the console. The sequence will start with the first piston on the Start Memory Level and can continue up to the last piston on the Stop Memory Level. Start and Stop can be adjusted by tapping their display.

The memory display is a duplicate of the console display and shows the current memory level and the last piston that was used.

The Piston Selector carousel allows you to activate any piston in the sequence. Tap on the piston and the stops will move on the console. Spin the carousel left or right to access pistons that are not visible. There is a blue progress bar underneath to show you where you are in the sequence. As you play and press next the carousel will rotate keeping the current piston in view. Each piston shows both the piston number and the memory level.

The Next and Previous buttons allow you to step through the pistons in the sequence. These buttons are duplicates of the Next and Previous pistons on the console.
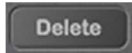
We have provided a local setter. Don't hold this set button in though, just tap Set, then a piston to store the stops in the piston. Tap set each time you need to use it.
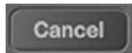
Tap Insert to insert a new piston in the Sequence:

The inserted piston can be set using the palette and will move the stops when stepping through the sequence. It is not accessible directly from the console as it does not have a physical piston.

The Delete button can be used to remove pistons from the sequence. If an inserted piston is deleted (e.g. 12a) it will be removed completely. If a normal piston is deleted then it will be bypassed when using Next and Previous. The piston will be greyed out on the carousel.

Tapping Cancel will turn off all the stops and reset the sequencer to 1.

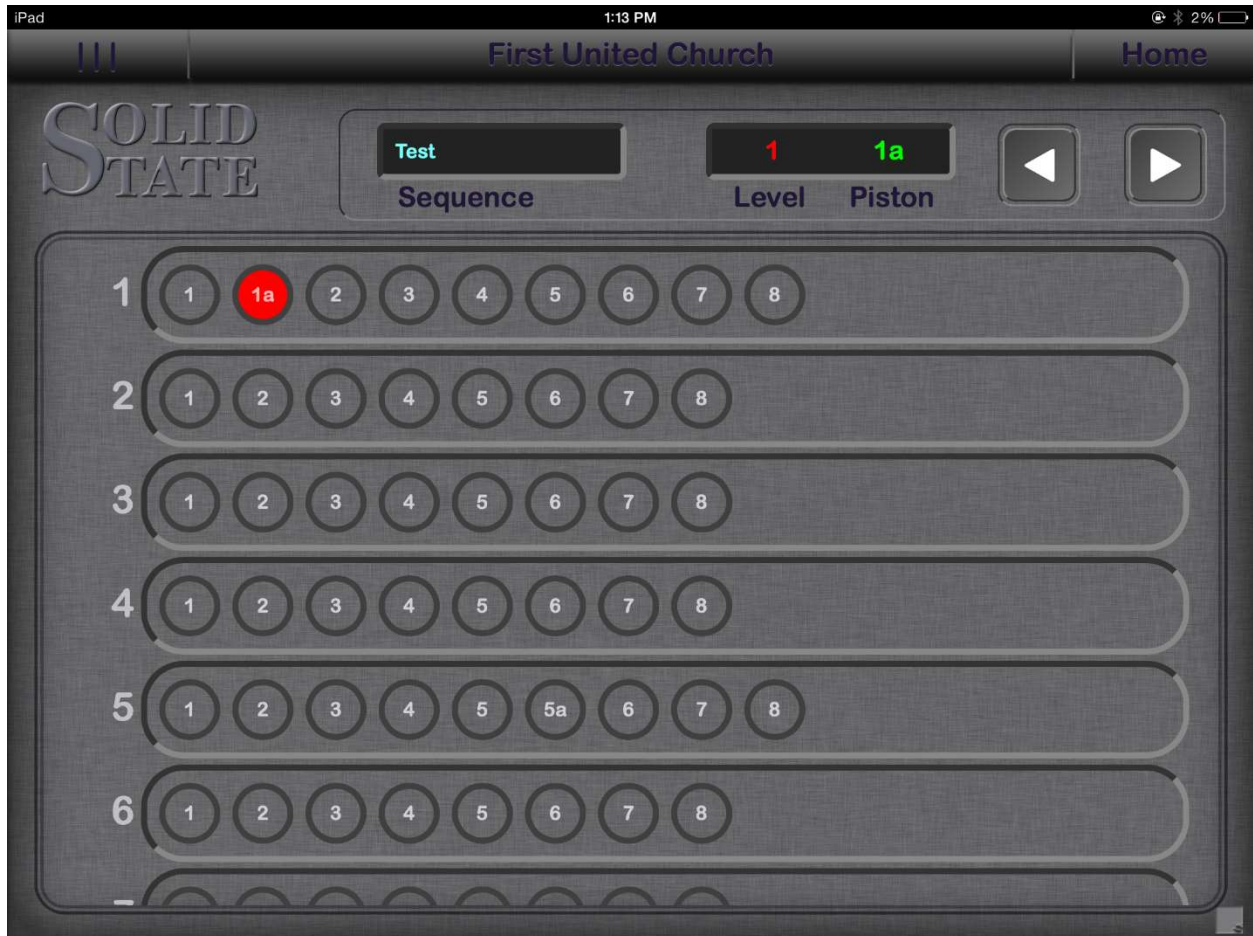The Pad allows you to save piston settings for use in other parts of the Sequence.

- Select the Piston that has the registration you want to save
- Tap the Store button
- Press OK or type a description into the text box that appears and press OK

To use the registration in another piston:

- Make sure the piston is visible
- Tap the Paste button
- Tap the piston where you wish to store the registration

Sequencer Matrix Screen

The Sequence Matrix Screen gives you quick access to any point in the current sequence. This can be useful when working with an orchestra and you need to rapidly access a point in the sequence.

You can choose a sequence by tapping on the Sequence display. There are also Next and Previous buttons so you can step through the sequence.

If a long sequence doesn't fit on the screen then use two fingers to scroll the screen up and down.

Sequencer View Screen

The Sequence View Screen shows you all your books and sequences and allows you to rename and delete them.

To rename a book or sequence tap the name and an editor will pop up.

To delete a book or sequence tap the name and in the editor delete all the letters. Click OK. You will be asked if you want to delete the book/sequence.

If you delete a book then all the sequences within that book will also be deleted.

When you delete books and sequences the pistons still retain their settings. If you wish to also delete the settings then this has to be done one level at a time using the clear button on the console.

Setup Screen

The Setup Screen allows you to choose the layout of the Modules on the Home Screen.

There are 8 panels where you can place modules. Tap on a panel and choose the Module you would like from the list that appears.

Changes are saved automatically.

Editing Sequences

A sequence is a series of General Pistons which can be progressed through when playing the organ. Each Piston can be set with the required registration for the whole organ.

Capture a sequence using the General Pistons
- At the Console choose a level to start on
- Start with Piston 1
- Set the general piston with the required registration
- Each time you require a registration change set the next piston.

- When you have used the last piston on a level move to piston 1 on the next level up. If you are using Set+Next the system will do this for you.

- You can set and advance at the same time by setting the Next piston (press Set and then the Next Piston)

Add the sequence to the palette
- On the Sequence Edit Screen choose the library you wish to add the sequence to
- Choose the Book (or add a new book) to store the sequence in

- Tap in the sequence panel and add a new sequence. Give it a descriptive name
- Set the Start and Stop levels to the first and last level you recorded the sequence in

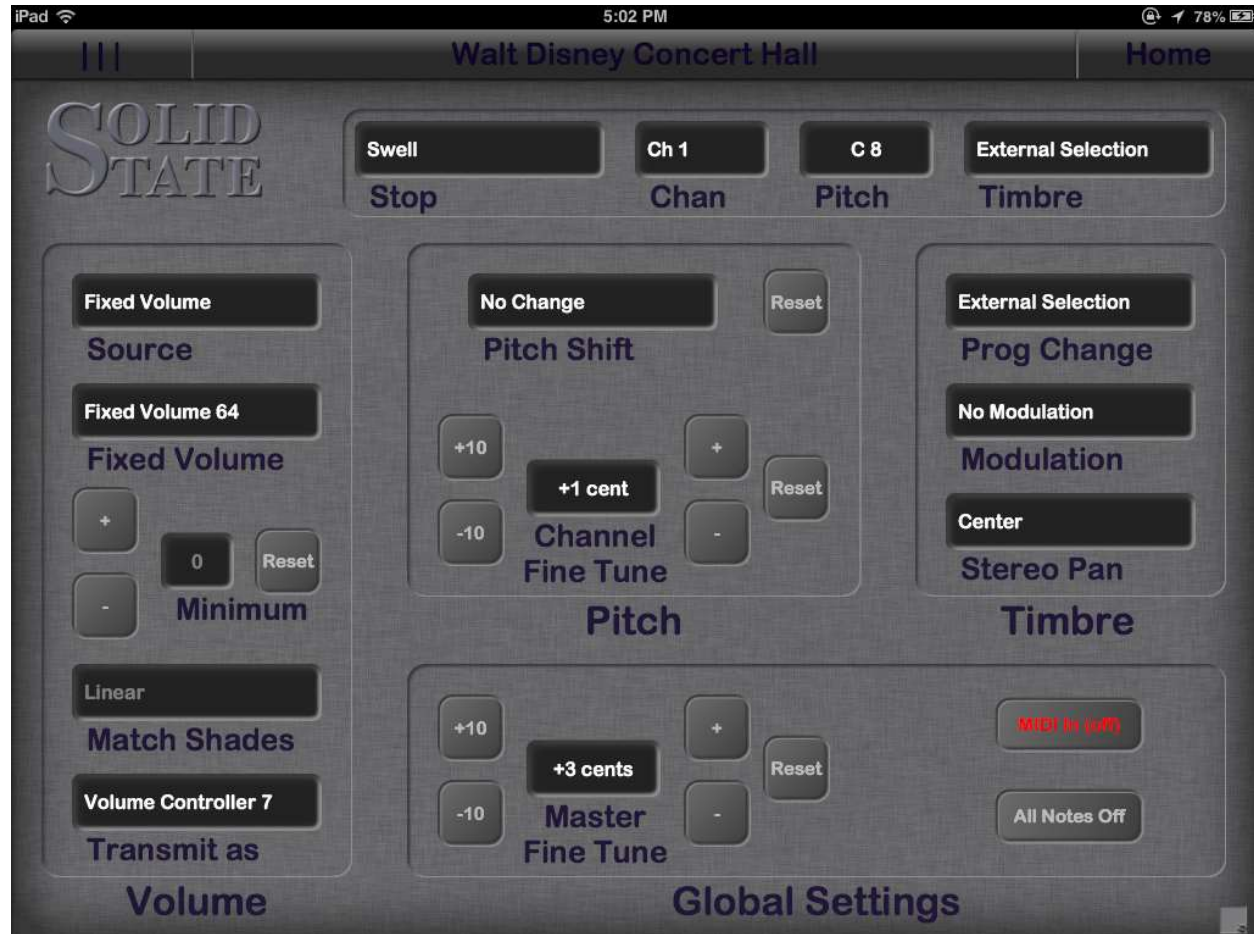## Capture a sequence using the Sequence Editor

Add a new sequence to the palette
- On the Sequence Edit Screen choose the library you wish to add the sequence to
- Choose the Book (or add a new book) to store the sequence in
- Tap in the sequence panel and add a new sequence. Give it a descriptive name
- Set the Start and Stop levels to the first and last level you recorded the sequence in (these can be changed later)

Capture the sequence
- At the Console choose a level to start on
- Start with Piston 1
- Set the general piston with the required registration
- Each time you require a registration change set the next piston

- When you have used the last piston on a level move to piston 1 on the next level up

- You can set and advance at the same time by setting the Next piston

MIDI

The optional MIDI controller controls the MIDI messages sent by MIDI stops on the console. The Palette displays a full range of MIDI controls associated with the stop chosen in the pulldown Stop window.
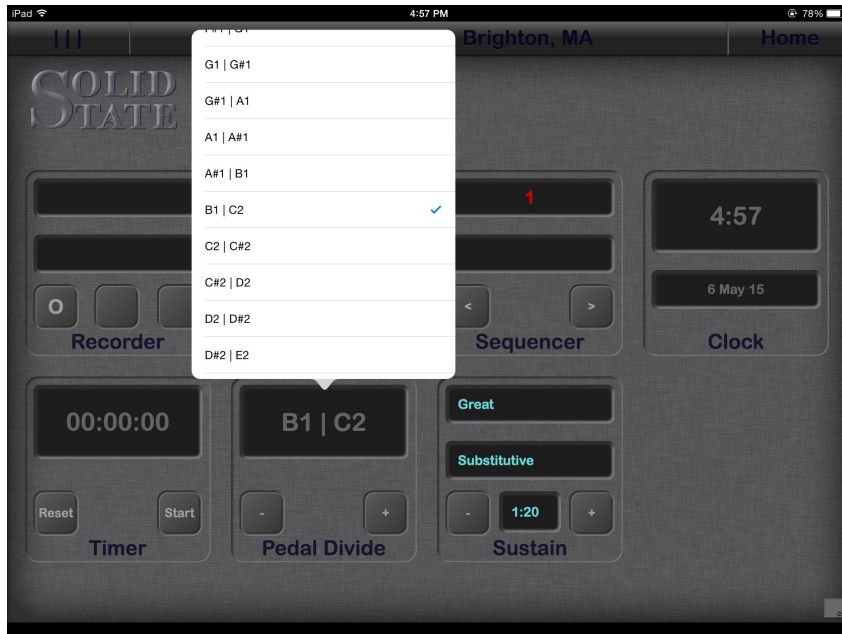
If you are using MIDI these controls will look familiar to you. At the top of the screen are the main controls such as MIDI channel number and pitch. The timbre can be controlled by the Palette or left unchanged by choosing External Selection.

Unique to pipe organs is the left side of the screen where the volume of the MIDI voices can be set to match the swell shoe. It is necessary to set a minimum volume as by default when the shoe is closed there will be no MIDI sound which is not true of the organ.

Pitch shift tunes the MIDI to the organ.

MIDI In (off) is an important feature. It is possible to create a loop where the Organ plays notes out to the MIDI device which then sends them back to the organ where they are re-sent to the MIDI. To prevent this you can either unplug the MIDI in cable or select MIDI In to be Off. Remember that if you can't play the organ from a MIDI keyboard this feature may be off.
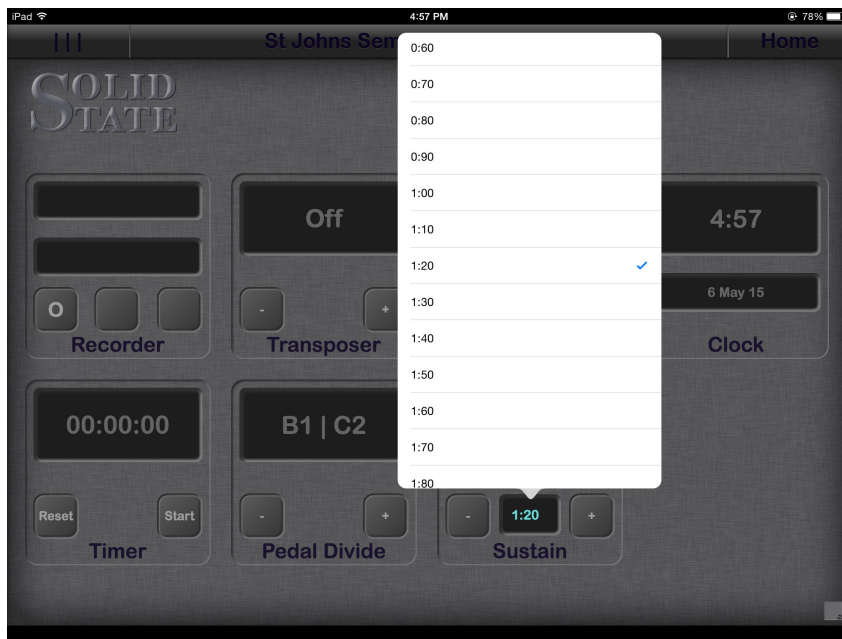
Pedal Divide

Tapping on the split point window on the Palette screen pops up the chooser to select a different divide point.

Sustain

The Sostenuto module is used to control the sustain time, and the type of sustain for each manual.

Recorder

The built in organ recorder control is available if the system has an RFM unit. This control panel can work in parallel with the control panel on the console if it is fitted. This option is also available for the iPod. There are more detailed instructions on the recorder operation in the recorder manual.

In this screenshot the recorder has been armed by pressing record once, to prevent accidental over recording of a previously recorded song it is necessary to press record again to start recording. Press stop to exit.

The Console Clock

The clock module follows the time set on the iPad. To change the time use the apple setup app.

Tapping on the screen will activate the time format chooser.