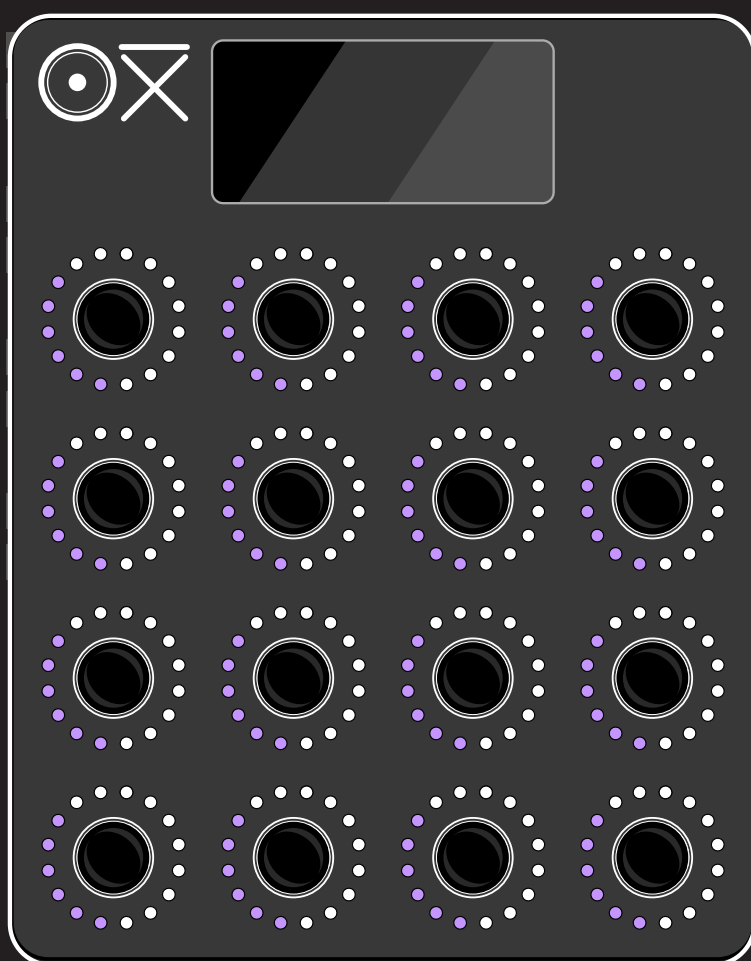




E16



Official User Manual

v 0.5.0a

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Overview

The E16 is a compact yet advanced MIDI parameter controller which can communicate MIDI over TRS, USB or Bluetooth connections. MIDI input also accepts messaging from external devices. There are 16 push/turn endless encoders immediately available on the panel which can be configured for control of a destination device's MIDI functions such as CC - Control Change , PC - Program Change, note data and many other MIDI parameters. The E16 can record and play back parameter automation, operate with parameter groups and provide precise individual parameter control and function selection. Controls are organised in Scenes. A maximum of 16 Scenes are available on board the E16, 7 of which are presented for immediate access in the home screen at power on. A scene stores the E16 settings and each scene has 16 presets which can be used to capture and store the current parameter settings. Presets can be used to recall stored parameter states. A scene contains 12 pages, each with 16 parameter controls. A scene can hold 192 parameters each with 2 destination controls and a push value. Navigating the menus and options is also performed using the 16 push/turn encoder knobs along with the multi-functional shift button. The E16 is a great tool in the MIDI armoury either as a creative contributor to your setup or as a flexible and practical utility tool. The important thing is that the E16 contributes to you making great music, being creative with live performances, and generally having fun!

1.1 Introduction

E16 is the latest part of the OXI family of audio products and the perfect compliment to OXI ONE. E16 is an advanced MIDI performance controller consisting of 16, configurable push / turn rotary encoders. Control over MIDI USB, TRS and Bluetooth is possible.

E16 is a MIDI controller and in itself does not generate any audio output. Audio is generated from the connected devices where E16 will control the synth, effect or sequencer parameters and pattern values.

Specifications

Electrical specifications:

- 5V DC 1.7A (USB type C supply)

Radio equipment:

- Bluetooth 5.0, 2.4GHz, Tx Max: 4 dBm

Mechanical specifications:

- Aluminium chassis.
- Dimensions: 143 x 114 x 19mm / 30mm incl knobs
- Weight: 950 gr.

Operating temperature:

- 10 °C to 36 °C

User interface

- 16x push / rotary encoders with LED indication. Detented or Non-Detented options available.
- Single power on button, also serves as a user interface navigation aid.
- OLED Display

Inputs & Outputs

- USB C for 5V power supply and MIDI USB.
- MIDI TRS input x1 & output x2. MIDI Out is 5V, MIDI IN accepts 5V and 3.3V
- MIDI Bluetooth BLE 5.0 bidirectional, peripheral and central roles.

What's In The Box

Supplied with the device are the following components:-

- 1 x OXI E16 Controller device.
- 1 x OXI E16 Protective Case.
- 1 x Quick start instruction leaflet. Main manual is downloadable.

Your Notes Can be written in any designated note section

NOTES

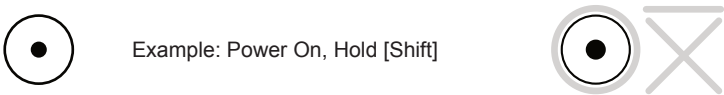
1.2 How To Use This Manual

This manual combines a formal reference with detailed instructions, illustrations, guides, workflows and tips for your device. You can add your own notes which personalises this into a comprehensive and unique guide book. For clarity, OXI E16 device will simply be called E16 in this manual.

While the Icons and graphics will be used in the diagrams that reflect the faceplate and display of the device. Controls on the E16 are multi functional, used for device control, navigation and setup. Therefore it is important to follow a clear convention in the terminology. Any walkthroughs and instructions will refer to these functions in text format.

[Shift]

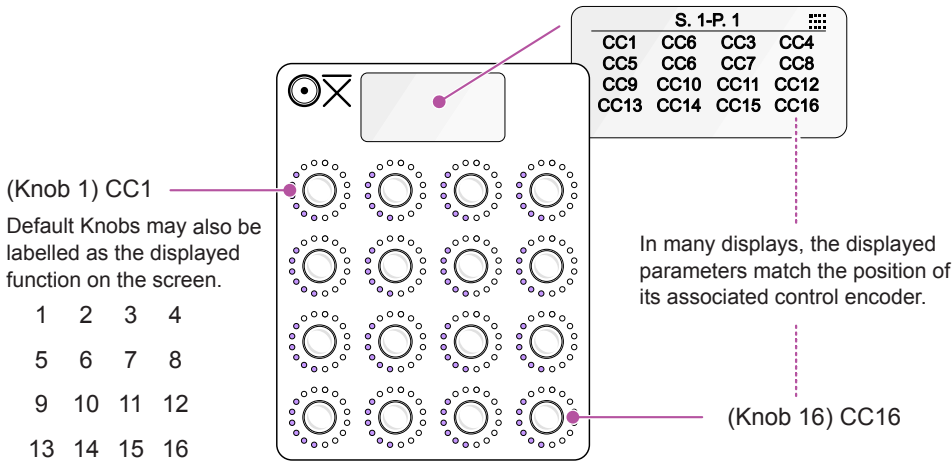
The multi-functional button located within the OXI 'O' will be called [Shift]. This is also the power on and off button and is used to action a backup in menus and for other navigation commands. This is described in square brackets.



(Knob X)

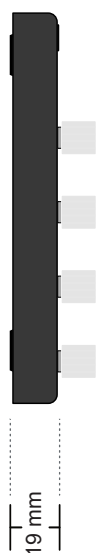
The 16 Front panel push / encoders generally control the CC or MIDI parameter values. Also they may be presented as menu and function selection or navigation buttons and controls. In order to differentiate, a name will be used as the parameter is dynamically displayed or a knob number relevant to the control position in the description text. It is possible to change these value so they will be referred to by their knob position in the descriptions. Encoder type can be changed to match your version in the config between normal, non-detended and detented.

Examples: Control Change, (Knob 1) for default CC1 encoder, (Knob 5) to edit the default CC5.

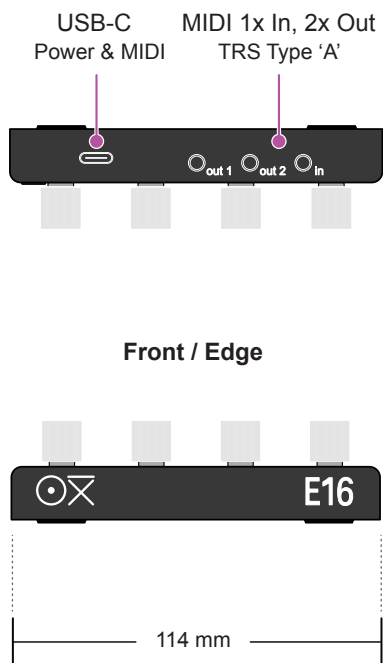


1.3 Hardware Overview

Left / Side



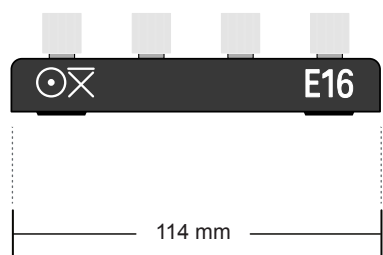
Rear / Edge



Right / Side



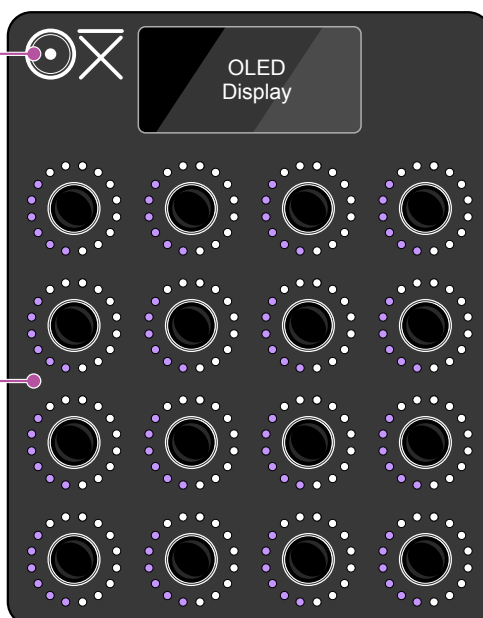
Front / Edge



Front Panel

Shift Button
Multifunctional button
Operates.
- Power On/Off.
- Shift button.
- Navigation backup.

Controls
16 Push / Turn
endless encoders
Operates.
- Direct control.
- Navigate & select.



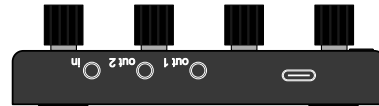
Important. Encoder Type

Knob behavior should be configured in the settings to match your hardware version.

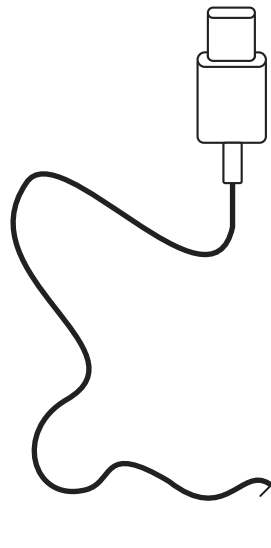
Select in the config settings between the default normal, smooth non-detented control or detented encoder type.

1.4 Powering Up

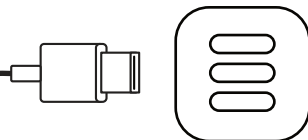
The E16 is powered using the USB-C connection. A standard USB Mains charger, PC / Macbook connection or a power bank can be used. The E16 has a low power rating and it is recommended to use a supply with a minimum of 200mA.



- 1 USB power connection**
Connect the other end of the USB-C cable to the **E16** USB Socket



- 2 Mains to USB adapter**
Connect the device to a mains connected USB power supply adapter.

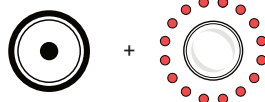


It is also possible to use a power bank with a USB output and also use USB-C to various USB cable types.

- 3 Turn On / Off**
The E16 will power directly from the USB power supply. There is no onboard rechargeable battery or charging option. To turn the device on, tap the shift button located in the OXI 'O'.



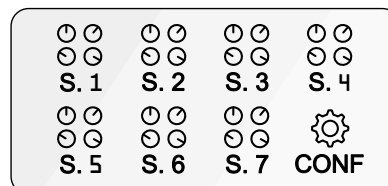
Power On
Hold the multifunctional [Shift] button.



Power Off
Hold the [Shift] button + hold (Knob 16), red lit encoder.
To turn off, navigate to the main, top level menu.

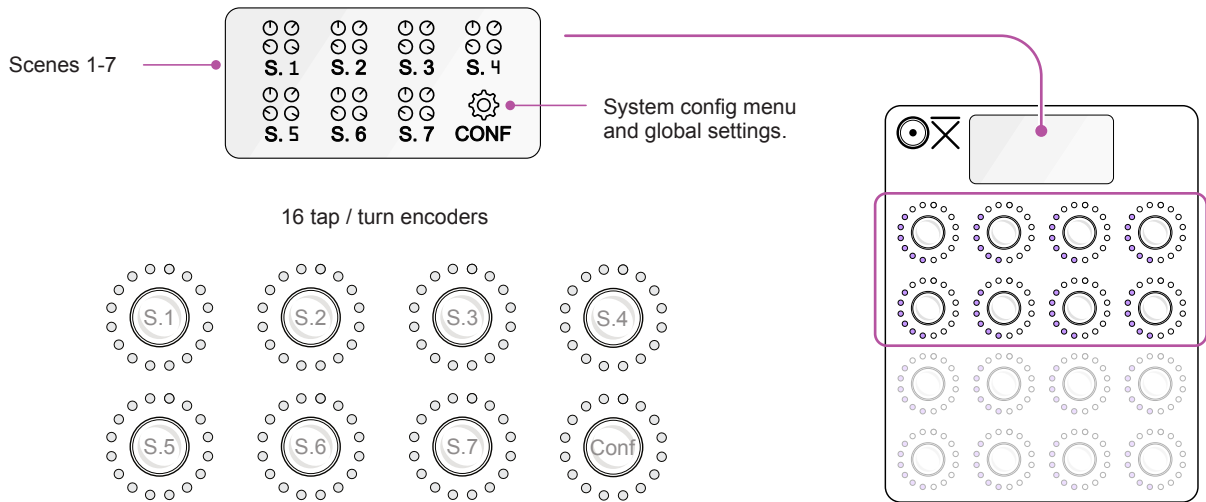
Main 'Home' Screen.

Available at power up and the location from where to power off. Tap [Shift] to backup in the menus.




1.5 Navigating the E16

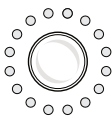
The main ‘home’ screen location in the structure of OXI **E16** is presented when first powering on. This display will show the 7 available scenes labelled S.1 to S.7. The encoder knobs will perform selection of each scene. Any knob which is controlling a menu command will be lit. Tap a knob to select the option and tap shift to backup in the menu structure. In the home screen, knob 8 selects the system options.. Tap a knob to select the option and tap shift to backup in the menu structure. Turning a knob selects a value or option.



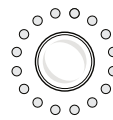
In several screens, the knob position matches the position of the displayed elements. For example the scenes presented from the home page match the 1-7 knob positions and the configuration access.




Turn
Edit or change value of the the respective parameter



Tap or Press
Select the respective displayed option.



[Shift] + Turn or Turn
Edit or select some secondary values and options.



Tap [Shift]
Navigate backup in the menu hierarchy structure

The rotary LEDs will indicate a parameter value setting.

Any knob which has a currently selectable menu option will be lit.

The [Shift] button is used as a classic shift, to access secondary parameters or to backup or exit menus as well as operating as the on/off command.

The option to save or not is presented on occasions, for example when exiting scene editing. Press a knob to select yes to save or no to backup without saving.



Save No

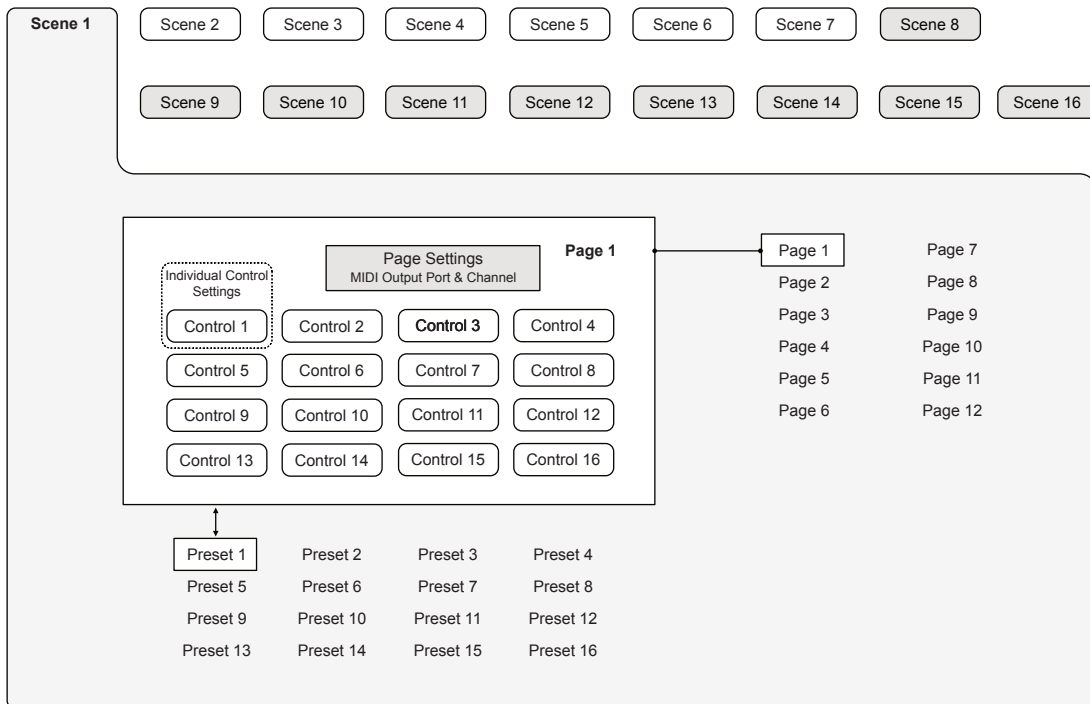


Save Yes

Encoder Type
Knob behavior must be set in the config settings for the encoder types on your controller hardware to the default normal, non-detented control or to the detented style.

1.6 Architecture

The highest elements in the E16 organisational structure are scenes. There are a total of 16 scenes on board with 7 available for direct access from the home screen and the interface knobs. A scene contains 12 pages each with 16 control parameters. Scenes can also be managed and setup on a PC/Mac by using the OXI App.



Navigating Scenes

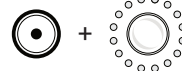
Choose a Scene.

Tap to select a scene from the home screen or hold shift + tap for other scenes.



View or Change Controls.

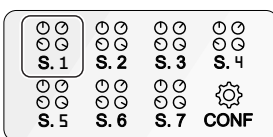
Hold [Shift] to select a page or to access the controls menu options.



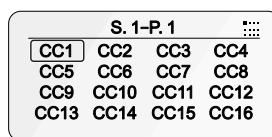
Page or Menu Option.

Tap a knob to change the page group or to choose an option.

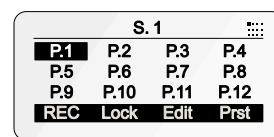
Home / Scenes



Control View



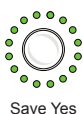
Shift Menu / Page Selection



This is the main, home screen and is available upon power up. If any scene parameters have been edited, backing up to the home screen will prompt to save the scene.

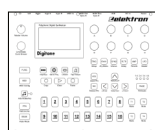


Save No



Save Yes

Turn a knob to adjust the MIDI output value for the respective parameter.



Menu Options: Knobs 13-16

REC - Record. Records parameter automation. Will capture the control value changes while turning a knob. Tap to stop.

Lock. Retains screen location to prevent backing up to the main, home menu.

Edit. Opens the edit menu for configuring each CC parameter.

Prst - Preset. Opens the load and save preset management menu.

A scene is a function to help organise the controls and saves all of the E16 settings. The scene options are found in the main, home screen, presented on power up. To start, select a scene to work with or to setup. Within the control view one of the 16 pages of parameters can also be selected. You can open one of the 7 direct access scenes from the main, home menu or exchange the accessible scenes with one of the other 16 stored scenes by holding [Shift] and clicking any scene button in the home screen.

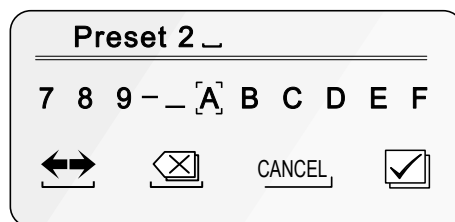
1.7 Naming Editor

At various points in the workflow the option to save as or rename something will be presented. This includes scenes and presets. The text editing interface is the same for all naming options and requires turning and tapping the knobs to edit and navigate in the text string.

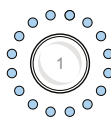
The top four encoder knobs are used to perform changes in the text editor.

- Knob 1 - Turn to scroll the selection of the alpha-numeric options.
Tap to change the character.
- Knob 2 - Turn to move the edit cursor in the text body being edited.
Tap to backspace and clear the previous character.
- Knob 3 - Press to cancel and return to the sub-menu.
- Knob 4 - Press to confirm editing and complete the changes.
- Press [Shift] at anytime to backup, cancel or exit.

Name editor option found in several menus

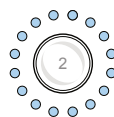


Turn
Select a
character



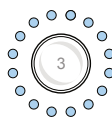
Tap
Change &
confirm

Turn
Move the
edit cursor



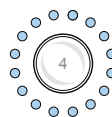
Tap
Backspace
and clear

Turn
-



Tap
Cancel &
backup

Turn
-



Tap
Confirm

NOTES

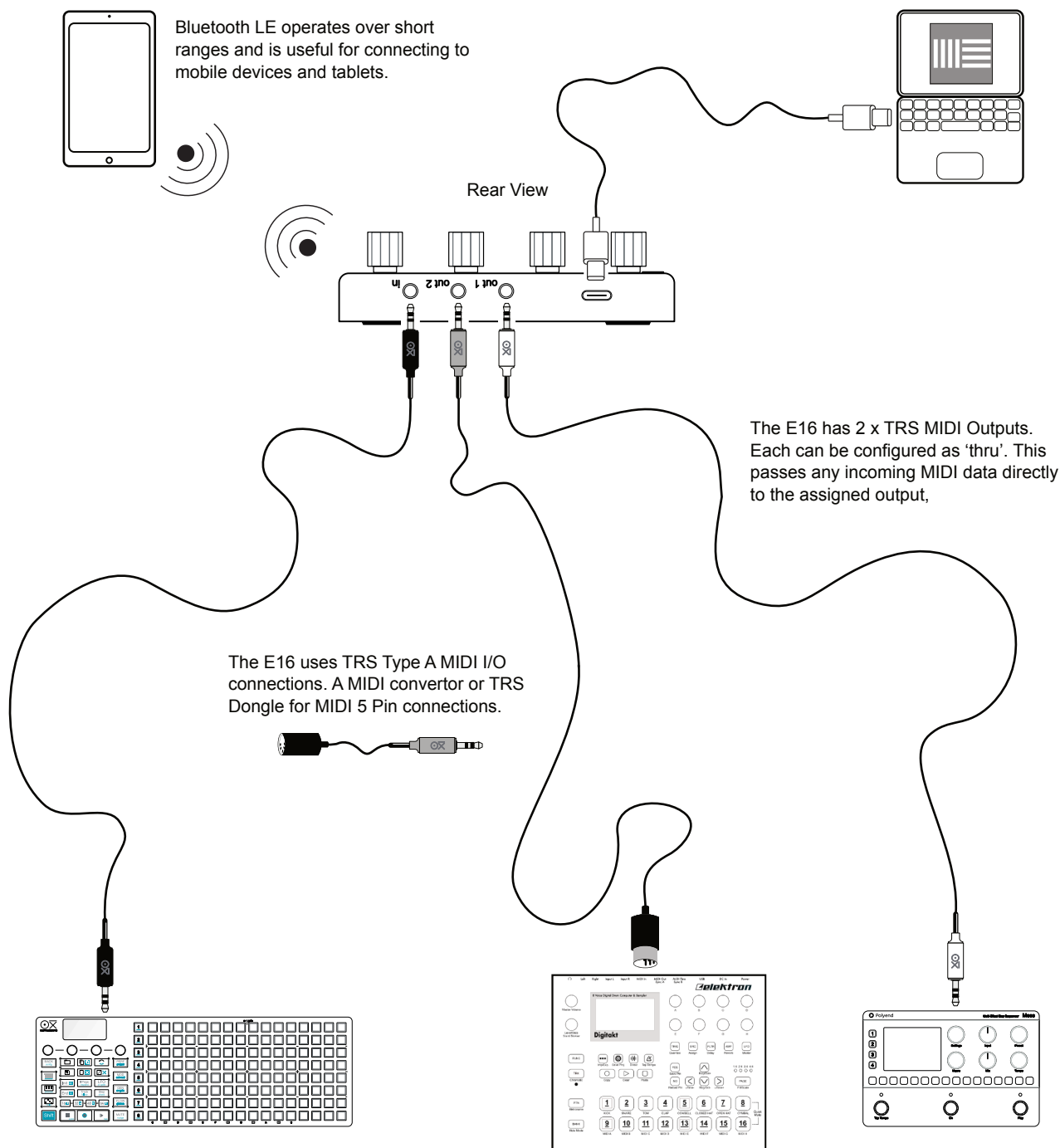
Connect & Control

The OXI E16 is focussed on MIDI parameter control of one or more external devices, whether a PC/Mac Digital Audio Workstation, synths or audio effects. Multiple connectivity options are available for a high level of flexibility across devices. These include USB-C, Bluetooth Low Energy or MIDI TRS In and Out. The target device MIDI accessible parameters such as CC - Control Change, PC - Program Change, Pitch Bend, Notes and more can be controlled by the E16. The choice of connectivity method will depend on the application and the devices to connect with. It is important that you have knowledge on the destination device MIDI parameter mappings to align the E16 controls. It is also possible to use instrument definitions with the E16 to quickly set predefined parameter mappings. The MIDI configuration documentation from the equipment manufacturer will provide details of the MIDI Mappings, especially the CC definitions used with each device.

2 Connect & Control

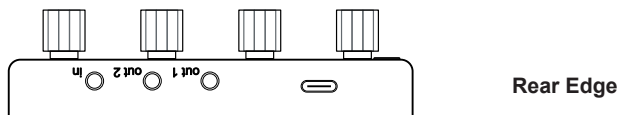
2.1 Connectivity Overview

OXI E16 has a variety of connection options including Bluetooth Light Energy, TRS MIDI and USB MIDI. This allows multiple devices to be connected and the choice of connection gives flexibility for the application required. A typical setup is shown in the illustration although many other options are possible.



2.2 MIDI USB Connectivity

It is possible to connect the E16 to another device directly with the USB-C connection. Bear in mind that this is also the power supply input so any connected device, for example a PC or Mac, must be able to supply the 5V, 200mA source..



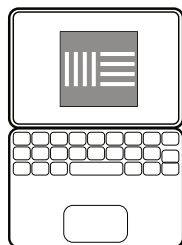
Rear Edge

MIDI USB

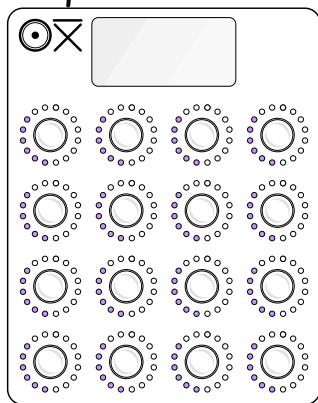


USB Type C can be connected between devices, ideal for PC/Mac hosted DAWs or applications. The config options can be set for the USB behavior where it is also used as the charge supply for the device.

Example: MIDI USB OXI E16 to Mac / PC Ableton Live DAW



MIDI can be connected directly using the USB-C connection on OXI E16 and the USB on the target PC/Mac. This provides MIDI In and Out messaging. OXI E16 should be configurable in the DAW settings.

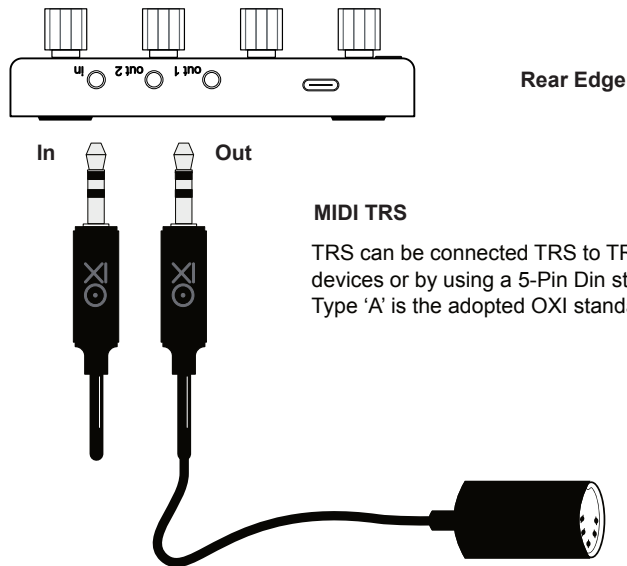


Controls such as the level, sends etc can be set with the Ableton Live MIDI Map option. For more precise setup with a destination, the E16 options can be configured for the specific parameter on a device if they have fixed mappings.

2 Connect & Control

2.3 MIDI TRS Connectivity

OXI E16 can be used to control MIDI devices using a TRS MIDI connection in and out. This can also connect to the classic MIDI 5 Pin Din style connections with a type 'A' adapter / interface or by using a TRS Stereo cable if both devices are type A compatible.



MIDI In / Out / Thru

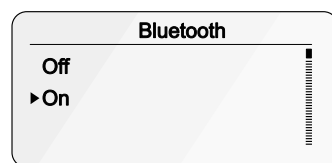
MIDI Thru can be set in the Conf > MIDI settings for TRS, USB or BLE. If set to On, MIDI messages from this input will be echoed to the other MIDI outputs. If set to off MIDI inputs will not be automatically be passed through the device to an output and only E16 generated messages are output.

2.4 MIDI Bluetooth Connectivity

OXI ONE uses BLE MIDI or Bluetooth Low Energy for wireless communications. BLE can sometimes be technically challenging to set up on some devices so it is advised to use a MIDI dongle such as WIDI Master, WIDI Jack or WIDI uHost when using devices like iPads. Android can be more robust for MIDI BLE.

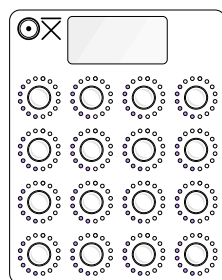
Ensure the external device has bluetooth turned on in order to pair. The pairing process will be determined by the device itself and may be different between devices. The E16 will show up as a Bluetooth central MIDI device not a peripheral.

On the OXI E16, turn Bluetooth on in: Conf > Bluetooth > On/Off.



Once the option is selected, turn the lit knob to select On or Off and then tap the knob to confirm. The bluetooth connection will be active or inactive.

Example: MIDI Bluetooth OXI E16 to iPad AUM App.

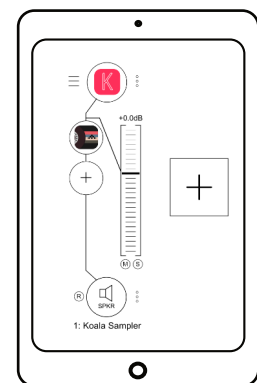


Conf > Bluetooth > On/Off = ON



In AUM: Wireless MIDI
Bluetooth Central = OXI E16 BLE
iPad is the peripheral device

In the AUM MIDI Routing matrix connect between
OXI E16 BLE and the loaded device in the track

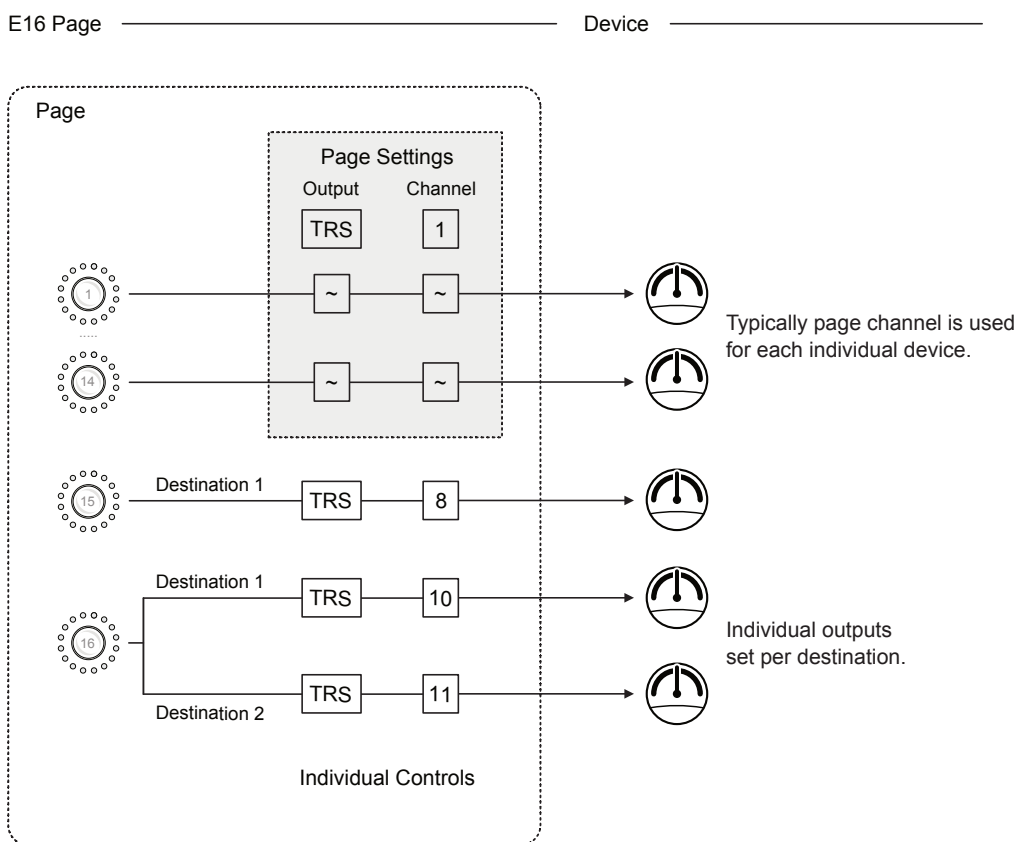


2 Connect & Control

2.5 MIDI Ports & Channels

OXI E16 has the ability to interface with multiple MIDI ports, each with 16 MIDI channels. Port A and B are the available ports integral to the E16 device but use the same physical output. These may be identified as 1 and 2 on some external DAWs and devices. Ports can be expanded with the OXI Split accessory. The output ports and the 16 channels in E16 can be assigned at a page level for all controls within that page or at an individual control level, per destination.

Example: Channel and Output Configuration



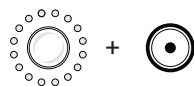
Page level output and channel can be set at the individual control level, tagged '~'. This means the control destination uses the collective page level settings. If the control destination setting has a dedicated output and channel number assigned then this will be used for this destination.

2.6 Control Settings Overview

The E16 can control a variety of MIDI message formats. The default parameter configuration is control change can be configured individually. The configuration and setup options will depend on the parameter type. Controls are configured in the control settings, accessed from the control view.

Directly Edit a Control

Hold (Knob) to edit + Tap [Shift].



| S. 1-P. 1 | | | |
|-----------|------|------|------|
| CC1 | CC2 | CC3 | CC4 |
| CC5 | CC6 | CC7 | CC8 |
| CC9 | CC10 | CC11 | CC12 |
| CC13 | CC14 | CC15 | CC16 |

Tap a (Knob) to change selection

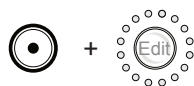


| Ctrl 3 | Page | Scene |
|---------|------|-------|
| Abbr. | CC3 | |
| Color | 12 | |
| Special | Off | |

Hold [Shift] + Tap (Knob) 1, 2 or 3 to change tab.

Alternatively

Hold [Shift] + Tap (Knob 15) for the editor

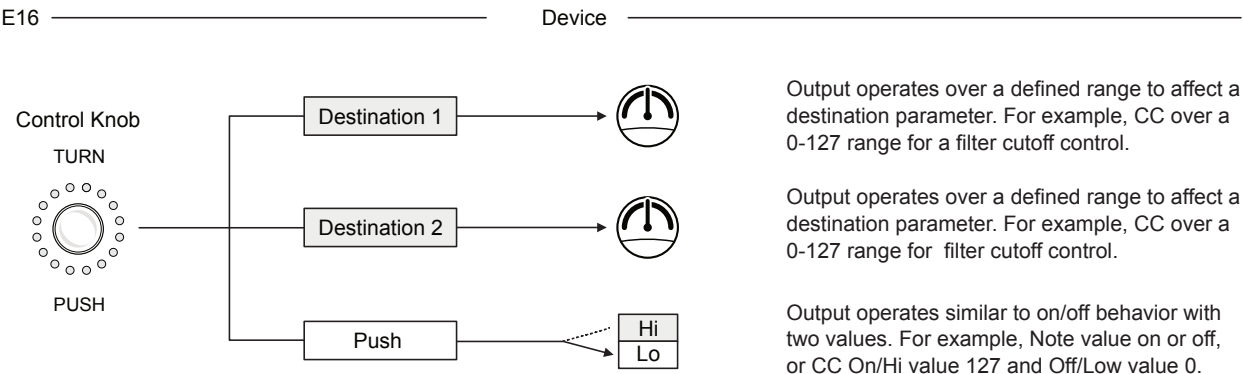


| S. 1 | | | |
|------|------|------|------|
| P.1 | P.2 | P.3 | P.4 |
| P.5 | P.6 | P.7 | P.8 |
| P.9 | P.10 | P.11 | P.12 |
| REC | Lock | Edit | Prst |

| Ctrl 3 | Page | Scene |
|---------|------|-------|
| Abbr. | CC3 | |
| Color | 12 | |
| Special | Off | |

Each parameter can control:-

- 2 x Control Destinations - Variable MIDI message sent by turning the rotary knob.
- 1 x Push Control - Discrete MIDI message sent by pushing the rotary knob.



2.7 Configuring a Control

The E16 can control a variety of control types. The settings menu is the starting point for configuring on board the device. Also a quicker solution is to use the OXI App which contains a dedicated scene editor, used to configure the pages and controls.

The control settings are accessed from the control view. Hold (Knob) + Tap [Shift] to edit the selected control. This will configure the control in the current scene and page of parameters. Turn the lit knob to scroll and tap to select an option to edit.

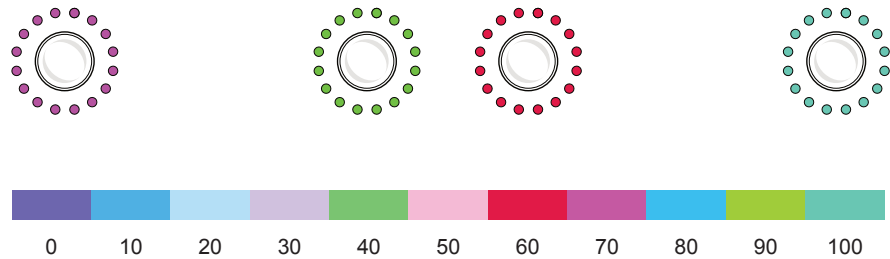
| Generic Parameter Options | | Turn knob to navigate, tap knob to change. |
|---------------------------|--------------------|--|
| | Function | Description |
| Abbr | Name Abbreviation | Allows editing of up to 4 characters. This is the label used on the control view for the parameter. |
| Color | LED ring color | Assigns the color for the LED indicators. These are displayed around the specific control encoder knob to represent its value. |
| Special | Encoder Options | Sets the behavior of the control knob. Can be set to off (standard 0-127 rotary operation), bipolar, snapshot, rec or play / pause recording. |
| Dest1 | Destination 1 | Configure the destination device settings when rotating the control. Two device destinations can be assigned to each parameter. If destination 1 is set to Off, destination 2 will be unavailable. |
| Dest2 | Destination 2 | |
| Push | Knob push behavior | Configure the destination device settings when pushing the control. Sets the behavior of the push command on the encoder and its associated display. |
| Copy | Copy Settings | Copies the control settings. |
| Paste | Paste Settings | Pastes previously copied settings to the selected control |
| Clear | Clear settings | Clears the settings to defaults. |

► Editing a Control

1. The settings edit menu is accessible from the control view. Tap [Shift] if necessary to backup the menu to the main home screen. Select a scene by tapping the associated knob to choose the scene and its control view.
2. To directly edit a control hold the (Knob) + Tap [Shift]. This is performed from the screen view. The editor will open for the selected control. Alternatively open the settings menu, hold [Shift] + Tap (Knob 15).
3. The editor tab should be open for 'Ctrl'. If not, hold [Shift] and tap (Knob 1) to choose the controller settings. The page and scene settings tabs are also available.
4. To navigate, turn (Knob 1). Scroll to the desired option and tap (Knob 1) to edit. The selected option is highlighted and when in edit mode the '►' tag label is shown.
5. Once editing is complete tap [Shift] to backup and exit. After any edits the scene can be saved. This option is presented when backing up to the home screen.
6. Note that a controllers settings can also be cleared, copied and pasted to another control from within this menu.

2.8 Control Colors

Each control can be set with its own color scheme for the control functions. This sets the color of the rotary LED ring for each control knob and is useful as a visual reference. The color setting is defined at a control level for each control knob and is set in the control editor. The color spectrum is chosen within a parameter range of 0 to 100.



When setting the color value in the edit menu, the knob LED color will change while editing making it easy to select visually rather than by numbers.

2.9 Controller Destination Options

A variety of parameter types can be controlled by the E16. These are setup based on the target device and parameter to modulate. The type of control is set up per destination. There are three options, two rotary controls and one push control. Select 'Dest 1', 'Dest 2' or 'Push' to configure each destination for the selected knob. If destination 1 is set to Off, destination 2 will be unavailable.

The destination menu options available will change depending on the destination.

CC Abs - Control Change Absolute

Control change sends a value that is used to affect a destination parameter over a defined range. Absolute is the most common application of CC control. The maximum range for absolute control is from 0-127. An example is to control a filter cutoff sweep with a CC parameter. The control sends an absolute value between 0-127 to the destination.

| CC Abs | | |
|---------|-------------------|--|
| | Function | Description |
| Instr. | Instrument Def | Select an instrument definition which contains preset settings for a selected destination instrument. These can be managed in the OXI App. Option also to set to the default 'Off'. |
| Param. | Parameter | Select an instrument definition to enable access to the parameter option. When an instrument definition is loaded the parameter mapped will be available in this setting. |
| Type | Parameter Type | Off, CC Rel1, CC Rel2, CC Abs, CC14 (High Resolution), PC, PB, AT, Note, NRPN, Snapshot |
| Output | Output & Port | MIDI physical output and port. Set to: Same as Page, TRS1, TRS2, USB1, USB2, USB3, BLE, ALL-BLE all except bluetooth, ALL-USB all except USB, or to Off. |
| Channel | MIDI Channel | Communicates MIDI messages on this channel. Set to: Same as Page, 1-16 |
| CC nr. | CC Number | Control Change Number. Sets the number for the CC mapping to a destination parameter. This will match the destination device parameter CC number. |
| Minimum | Min value | The lower minimum value that the CC knob will send out. This is a value between the standard 0-127 standard. |
| Maximum | Max value | The upper maximum value that the CC knob will send out. This is a value between the standard 0-127 standard. |
| Default | Default value | Default starting value when first started up or when the value is cleared. |
| Mode | Encoder behavior. | Sets the behavior of the encoder rotation. Options are: Div8, Div4 and Div 2 - Divides the encoder resolution by 8, 4 or 2. Acc0, Acc1, Acc2, Acc3 - Encoder acceleration. 0 = default no acceleration, normal operation, 3 is max acceleration when rotating. LSp2, LSp4, LSp6 - large step mode - steps values in the 2, 4 or 6 increments selected. |
| Display | Encoder Scale | How the encoder scale is displayed. Set to : Off - blank display, 127 - Default, 100, 1000 - useful for CC14, B63 bipolar +/-, B50 bipolar +/-, B500 bipolar CC14 +/-, On/Off binary on 0-63, off 64-127. 9999 useful for CC14. |

CC Rel 1 & 2 - Control Change Relative

Control change sends a value that is used to affect a destination parameter over a defined range. Relative mode is useful for interfacing to DAWs and other devices where an incremental change iteration is required. Relative 1 will send a value of 1 to increment the control and 127 to decrement. Relative 2 operates the same but uses 63 to increment and 65 to decrement the destination.

| CC Rel | | |
|---------|-------------------|--|
| | Function | Description |
| Instr. | Instrument Def | Select an instrument definition which contains preset settings for a selected destination instrument. These can be managed in the OXI App. Option also to set to the default 'Off'. |
| Param. | Parameter | Select an instrument definition to enable access to the parameter option. When an instrument definition is loaded the parameter mapped will be available in this setting. |
| Type | Parameter Type | Off, CC Rel1, CC Rel2, CC Abs, CC14 (High Resolution), PC, PB, AT, Note, NRPN, Snapshot |
| Output | Output & Port | MIDI physical output and port. Set to: Same as Page, TRS1, TRS2, USB1, USB2, USB3, BLE, ALL-BLE all except bluetooth, ALL-USB all except USB, or to Off. |
| Channel | MIDI Channel | Communicates MIDI messages on this channel. Set to: Same as Page, 1-16 |
| CC nr. | CC Number | Control Change Number. Sets the number for the CC mapping to a destination parameter. This will match the destination device parameter CC number. |
| Minimum | Min value | The lower minimum value that the CC knob will send out. This is a value between the standard 0-127 standard. |
| Maximum | Max value | The upper maximum value that the CC knob will send out. This is a value between the standard 0-127 standard. |
| Default | Default value | Default starting value when first started up or when the value is cleared. |
| Mode | Encoder behavior. | Sets the behavior of the encoder rotation. Options are: Div8, Div4 and Div 2 - Divides the encoder resolution by 8, 4 or 2. Acc0, Acc1, Acc2, Acc3 - Encoder acceleration. 0 = default no acceleration, normal operation, 3 is max acceleration when rotating. LSp2, LSp4, LSp6 - large step mode - steps values in the 2, 4 or 6 increments selected. |
| Display | Encoder Scale | How the encoder scale is displayed. Set to : Off - blank display, 127 - Default, 100, 1000 - useful for CC14, B63 bipolar +/-, B50 bipolar +/-, B500 bipolar CC14 +/-, On/Off binary on 0-63, off 64-127. 9999 useful for CC14. |

CC 14 (High Res) - Control Change Absolute - High Resolution

Control change sends a value that is used to affect a destination parameter over a defined range, the standard being 7 bit 0-127. High resolution refers to the ability to send more precise, smoother controlled absolute CC values over a range of 0-16,383. This is implemented using MSB and LSB messaging to the CC numbers.

| CC14 High Resolution | | |
|----------------------|------------------------|--|
| | Function | Description |
| Instr. | Instrument Def | Select an instrument definition which contains preset settings for a selected destination instrument. These can be managed in the OXI App. Option also to set to the default 'Off'. |
| Param. | Parameter | Select an instrument definition to enable access to the parameter option. When an instrument definition is loaded the parameter mapped will be available in this setting. |
| Type | Parameter Type | Off, CC Rel1, CC Rel2, CC Abs, CC14 (High Resolution), PC, PB, AT, Note, NRPN, Snapshot |
| Output | Output & Port | MIDI physical output and port. Set to: Same as Page, TRS1, TRS2, USB1, USB2, USB3, BLE, ALL-BLE all except bluetooth, ALL-USB all except USB, or to Off. |
| Channel | MIDI Channel | Communicates MIDI messages on this channel. Set to: Same as Page, 1-16 |
| LSB | Least Significant Byte | Fine adjustment. CC number used for the LSB message destination. Typically this uses CC 32-63, but check with the destination device to pair correctly. |
| MSB | Most Significant Byte | Coarse adjustment. CC number used for the MSB message destination. Typically this uses CC 0-31, but check with the destination device to pair correctly. |
| Minimum | Min value | The lower minimum value that the CC knob will send out. This is a value between the standard 0-127 standard. |
| Maximum | Max value | The upper maximum value that the CC knob will send out. This is a value between the standard 0-127 standard. |
| Default | Default value | Default starting value when first started up or when the value is cleared. |
| Mode | Encoder behavior. | Sets the behavior of the encoder rotation. Options are: Div8, Div4 and Div 2 - Divides the encoder resolution by 8, 4 or 2. Acc0, Acc1, Acc2, Acc3 - Encoder acceleration. 0 = default no acceleration, normal operation, 3 is max acceleration when rotating. LSp2, LSp4, LSp6 - large step mode - steps values in the 2, 4 or 6 increments selected. |
| Display | Encoder Scale | How the encoder scale is displayed. Set to : Off - blank display, 127 - Default, 100, 1000 - useful for CC14, B63 bipolar +/-, B50 bipolar +/-, B500 bipolar CC14 +/-, On/Off binary on 0-63, off 64-127. 9999 useful for CC14. |

PC - Program Change

Program change messages also called PC, are used to change a destination device preset, bank, patch or program using values between 1-128. The actual impact and numerical alignment of a PC message from the E16 will depend on how the destination device is designed. Refer to the manufacturers MIDI implementation guide.

| PC | | |
|---------|-------------------|--|
| | Function | Description |
| Instr. | Instrument Def | Select an instrument definition which contains preset settings for a selected destination instrument. These can be managed in the OXI App. Option also to set to the default 'Off'. |
| Param. | Parameter | Select an instrument definition to enable access to the parameter option. When an instrument definition is loaded the parameter mapped will be available in this setting. |
| Type | Parameter Type | Off, CC Rel1, CC Rel2, CC Abs, CC14 (High Resolution), PC, PB, AT, Note, NRPN, Snapshot |
| Output | Output & Port | MIDI physical output and port. Set to: Same as Page, TRS1, TRS2, USB1, USB2, USB3, BLE, ALL-BLE all except bluetooth, ALL-USB all except USB, or to Off. |
| Channel | MIDI Channel | Communicates MIDI messages on this channel. Set to: Same as Page, 1-16 |
| Minimum | Min value | The lower minimum value that the CC knob will send out. This is a value between the standard 0-127 standard. |
| Maximum | Max value | The upper maximum value that the CC knob will send out. This is a value between the standard 0-127 standard. |
| Default | Default value | Default starting value when first started up or when the value is cleared. |
| Mode | Encoder behavior. | Sets the behavior of the encoder rotation. Options are: Div8, Div4 and Div 2 - Divides the encoder resolution by 8, 4 or 2. Acc0, Acc1, Acc2, Acc3 - Encoder acceleration. 0 = default no acceleration, normal operation, 3 is max acceleration when rotating. LSp2, LSp4, LSp6 - large step mode - steps values in the 2, 4 or 6 increments selected. |
| Display | Encoder Scale | How the encoder scale is displayed. Set to : Off - blank display, 127 - Default, 100, 1000 - useful for CC14, B63 bipolar +/-, B50 bipolar +/-, B500 bipolar CC14 +/-, On/Off binary on 0-63, off 64-127. 9999 useful for CC14. |

2 Connect & Control

PB - Pitch Bend

Pitch bend refers to the adjustment of the note pitch up or down while it plays by use of a modulation control. On many synths this would be represented by a pitch bend wheel. On the E16 a knob can be set to operate the pitch bend command for MIDI out configured over a note range of C-2 to G8.

PB

| | Function | Description |
|---------|-------------------|--|
| Type | Parameter Type | Off, CC Rel1, CC Rel2, CC Abs, CC14 (High Resolution), PC, PB, AT, Note, NRPN, Snapshot |
| Output | Output & Port | MIDI physical output and port. Set to: Same as Page, TRS1, TRS2, USB1, USB2, USB3, BLE, ALL-BLE all except bluetooth, ALL-USB all except USB, or to Off. |
| Channel | MIDI Channel | Communicates MIDI messages on this channel. Set to: Same as Page, 1-16 |
| Minimum | Min PB value | The lower PB value that the knob will send out. |
| Maximum | Max PB value | The upper PB value that the knob will send out. |
| Default | Default value | Default starting value when first started up or when the value is cleared. |
| Mode | Encoder behavior. | Sets the behavior of the encoder rotation. Options are: Div8, Div4 and Div 2 - Divides the encoder resolution by 8, 4 or 2. Acc0, Acc1, Acc2, Acc3 - Encoder acceleration. 0 = default no acceleration, normal operation, 3 is max acceleration when rotating. LSp2, LSp4, LSp6 - large step mode - steps values in the 2, 4 or 6 increments selected. |
| Display | Encoder Scale | How the encoder scale is displayed. Set to : Off - blank display, 127 - Default, 100, 1000 - useful for CC14, B63 bipolar +/-, B50 bipolar +/-, B500 bipolar CC14 +/-, On/Off binary on 0-63, off 64-127. 9999 useful for CC14. |

AT - Aftertouch

Aftertouch is a common feature on many synths and audio devices. Aftertouch represents how hard a keyboard key is pressed after triggering the initial note. Sometimes called channel pressure, aftertouch operates over a 0-127 range. The E16 can send an aftertouch message by using a control knob. Aftertouch messages are part of the MIDI standard so should easily be recognised by a compatible destination device.

| AT | | |
|---------|-------------------|--|
| | Function | Description |
| Type | Parameter Type | Off, CC Rel1, CC Rel2, CC Abs, CC14 (High Resolution), PC, PB, AT, Note, NRPN, Snapshot |
| Output | Output & Port | MIDI physical output and port. Set to: Same as page, TRS1, TRS2, USB1, USB2, USB3, BLE, ALL-BLE all except bluetooth, ALL-USB all except USB, or to Off. |
| Channel | MIDI Channel | Communicates MIDI messages on this channel. Set to: Same as page, 1-16 |
| Minimum | Min value | The lower minimum value that the CC knob will send out. This is a value between the standard 0-127 standard. |
| Maximum | Max value | The upper maximum value that the CC knob will send out. This is a value between the standard 0-127 standard. |
| Default | Default value | Default starting value when first started up or when the value is cleared. |
| Mode | Encoder behavior. | Sets the behavior of the encoder rotation. Options are: Div8, Div4 and Div 2 - Divides the encoder resolution by 8, 4 or 2. Acc0, Acc1, Acc2, Acc3 - Encoder acceleration. 0 = default no acceleration, normal operation, 3 is max acceleration when rotating. LSp2, LSp4, LSp6 - large step mode - steps values in the 2, 4 or 6 increments selected. |
| Display | Encoder Scale | How the encoder scale is displayed. Set to : Off - blank display, 127 - Default, 100, 1000 - useful for CC14, B63 bipolar +/-, B50 bipolar +/-, B500 bipolar CC14 +/-, On/Off binary on 0-63, off 64-127. 9999 useful for CC14. |

2 Connect & Control

Note - Musical Note Values

Note messages represent a musical note value, similar to pressing a keyboard key or triggering a sequencer note. A Note On message is sent at a fixed velocity of 100 over a range of C-2 up to G8 when turning the control knob followed by a Note Off message.

| Note | | |
|----------|-------------------|--|
| | Function | Description |
| Instr. | Instrument Def | Select an instrument definition which contains preset settings for a selected destination instrument. These can be managed in the OXI App. Option also to set to the default 'Off'. |
| Param. | Parameter | Select an instrument definition to enable access to the parameter option. When an instrument definition is loaded the parameter mapped will be available in this setting. |
| Type | Parameter Type | Off, CC Rel1, CC Rel2, CC Abs, CC14 (High Resolution), PC, PB, AT, Note, NRPN, Snapshot |
| Output | Output & Port | MIDI physical output and port. Set to: Same as Page, TRS1, TRS2, USB1, USB2, USB3, BLE, ALL-BLE all except bluetooth, ALL-USB all except USB, or to Off. |
| Channel | MIDI Channel | Communicates MIDI messages on this channel. Set to: Same as Page, 1-16 |
| Min Note | Min note value | The lower note value that the knob will send out. This is a value between the between C-2(0) and G8 (127). |
| Max Note | Max note value | The upper note value that the knob will send out. This is a value between the between C-2 (0) and G8 (127). |
| Default | Default value | Default starting value when first started up or when the value is cleared. |
| Mode | Encoder behavior. | Sets the behavior of the encoder rotation. Options are: Div8, Div4 and Div 2 - Divides the encoder resolution by 8, 4 or 2. Acc0, Acc1, Acc2, Acc3 - Encoder acceleration. 0 = default no acceleration, normal operation, 3 is max acceleration when rotating. LSp2, LSp4, LSp6 - large step mode - steps values in the 2, 4 or 6 increments selected. |
| Display | Encoder Scale | How the encoder scale is displayed. Set to : Off - blank display, 127 - Default, 100, 1000 - useful for CC14, B63 bipolar +/-, B50 bipolar +/-, B500 bipolar CC14 +/-, On/Off binary on 0-63, off 64-127. 9999 useful for CC14. |

NRPN - Non-Registered Parameter Number

NRPN is an alternative messaging to the MIDI CC standard and offers a higher resolution of control. Not all devices are NRPN compatible so check with the manufacturers MIDI implementation documentation. NRPN and High Resolution CC14 operate in a similar way with an MSB / LSB messaging approach.

| NRPN | | |
|---------|------------------------|--|
| | Function | Description |
| Instr. | Instrument Def | Select an instrument definition which contains preset settings for a selected destination instrument. These can be managed in the OXI App. Option also to set to the default 'Off'. |
| Param. | Parameter | Select an instrument definition to enable access to the parameter option. When an instrument definition is loaded the parameter mapped will be available in this setting. |
| Type | Parameter Type | Off, CC Rel1, CC Rel2, CC Abs, CC14 (High Resolution), PC, PB, AT, Note, NRPN, Snapshot |
| Output | Output & Port | MIDI physical output and port. Set to: '~' same as page, TRS1, TRS2, USB1, USB2, USB3, BLE, ALL-BLE all except bluetooth, ALL-USB all except USB, or to Off. |
| Channel | MIDI Channel | Communicates MIDI messages on this channel. Set to: '~' same as page, 1-16 |
| LSB | Least Significant Byte | Fine adjustment. Number used for the LSB message destination. |
| MSB | Most Significant Byte | Coarse adjustment. Number used for the MSB message destination. |
| Minimum | Min value | The lower minimum value that the CC knob will send out. This is a value between the standard 0-127 standard. |
| Maximum | Max value | The upper maximum value that the CC knob will send out. This is a value between the standard 0-127 standard. |
| Default | Default value | Default starting value when first started up or when the value is cleared. |
| Mode | Encoder behavior. | Sets the behavior of the encoder rotation. Options are: Div8, Div4 and Div 2 - Divides the encoder resolution by 8, 4 or 2. Acc0, Acc1, Acc2, Acc3 - Encoder acceleration. 0 = default no acceleration, normal operation, 3 is max acceleration when rotating. LSp2, LSp4, LSp6 - large step mode - steps values in the 2, 4 or 6 increments selected. |
| Display | Encoder Scale | How the encoder scale is displayed. Set to : Off - blank display, 127 - Default, 100, 1000 - useful for CC14, B63 bipolar +/-, B50 bipolar +/-, B500 bipolar CC14 +/-, On/Off binary on 0-63, off 64-127. 9999 useful for CC14. |

Snapshot

The option to set a controller as a snapshot is also found in the destination options. The details of this function are covered in the special parameter setting options.

Push Control Options

Each control can be set to 2 destinations using the rotary knob and 1 destination for the push command from the knob. The push control sends a MIDI message when the knob is quickly pressed. Slow / long presses may select a secondary function rather than trigger the push option. Once a type has been selected, the available settings will present the configuration options including the behavior mode of the knob press.

| CC | | |
|---------|----------------|---|
| | Function | Description |
| Instr. | Instrument Def | Select an instrument definition which contains preset settings for a selected destination instrument. These can be managed in the OXI App. Option also to set to the default 'Off'. |
| Param. | Parameter | Select an instrument definition to enable access to the parameter option. When an instrument definition is loaded the parameter mapped will be available in this setting. |
| Type | Parameter Type | Off, Note, CC, PC, Set to Default, AT, Page, Record. PlayPause Rec. |
| Output | Output & Port | MIDI physical output and port. Set to: Same as Page, TRS1, TRS2, USB1, USB2, USB3, BLE, ALL-BLE all except bluetooth, ALL-USB all except USB, or to Off. |
| Channel | MIDI Channel | Communicates MIDI messages on this channel. Set to: Same as Page, 1-16 |
| CC nr. | CC Number | Control Change Number. Sets the number for the CC mapping to a destination parameter. This will match the destination device parameter CC number. |
| Mode | Behavior | Press only - 127 value sent on press. Press & release - 127 value sent when pressed and 0 sent when released. Toggle - each push will change the state between 0 & 127. |

| Note | | |
|----------|----------------|---|
| | Function | Description |
| Type | Parameter Type | Off, Note, CC, PC, Set to Default, AT, Page, Record. PlayPause Rec. |
| Output | Output & Port | MIDI physical output and port. Set to: Same as Page, TRS1, TRS2, USB1, USB2, USB3, BLE, ALL-BLE all except bluetooth, ALL-USB all except USB, or to Off. |
| Channel | MIDI Channel | Communicates MIDI messages on this channel. Set to: Same as Page, 1-16 |
| Note | Note value | Sets the note value to send on the press of the knob. Options C-2 (0) to G8 (127) |
| Velocity | Note Velocity | Sets the MIDI output velocity level 0-127 that is sent with the note message. |
| Mode | Behavior | Press only - note on + velocity sent on press followed by note off. Press & release - note on + velocity sent when pressed and note off when released. Toggle - Note on + velocity sent on first press and note off on next press. State changes per press. |

PC

| | Function | Description |
|---------|----------------|--|
| Type | Parameter Type | Off, Note, CC, PC, Set to Default, AT, Page, Record. PlayPause Rec. |
| Output | Output & Port | MIDI physical output and port. Set to: Same as Page, TRS1, TRS2, USB1, USB2, USB3, BLE, ALL-BLE all except bluetooth, ALL-USB all except USB, or to Off. |
| Channel | MIDI Channel | Communicates MIDI messages on this channel. Set to: Same as Page, 1-16 |
| PC nr. | PC Number | Program Change number sent each time the knob is pressed. |

AT

| | Function | Description |
|---------|------------------|--|
| Type | Parameter Type | Off, Note, CC, PC, Set to Default, AT, Page, Record. PlayPause Rec. |
| Output | Output & Port | MIDI physical output and port. Set to: Same as Page, TRS1, TRS2, USB1, USB2, USB3, BLE, ALL-BLE all except bluetooth, ALL-USB all except USB, or to Off. |
| Channel | MIDI Channel | Communicates MIDI messages on this channel. Set to: Same as Page, 1-16 |
| AT Val | Aftertouch Value | Value sent as channel pressure / aftertouch when the knob is pressed. |
| Mode | Behavior | Press only - aftertouch value sent on press. Press & release - aftertouch value sent on press. Toggle - aftertouch value sent on press |

Page

| | Function | Description |
|------|----------------|---|
| Type | Parameter Type | Off, Note, CC, PC, Set to Default, AT, Page, Record. PlayPause Rec. |
| Page | Page Number | This selects an internal command to switch from the current scene page to another page number as defined. Quickly pressing knobs can therefore be configured to navigate pages. Remember to also configure the destination page knobs to return back to the original page number if required. |

Record and Play / Pause Rec

The knob press can also be configured to control automation recording transport. See the automation recording section for more details..

About the Push behavior: When using the push knob configured for a destination, the push requires a quick press. This is important as some commands also operate by holding / long pressing a knob. So for example, tap quickly to change page if set as destination or long press to assign a control to a group from the control page.

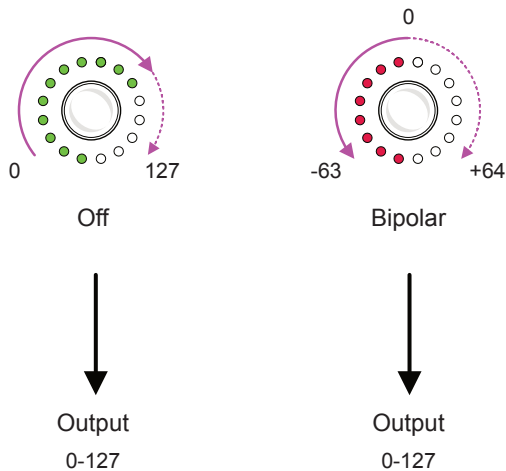
2.10 Special Functions

The E16 special functions, accessible in the control settings, affects the behavior of the knob and its control operation. Four special functions can be selected for each control including standard linear or bipolar range, a snapshot selected A-B range or to enable and control parameter automation recording. The 'Special' menu options are:-

| Special Options | | Turn knob to navigate, tap knob to change. |
|-----------------|------------------------------|---|
| | Function | Description |
| Off | Rotate 0-127 | Control will operate with default behavior. Turning the knob will control the output over a 0-127 range. |
| Bipolar | Rotate -63 to 64 | Control will operate with bipolar behavior. Turning the knob will control the output over a -63 - 0 - 64 range. |
| Snapshot | A to B range | Snapshot allows two knob values to be captured. These are stored as position A and position B. The A-B values then set the range of control. |
| Rec | Enables automation recording | Rec enables automation to be recorded to the knob when in the control view. When recording, the knob rotation value is recorded to the control. Can then be replayed on loop. |
| Play/Pause Rec | Controls record | Sets the behaviour when pressing the knob in the control view. This option enables the start / pause of automation recording and subsequent playback of the recorded value changes. |

Control Range

The knob behavior can be set to display a normal 0 to 127 range or a bipolar -63 to 64 range. The LED ring will represent the value as well as the display screen. This setting affects only the display and control behavior. In both instances the physical output would be the same, for example for CC, both are ranged over 0-127.

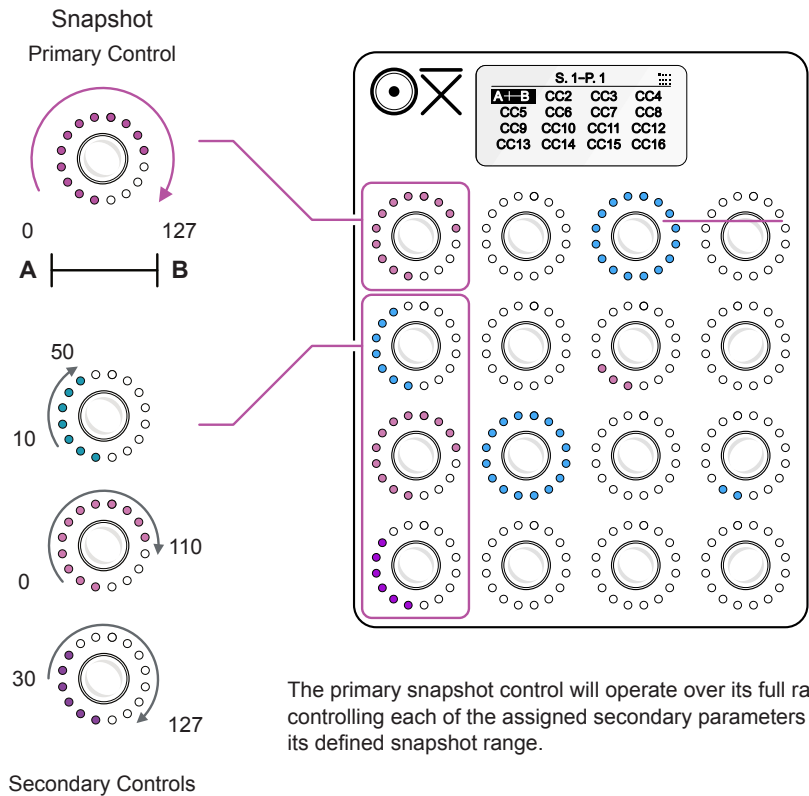


The snapshot and recording functions are covered in more detail in the next section.

2.11 Snapshot - Special Function

Any control knob can be set to snapshot mode and act as the primary control over one or more other selected secondary controls. The primary snapshot only affects the connected secondary controls and does not in itself send any output. The secondary controls do send their own outputs generated by each control or by the primary snapshot controller. The lower and upper values of each secondary controller's range can be assigned to the A and B values of the primary snapshot. This allows the full range of the primary snapshot to affect the secondary control over its defined range.

Example



Snapshot A - Captures the lower value of selected secondary controls.

Snapshot B - Captures the upper value of the selected secondary controls.

The primary snapshot control will affect the secondary controls across their defined A-B Ranges.

Individual secondary controls can still be adjusted across its full range manually.

► Setting Up a Snapshot

1. The settings for snapshots is found in the settings editor, in the special section this is accessed from the control view. Tap [Shift] if necessary to backup the menu to the main home screen. Select a scene by tapping the associated knob to choose the scene and its control view.
2. To open the settings menu, hold [Shift] + Tap (Knob 15). This is performed from the control view. The editor will open for the previously selected control so turning a knob prior to opening the editor will select the settings for this selected knob.
3. The editor tab should be open for 'Ctrl'. If not, hold [Shift] and tap (Knob 1) to choose the controller settings. The page and scene settings tabs are also available.
4. The knob which will be assigned as the primary snapshot control should be setup first.
 - Tap a knob to select a control to edit or use the currently selected control. Example (Knob 1).
 - To navigate, turn (Knob 1). Scroll to the 'Special' option and tap (Knob 1) to edit. The selected option is highlighted and when in edit mode the '►' tag label is shown.
 - Select the 'Snapshot' option for the special setting. Note also that this sets the 'Destination 1' to snapshot. A primary snapshot control only affects other controls and does not output MIDI messages.
 - When complete, tap [Shift] to backup and exit the edit menu.
5. Once a primary snapshot control is assigned, the A-B symbol is displayed on the screen for the control. The next step is to connect the secondary controls that will be affected by the primary snapshot.
 - Hold the Primary Snapshot knob + Tap the knobs to add to the snapshot control. Example: Hold (Knob 1) + Tap (Knob 5), (Knob 9) and (Knob 13). The secondary controls are displayed highlighted with the primary knob held.
 - Adjust the lower value for the starting point of each knobs range.
 - Hold + Turn counter-clockwise the primary snapshot knob. Then release the knob to capture and save the values into the slot 'A'.
 - Adjust the same secondary knobs to set the upper value for each knobs range.
 - Hold + Turn clockwise the primary snapshot knob. Then release the knob to capture and save the values into the slot 'B'.
6. Adjusting the A-B Primary Snapshot knob will now control the values of the assigned secondary control knobs within their discrete ranges set.

2.12 Recording Automation

Control automation refers to the recording of parameter changes and then playing these back to replay the control behavior. In the E16 each knob turn can be freestyle recorded and then played back in a loop. This will then apply the automated control pattern to the destination parameter. There are 2 workflow options to consider:

1. Quick recording. Direct and generic recording controlled in the settings menu when in the control screen. Access the editor from the control view by holding [Shift] + tap (Knob 13) to start and stop recording.
2. Transport knob controls. Recording by assigning the recording transport controls to one or more of the knobs. This is performed in the editor, accessed from the control view. The 'Rec' or to 'Play/Pause rec' assignment can be set in the 'special' settings.

In both workflow cases, manually adjusting a knob in normal mode will clear the automation recorded.

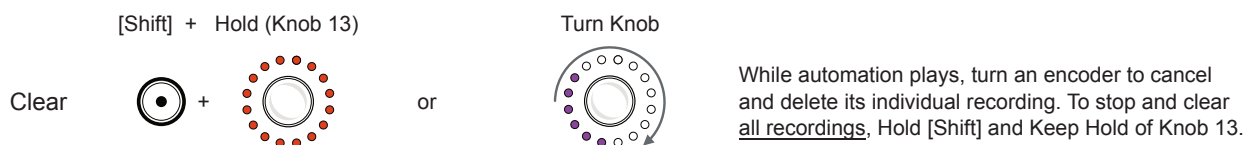
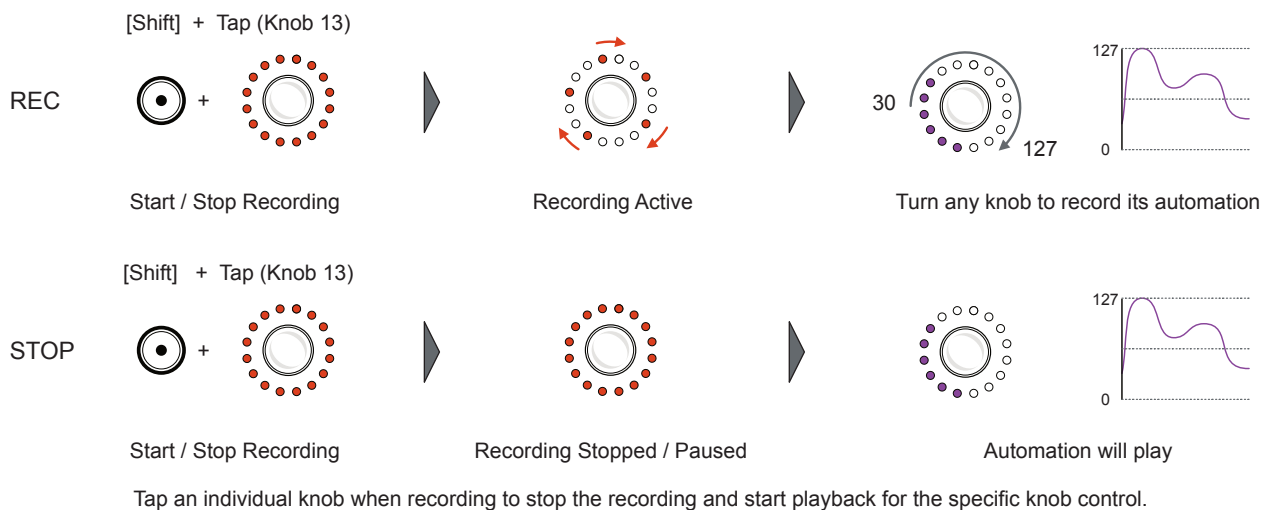
2 Connect & Control

Quick Recording

Quickly activate recording mode to record and capture any knob adjustment into the recording buffer. Then simply switch to playback mode to playback the automation for the knobs. Record automation in the control view.

Start / Play Recording

From the control view



► Quick Recording

1. Quick recording is found in the shift menu, accessed from the control view by holding [Shift].
2. To start recording hold [Shift] + Tap (Knob 13), 'REC'. Recording will commence as indicated by Knob 13 and its rotating red LEDs.
3. Once recording is started, release the buttons to exit the menu. Recording will continue. The record symbol will be displayed top left.
4. Recording is made freestyle, so adjusting any knob for the controls at any time while recording will capture the value change cycles to the recording buffer. To stop recording and continue playback for the individual knob, tap the knob.
5. Once knobs have been recorded, hold [Shift] + tap (Knob 13), 'REC' again to stop recording and continue playing the recorded automation. The knob LEDs will animate the value changes.
6. To clear automation recorded to a knob, turn the (Knob) to erase. Any manual adjustments to an individual knob will also clear and override the recorded automation. The manual setting and will be applied.

Transport Knob Control Recording

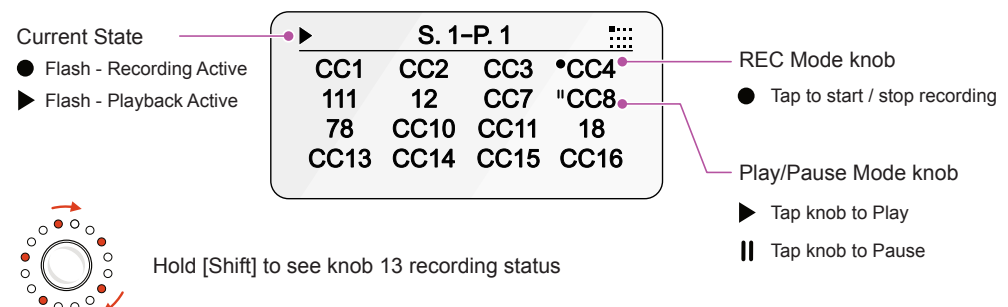
In order to offer more control over the recording process, one or more knobs can be assigned to control the record / stop / play transport process. This is set up in the control editor and is found in the 'special' settings for the control.

► Transport Control Recording

1. Transport for recording is found in the control editor options, accessed from the control view by holding [Shift]. Ensure a scene is selected and its control view.
2. To edit the knob transport settings hold a Knob + tap [Shift] to edit the selected control. Alternatively, hold [Shift] + Tap (Knob 13), 'Edit'.
3. Ensure the 'Ctrl' tab is selected. If not, hold [Shift] and tap (Knob 1).
4. Tap a knob to edit and scroll through the options by turning the knob. Highlight the 'Special' option and tap the knob to edit the setting.
5. Two transport options are available for assignment to the knob.
 - Rec. This allows the knob to start and stop automation recording. In control view, tap this knob to start and stop recording of any knobs automation. When recording any knob can be adjusted to record its automation values. The knob value is shown with a transport record symbol tag. Recording is shown by the top left displayed record symbol.
 - Play/ Pause Rec. This allows the knob to start or pause automation playback. In control view, tap this knob to start and pause playback of automation for all knobs. When playing, any recorded automation is replayed. The knob is displayed with a pause / play transport symbol.
6. Recording and playback is then performed by tapping the configured knobs to control the transport in the control view.
7. To clear automation recorded to a knob, turn the (Knob) to erase. Any manual adjustments will override the recorded automation and apply the manually entered value. To stop and clear all recordings, Hold [Shift] and Keep Hold of Knob 13.

General Recording Status

Knob Transport Controls



2.13 Groups

Each of the individual parameters can also be added to a 'group'. A group is a collection of 2 or more parameters that can be controlled together as a collective set. Push and hold an encoder knob to view the group status. A maximum of 4 groups are available. A maximum of 4 groups are available.

A control knob can play one of two roles if assigned into a group.

- **Primary lead.** A control which, when adjusted, will also change the value of all other knobs in the same group at the same time. Primary lead knobs will change its own value and the relative values of the others in its group.
- **Secondary follower.** A control knob who's value can be changed by the lead knob. Turning a lead knob in the same group will change the value of this knob. A secondary follower knob can also be adjusted manually in isolation.

Create a group.
In the control view, push and hold first knob + tap knob(s)



| Group 1 | | | |
|---------|------|------|------|
| CC1 | CC2 | CC3 | CC4 |
| CC5 | CC6 | CC7 | CC8 |
| CC9 | CC10 | CC11 | CC12 |
| CC13 | CC14 | CC15 | CC16 |

► Creating a group

1. Groups are set from the control view by holding a knob. The group number is displayed while holding a knob. Push and hold a knob, typically this will be the primary lead, displayed by the dotted border and fully lit LED ring for the knob. Example: Keep hold of (Knob 1).
2. While holding the lead knob, tap any other knob to add to the same group. Example: Hold (Knob 1) + Tap (Knob 2) & (Knob 3). The first tap will add controls as secondary followers, indicated by the solid border and the LED ring partially lit, right side.
3. While still holding the lead knob, tap any other knob a second time to change the group assignment from a follower to a lead. Example: Hold (Knob 1) + Tap (Knob 2). The second tap will change its control mode from follower to lead, indicated by the dotted border and fully lit LED ring.
4. To remove a control from the group. While holding the lead knob, tap any other knob a third time to remove it from the group. Example: Hold (Knob 1) + Tap (Knob 2). Knobs that are not in the group are shown as normal, not highlighted and the LED ring unlit while holding the indicated by the solid border and the LED ring partially lit,
5. At the conclusion of these examples, Knob 1 will be the primary lead and Knob 3 a follower control.

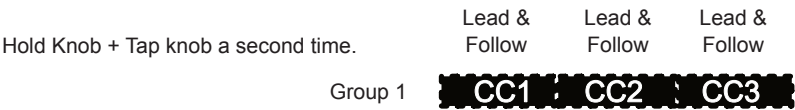
Group Operating Behavior

Parameters displayed with a ‘solid’ bounding box will follow any changes made by a primary lead control, but can also be adjusted independently. The primary lead controls are shown with a ‘dotted’ boundary box. In the example below only CC1, when adjusted, will affect its own value plus the value of the other 2 parameters. When changing the CC2 or CC3 knob, only its own individual value is changed. Other parameters in the group are not affected.

The amount of control applied by the primary lead to a follower can be set for each follower parameter. The amount is set on each follower by holding & turning its knob. In this example hold + turn knob 2 (CC2) to set the amount, then repeat for CC3.

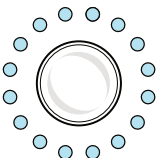


Parameters displayed with a ‘dotted’ bounding box will act as a primary lead control. If any of these are adjusted, the values of the other parameters in the same group are also adjusted in harmony. The value change is relative to each of the parameter’s original value. In the example below, all three knobs will affect the value of itself and the other two parameters.



While setting up a group and holding the lead knob - each subsequent tap of the follower knob will cycle through its functional mode.

Hold Primary Lead
Full LED ring

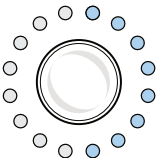


+

CC2

1st Tap
Secondary Follower

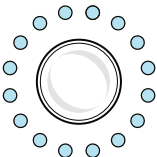
Tap another knob
Half LED ring



CC1

2nd Tap
Primary lead

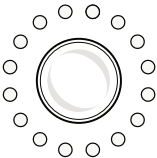
Tap again
full LED ring



CC2

3rd Tap
Remove from group

Tap again
Unlit



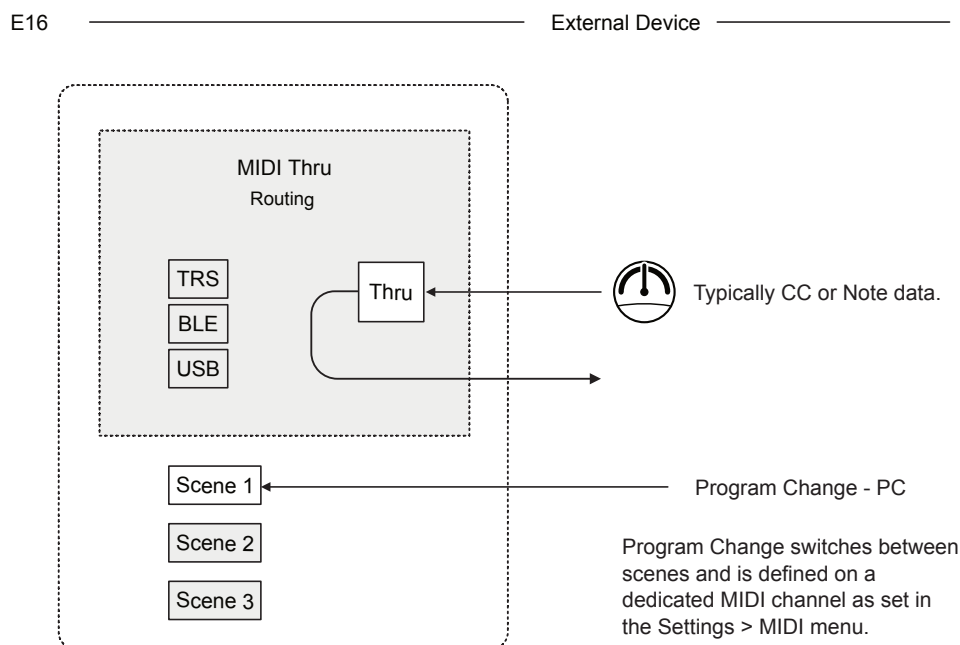
Group

2 Connect & Control

2.14 MIDI In

The E16 can channel incoming MIDI through to the selected outputs. This is configured in the Settings > MIDI section. In addition external MIDI PC - Program Change messages can be used to change scenes on the device. A dedicated MIDI channel is available for this purpose, also set in the MIDI settings.

Example: MIDI Input



► Changing the Scene by PC

1. Connect the externally controlling device to a MIDI input on the E16, for example from PC/Mac to the E16. Ensure the general MIDI settings are correct on the external device in order to send a PC message.
2. On the E16, open the system config. In the home screen, press (Knob 8).
3. Navigate to the MIDI settings, tap to open. Navigate to 'PC Receive Channel' and set this to a dedicated MIDI channel that the external device will send the PC message. Example, set to channel 8.
4. Sending a PC message on the defined channel will then change the scene to the PC message value. For example PC 1 will select Scene 1, PC 4, selects Scene 4. Scenes 1-16 can be selected directly by PC.

NOTES

Scenes

Scenes are the highest order of organisation in the E16, each scene can hold 16 pages of parameters. Seven scenes are presented for access from the main home page but the E16 can hold 16 Scenes in total on the device. These are accessed using [Shift] + (Knob) from the home page in order to re-allocate a scene. A scene stores all of the settings and helps to organise the controls. Scene selection is available from the first page presented when powering up the E16 along with the system configuration settings menu. To start, select a scene to work with or to setup. Scene switching is also possible from an external device by using PC - Program Change messaging. The E16 uses a dedicated MIDI channel to listen for incoming PC change messages. Each scene also contains 16 presets. A preset stores the current values of all the knobs which can then be recalled. Different configurations are therefore possible in order to match various hardware setups.

3 Scenes

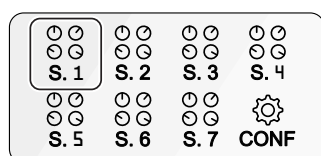
3.1 Scene Navigation

When the E16 is first powered up, the 'home' screen is displayed which presents the 7 directly accessible scenes S.1 to S.7. There are 16 in total stored on the E16 with 7 presented for quick access. Tap a rotary knob to select and tap [Shift] to backup. Each scene has 12 pages, each with 16 control parameters.

Scene Select

Tap (Knob X) to select the scene from the main menu.

Example S.1

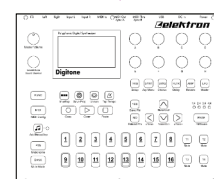


Main Home View - Scenes / System

Control Page

The configured controls are presented. The knobs will send a MIDI control message to the defined destination

Example CC.1



Tap [Shift] to backup in the menu / page structure

Save on Exit

After editing a scene and backing up to the home screen the option to save the scene or not is presented. Tap the knob to choose the save option.

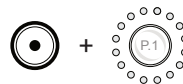


Save No



Save Yes

Example Page 1



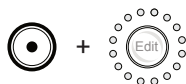
Change Page

Hold [Shift] to access the page selection screen along with the scene settings. Hold [Shift] + Tap (Knob X) 1-12 to change page.

Scene / Page / Controller Settings

The configuration settings for a scene enable the controller, page and scene to be setup and edited. For a scene the abbreviated name can be edited along with reloading and resetting a scene. For each page in a scene its name can be edited along with the MIDI Channel and output port. Controller editing covers a range of detailed configuration parameters per control. To navigate to the settings options, select a scene and hold [Shift] + (Knob 15) then [Shift] + (Knob 1), (Knob 2) or (Knob 3).

In the controller page



| Ctrl 3 | Page | Scene |
|---------|------|-------|
| Abbr. | CC3 | |
| Color | 12 | |
| Special | Off | |

In the edit page, Ctrl, Page or Scene options



3.2 Scene Pages

Each scene has 12 pages which contains 16 parameters. A total of 192 parameters are therefore available in each scene. Organising parameters in pages allows them to be managed in an easy and structured way.

The MIDI communication channel and output can be assigned at an individual page level for all parameters in the page or at a discrete destination level for each control. It is useful to switch between pages of the same control assignments, but with different port or channel settings.

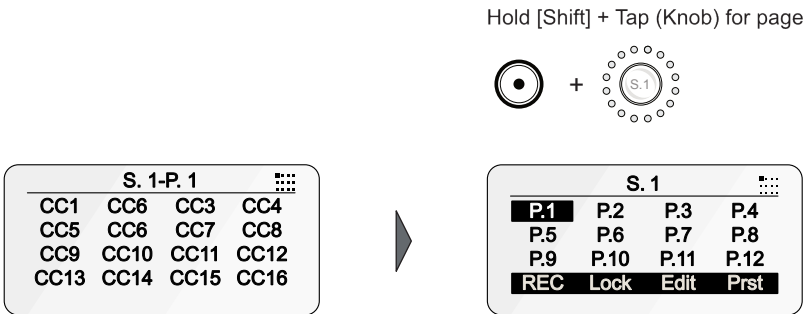
► Navigating Pages

- 1. Pages are accessible from the control view. Tap [Shift] if necessary to backup the menu to the main home screen. Select a scene by tapping the associated knob to choose the scene and its control view.
- 2. To view the available pages, hold [Shift]. The default names are P.1 - P.12 but these can be edited. The currently selected page is highlighted on the display and its associated knob will flash. The top right matrix icon will show the selected page.
- 3. To change page, hold [Shift] + tap (Knob 1) - (Knob 12) to select the respective page. The default names are P.1 - P.12 but these can be edited. The currently selected page is highlighted on the display and its associated knob will flash.

Each page consists of:-

- 16 Configurable control parameters.
- The MIDI Channel assignment for the 16 controls.
- The MIDI Port output for the 16 controls.

Change Page - from the control view.



— Note —
The 'Push' control option can be used to assign a page. This is setup in the control configuration and by setting the push option to type 'page'. A page number can be assigned which allows the knob push to switch from the current page and jump directly to the assigned control view.

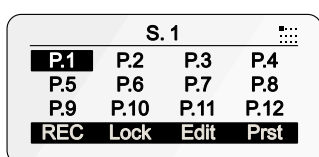
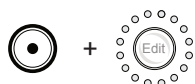
3 Scenes

The page options can be edited. This allows the page to be renamed and the MIDI channel and port to be set. Copying pages is also possible from within the editor. The editor is accessible from the control view. Select a page to edit first.

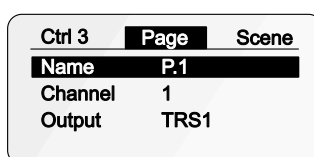
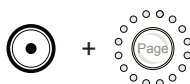
► Edit the Page Settings

1. Pages are accessible from the control view. Tap [Shift] if necessary to backup the menu to the main home screen. Select a scene by tapping the associated knob to choose the scene and its control view.
2. Select a page to edit, hold [Shift] + tap (Knob 1) - (Knob 12).
3. Open the editor, hold [Shift] + tap (Knob 15), 'Edit'.
4. Select the page tab. Hold [Shift] + tap (Knob 2), 'Page'. The edit options also include controls with knob 1 and scene with knob 3.
5. To navigate and scroll the options, turn (Knob 2). To select an option for editing press (Knob 2) then turn to change the setting. The '►' tag label indicates that the parameter is editable. Press again to confirm the change.
6. When backing up and exiting the control view using [Shift], a 'Save Scene?' option is presented. Tap the red lit (Knob 2) to exit without saving or tap the green lit (Knob 3) to save the scene.

Hold [Shift] + Tap (Knob 15) for the editor



Hold [Shift] + Tap (Knob 2) for the page options



Page Settings

In the editor, access settings by [Shift] + (Knob 2)

| Setting | Options | Description |
|---------|--------------------------------------|---|
| Name | Text Entry | Opens the text editor for renaming the page. The page name has a maximum of 7 characters. The name is presented on the control view header and the first 4 characters in the page list. |
| Channel | 1-16 | Select MIDI channel for the controls set in the selected page.. |
| Output | All, TRS, USB, All-BLE, All-USB, OFF | Sets the MIDI Output port 1 or 2 for TRS and USB or Off. Also all ports excluding USB or excluding BLE can be selected. |
| Copy | Command | Copies the current page and controls to the clipboard. |
| Paste | Command | Pastes the copied page and controls from the clipboard into the currently selected page. |
| Clear | Command | Clears settings for the current page to defaults. Requires the action to be confirmed by the green (Knob 3) or cancel with red (Knob 2). |

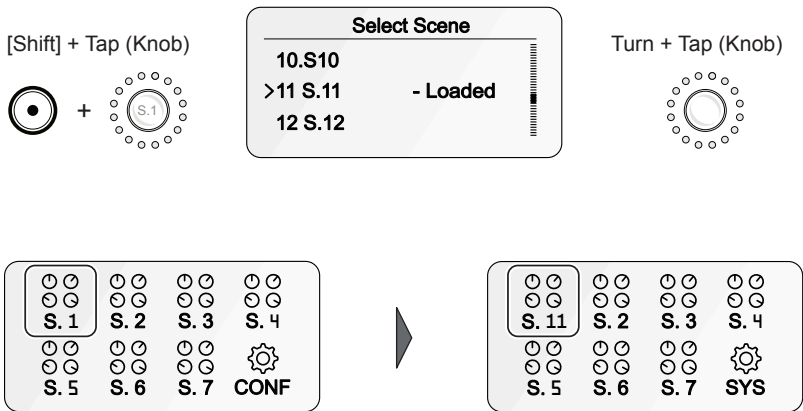
3.3 Accessing All Scenes

There are 16 scene slots stored on the E16, 7 of which are directly accessible from the home screen. Scenes can be managed in the OXI App but also can be configured on board the E16 device. Assignment of the scenes from the total 16 is performed in the home screen using shift.

► Assigning a scene as direct access

- 1. There are 7 scenes that are assigned to knobs 1-7 in the home screen, scene page. These are configured by default, but can be changed to another one from the 16 onboard scenes. Navigate to the home screen to start. Tap [Shift] if needed to backup the menu and screen structure.
- 2. Hold [Shift] + Tap (Knob 1) to (Knob 7). These contain the assigned scenes. The 'Select Scene' screen is displayed.
- 3. Turn the selected knob to navigate the 16 available scenes. The scene currently loaded to the selected knob is shown in the list.
- 4. The desired scene will be tagged with the '>' symbol. Tap the knob to select and assign to the chosen knob.
- 5. The menu is automatically exited and the display returns to the home screen. The assigned scenes to knobs are shown.

Change Scene Assignments - from the home / scene screen.

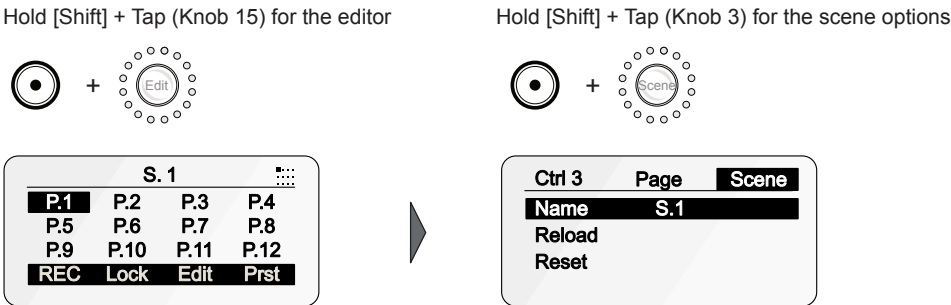


3.4 Scene Settings

The scene settings can be edited. This allows the scene name abbreviation to be changed. Also the options to reload or reset the scene are possible from this menu.

► Edit the Scene Settings

- 1. Accessing the scene settings is managed from the control view. Tap [Shift] if necessary to backup the menu to the main home screen. Select a scene by tapping the associated knob to choose the scene and its control view.
- 2. Open the editor, hold [Shift] + tap (Knob 15), 'Edit'.
- 3. Select the scene tab. Hold [Shift] + tap (Knob 3), 'Scene'. The edit options also include controls with knob 1 and page with knob 2.
- 4. To navigate and scroll the options, turn (Knob 3). To select an option for editing or choose a menu command press (Knob 3). Some commands may need confirmation by pressing no/red knob or yes/green knob.
- 5. When backing up and exiting the control view using [Shift], a 'Save Scene?' option is presented. Tap the red lit (Knob 2) to exit without saving or tap the green lit (Knob 3) to save the scene.



Scene Settings

In the editor, access settings by [Shift] + (Knob 3)

| Setting | Options | Description |
|---------|------------|--|
| Abbr. | Text Entry | Opens the text editor for renaming the scene. The scene name has a maximum of 7 characters. The name is presented on the control view header and the first 4 characters in the scene list. |
| Reload | Command | Reloads the saved scene and its setting from the E16 memory. Tap the lit knob to confirm, Yes/Green to confirm, No/Red to cancel. |
| Reset | Command | Resets the scene to the default settings. Tap the lit knob to confirm, Yes/Green to confirm, No/Red to cancel. |

3.5 Presets

Each scene has 16 preset slots. Each preset can store the current state of all of the control knob values from the scene. Presets can be recalled later. The preset menu is accessible from the control view by holding [Shift] and pressing (Knob 16), 'Prst'. The preset management menu is then navigated using Knob 1 which will be shown lit.

► Saving a Preset

1. Ensure the knob values are set or configured as snapshots or with automation as desired. This will be the state saved.
2. Open the preset manager. In the control view, hold [Shift] + tap (Knob 16), 'Prst'.
3. To Save:
 - To save to the current slot. Navigate in the menu by turning (Knob 16). Highlight with the '►' tag the 'Save' option. Tap (Knob 16) to select save.
 - To save to another slot and rename the preset. Navigate in the menu by turning (Knob 16). Highlight with the '►' tag the 'Save As' option. Tap (Knob 16) to select save. The slot selector will open and a new slot can be selected. The name can also be edited when saving.

► Loading a Preset

1. Open the preset manager. In the control view, hold [Shift] + tap (Knob 16), 'Prst'.
2. To Load a preset. Navigate in the menu by turning (Knob 16). Highlight with the '►' tag the 'Load' option. Tap (Knob 16) to select load.
3. The preset slot selector will open and a preset from the list can be selected. The currently active preset will be displayed in the list as 'loaded'. Navigate th the '►' to the preset to load and press (Knob 16).
4. If the currently active preset has been changed, the option to save prior to loading the new preset is presented. Tap red (Knob 2) to cancel without saving and green (Knob 3) to save to the current slot prior to loading.
5. The selected preset will be loaded, restoring its control values.

— Note —

The options to clear the currently selected preset slot or to rename the preset are also presented in the preset menu. Navigate using the lit knob and select by tapping the knob.

System & App

This final section is more about configuration and setup of the OXI E16. However don't overlook these topics as there are lots of useful topics that will be valuable and help your workflow. Here, the firmware updates are covered along with the OXI App and a complete overview of the configuration options. There are some useful elements that will be important to know, if not now, then certainly in the future. It is recommended that you at least familiarise yourself with the content and features covered here for future reference and awareness. To finish, OXI Instruments would like to issue a heartfelt and big thank you for buying OXI E16 and following our journey as new devices join the OXI family and its associated ecosystem of gear. Good luck with your musical adventures; hopefully, OXI E16 will join the OXI ONE, Coral, Meta and all the other gear to help your musical journey. Remember, things don't end here; only the manual does. The real journey is only just starting. Have fun!

4.1 OXI App

Most device management activities when working with the OXI gear is handled using the OXI App. This is a stand alone utility that, when connected to an OXI device will help update, backup and transfer data between the device and a PC or Mac. The app also contains some useful tools such as the ability to configure the E16 directly from the App and to create and load instrument definitions. Download the App from the OXI site.



[Click Here to Download the App](#)

The OXI App can manage operations between a PC / Mac and E16:-

- Manage and backup scenes.
- Edit and create scenes in the on-board scene editor.
- Manage instrument CC definition files between devices.
- Check the available firmware in comparison with the OS installed on the connected e16 and perform an update to the firmware on the device.

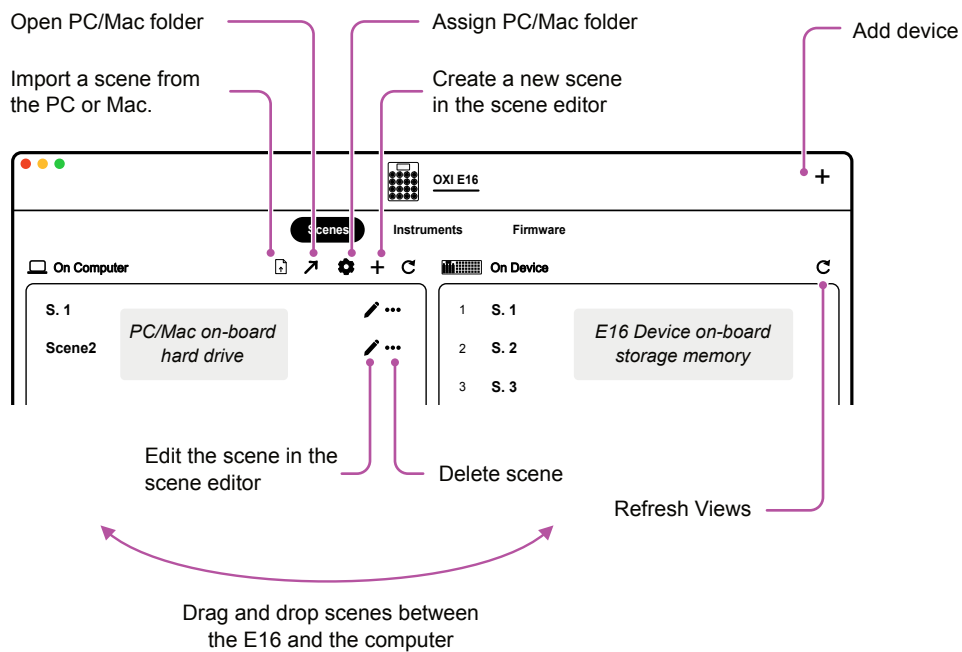
— Note —

The OXI App is a tool used for several OXI devices. The devices can be selected with the '+' button top left. For example the OXI ONE and ONE MkII can all be connected to the App. Also instrument definitions are managed and can be created directly in the App.

Scene Management

The option to set a storage directory is available which assigns a folder on the PC/Mac as the storage location for E16 files and data. Scenes can be copied from E16 to / from a PC/Mac using the drag and drop options in the 'Scene' tab menu.

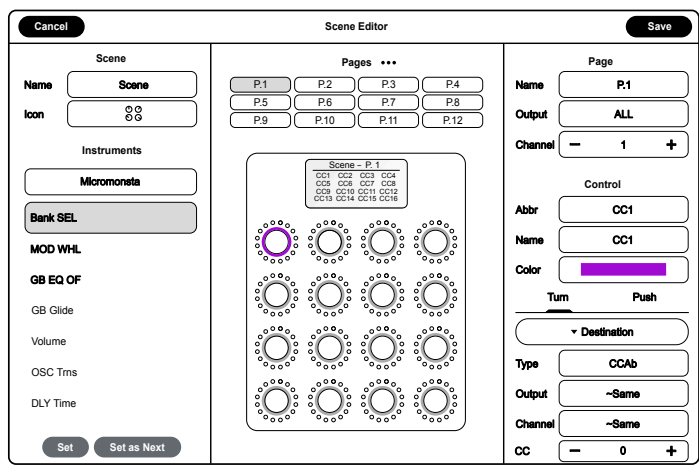
Scenes Tab



Scenes Editor

The App scene editor speeds up the E16 configuration and workflow enormously. While editing on the device is quite easy, the App presents all of the setup data in one place and makes it even quicker to get going. It is recommended to use the App for getting the E16 initially configured and then make any required individual changes on the device going forwards.

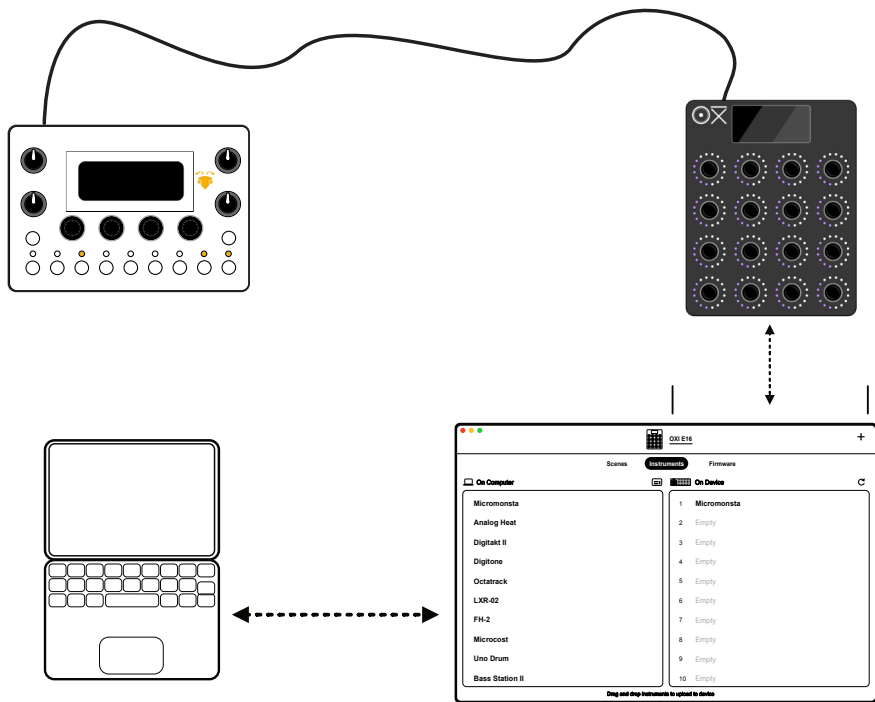
The scene icon can also be changed from the available symbol library or new icons created when clicking the icon in the app.



4.2 Instrument Definitions

An instrument definition is a predefined configuration for MIDI CC mapping to external devices. Instead of manually setting up each CC to control an external device parameter, the instrument definition for that selected equipment will map the parameters automatically and apply their names. This saves time and is an efficient way to work with MIDI continuous control messages for external gear.

OXI E16 Instrument definition is selected in the destination 1, 2 or push destination settings for any of the controls. This examples show Audiothingies MicroMonsta2 connected by MIDI and the CC control can be performed from E16 without manual configuration. Restart the E16 after transferring instrument definitions for them to be visible and accessible in the E16.



The OXI App can be used to download instrument definitions from the database and transfer the definition files between the OXI E16 and a PC/Mac.

The instrument definition for a device is selected in the destination 'Instrument' option. The mapped parameter for the control is also available under 'Parameter'.

| Destination 1 | |
|---------------|-----------|
| Instr. | Micromons |
| Param. | Bank SEL |
| Type | CC Abs |

— Note —
Instrument definitions are not user configurable on the device but can be created in the OXI App. These can be created individually and then loaded to OXI OE16 using the app. If the manufacturer changes the CC mapping of the device the instrument definition may not work as originally configured. Instrument definitions are saved with the scene and can be backed up with the app. See the OXI App manual regarding the instrument editor.

Instrument Definitions

The currently available instrument definitions to download via the App are listed. The list captures most definitions available but is always likely to change at any time as more are added :-

| Manufacturer | Device |
|------------------------|---------------------|
| ASM | Hydrasynth |
| Abildgaard | Droid-3 |
| Access | Virus A |
| Access | Virus T1 |
| Arturia | Microfreak |
| Arturia | Minifreak |
| Arturia | Polybrute |
| Audiothingies | Doctor A |
| Audiothingies | Micromonsta |
| Behringer | Deepmind 12 |
| Behringer | Neutron |
| Behringer | Pro 800 |
| Behringer | TD-3-MO |
| Black Corporation | Deckard's Dream |
| Black Corporation | Deckard's Dream Mk2 |
| Conductive Labs | NDLR |
| Dave Smith Instruments | Evolver |
| Dave Smith Instruments | OB-6 |
| Dave Smith Instruments | Prophet '08 |
| Dave Smith Instruments | Prophet 12 |
| Dave Smith Instruments | Prophet Rev 2 |
| Dave Smith Instruments | Prophet X (XL) |
| Dreadbox | Nymphes |
| Dreadbox | Typhon |
| Elektron | Analog 4 MKII |
| Elektron | Analog Heat |
| Elektron | Analog Heat +FX |
| Elektron | Analog Rtm MKII |
| Elektron | Digitakt |
| Elektron | Digitakt II |
| Elektron | Digitone |
| Elektron | MachineDrum |
| Elektron | Model Cycles |
| Elektron | MonoMachine |
| Elektron | Octatrack |
| Elektron | Syntakt |
| Elektron | Model Samples |
| Empress | Echosystem |
| Empress | Reverb |
| Ensoniq | ASR-X Pro |
| Erica Synths | LXR-02 |
| Expert Sleepers | FH-2 |
| Flame | Curve |
| Flame | Maander |
| Fred's Lab | Buzzzy! |
| GEM | rp-x |
| GSmusic | E7 |
| Gotharman | Spazedrum Black |

| Manufacturer | Device |
|-----------------------|-----------------|
| Hologram | Microcosm |
| IK Multimedia | Uno Synth Pro X |
| IK Multimedia | Uno Drum |
| IK Multimedia | Uno Synth |
| Intellijel | uMidi |
| Jomox | Airbase 99 |
| Korg | Arp 2600 M |
| Korg | Electrabe ER-1 |
| Korg | MS2000 |
| Korg | NTS-1 |
| Korg | Opsix |
| Korg | Wavestate |
| Korg | Minilogue |
| Korg | Minilogue XD |
| Korg | Monologue |
| Korg | Volca Bass |
| Korg | Volca Beats |
| Korg | Volca Drum |
| Korg | Volca FM |
| Korg | Volca Keys |
| Korg | Volca Kick |
| Korg | Volca Nubass |
| Korg | Volca Sample |
| Korg | Prologue |
| Kodamo | Essence FM |
| Kurzweil | K2661 |
| LPZW | Tram 8 |
| MFB | Synth II |
| MFB | Tanzbar 1 |
| MFB | TanzbarLite |
| MFB | Tanzmous |
| Make Noise | O-Coast |
| MeeBlip | Geode |
| MeeBlip | Triode |
| Melbourne Instruments | Nina |
| Meris | LVX |
| Meris | Ottobit Jr |
| Meris | Polymoon |
| Modal Electronics | ARGON8M |
| Modal Electronics | COBALT5S |
| Modal Electronics | CRAFTsynth2 |
| Modal Electronics | Craft |
| Modal Electronics | Skulpt |
| Modor | NF-1 |
| Moog | Grandmother |
| Moog | Matriarch |
| Moog | Minitaur |
| Moog | Mother 32 |

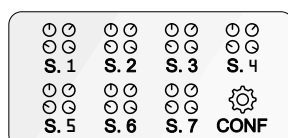
4 System

| Manufacturer | Device |
|---------------------|-------------------|
| Moog | Sirin |
| Moog | Sub-Phatty |
| Moog | Subsequent 25 |
| Moog | Subsequent 37 |
| Moog | Voyager |
| Mutable Instruments | Shruthi |
| Norand | Mono |
| Nord | Drum 2 |
| Nord | Drum 3P |
| Nord | Lead (Rack) |
| Nord | Lead (Rack) 2x |
| Nord | Wave 2 |
| Novation | Bass Station II |
| Novation | Bass Station Rack |
| Novation | Circuit |
| Novation | Nova |
| Novation | Summit |
| Novation | Peak |
| OTO Machines FX | BAM |
| OTO Machines FX | BIM |
| OTO Machines FX | BOUM |
| OXI Instruments | Coral |
| Oberheim | OB-6 |
| Oberheim | OB-X8 |
| Pioneer | Toraiz AS-1 |
| Polyend | Tracker |
| Red Panda | Particle |
| Red Panda | Raster |
| Roland | D-05 |
| Roland | GAIA SH-01 |
| Roland | JD-XA |
| Roland | JD-XI |
| Roland | JP-08 |
| Roland | JU-06 |
| Roland | JU-06A |
| Roland | JV1010 |
| Roland | JX-03 |
| Roland | JX-08 |
| Roland | Juno 60 Minerva |
| Roland | Jupiter X (xM) |
| Roland | MC-101 |
| Roland | MC-20h2 |
| Roland | MKS-50 |
| Roland | MX-1 |
| Roland | S-1 |
| Roland | SE-02 |
| Roland | SH-01A |
| Roland | SH-4d |
| Roland | System 1 (1M) |
| Roland | System 8 |

| Manufacturer | Device |
|---------------------|---------------|
| Roland | TB-03 |
| Roland | TB-3 |
| Roland | TR-06 |
| Roland | TR-08 |
| Roland | TR-09 |
| Roland | TR-6S |
| Roland | TR-8 |
| Roland | TR-8S |
| Roland | VP-03 |
| Roland | XV-5050 |
| Sequential | Pro 3 |
| Sequential | Prophet-6 |
| Sequential | TAKE 5 |
| Sherman | Filterbank |
| Sonicware | Liven Lofi 12 |
| Sonicware | Liven XFM |
| Sonicware | Smpltrek |
| Strymon | Nightsky |
| Strymon | Volante |
| Studio Electronics | ATC-1 |
| Studio Electronics | SE-1X |
| Studiologic | Sledge |
| TC Electronic | D-Two |
| Tasty Chips | Gr-1 |
| Teenage Engineering | OP-1 |
| Teenage Engineering | OP-Z |
| Twisted Electronics | MEGAfm |
| Twisted Electronics | TherapSID |
| UDO Audio | Super 6 |
| Waldorf | Blofeld |
| Waldorf | Iridium |
| Waldorf | M |
| Waldorf | Pulse 2 |
| Waldorf | Rocket |
| Waldorf | Streichfett |
| Yamaha | Reface CP |
| Yamaha | Reface CS |
| Yamaha | Reface DX |
| Yamaha | Reface YC |

4.3 System Settings

The global settings for the device can be accessed from the main home page by using (Knob 8). The user interface settings include: Interface brightness, auto save option, screen saver and auto turn off timer. Also firmware options and a MIDI monitor are available. Other menus include MIDI and Bluetooth settings. These are found in the System sub-menu.



Tap (Knob 8) to open the system settings.
Turn to navigate and tap to access sub-menus.

MIDI

| Setting | Options | Description |
|--------------------|-----------|--|
| BLE Thru | On/Off | Sets if the incoming MIDI from the bluetooth interface is passed thru to the MIDI output or is set to off - no thru. |
| TRS Thru | On/Off | Sets if the incoming MIDI from the TRS interface is passed thru to the MIDI output or is set to off - no thru. |
| USB Thru | On/Off | Sets if the incoming MIDI from the USB interface is passed thru to the MIDI output or is set to off - no thru. |
| PC Receive Channel | Off, 1-16 | Sets the MIDI channel that the E16 will listen to for program change messages. Incoming program change messages will switch scenes in the E16. |

Bluetooth

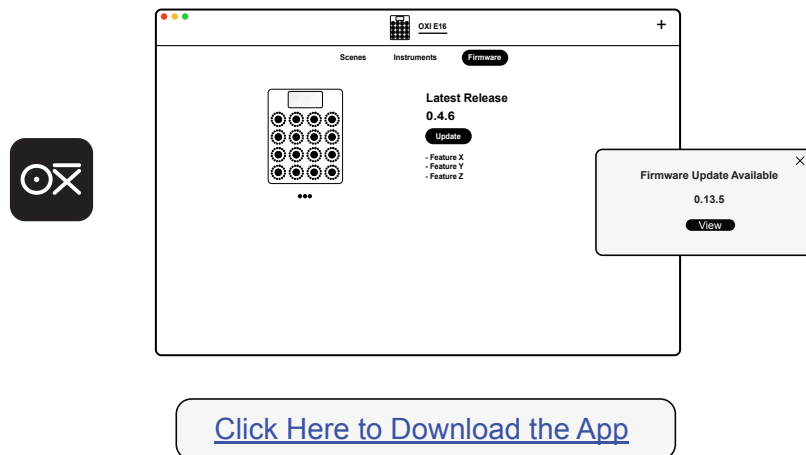
| Setting | Options | Description |
|-----------|---------|---|
| Bluetooth | Various | Bluetooth can be set to off. Alternatively bluetooth can be set as a central interface, peripheral interface or both. |

System

| Setting | Options | Description |
|-----------------------|----------------------------------|--|
| MIDI Monitor | On/Off | MIDI monitor is a tool that will display in real-time any incoming MIDI messages. Used as a diagnostic tool. |
| Brightness | Low, Med, High | Sets the rotary LED brightness level for the control knobs. |
| Auto Save | All Off, All On, Scenes, Presets | The device will automatically save everything, just scenes or just presets. Can also be set to off. |
| Screensaver Animation | Off or Timed | Enable or disable the screen saver animation. Timer can be set to start the screensaver to 10 MIns, 30 Min or 1 hr. |
| Auto Turn Off | Off or Timed | Enable or disable the automatic shutdown time. Timer can be set to off or power down after 30 Min or 1,2 or 4 hrs. |
| Encoder Type | Normal or Detented | Sets the encoder behavior from a normal non-detented style or a detented style encoder. This must be set to match the hardware encoders for your specific E16. |
| Factory Reset | Initiate reset | Initiate a factory reset to the original defaults. Will erase any existing settings and data. |
| HW/FW Version | View only | Display the current firmware version. |

4.4 Firmware Update

Updates to OXI E16 firmware are released from time to time to add new features, improve performance and fix bugs. The update process is automated within the OXI App. Simply connect the PC/Mac to OXI E16 and open the 'Firmware' page. The current status of the device and any available firmware versions will be displayed.



The currently installed firmware version and hardware version can be viewed in the Sys Settings > System > HW & FW Version.

► Update Firmware

1. Connect OXI E16 to the PC or Mac which hosts the OXI App using the USB connection.
2. Open the OXI App.
3. In the 'Firmware' page the currently installed firmware will be displayed as well as the latest available firmware. It is possible to update from this page.
4. Any newly available updates will be displayed in the pop-up message. Click 'View' to see more information and to proceed to perform the update.
5. While updating the update progress bar will be displayed on E16. Do not disconnect the devices while updating.
6. Once complete, E16 will reboot. Update takes between 15 - 60 seconds.
7. Note that the option to update a specific firmware version from a update file is also possible. Click the 3 dots under the E16 image and the options to update the firmware from a file will be available. The file must have been previously downloaded to a location on the PC/Mac.

4.5 Troubleshooting Updates

It is unusual for the OXI E16 to freeze or to get locked into a 'bricked' condition while updating. Should this situation occur the following steps should be followed.

► Update Mode Recovery

1. Connect OXI E16 to the PC or Mac which hosts the OXI App using the USB connection. Also ensure the PC / Mac is connected to the internet.
2. Push and hold the power button of OXI E16 to force it to off.
3. Power up in update mode. Hold {Knob 15} + {Knob 16} while pressing the power on button. The E16 should power up in update mode.
4. Try updating again using the App but use a downloaded OS version. This could be an older revision or the latest version.
5. Try powering off / on. Repeat the procedure.

A factory reset is also an option to return the E16 to its original state. Be careful in using this function as any configurations and settings will be permanently cleared.

► Factory Reset

1. In the main home page, tap {Knob 8}, 'Sys' for the settings menu.
2. Navigate to 'System' and tap {Knob 8} to open the sub-menu.
3. Navigate to 'Factory Reset' and tap {Knob 8} to initiate the command.
4. Confirm by pressing the green lit {Knob 3} for 'Yes' or tap red lit {Knob 2} for 'No' and to exit back to the menu.
5. A factory reset will be performed if choosing 'Yes' and the unit will restart.

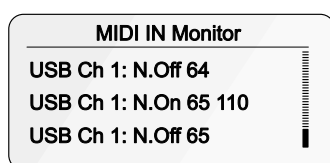
—Note—

The Sysex Librarian utility can be used if the PC/Mac OS doesn't support the App.

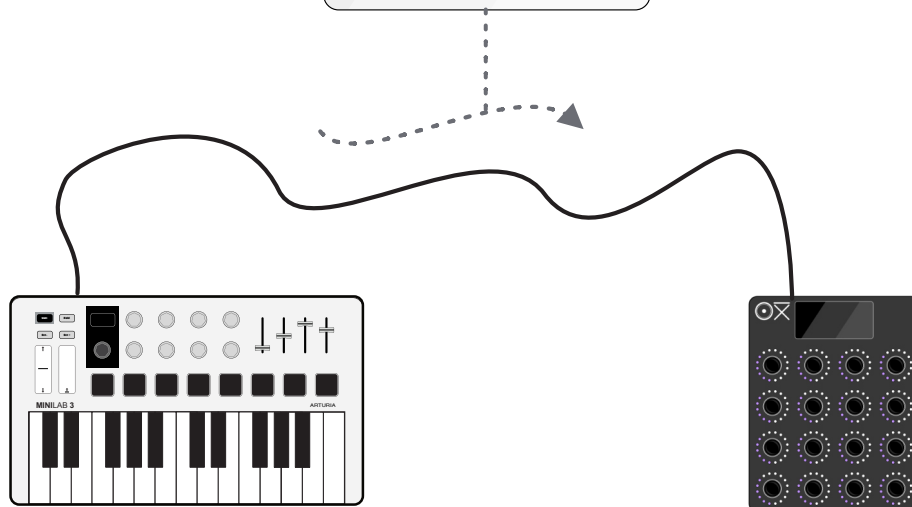
4.6 MIDI Input Monitor

MIDI Monitor is a utility used for checking incoming MIDI activity within OXI E16 from all routes and channels. It is a simple, yet highly useful tool available when needed from the config menu or directly on the user panel.

Shows Connection, Channel and message. Example is Note numbers + velocity with a note 'on' message.



Last 3 messages are displayed. If a clock is monitored this may overwrite any notes or cc information.



Turn MIDI Monitor on in: Conf Settings > System > MIDI Monitor.

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DECLARATION OF CONFORMITY

SPECIAL MESSAGE SECTION

This product utilizes rechargeable batteries. DO NOT connect this product to any power supply or adapter different than one described in the manual or specifically recommended by OXI Instruments.

This product should be used only with the components supplied or, in case a non-official accessory is used, please observe that the specifications are the same as the official ones.

IMPORTANT: Don't try to open or disassembly the OXI One. For any technical problem it may have, please contact OXI Instruments for further information. Opening or disassembling the OXI One will void your warranty.

FCC INFORMATION (U.S.A)

1. IMPORTANT NOTICE: DO NOT MODIFY THIS UNIT!

This product meets FCC requirements once it is produced and assembled. Modifications not expressly approved by OXI Instruments may void your authority, granted by the FCC, to use the product.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Contains FCC ID: 2A094-MK02

2. IMPORTANT

When connecting this product to accessories and/or another product use only high- quality shielded cables. Cable/s supplied with this product MUST be used. Follow all installation instructions. Failure to follow instructions could void your FCC authorization to use this product in the USA.

3. NOTE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.devices.

DECLARATION OF CONFORMITY

The full text of the US declaration of conformity is available at the following internet address: www.oxiinstruments.com/



EUROPE

This product complies with the requirements of **European Directive 2014/53/EU & Directive 2011/65/EU**.

The full text of the EU declaration of conformity is available at the following internet address www.oxiinstruments.com/



ENVIRONMENTAL ISSUES:



This symbol indicates that this product should not be treated as domestic waste. Once its useful life has ended, it must be taken to a relevant collection point for the recycling of electrical appliances. Through the correct recycling of batteries and electrical devices, we contribute to avoiding risks to environmental health and safety.

Product Disposal Note: If this product is damaged beyond repair or, for any reason, its useful life is deemed to have expired, please inform yourself about local, state and European regulations regarding the proper disposal and recycling of products containing lead, batteries, plastics, among other materials, as well as collection points for these types of products.



These symbols indicate that this product contains batteries and cannot be disposed as domestic waste. Once its useful life has ended, it must be taken to a relevant collection point for the correct recycling of its batteries.

This product is classified as **Radio Equipment**.

SERIAL NUMBER LOCATION:

The serial number is located on the instrument body, in the label placed in the bottom side.

TERMS OF WARRANTY

REFUND POLICY (only in European Union)

The consumer has a total of 14 days from the acquisition of the OXI One to be able to return the product thus receiving a full refund of the price of it. The product must be in the same state and with all the original content in order to receive a full refund.

Shipping costs will be paid by the customer.

WARRANTY

OXI Instruments warrants the included hardware product and accessories against defects in materials and workmanship for two years from the date of original purchase. Unless proven otherwise, it will be presumed that the breaches of conformity manifested in a period of six months from the delivery of the product already existed on that date.

The warranty will not cover the repairing costs of the following cases:

Misuse of OXI One, whether subject to extreme conditions, as using it incorrectly.

Improper handling of the product.

Normal wear and tear, nor damage caused by accident or abuse.

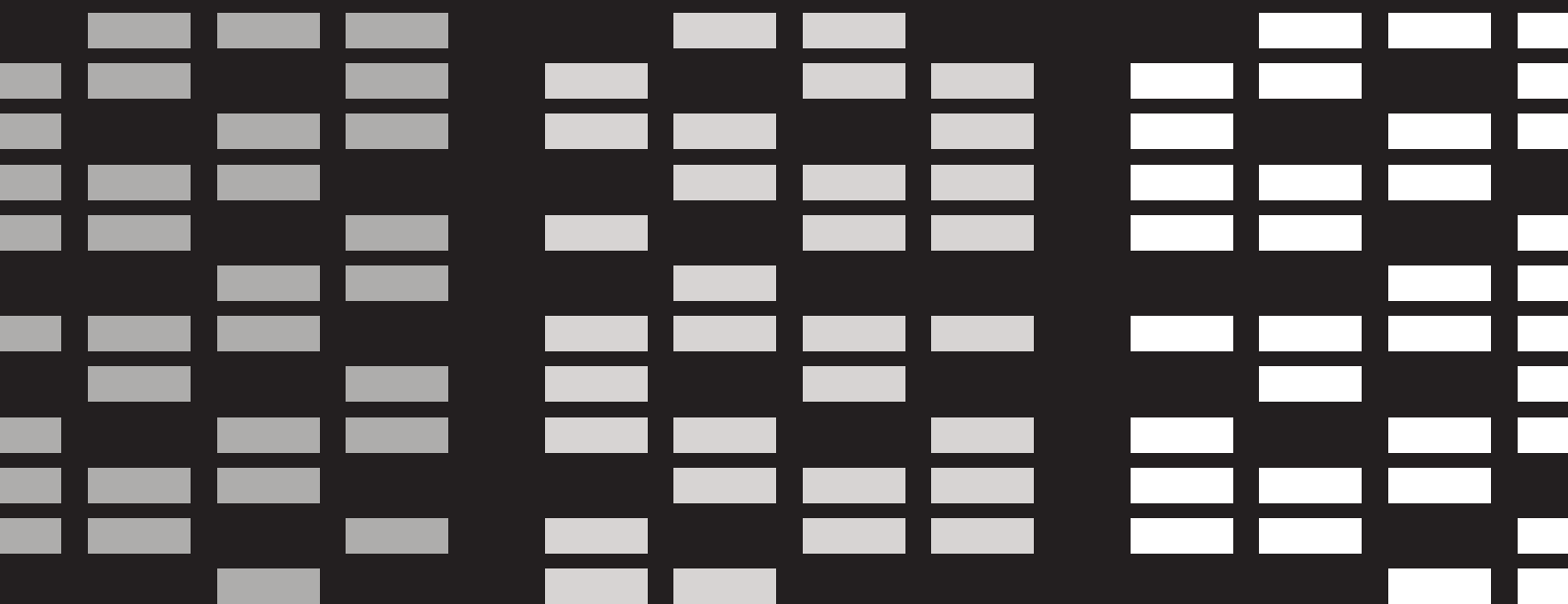
Malfunction due to the use of accessories not authorized by OXI Instruments.

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December 2025 - OXI ONE MKII OS 0.5.0 a

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