

# Yamaha GENOS

## Using a Nectar Pacer MIDI Foot Controller

### Contents

Overview.....	2
MIDI SETTINGS .....	4
External Controller .....	5
Default Mappings of the 30 CC#/Notes .....	7
List of 95 Functions that can be assigned to a CC#/Note .....	14
The default MIDI Template.....	33
Nectar Pacer MIDI Foot Controller.....	36
Program Preset A1 .....	37
Launch the PACER EDITOR.....	38
Launch the MIDI Monitor .....	46
Download the SysEx File .....	49
Preset A1 = GENOS.....	55
Using an AC Adapter .....	56
Connecting the Pacer to the GENOS.....	59
Connecting Expression Pedals to the Pacer.....	64
Connecting Foot Switches to the Pacer .....	75
Summary.....	76

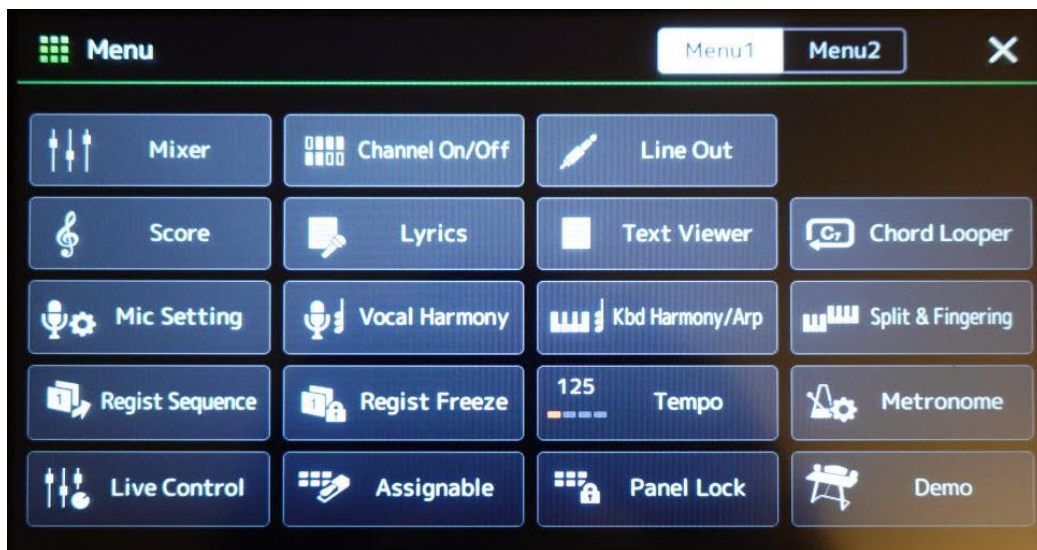
## Overview

This document will explain how to set up a Nectar Pacer MIDI Foot Controller with your Yamaha GENOS Arranger Keyboard.

Make sure you are using OS 2.02

Check your OS version:

MENU | Menu 1

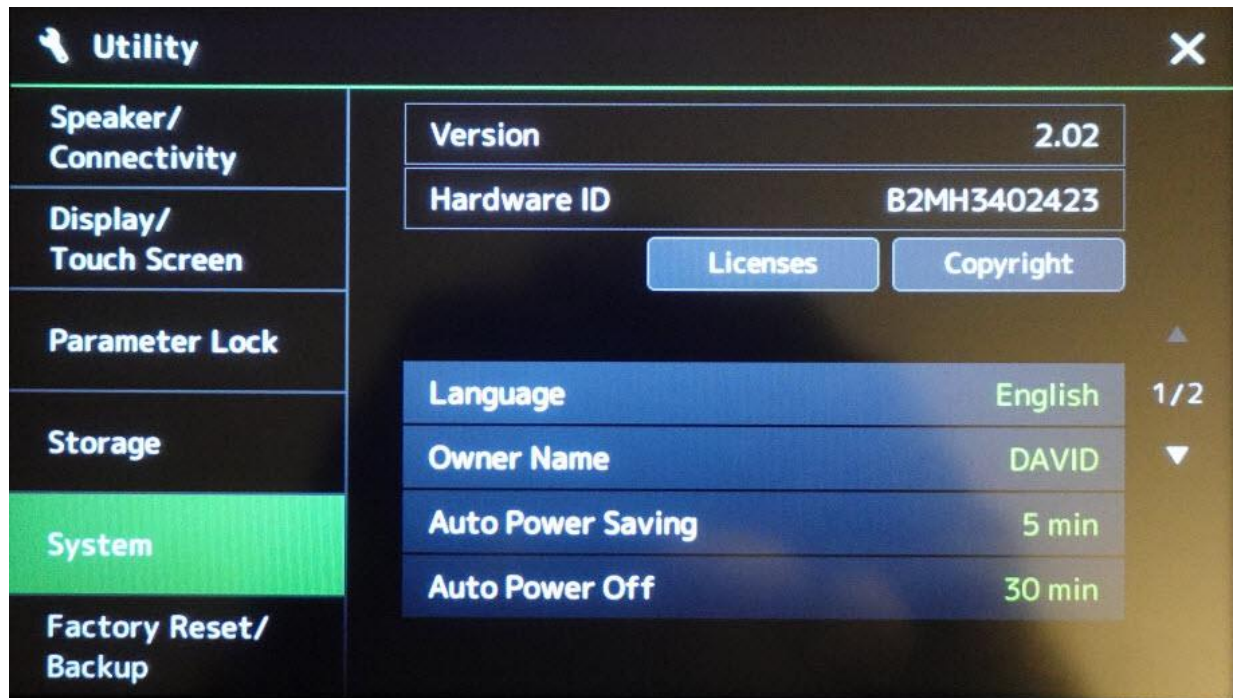


Menu 2 | Utility



## System

Version = 2.02



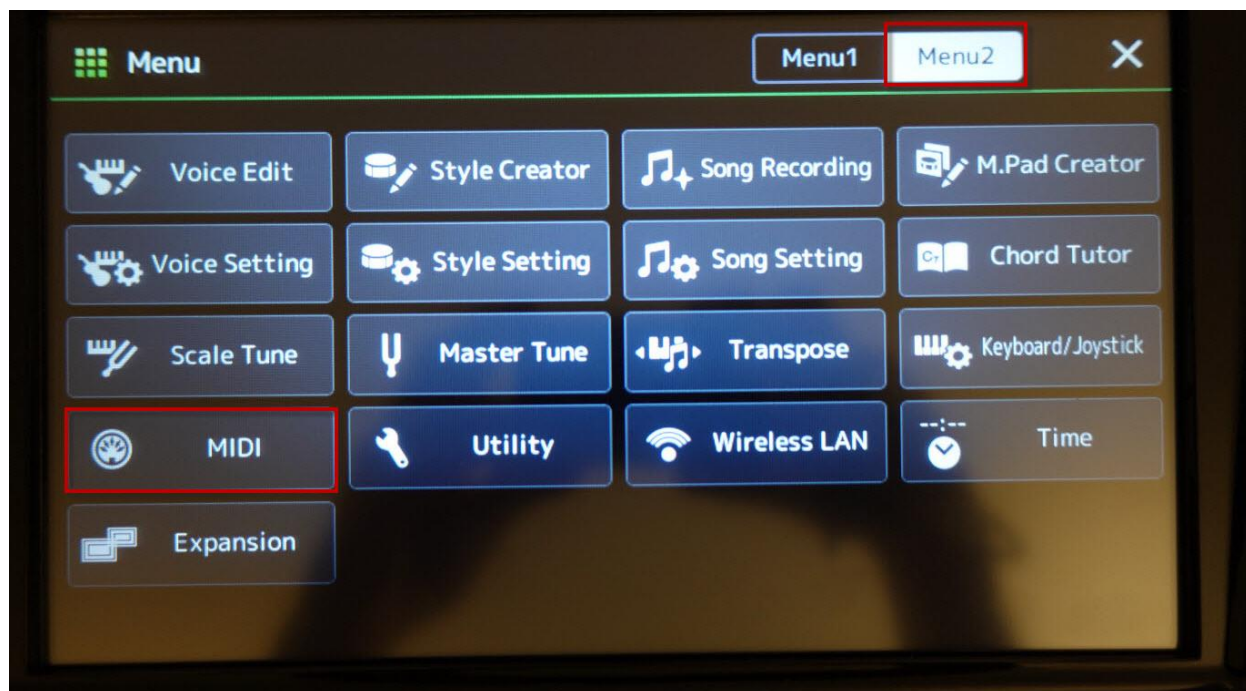
If you do not have the latest OS, download the OS update from:

[https://usa.yamaha.com/products/musical\\_instruments/keyboards/arranger\\_workstations/genos/downloads.html#product-tabs](https://usa.yamaha.com/products/musical_instruments/keyboards/arranger_workstations/genos/downloads.html#product-tabs)

## MIDI SETTINGS

Press the MENU button and open the MIDI page:

MENU | Menu 2 | MIDI



## External Controller

MENU | MENU 2 | MIDI | External Controller





Set MIDI Port = **MIDI B**



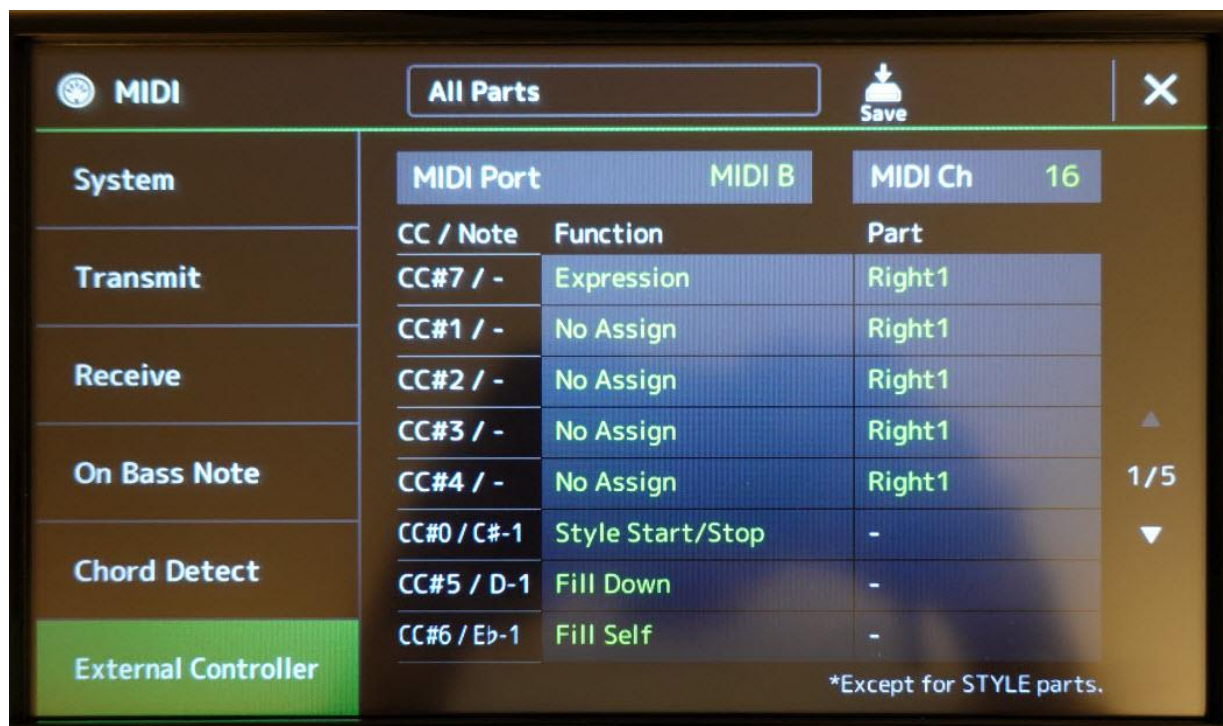
You will be connecting the Nectar Pacer to MIDI IN Port B on the Yamaha GENOS with a MIDI Cable.

## Default Mappings of the 30 CC#/Notes

Set **MIDI Channel = 16**

The Nectar Pacer will be transmitting the Control Change messages on MIDI Channel 16.

Page 1



Continuous Controller & MIDI Note Pairings

CC#	Note	MIDI Note	Default Mapping
CC 0	C# -1	13	Style Start/Stop
CC 5	D -1	14	Fill Down
CC 6	Eb -1	15	Fill Self



CC#	Note	MIDI Note	Default Mapping
CC 8	E -1	16	Fill Break
CC 9	F -1	17	Fill Up
CC 10	F# -1	18	Synchro Stop
CC 11	G -1	19	Main A
CC 12	Ab -1	20	Main B
CC 13	A -1	21	Main C
CC 14	Bb -1	22	Main D
CC 15	B -1	23	Style Start/Stop





CC#	Note	MIDI Note	Default Mapping
CC 16	C 0	24	Fill Down
CC 17	C# 0	25	Fill Self
CC 18	D 0	26	Fill Break
CC 19	Eb 0	27	Fill Up
CC 20	E 0	28	Synchro Stop
CC 21	F 0	29	Intro 1
CC 22	F# 0	30	Intro 2
CC 23	G 0	31	Intro 3



CC#	Note	MIDI Note	Default Mapping
CC 24	Ab 0	32	Tap Temp
CC 25	A0	33	Style Start/Stop
CC 26	Bb 0	34	Fill Down
CC 27	B 0	35	Fill Self
CC 28	C 1	36	Fill Break
CC 29	C# 1	37	Fill Up
CC 30	D 1	38	Synchro Stop
CC 31	Eb 1	39	Ending 1



CC#	Note	MIDI Note	Default Mapping
CC 32	E 1	40	Ending 2
CC 33	F 1	41	Ending 3
CC 34	F# 1	42	Fade In/Out

CC#	Note	MIDI Note	Default Mapping
CC 0	C# -1	13	Style Start/Stop
CC 5	D -1	14	Fill Down
CC 6	Eb -1	15	Fill Self
CC 8	E -1	16	Fill Break
CC 9	F -1	17	Fill Up
CC 10	F# -1	18	Synchro Stop
CC 11	G -1	19	Main A
CC 12	Ab -1	20	Main B
CC 13	A -1	21	Main C
CC 14	Bb -1	22	Main D
CC 15	B -1	23	Style Start/Stop
CC 16	C 0	24	Fill Down
CC 17	C# 0	25	Fill Self
CC 18	D 0	26	Fill Break
CC 19	Eb 0	27	Fill Up
CC 20	E 0	28	Synchro Stop
CC 21	F 0	29	Intro 1
CC 22	F# 0	30	Intro 2
CC 23	G 0	31	Intro 3
CC 24	Ab 0	32	Tap Temp
CC 25	A 0	33	Style Start/Stop
CC 26	Bb 0	34	Fill Down
CC 27	B 0	35	Fill Self
CC 28	C 1	36	Fill Break
CC 29	C# 1	37	Fill Up
CC 30	D 1	38	Synchro Stop
CC 31	Eb 1	39	Ending 1
CC 32	E 1	40	Ending 2
CC 33	F 1	41	Ending 3
CC 34	F# 1	42	Fade In/Out

Note: These are the default mappings for Preset = **All Parts**.

You are free to create your own mapping scheme and save them as a User Preset.

You can assign various functions to these 30 CC#/Note pairs:

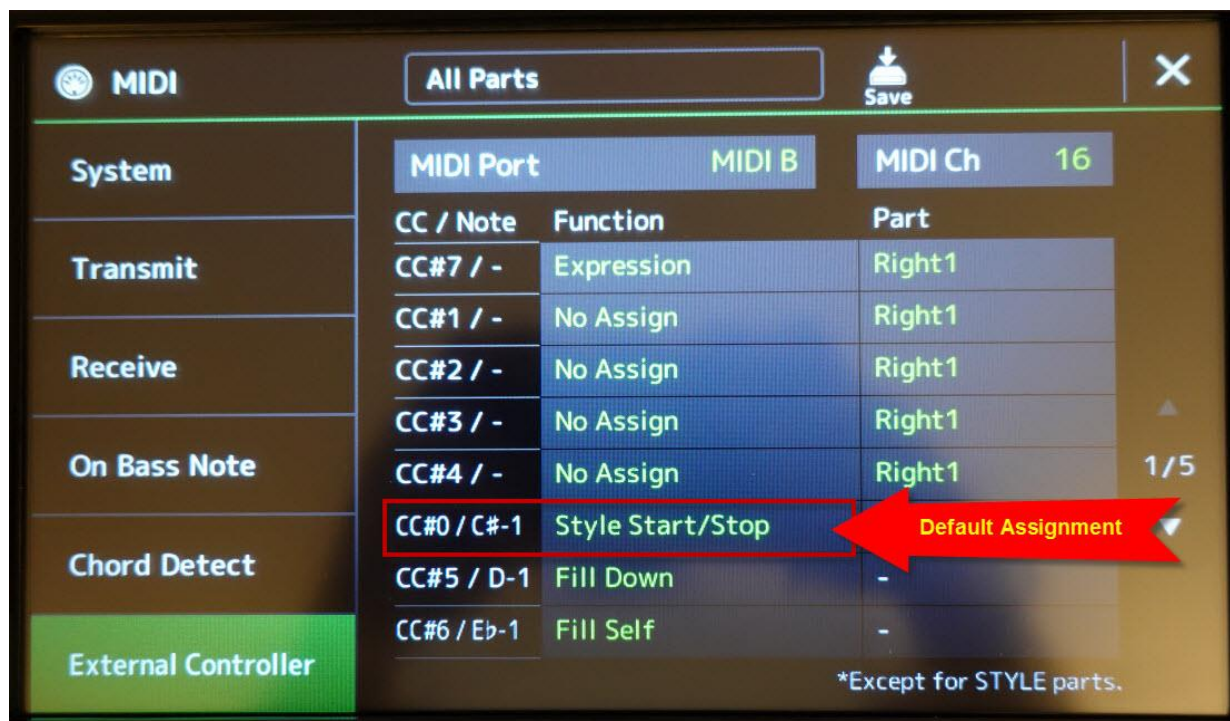
CC_Number	Note_Name	MIDI_Note
CC 0	C# -1	13
CC 5	D -1	14
CC 6	Eb -1	15
CC 8	E -1	16
CC 9	F -1	17
CC 10	F# -1	18
CC 11	G -1	19
CC 12	Ab -1	20
CC 13	A -1	21
CC 14	Bb -1	22
CC 15	B -1	23
CC 16	C 0	24
CC 17	C# 0	25
CC 18	D 0	26
CC 19	Eb 0	27
CC 20	E 0	28
CC 21	F 0	29
CC 22	F# 0	30
CC 23	G 0	31
CC 24	Ab 0	32
CC 25	A 0	33
CC 26	Bb 0	34
CC 27	B 0	35
CC 28	C 1	36
CC 29	C# 1	37
CC 30	D 1	38
CC 31	Eb 1	39
CC 32	E 1	40
CC 33	F 1	41
CC 34	F# 1	42



## List of 95 Functions that can be assigned to a CC#/Note

The default function assigned to CC#0 = Style Start/Stop

Click on this to see a list of all possible functions that you can map.

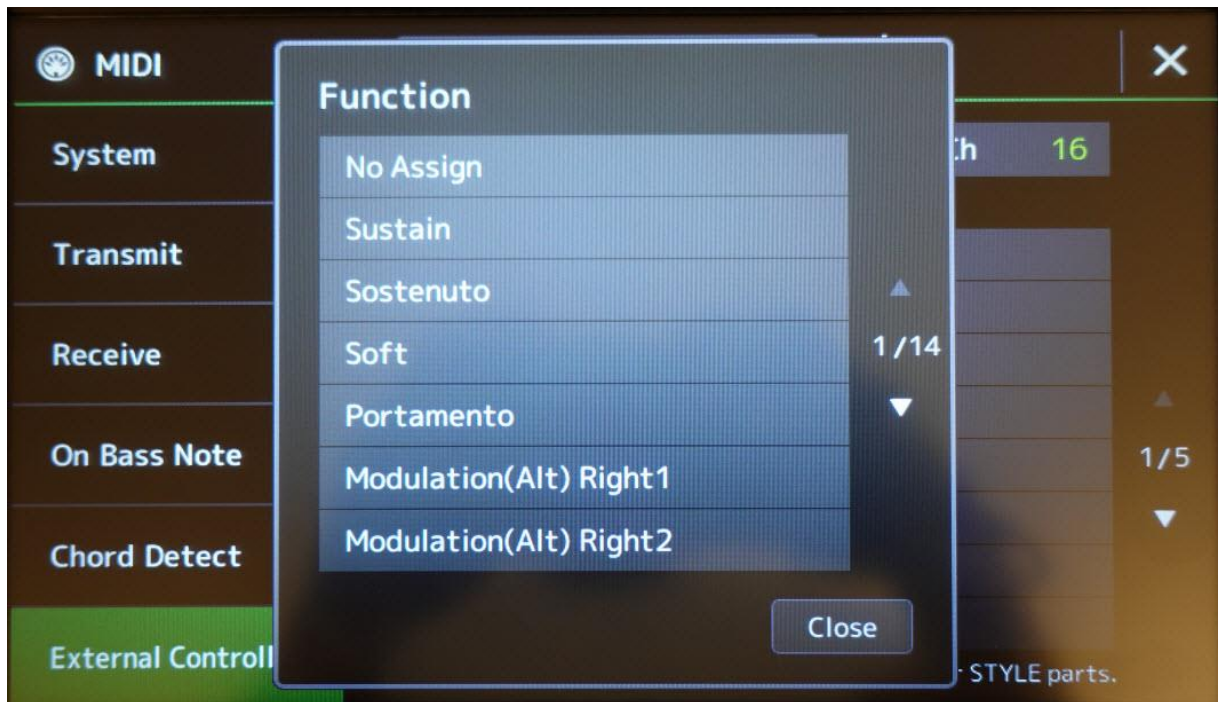


There are 95 Functions spanning 14 pages that you can assign to this CC#/Note



Here is the complete list of assignable Functions:

Page 1



- No Assign
- Sustain
- Sostenuto
- Soft
- Portamento
- Modulation (Alt) Right 1
- Modulation (Alt) Right 2



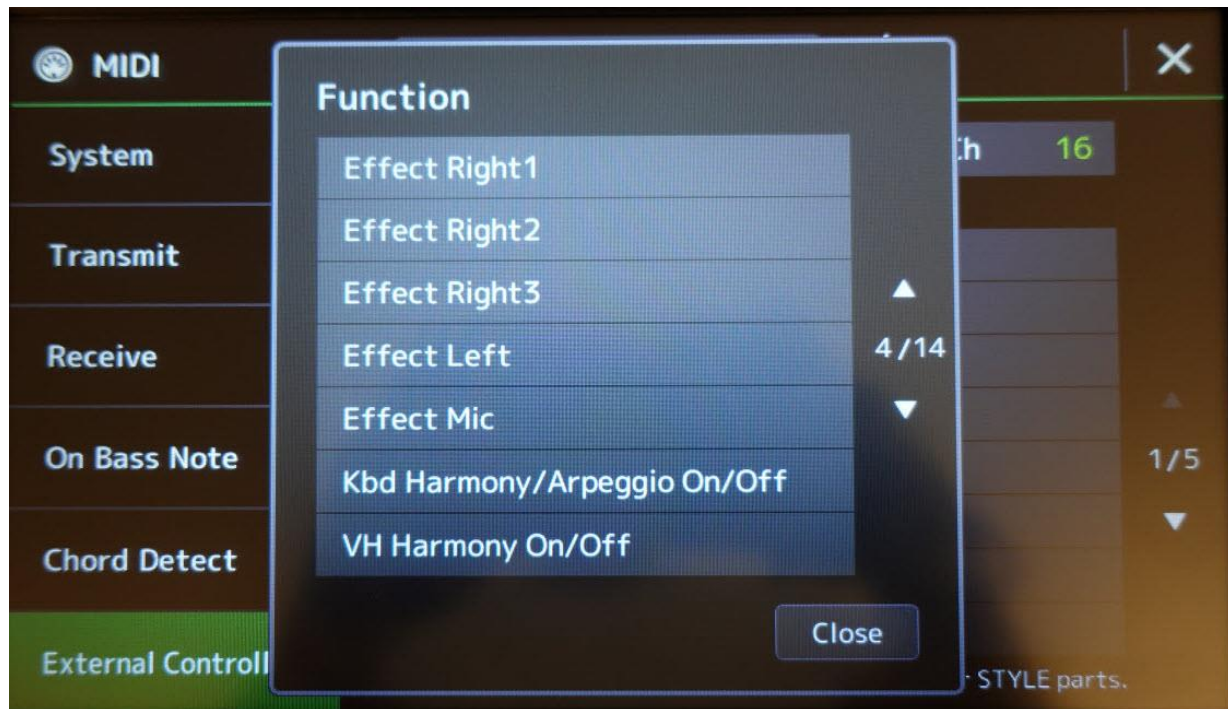
- Modulation (Alt) Right 3
- Modulation (Alt) Left
- Articulation 1 Right 1
- Articulation 1 Right 2
- Articulation 1 Right 3
- Articulation 1 Left
- Articulation 2 Right 1



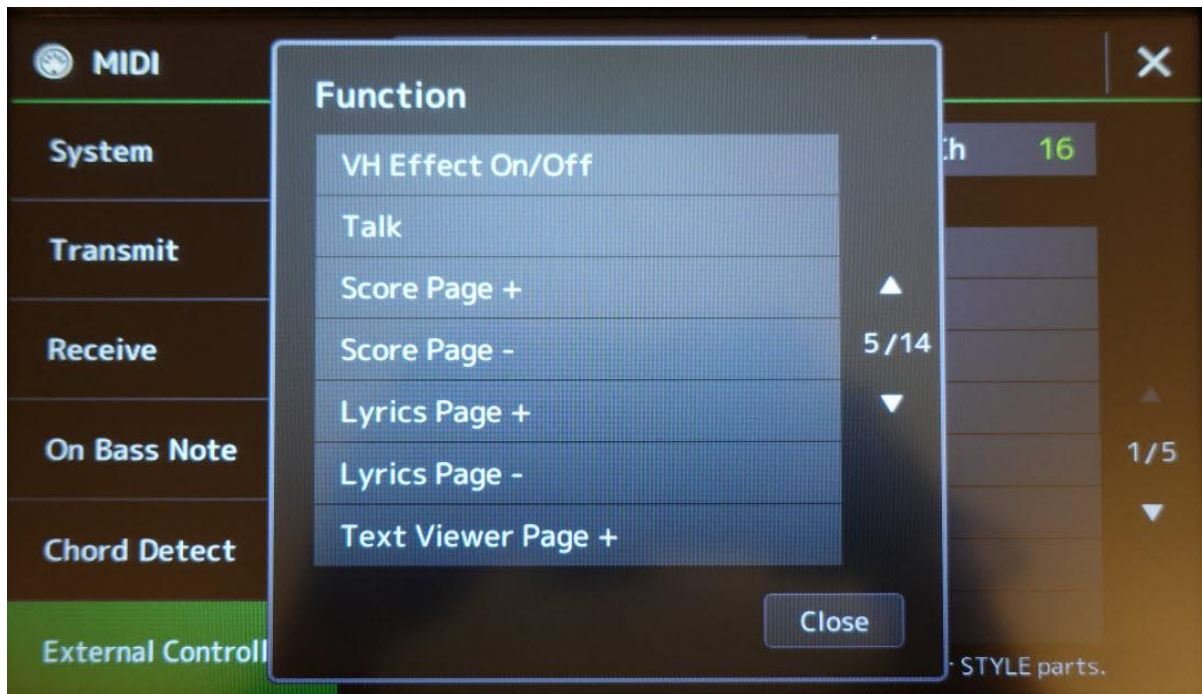


- Articulation 2 Right 2
- Articulation 2 Right 3
- Articulation 2 Left
- Articulation 3 Right 1
- Articulation 3 Right 2
- Articulation 3 Right 3
- Articulation 3 Left

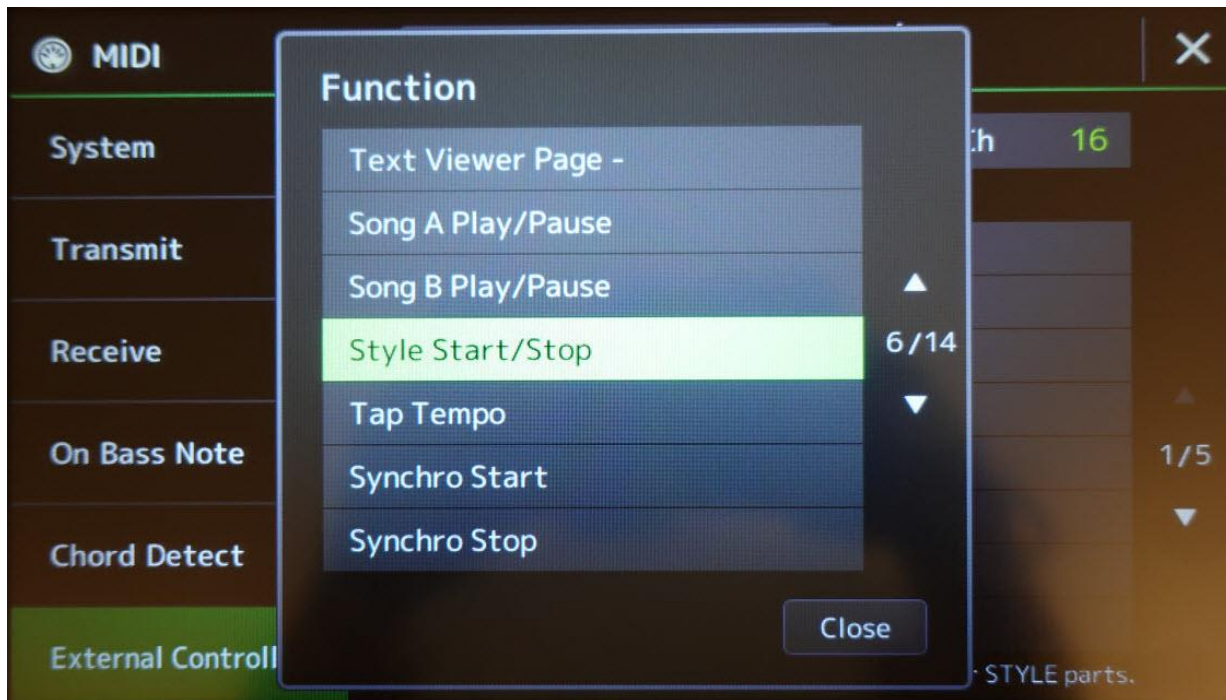




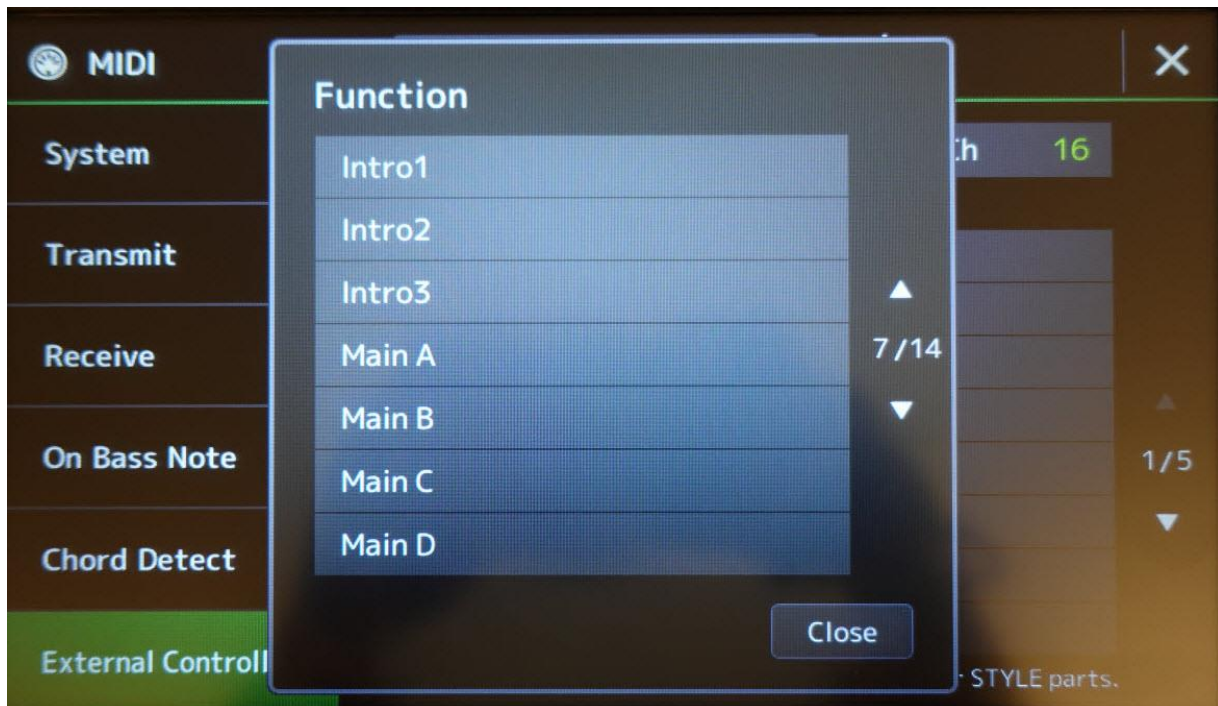
- Effect Right 1
- Effect Right 2
- Effect Right 3
- Effect Left
- Effect Mic
- Keyboard Harmony/Arpeggio On/Off
- Vocal Harmony On/Off



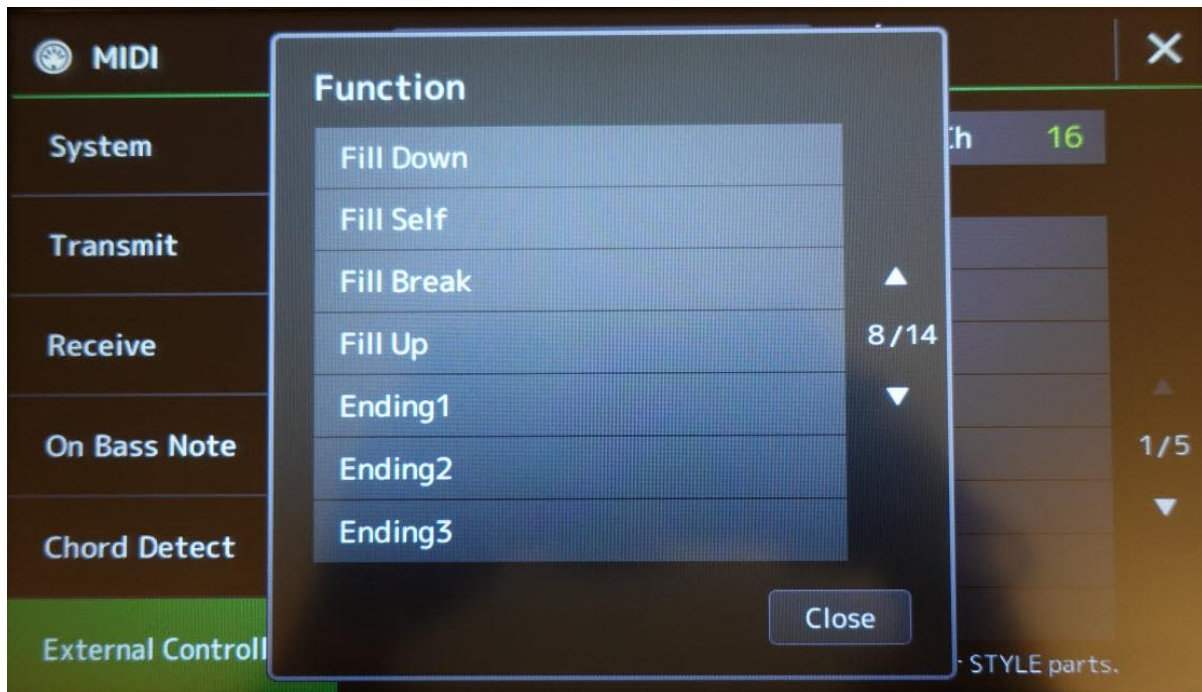
- Vocal Harmony Effect On/Off
- Talk
- Score Page +
- Score Page –
- Lyrics Page +
- Lyrics Page –
- Text Viewer Page +



- Text Viewer Page –
- Song A Play/Pause
- Song B Play/Pause
- Style Start/Stop
- Tap Tempo
- Synchro Start
- Synchro Stop



- Intro 1
- Intro 2
- Intro 3
- Main A
- Main B
- Main C
- Main D

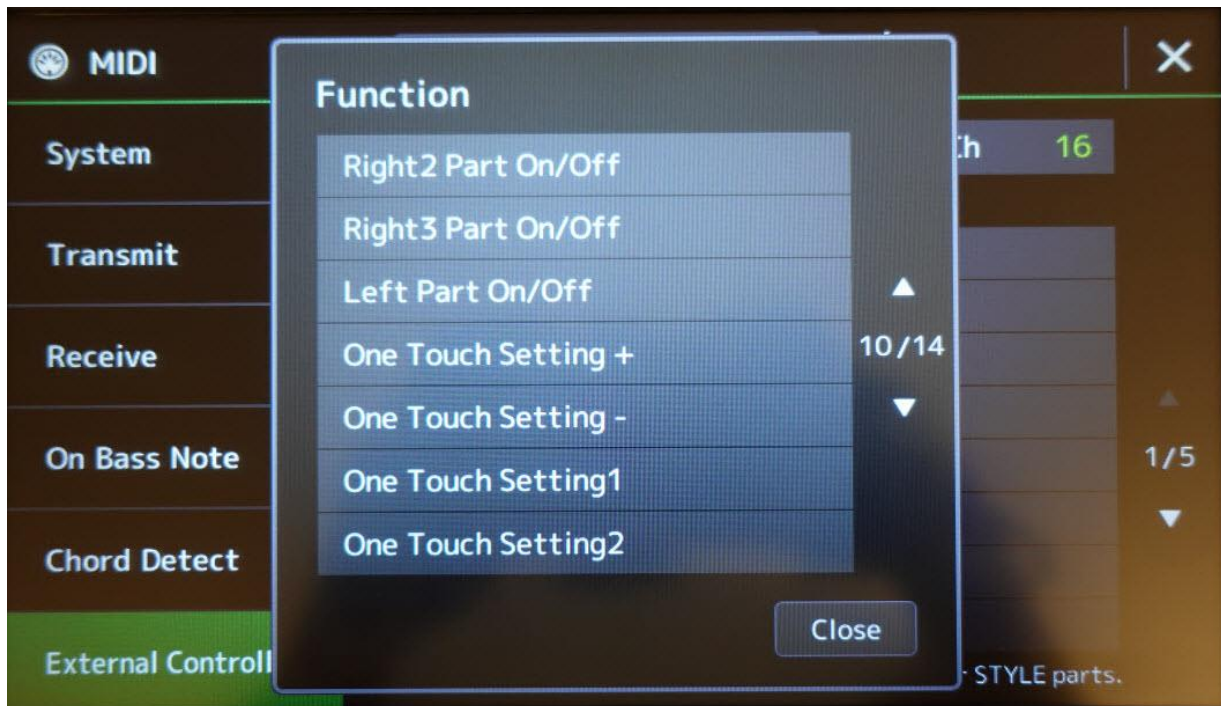


- Fill Down
- Fill Self
- Fill Break
- Fill Up
- Ending 1
- Ending 2
- Ending 3

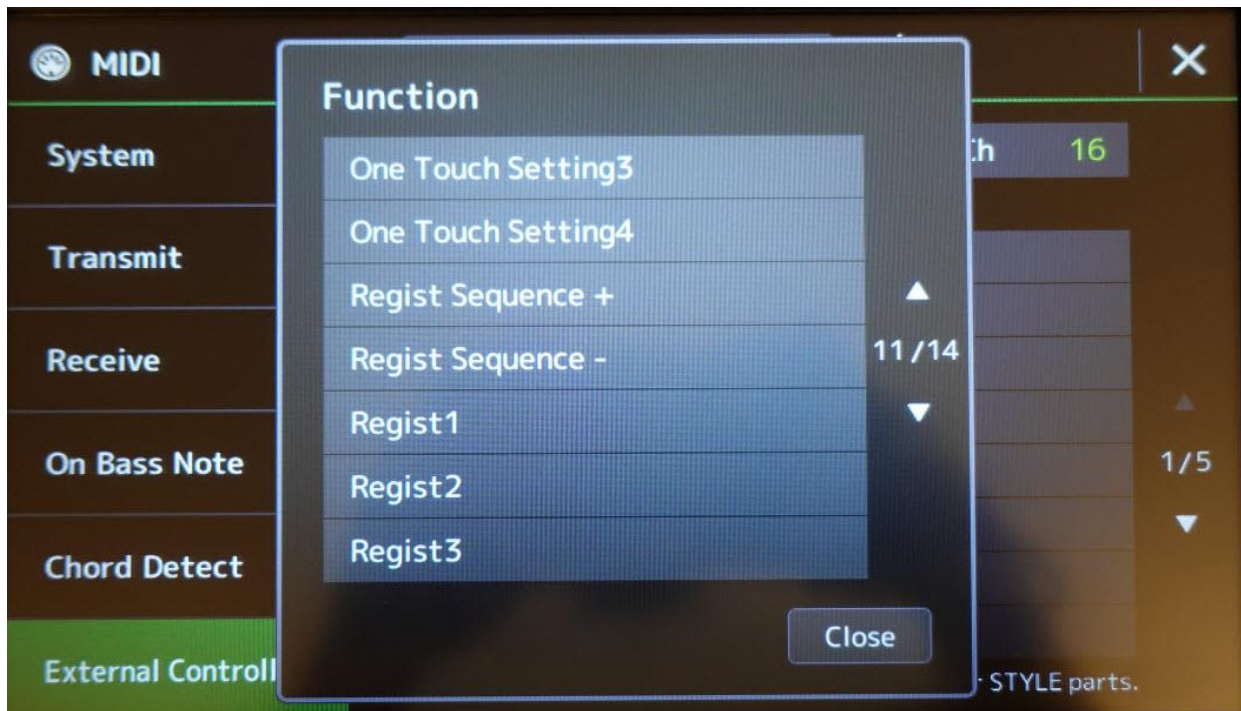




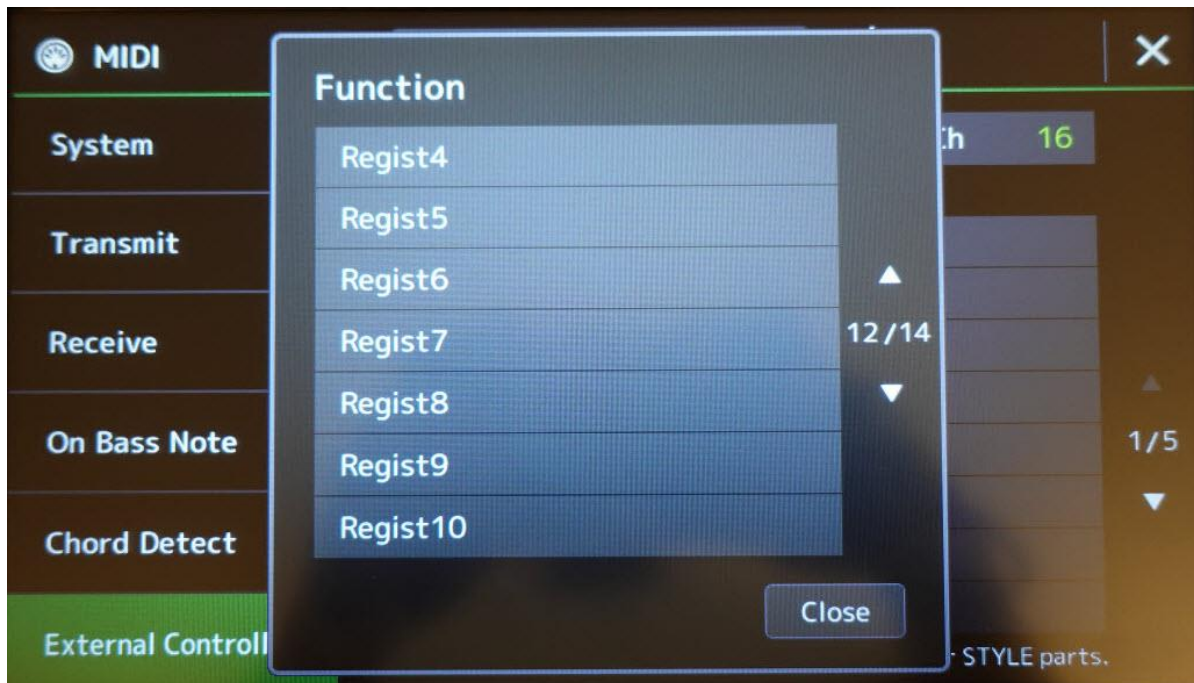
- Fade In/Out
- Fingered/Fingered On Bass
- Bass Hold
- Percussion 1
- Percussion 2
- Percussion 3
- Right 1 Part On/Off



- Right 2 Part On/Off
- Right 3 Part On/Off
- Left Part On/Off
- One Touch Setting +
- One Touch Setting –
- One Touch Setting 1
- One Touch Setting 2



- One Touch Setting 3
- One Touch Setting 4
- Registration Sequence +
- Registration Sequence –
- Registration 1
- Registration 2
- Registration 3

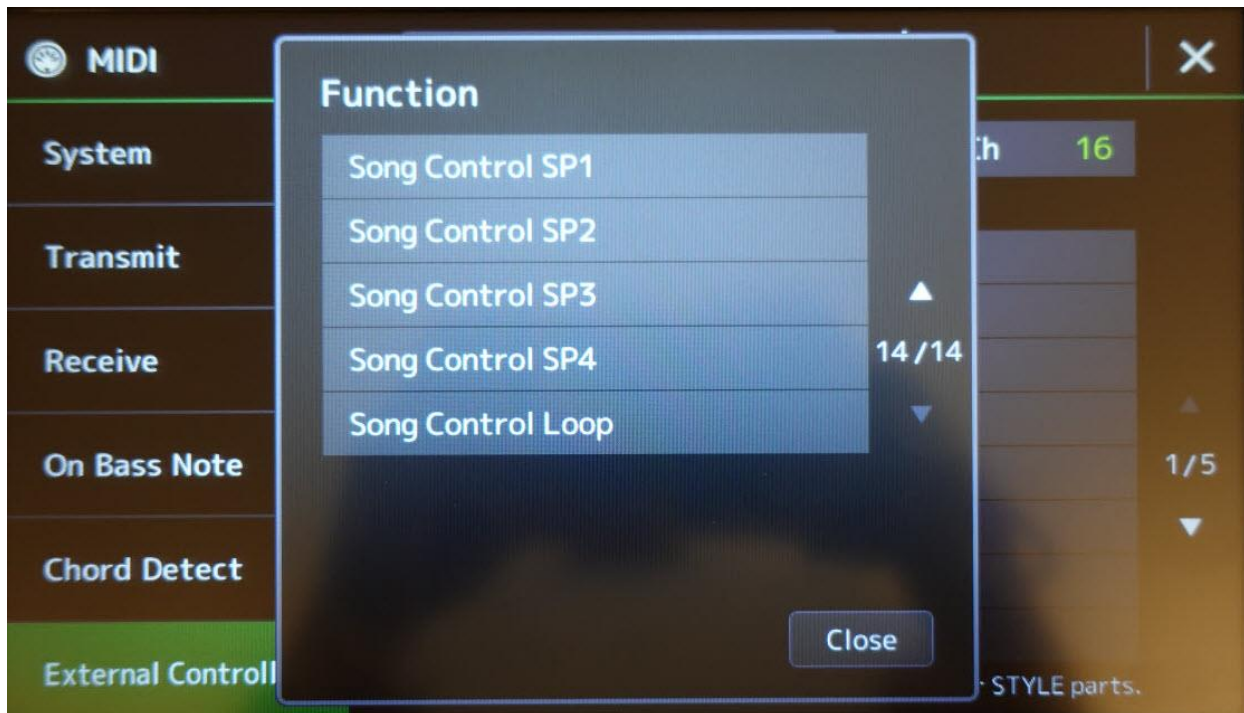


- Registration 4
- Registration 5
- Registration 6
- Registration 7
- Registration 8
- Registration 9
- Registration 10



- Transpose +
- Transpose –
- Multi Pad 1
- Multi Pad 2
- Multi Pad 3
- Multi Pad 4
- Multi Pad Stop





- Song Control SP1
- Song Control SP2
- Song Control SP3
- Song Control SP4
- Song Control Loop

There are a total of 95 different functions you can assign to any of the 30 CC# and MIDI Notes.

List of all 95 Functions:

- No Assign
- Sustain
- Sostenuto
- Soft
- Portamento
- Modulation (Alt) Right 1
- Modulation (Alt) Right 2
- Modulation (Alt) Right 3
- Modulation (Alt) Left
- Articulation 1 Right 1
- Articulation 1 Right 2
- Articulation 1 Right 3
- Articulation 1 Left
- Articulation 2 Right 1
- Articulation 2 Right 2
- Articulation 2 Right 3
- Articulation 2 Left
- Articulation 3 Right 1
- Articulation 3 Right 2
- Articulation 3 Right 3
- Articulation 3 Left
- Effect Right 1
- Effect Right 2
- Effect Right 3
- Effect Left
- Effect Mic
- Keyboard Harmony/Arpeggio On/Off
- Vocal Harmony On/Off
- Vocal Harmony Effect On/Off
- Talk
- Score Page +
- Score Page –
- Lyrics Page +
- Lyrics Page –
- Text Viewer Page +
- Text Viewer Page –
- Song A Play/Pause
- Song B Play/Pause
- Style Start/Stop

- Tap Tempo
- Synchro Start
- Synchro Stop
- Intro 1
- Intro 2
- Intro 3
- Main A
- Main B
- Main C
- Main D
- Fill Down
- Fill Self
- Fill Break
- Fill Up
- Ending 1
- Ending 2
- Ending 3
- Fade In/Out
- Fingered/Fingered On Bass
- Bass Hold
- Percussion 1
- Percussion 2
- Percussion 3
- Right 1 Part On/Off
- Right 2 Part On/Off
- Right 3 Part On/Off
- Left Part On/Off
- One Touch Setting +
- One Touch Setting –
- One Touch Setting 1
- One Touch Setting 2
- One Touch Setting 3
- One Touch Setting 4
- Registration Sequence +
- Registration Sequence –
- Registration 1
- Registration 2
- Registration 3
- Registration 4
- Registration 5
- Registration 6
- Registration 7

- Registration 8
- Registration 9
- Registration 10
- Transpose +
- Transpose –
- Multi Pad 1
- Multi Pad 2
- Multi Pad 3
- Multi Pad 4
- Multi Pad Stop
- Song Control SP1
- Song Control SP2
- Song Control SP3
- Song Control SP4
- Song Control Loop

**Note:**

The GENOS offers extreme flexibility for configuring any External MIDI Controller.

You can select from a list of 95 different functions to map to 30 different CC#/Notes.

## The default MIDI Template

The default MIDI Template is **All Parts**

The screenshot shows the MIDI Template screen on a Yamaha GENOS. The 'All Parts' template is selected and highlighted with a red box. The screen displays a table of MIDI assignments for various functions. The 'External Controller' option is highlighted in green at the bottom left. A 'Save' button with a download icon is at the top right. A page indicator '1/5' is on the right side of the table.

System	MIDI Port	MIDI B	MIDI Ch	16
Transmit	CC / Note	Function	Part	
	CC#7 / -	Expression	Right1	
	CC#1 / -	No Assign	Right1	
Receive	CC#2 / -	No Assign	Right1	
	CC#3 / -	No Assign	Right1	
On Bass Note	CC#4 / -	No Assign	Right1	
	CC#0 / C#-1	Style Start/Stop	-	
Chord Detect	CC#5 / D-1	Fill Down	-	
External Controller	CC#6 / Eb-1	Fill Self	-	

\*Except for STYLE parts.

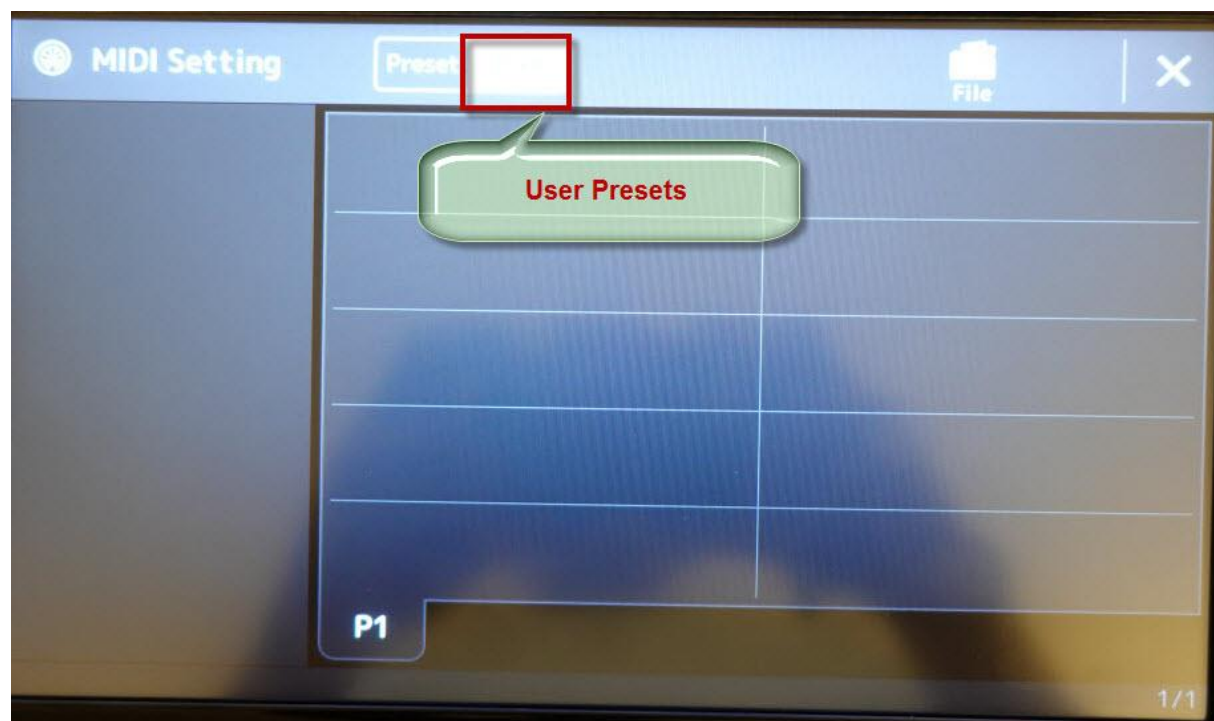


There are 10 MIDI Presets:



- All Parts
- Keyboard & Style
- Master Keyboard 1
- Master Keyboard 2
- Clock External.A
- MIDI Accordion 1
- MIDI Accordion 2
- MIDI Pedal 1
- MIDI Pedal 2
- MIDI OFF

You can modify the factory presets and save them as **User Presets**



You can save up to 10 User Presets.

## Nectar Pacer MIDI Foot Controller

Use the default mapping of the Factory Preset = **All Parts**

CC#	Note	MIDI Note	Default Mapping
CC 0	C# -1	13	Style Start/Stop
CC 5	D -1	14	Fill Down
CC 6	Eb -1	15	Fill Self
CC 8	E -1	16	Fill Break
CC 9	F -1	17	Fill Up
CC 10	F# -1	18	Synchro Stop
CC 11	G -1	19	Main A
CC 12	Ab -1	20	Main B
CC 13	A -1	21	Main C
CC 14	Bb -1	22	Main D
CC 15	B -1	23	Style Start/Stop
CC 16	C 0	24	Fill Down
CC 17	C# 0	25	Fill Self
CC 18	D 0	26	Fill Break
CC 19	Eb 0	27	Fill Up
CC 20	E 0	28	Synchro Stop
CC 21	F 0	29	Intro 1
CC 22	F# 0	30	Intro 2
CC 23	G 0	31	Intro 3
CC 24	Ab 0	32	Tap Temp
CC 25	A0	33	Style Start/Stop
CC 26	Bb 0	34	Fill Down
CC 27	B 0	35	Fill Self
CC 28	C 1	36	Fill Break
CC 29	C# 1	37	Fill Up
CC 30	D 1	38	Synchro Stop
CC 31	Eb 1	39	Ending 1
CC 32	E 1	40	Ending 2
CC 33	F 1	41	Ending 3
CC 34	F# 1	42	Fade In/Out

You can use either the CC# or the MIDI Note Numbers to trigger various functions. In this tutorial you will be using the CC Numbers.

## Program Preset A1

You are going to program the 10 Switches in Preset A1 with these attributes:

Switch	Function	CC#	LED Color
1	INTRO 2	22	Green
2	INTRO 3	23	Green
3	FILL DOWN	26	Pink
4	FILL SELF	27	Teal
5	FILL UP	29	Pink
6	FILL BREAK	28	Yellow
A	INTRO 1	21	Green
B	ENDING 1	31	Red
C	ENDING 2	32	Red
D	ENDING 3	33	Red

## Launch the PACER EDITOR

Connect the Nectar Pacer to your PC using a USB cable.

Open Chrome

<https://studiocode.dev/pacer-editor/#/>

**Overview** Preset Controls Preset MIDI Import/Export Monitor Help

MIDI input: PACER MIDI output: PACER

### Presets

☐ Always read from Pacer

CURRENT					
A1	A2	A3	A4	A5	A6
B1	B2	B3	B4	B5	B6
C1	C2	C3	C4	C5	C6
D1	D2	D3	D4	D5	D6

**Read Pacer**

Load sysex file

Click **Read Pacer**



These are the 24 Factory Presets on the Pacer

**Overview**   **Preset Controls**   **Preset MIDI**   **Import/Export**   **Monitor**   **Help**

MIDI input: PACER   MIDI output: PACER

## Presets

**24 Factory Presets**

CUR: PRGM1

☐ Always read from Pacer

A1 PRGM1	A2 PRGM2	A3 PRGM3	A4 PRGM4	A5 NOTES	A6 RELAY
B1 HELX1	B2 HELX2	B3 PODHD	B4 POD2	B5 AXFX1	B6 AXFX2
C1 11RAC	C2 KPA	C3 L6LOP	C4 AXLOP	C5 OCTRK	C6 EHX45
D1 G-MST	D2 COLOR	D3 KBDTL	D4 GM CC	D5 MMC	D6

Read Pacer

Load sysex file

CLEAR ALL

You are going to program the 10 Switches on Preset A1

current: **PRGM1**

FS 1 PRG STEP 0 to 127 global ch.	FS 2 PRG STEP 127 to 0 global ch.	FS 3 OFF	FS 4 OFF	EXP 1 CC7 min 0 max 127 global ch.	EXP 2 CC11 min 0 max 127 global ch.
A PRESET SELECT Track global ch.		B PRESET SELECT Transport global ch.		C PRESET DEC global ch.	
D PRESET INC global ch.					
1 PRG BANK 0 0:0 global ch.	2 PRG BANK 1 0:0 global ch.	3 PRG BANK 2 0:0 global ch.	4 PRG BANK 3 0:0 global ch.	5 PRG BANK 4 0:0 global ch.	6 PRG BANK 5 0:0 global ch.

**A1: PRGM1**

**Preset A1**

FS 1 PRG STEP 0 to 127 global ch.	FS 2 PRG STEP 127 to 0 global ch.	FS 3 OFF	FS 4 OFF	EXP 1 CC7 min 0 max 127 global ch.	EXP 2 CC11 min 0 max 127 global ch.
A PRESET SELECT Track global ch.		B PRESET SELECT Transport global ch.		C PRESET DEC global ch.	
D PRESET INC global ch.					
1 PRG BANK 0 0:0 global ch.	2 PRG BANK 1 0:0 global ch.	3 PRG BANK 2 0:0 global ch.	4 PRG BANK 3 0:0 global ch.	5 PRG BANK 4 0:0 global ch.	6 PRG BANK 5 0:0 global ch.

Select **Switch 1** within Preset A1

**A1: PRGM1**

<b>FS 1</b> <b>PRG STEP 0 to 127</b> global ch.	<b>FS 2</b> <b>PRG STEP 127 to 0</b> global ch.	<b>FS 3</b> <b>OFF</b>
<div><div>Select</div><div><b>1</b> <b>PRG BANK 0 0:0</b> global ch. <span>click to edit</span></div></div>	<b>A</b> <b>PRESET SELECT Track</b> global ch.	<b>B</b> <b>PRESET SELECT Transport</b> global ch.
<b>2</b> <b>PRG BANK 1 0:0</b> global ch.	<b>3</b> <b>PRG BANK 2 0:0</b> global ch.	

### Preset A1: PRGM1

Name:  max 5 characters

FS 1	FS 2	FS 3	FS 4	EXP 1	EXP 2
A	B	C	D		
<b>1</b>	2	3	4	5	6

Stompswitch 1:

Control mode:

Type	Data 1	Data 2	Data 3	MIDI Ch.	LED Off	LED On	LED Num	LED MIDI
Step 1: <b>Program &amp; Bank</b>	<input type="text" value="0"/> program	<input type="text" value="0"/> bank LSB	<input type="text" value="0"/> bank MSB	<input type="text" value="global"/>	<input type="text" value="Off"/>	<input type="text" value="Off"/>	<input type="text" value="default"/>	<input type="text" value="0"/>
Step 2: OFF								
Step 3: OFF								
Step 4: OFF								
Step 5: OFF								
Step 6: OFF								

Select Step 1 = CC Trigger

## Stompswitch 1:

Control mode: All steps in one shot ▼

	Type	Data 1	Data 2	Data 3
Step 1:	Program & Bank ▼	0 program	0 bank LSB	0 bank MSB
Step 2:	CC Trigger			
Step 3:	CC Step			
Step 4:	Note			
Step 5:	Note Toggle			
Step 6:	Program & Bank			
	Program Step			
	NRPN Coarse			
	NRPN Fine			
	MIDI Machine Control			
	Relay Outputs			
	Preset Select			
	Preset Inc/Dec			
	Step Select			
	Step Inc/Dec			
	OFF			

## Stompswitch 1:

Control mode: All steps in one shot ▼

	Type	Data 1	Data 2	Data 3
Step 1:	CC Trigger ▼	0 controller	0 down	0 up
Step 2:	OFF ▼			
Step 3:	OFF ▼			
Step 4:	OFF ▼			
Step 5:	OFF ▼			
Step 6:	OFF ▼			

Update Pacer

Enter:

Data 1 = 22 (This is the Controller Number)

Data 2 = 127 (This is the value when the switch is down)

Data 3 = 0 (This is the value when the switch is up)

MIDI Channel = 16

### Stompswitch 1:

Control mode: All steps in one shot ▼

	Type	Data 1	Data 2	Data 3	MIDI Ch.
Step 1:	CC Trigger ▼	22 controller	127 down	0 up	16 ▼
Step 2:	OFF ▼				
Step 3:	OFF ▼				
Step 4:	OFF ▼				
Step 5:	OFF ▼				
Step 6:	OFF ▼				

Update Pacer

Enter:

LED Off = Green

LED On = White

LED Number = Bottom

LED MIDI = 0

MIDI Ch.	LED Off	LED On	LED Num	LED MIDI
16 ▼	7A Green ▼	12A White ▼	bottom ▼	0 ▼

This is how the attributes for Switch 1 should appear.

### Preset A1: PRGM1

Name:  max 5 characters

FS 1	FS 2	FS 3	FS 4	EXP 1	EXP 2
A	B	C	D		
1	2	3	4	5	6

Stompswitch 1:

Control mode:

Type	Data 1	Data 2	Data 3	MIDI Ch.	LED Off	LED On	LED Num	LED MIDI
Step 1:	<input type="text" value="CC Trigger"/>	<input type="text" value="22"/> <small>controller</small>	<input type="text" value="127"/> <small>down</small>	<input type="text" value="0"/> <small>up</small>	<input type="text" value="16"/>	<input type="text" value="7A Green"/>	<input type="text" value="12A White"/>	<input type="text" value="bottom"/>
Step 2:	<input type="text" value="OFF"/>							
Step 3:	<input type="text" value="OFF"/>							
Step 4:	<input type="text" value="OFF"/>							
Step 5:	<input type="text" value="OFF"/>							
Step 6:	<input type="text" value="OFF"/>							

Name the Preset A1 = GENOS

### Preset A1: GENOS

Name:  max 5 characters

**Name = GENOS**

FS 1	FS 2	FS 3	FS 4	EXP 1	EXP 2
A	B	C	D		
1	2	3	4	5	6



# Preset A1: GENOS

Name:  max 5 characters

FS 1	FS 2	FS 3	FS 4	EXP 1	EXP 2
A	B	C	D		
1	2	3	4	5	6

## Stompswitch 1:

Control mode:

	Type	Data 1	Data 2	Data 3	MIDI Ch.
Step 1:	<input type="text" value="CC Trigger"/>	<input type="text" value="22"/> controller	<input type="text" value="127"/> down	<input type="text" value="0"/> up	<input type="text" value="16"/>
Step 2:	<input type="text" value="OFF"/>				
Step 3:	<input type="text" value="OFF"/>				
Step 4:	<input type="text" value="OFF"/>				
Step 5:	<input type="text" value="OFF"/>				
Step 6:	<input type="text" value="OFF"/>				

Press Update Pacer

Press the Data Knob on the Pacer twice.

The display will now read:

**GENOS**  
**A1**

Press down and hold Switch 1

The display will read:

**CC 022**  
**127**

This indicates the Pacer is sending Control Change 22 when switch 1 is depressed.

Release Switch 1

The display will read:

**CC 022**  
**000**


## Launch the MIDI Monitor

Open Chrome:

<https://studiocode.dev/midi-monitor/>

Keep the last  messages. Middle C (60) octave:  Pitch Bend range:  CLEAR [Documentation](#)

	time delta (ms)	source	data (hex)	data (dec)	ch.	message
<b>Devices:</b>						
unknown man. <input type="checkbox"/>						
<b>loopMIDI Port IN</b>						
unknown man. <input type="checkbox"/>						
<b>loopMIDI Port OUT</b>						
unknown man. <input checked="" type="checkbox"/>						
<b>PACER</b>						
unknown man. <input type="checkbox"/>						
<b>MIDIIN2 (PACER)</b>						




Turn On

Press and hold down Switch 1

Keep the last  messages. Middle C (60) octave:  Pitch Bend range:  CLEAR [Documentation](#)

	time delta (ms)	source	data (hex)	data (dec)	ch.	message
	0.00	PACER	BF 16 7F	191 022 127	16	CC #22 value 127 100%



MIDI Ch 16

CC #22

The MIDI Monitor will confirm the Pacer is sending CC #22 with a value of 127 on Channel 16.

Release Switch 1

You will see a new entry confirming that a value of 0 has been sent for CC #22 on Channel 16.

Keep the last  messages. Middle C (60) octave:  Pitch Bend range:  [CLEAR](#) [Documentation](#)

[show filters](#)

**Devices:**

unknown man. ☐

**loopMIDI Port IN**

unknown man. ☐

**loopMIDI Port OUT**

unknown man. ☒

**PACER**

unknown man. ☐

**MIDIIN2 (PACER)**

time delta (ms)	source	data (hex)	data (dec)	ch.	message
9984.00	PACER	BF 16 00	191 022 000	16	CC #22 value 0 0%
0.00	PACER	BF 16 7F	191 022 127	16	CC #22 value 127 100%

**Value = 0**

This verifies the Switch 1 is acting like a CC trigger.

Notice the color of the LED on Switch 1.

It is green.

The color changes to white when you press down.

This gives you a visual cue when the switch is activated.

Program the other switches according to this table:

Switch	Function	CC#	LED Color
1	INTRO 2	22	Green
2	INTRO 3	23	Green
3	FILL DOWN	26	Pink
4	FILL SELF	27	Teal
5	FILL UP	29	Pink
6	FILL BREAK	28	Yellow
A	INTRO 1	21	Green
B	ENDING 1	31	Red
C	ENDING 2	32	Red
D	ENDING 3	33	Red

This is how Preset A1 will appear when all 10 Switches have been programmed.

**A1: GENOS**

<b>FS 1</b> PRG STEP 0 to 127 <small>global ch.</small>	<b>FS 2</b> PRG STEP 127 to 0 <small>global ch.</small>	<b>FS 3</b> OFF	<b>FS 4</b> OFF	<b>EXP 1</b> CC7 min 0 max 127 <small>global ch.</small>	<b>EXP 2</b> CC11 min 0 max 127 <small>global ch.</small>
<b>A</b> CC21 0-127 0 <small>ch. 16</small> <div style="display: flex; align-items: center;"> <input type="checkbox"/> <div style="width: 15px; height: 15px; background-color: green; margin-left: 5px;"></div> </div>		<b>B</b> CC31 0-127 0 <small>ch. 16</small> <div style="display: flex; align-items: center;"> <input type="checkbox"/> <div style="width: 15px; height: 15px; background-color: red; margin-left: 5px;"></div> </div>	<b>C</b> CC32 0-127 0 <small>ch. 16</small> <div style="display: flex; align-items: center;"> <input type="checkbox"/> <div style="width: 15px; height: 15px; background-color: red; margin-left: 5px;"></div> </div>	<b>D</b> CC33 0-127 0 <small>ch. 16</small> <div style="display: flex; align-items: center;"> <input type="checkbox"/> <div style="width: 15px; height: 15px; background-color: red; margin-left: 5px;"></div> </div>	
<b>1</b> CC22 0-127 0 <small>ch. 16</small> <div style="display: flex; align-items: center;"> <input type="checkbox"/> <div style="width: 15px; height: 15px; background-color: green; margin-left: 5px;"></div> </div>	<b>2</b> CC23 0-127 0 <small>ch. 16</small> <div style="display: flex; align-items: center;"> <input type="checkbox"/> <div style="width: 15px; height: 15px; background-color: green; margin-left: 5px;"></div> </div>	<b>3</b> CC26 0-127 0 <small>ch. 16</small> <div style="display: flex; align-items: center;"> <input type="checkbox"/> <div style="width: 15px; height: 15px; background-color: pink; margin-left: 5px;"></div> </div>	<b>4</b> CC27 0-127 0 <small>ch. 16</small> <div style="display: flex; align-items: center;"> <input type="checkbox"/> <div style="width: 15px; height: 15px; background-color: teal; margin-left: 5px;"></div> </div>	<b>5</b> CC29 0-127 0 <small>ch. 16</small> <div style="display: flex; align-items: center;"> <input type="checkbox"/> <div style="width: 15px; height: 15px; background-color: pink; margin-left: 5px;"></div> </div>	<b>6</b> CC28 0-127 0 <small>ch. 16</small> <div style="display: flex; align-items: center;"> <input type="checkbox"/> <div style="width: 15px; height: 15px; background-color: yellow; margin-left: 5px;"></div> </div>







## Download the SysEx File

To save time, you can download the SysEx File for Preset A1.

[http://davidapps.net/pacer/pacer\\_genos.zip](http://davidapps.net/pacer/pacer_genos.zip)

When you unzip, you will get:

Name	Date modified	Type	Size
 Preset A1 Pacer + Genos.syx	5/30/2021 4:06 PM	MIDI-OX SysEx	6 KB
 Preset A2 Pacer + Genos.syx	5/30/2021 4:05 PM	MIDI-OX SysEx	6 KB
 Preset A3 Pacer + Genos.syx	5/30/2021 4:08 PM	MIDI-OX SysEx	6 KB
 Preset A4 Pacer + Genos.syx	5/30/2021 4:09 PM	MIDI-OX SysEx	6 KB

In addition to the SysEx file for Preset A1, you will also get 3 additional SysEx files for Presets A2, A3 and A4.

Open the **Import/Export** Tab

<https://studiocode.dev/pacer-editor/#/patch>

**Overview**   **Preset Controls**   **Preset MIDI**   **Import/Export**   **Monitor**   **Help**   Pacer editor 1.4.1 by StudioCode.dev

MIDI input: PACER   MIDI output: PACER

## Import/Export all presets at once

This page allows you to import/export all the Pacer presets at once.

Please note that, due to a limitation with the current Pacer firmware, the preset D6 cannot be read by this application. A future firmware update should fix this.

The Global Config is not read or written by this tool. A future update may offer this possibility.

Pacer → file :

Read Pacer   Save to file

file → Pacer :

Load sysex file   Send to Pacer

## Data included in the dump:

Presets marked "no data" are ignored and will not be sent to your Pacer or included in the sysex file.

A1 GENOS	A2 PRGM2	A3 PRGM3	A4 PRGM4	A5 NOTES	A6 RELAY
B1 HELX1	B2 HELX2	B3 PODHD	B4 POD2	B5 AXFX1	B6 AXFX2
C1 11RAC	C2 KPA	C3 L6LOP	C4 AXLOP	C5 OCTRK	C6 EHX45
D1 G-MST	D2 COLOR	D3 KBDTL	D4 GM CC	D5 MMC	D6 <i>no data</i>

CLEAR DATA

Load Preset A1 Pacer + Genos.syx

Then, Send to Pacer.

These are the contents of Preset A1

**A1: GENOS**

<b>FS 1</b> CC24 ↕127 ⬆0 ch. 16	<b>FS 2</b> CC25 ↕127 ⬆0 ch. 16	<b>FS 3</b> CC30 ↕127 ⬆0 ch. 16	<b>FS 4</b> CC34 ↕127 ⬆0 ch. 16	<b>EXP 1</b> CC1 min 0 max 127 ch. 16	<b>EXP 2</b> CC2 min 0 max 127 ch. 16
	<b>A</b> CC21 ↕127 ⬆0 ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>	<b>B</b> CC31 ↕127 ⬆0 ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>	<b>C</b> CC32 ↕127 ⬆0 ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>	<b>D</b> CC33 ↕127 ⬆0 ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>	
<b>1</b> CC22 ↕127 ⬆0 ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>	<b>2</b> CC23 ↕127 ⬆0 ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>	<b>3</b> CC26 ↕127 ⬆0 ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>	<b>4</b> CC27 ↕127 ⬆0 ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>	<b>5</b> CC29 ↕127 ⬆0 ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>	<b>6</b> CC28 ↕127 ⬆0 ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>

Here is how the 10 Switches have been mapped

Switch	Function	CC#	LED Color
1	INTRO 2	22	Green
2	INTRO 3	23	Green
3	FILL DOWN	26	Pink
4	FILL SELF	27	Teal
5	FILL UP	29	Pink
6	FILL BREAK	28	Yellow
A	INTRO 1	21	Green
B	ENDING 1	31	Red
C	ENDING 2	32	Red
D	ENDING 3	33	Red

Here is how the 4 Foot Switches have been mapped

FootSwitch	Function	CC#
1	TAP TEMPO	24
2	START/STOP	25
3	SYNCHRO/STOP	30
4	FADE IN/OUT	34

Here is how the 2 Expression Pedals have been mapped

EXP	Function	CC#
1	User assigned	1
2	User assigned	2

The other 3 Presets contain the complete list of 30 Control Changes that can be used to trigger the 95 different functions.

Load Preset A2 Pacer + Genos.syx

**A2: GENOS**

<b>FS 1</b> CC24 ↕127 ⇅0 ch. 16	<b>FS 2</b> CC25 ↕127 ⇅0 ch. 16	<b>FS 3</b> CC30 ↕127 ⇅0 ch. 16	<b>FS 4</b> CC34 ↕127 ⇅0 ch. 16	<b>EXP 1</b> CC1 min 0 max 127 ch. 16	<b>EXP 2</b> CC2 min 0 max 127 ch. 16
<b>A</b> CC11 ↕127 ⇅0 ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>		<b>B</b> CC12 ↕127 ⇅0 ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>		<b>C</b> CC13 ↕127 ⇅0 ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>	
<b>D</b> CC14 ↕127 ⇅0 ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>					
<b>1</b> CC0 ↕127 ⇅0 ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>	<b>2</b> CC5 ↕127 ⇅0 ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>	<b>3</b> CC6 ↕127 ⇅0 ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>	<b>4</b> CC8 ↕127 ⇅0 ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>	<b>5</b> CC9 ↕127 ⇅0 ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>	<b>6</b> CC10 ↕127 ⇅0 ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>

These are the factory default mappings:

CC#	Note	MIDI Note	Default Mapping
CC 0	C# -1	13	Style Start/Stop
CC 5	D -1	14	Fill Down
CC 6	Eb -1	15	Fill Self
CC 8	E -1	16	Fill Break
CC 9	F -1	17	Fill Up
CC 10	F# -1	18	Synchro Stop
CC 11	G -1	19	Main A
CC 12	Ab -1	20	Main B
CC 13	A -1	21	Main C
CC 14	Bb -1	22	Main D

Load **Preset A3 Pacer + Genos.syx**

**A3: GENOS**

<b>FS 1</b> <b>CC24 ↕127 ⇅0</b> ch. 16	<b>FS 2</b> <b>CC25 ↕127 ⇅0</b> ch. 16	<b>FS 3</b> <b>CC30 ↕127 ⇅0</b> ch. 16	<b>FS 4</b> <b>CC34 ↕127 ⇅0</b> ch. 16	<b>EXP 1</b> <b>CC1 min 0 max 127</b> ch. 16	<b>EXP 2</b> <b>CC2 min 0 max 127</b> ch. 16
<b>A</b> <b>CC21 ↕127 ⇅0</b> ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>		<b>B</b> <b>CC22 ↕127 ⇅0</b> ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>		<b>D</b> <b>CC24 ↕127 ⇅0</b> ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>	
<b>1</b> <b>CC15 ↕127 ⇅0</b> ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>	<b>2</b> <b>CC16 ↕127 ⇅0</b> ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>	<b>3</b> <b>CC17 ↕127 ⇅0</b> ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>	<b>4</b> <b>CC18 ↕127 ⇅0</b> ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>	<b>5</b> <b>CC19 ↕127 ⇅0</b> ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>	<b>6</b> <b>CC20 ↕127 ⇅0</b> ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>

CC#	Note	MIDI Note	Default Mapping
CC 15	B -1	23	Style Start/Stop
CC 16	C 0	24	Fill Down
CC 17	C# 0	25	Fill Self
CC 18	D 0	26	Fill Break
CC 19	Eb 0	27	Fill Up
CC 20	E 0	28	Synchro Stop
CC 21	F 0	29	Intro 1
CC 22	F# 0	30	Intro 2
CC 23	G 0	31	Intro 3
CC 24	Ab 0	32	Tap Temp



Load Preset A4 Pacer + Genos.syx

**A4: GENOS**

<b>FS 1</b> <b>CC24 ↕127 ⇅0</b> ch. 16	<b>FS 2</b> <b>CC25 ↕127 ⇅0</b> ch. 16	<b>FS 3</b> <b>CC30 ↕127 ⇅0</b> ch. 16	<b>FS 4</b> <b>CC34 ↕127 ⇅0</b> ch. 16	<b>EXP 1</b> <b>CC1 min 0 max 127</b> ch. 16	<b>EXP 2</b> <b>CC2 min 0 max 127</b> ch. 16
<b>A</b> <b>CC31 ↕127 ⇅0</b> ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>		<b>B</b> <b>CC32 ↕127 ⇅0</b> ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>		<b>C</b> <b>CC33 ↕127 ⇅0</b> ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>	
<b>D</b> <b>CC34 ↕127 ⇅0</b> ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>					
<b>1</b> <b>CC25 ↕127 ⇅0</b> ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>	<b>2</b> <b>CC26 ↕127 ⇅0</b> ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>	<b>3</b> <b>CC27 ↕127 ⇅0</b> ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>	<b>4</b> <b>CC28 ↕127 ⇅0</b> ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>	<b>5</b> <b>CC29 ↕127 ⇅0</b> ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>	<b>6</b> <b>CC30 ↕127 ⇅0</b> ch. 16 <input type="checkbox"/> <input checked="" type="checkbox"/>

CC#	Note	MIDI Note	Default Mapping
CC 25	A0	33	Style Start/Stop
CC 26	Bb 0	34	Fill Down
CC 27	B 0	35	Fill Self
CC 28	C 1	36	Fill Break
CC 29	C# 1	37	Fill Up
CC 30	D 1	38	Synchro Stop
CC 31	Eb 1	39	Ending 1
CC 32	E 1	40	Ending 2
CC 33	F 1	41	Ending 3
CC 34	F# 1	42	Fade In/Out

#### Note:

For all the Presets the Expression Pedal 1 is sending CC#1 values ranging from 0 to 127.

For all the Presets the Expression Pedal 2 is sending CC#2 values ranging from 0 to 127.

## Preset A1 = GENOS

This is how the colored LEDs will appear once you have programmed **Preset A1**



The 3 INTRO switches light up in Green.

The 3 ENDING switches light up in Red.

The BREAK switch lights up in Yellow.

The FILL UP/DOWN switches light up in Pink

The FILL SELF switch lights up in Teal.

The colored LEDs help to easily identify the switches.

## Using an AC Adapter

The Nectar Pacer does not come with an AC Adapter. The reason being, it draws its power from the USB 2.0 cable.

You can run the Pacer without a Computer by using an AC Adapter having the following specs:

- DC 9V
- 600mA
- Center Negative
- 2.1mm barrel connector

The Boss PSA-120S Power Adapter is an excellent choice. However, it is expensive.

<https://www.amazon.com/R-O-L-PSA-120S-Adapter/dp/B0012BPMHW/>

\$39.99



A far more economical option is to buy the SoulBay 12W Universal AC/DC Adapter

<https://www.amazon.com/SoulBay-Universal-Reversible-Compatible-Electronics/dp/B087FYRG9K>

\$14.90



Roll over image to zoom in

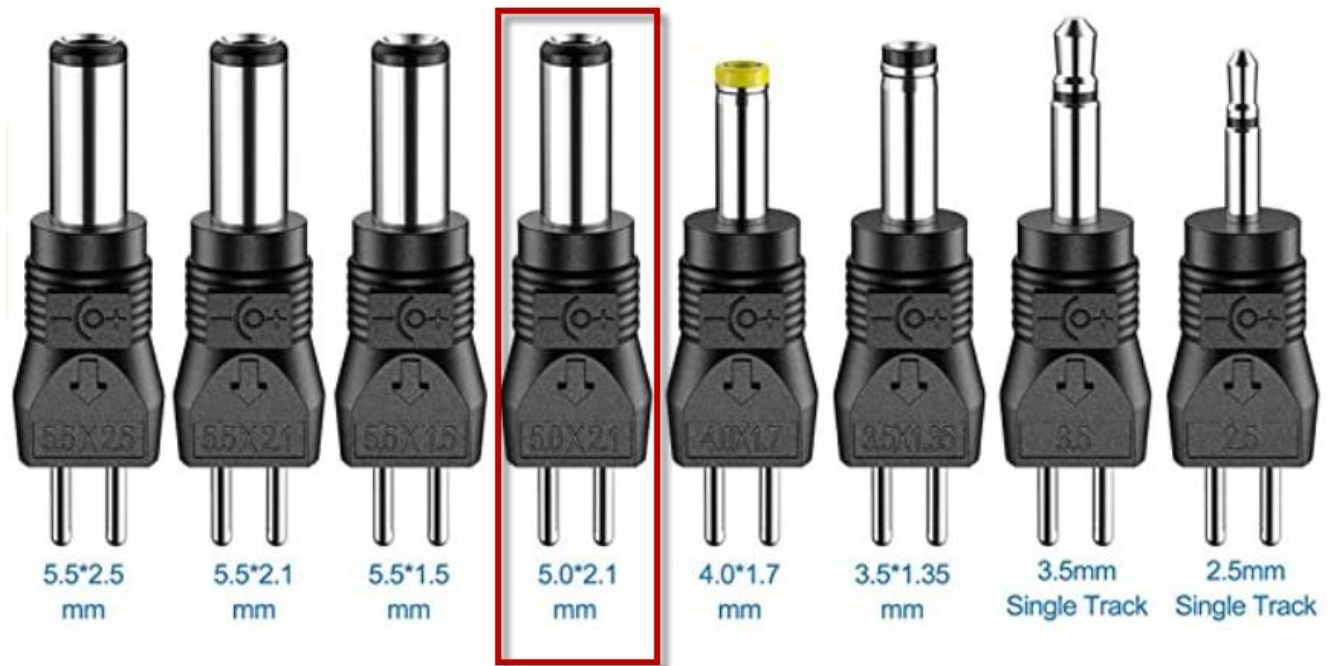
SoulBay 12W  
Universal AC  
Adapter  
Reversible  
Polarity Multi  
Voltage DC Power  
Supply, with 9pcs  
Adaptor Tips,  
Compatible with  
3V to 12V  
Household  
Electronics,  
1.2Amp Output

[Visit the SoulBay Store](#)

★★★★★ 136 ratings

It comes with 8 different reversible TIPS.

Use the one that is 2.1mm in diameter and 5mm in length



Make sure you set the voltage dial to **9V** and adjust the TIP so that the CENTER is **NEGATIVE**

This works flawlessly with the Nectar Pacer MIDI Foot Controller.



## Connecting the Pacer to the GENOS

You have programmed Preset A1 to transmit the Control Change Messages on MIDI Channel 16.

Connect the Pacer to the **MIDI IN B** Port of the GENOS with a MIDI cable.

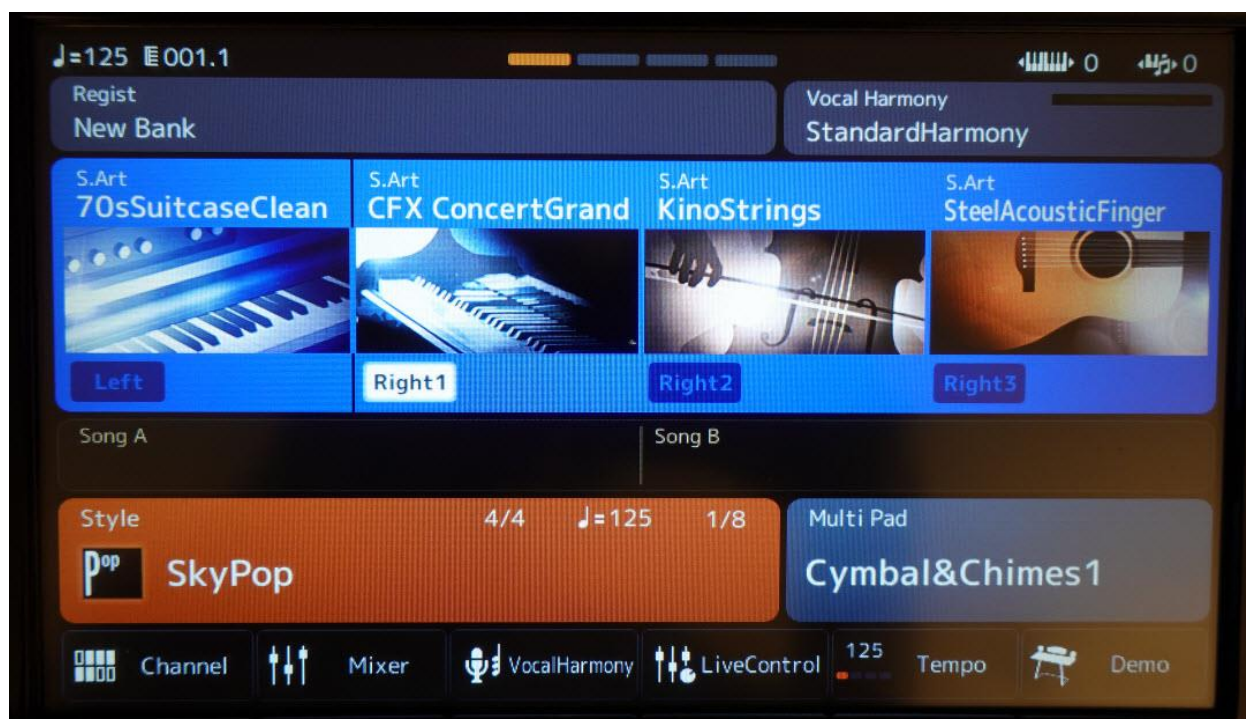
Connect the AC adapter to the Pacer. Turn on the power.

Make sure the display reads:

### GENOS A1

Next, turn on the GENOS.

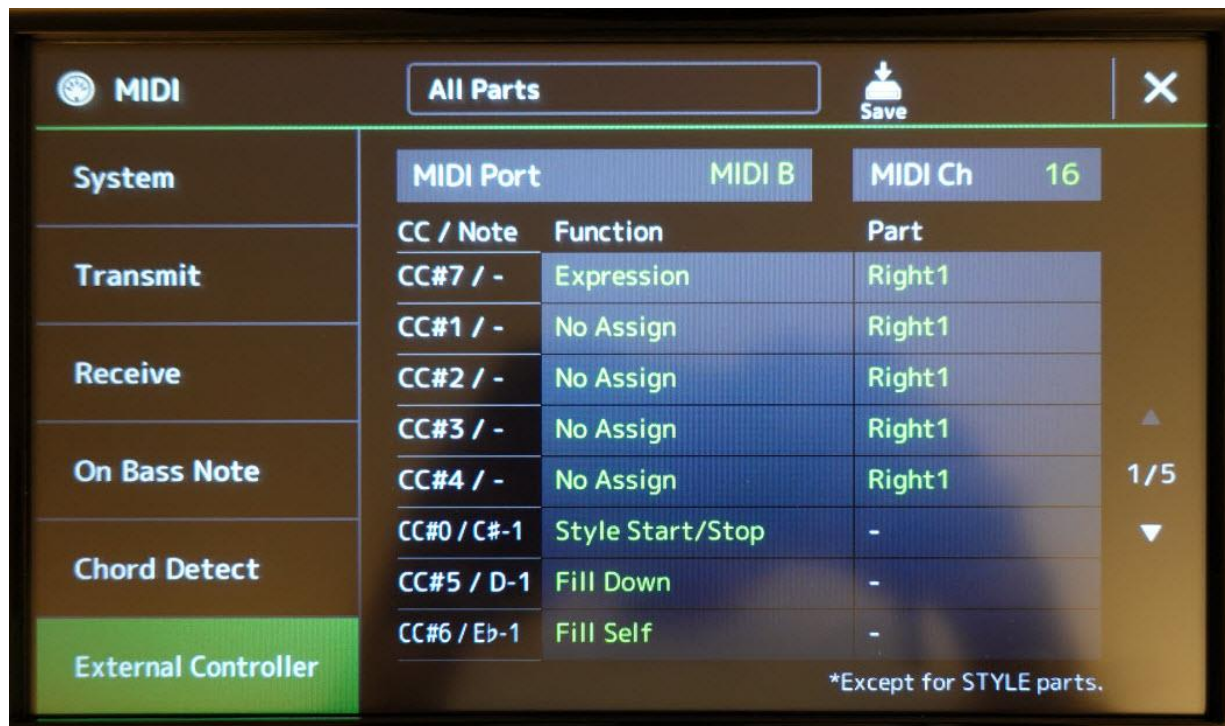
This is what the display will show:





Make sure the GENOS is set to receive MIDI commands from an External MIDI Controller on **MIDI IN Port B** on MIDI Channel **16**.

MENU | Menu 2 | MIDI | External Controller





Activate the following 3 buttons:

- ACMP
- OTS LINK
- AUTO FILL IN

Make sure the **SYNC START** button is engaged.





Press **Switch 1** on the Pacer.

This will activate **INTRO 2**



Play a chord to start **INTRO 2**.

Try out the other switches to engage the following functions:

Switch	Function
1	INTRO 2
2	INTRO 3
3	FILL DOWN
4	FILL SELF
5	FILL DOWN
6	BREAK
A	INTRO 1
B	ENDING 1
C	ENDING 2
D	ENDING 3

## Connecting Expression Pedals to the Pacer

You can connect 2 Expression Pedals to the Nectar Pacer.

The Yamaha FC7 Expression Pedals are ideal for this purpose.

[https://www.bhphotovideo.com/c/product/162244-REG/Yamaha\\_FC7\\_FC7\\_Volume\\_Control.html](https://www.bhphotovideo.com/c/product/162244-REG/Yamaha_FC7_FC7_Volume_Control.html)

Load Preset A1 Pacer + Genos.syx

Connect two Yamaha FC7 Expression Pedals to the Pacer.

Expression Pedal 1 is programmed to send CC#1 values ranging from 0 to 127

Expression Pedal 2 is programmed to send CC#2 values ranging from 0 to 127

When you operate the pedals nothing will happen!

This is because you have not yet assigned any functions to CC#1 and CC#2 on the GENOS yet.



Click on CC#1

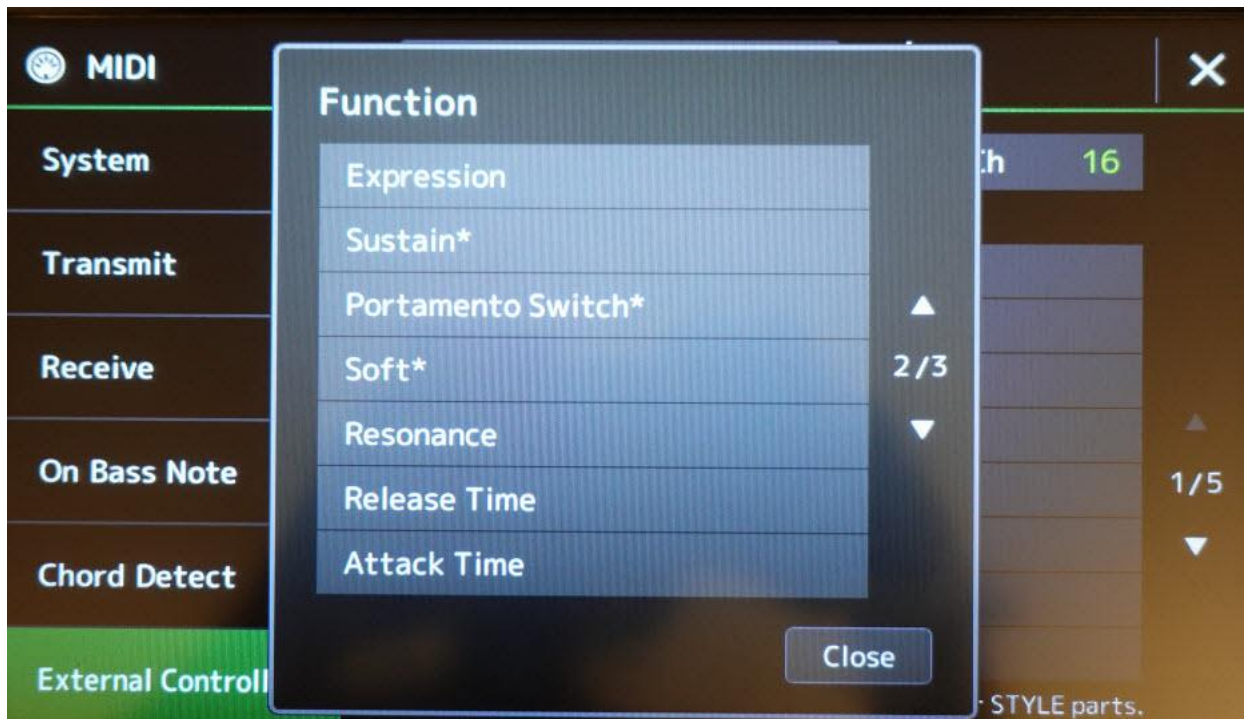
You will see a list of all the Functions you can assign to CC#1

They span over 3 pages.

Page 1

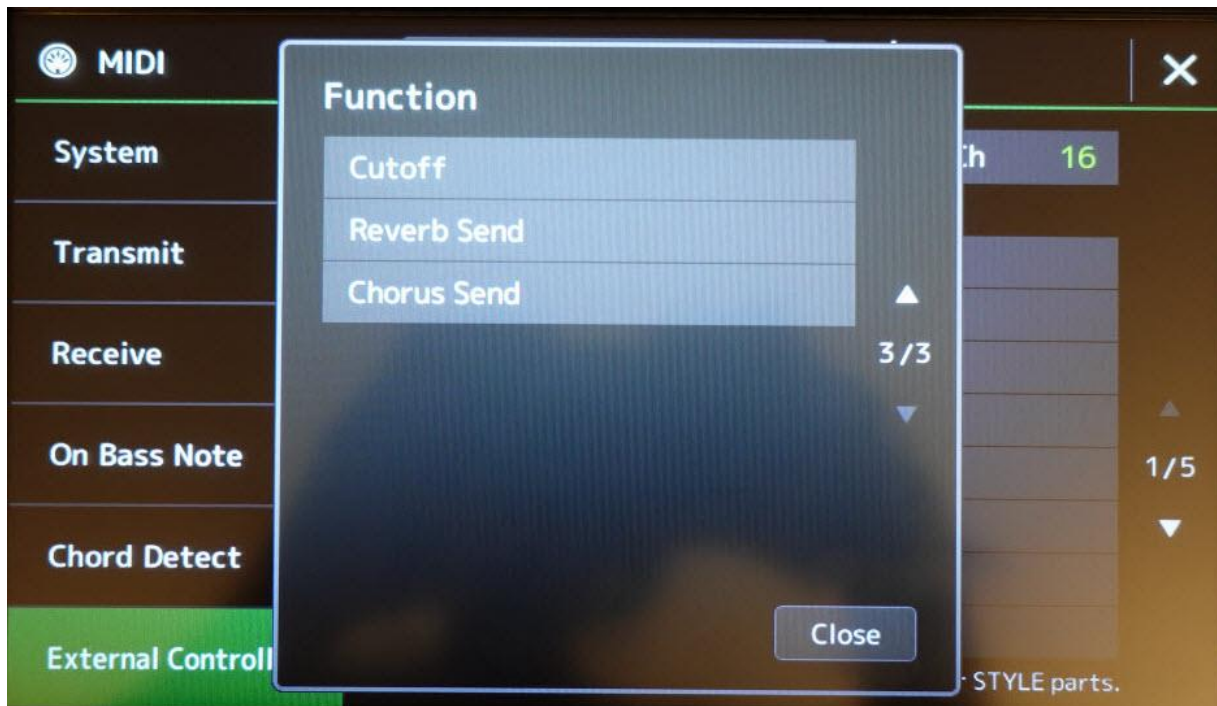


- No Assign
- Modulation
- Breath Controller
- Foot Controller
- Portamento Time
- Volume
- Pan



- Expression
- Sustain
- Portamento Switch
- Soft
- Resonance
- Release Time
- Attack Time





- Cutoff
- Reverb Send
- Chorus Send

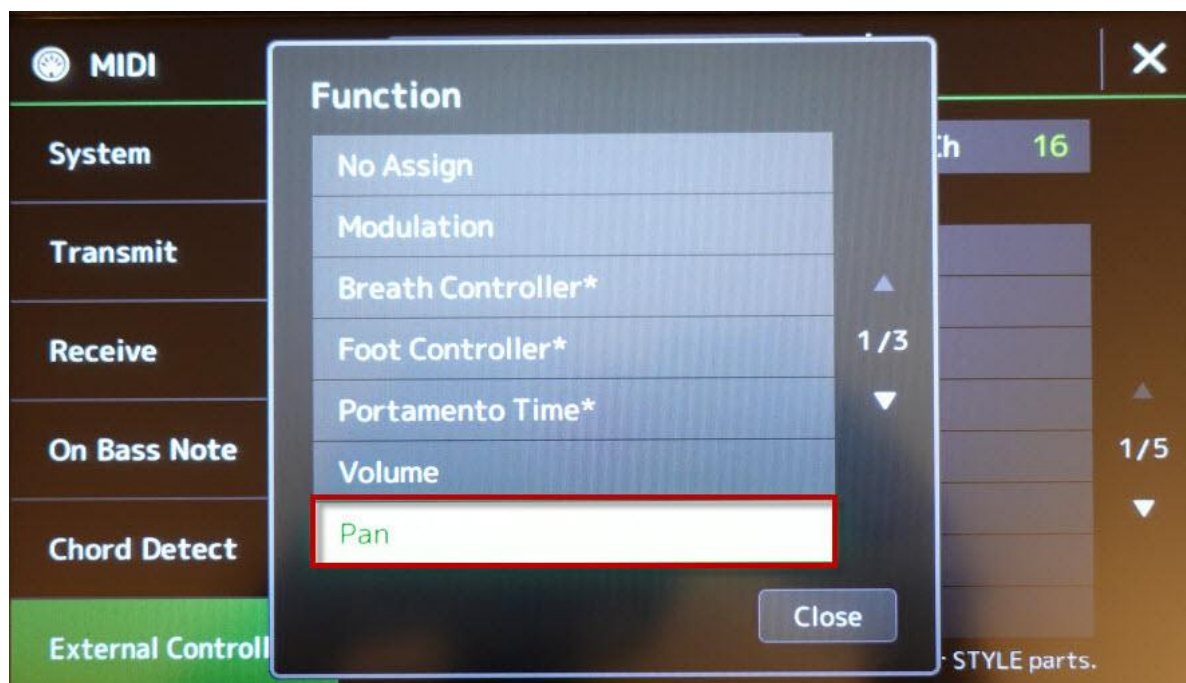
Here is a list of 16 Functions that you can assign to CC#7, CC#1, CC#2, CC#3, CC#4

- No Assign
- Modulation
- Breath Controller
- Foot Controller
- Portamento Time
- Volume
- Pan
- Expression
- Sustain
- Portamento Switch
- Soft
- Resonance
- Release Time
- Attack Time
- Cutoff
- Reverb Send
- Chorus Send

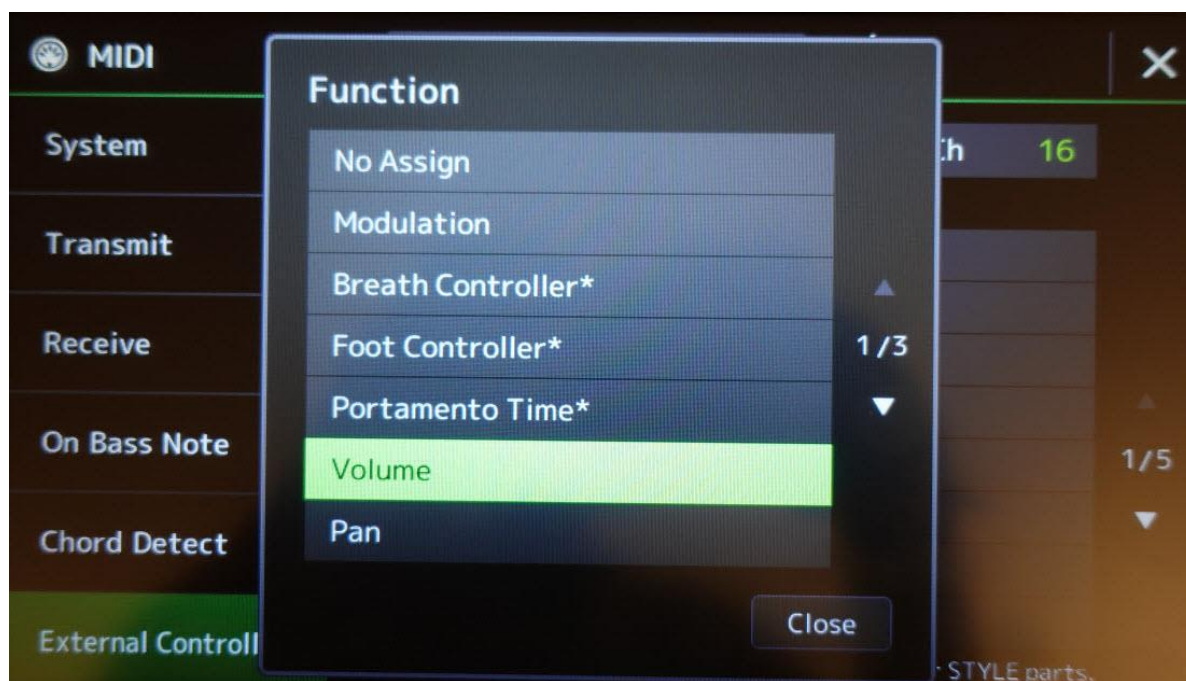
The GENOS offers wide flexibility in the ways you can configure your external MIDI Controller.

You can simultaneously use up to 5 Expression Pedals to control any of the 16 Functions listed above if your external MIDI controller supports them.

Assign **PAN** to CC#1



Assign **Volume** to CC#2



Notice how the Right 1 Voice Pans as you operate Expression Pedal 1.

Notice how the Volume of the Right 1 Voice changes as you operate Expression Pedal 2.

You are free to assign any of the 16 Functions and experiment what works best for you.

You can also change the scope of what gets affected by Expression Pedals 1 and 2.

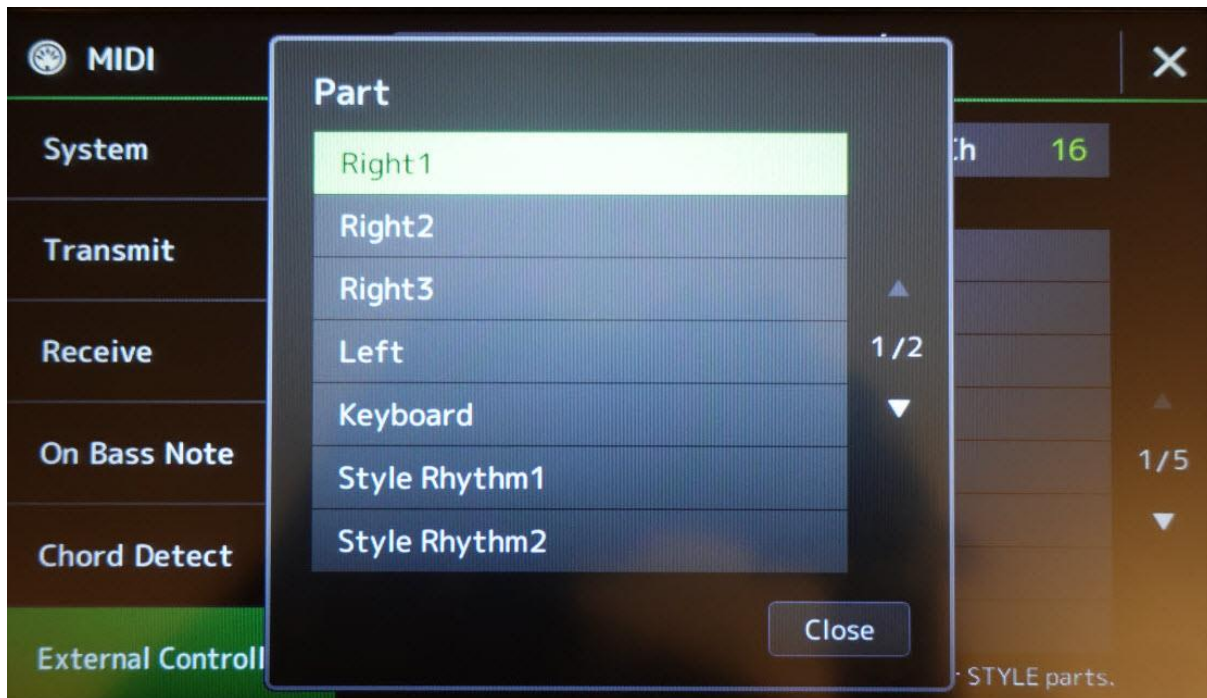
At the moment, Expression Pedals 1 and 2 are affecting the **Right 1 Voice**

System	MIDI Port	MIDI B	MIDI Ch	16
Transmit	CC / Note	Function	Part	
	CC#7 / -	Expression	Right1	
	CC#1 / -	Pan	Exp Pedal 1	Right1
	CC#2 / -	Volume	Exp Pedal 2	Right1
	CC#3 / -	No Assign		Right1
	CC#4 / -	No Assign		Right1
	CC#0 / C#-1	Style Start/Stop	-	
	CC#5 / D-1	Fill Down	-	
	CC#6 / Eb-1	Fill Self	-	

\*Except for STYLE parts.

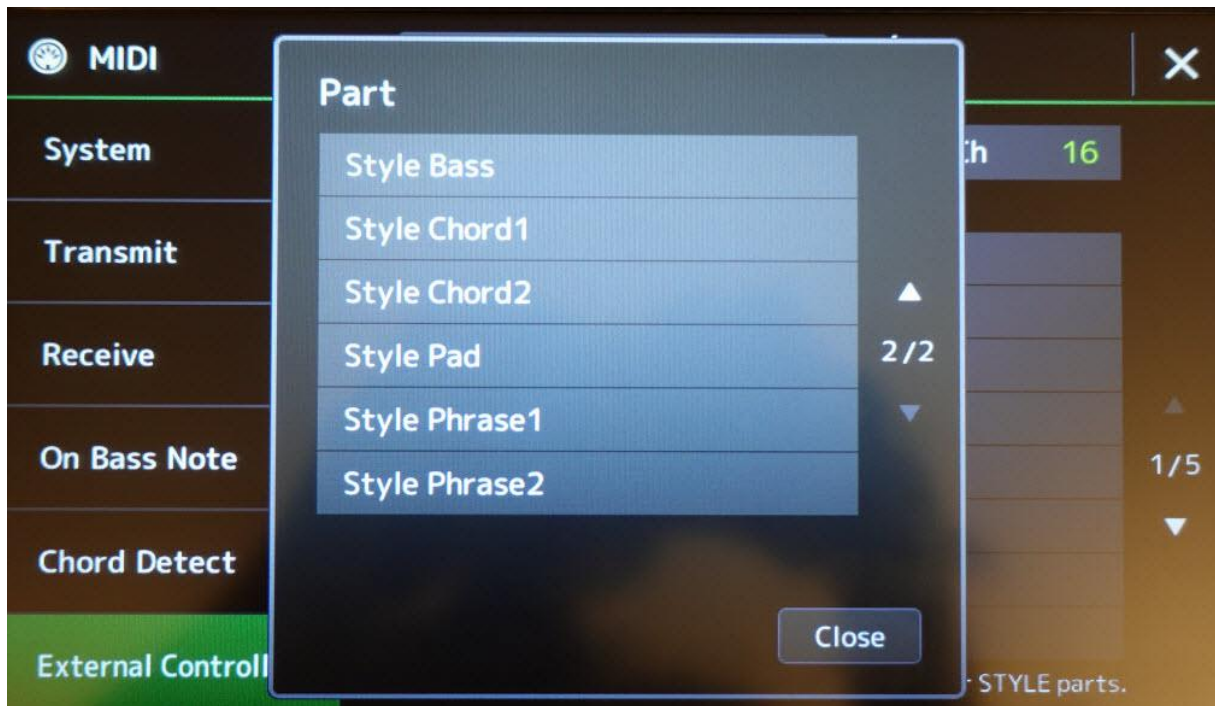
You can specify what gets affected.

Page 1



- Right 1
- Right 2
- Right 3
- Left
- Keyboard
- Style Rhythm 1
- Style Rhythm 2





- Style Bass
- Style Chord 1
- Style Chord 2
- Style Pad
- Style Phrase 1
- Style Phrase 2

These are all the Parts you can control with your Expression Pedals.

- Right 1
- Right 2
- Right 3
- Left
- Keyboard
- Style Rhythm 1
- Style Rhythm 2
- Style Bass
- Style Chord 1
- Style Chord 2
- Style Pad
- Style Phrase 1
- Style Phrase 2

You can hook up 5 Expression Pedals transmitting Control Change Numbers 1, 2, 3, 4 and 7.

MIDI Port	MIDI B	MIDI Ch	Part
CC#7 / -	Expression	Pedal 5	Right1
CC#1 / -	Pan	Pedal 1	Right1
CC#2 / -	Volume	Pedal 2	Right1
CC#3 / -	Reverb Send	Pedal 3	Keyboard
CC#4 / -	Chorus Send	Pedal 4	Style Bass
CC#0 / C#-1	Style Start/Stop	-	-
CC#5 / D-1	Fill Down	-	-
CC#6 / Eb-1	Fill Self	-	-

\*Except for STYLE parts.

This is in addition to the 30 Pedals you can connect to control 95 different functions.



If you want to disengage the Expression Pedals, simply set the Functions of CC#1 and CC#2 to **No Assign** as shown here:



## Connecting Foot Switches to the Pacer

You can connect 4 Foot Switches to the Pacer.

The M-Audio SP-2 Universal Sustain Pedals works best for this purpose.

[https://www.bhphotovideo.com/c/product/351642-REG/M\\_Audio\\_9900\\_50805\\_00\\_SP\\_2\\_Universal\\_Keyboard.html](https://www.bhphotovideo.com/c/product/351642-REG/M_Audio_9900_50805_00_SP_2_Universal_Keyboard.html)

The Preset is programmed to trigger the following functions on the 4 Foot Switches:

Foot Switch	Function	CC#
1	Tap Tempo	24
2	Start/Stop	25
3	Synchro Stop	30
4	Fade In/Out	34

### Note:

You are free to remap the functions any way you see fit and save your custom map to a User Preset.

## Summary

You can access the External Controller Settings by navigating to:

MENU | Menu 2 | MIDI | External Controller

You can use up to **5 Expression Pedals** simultaneously to control these **16 Functions**:

- No Assign
- Modulation
- Breath Controller
- Foot Controller
- Portamento Time
- Volume
- Pan
- Expression
- Sustain
- Portamento Switch
- Soft
- Resonance
- Release Time
- Attack Time
- Cutoff
- Reverb Send
- Chorus Send

You can specify the scope by selecting the **Part** you wish to control:

- Right 1
- Right 2
- Right 3
- Left
- Keyboard
- Style Rhythm 1
- Style Rhythm 2
- Style Bass
- Style Chord 1
- Style Chord 2
- Style Pad
- Style Phrase 1
- Style Phrase 2

You can use up to **30 Pedals** simultaneously to control these **95 different functions**.

- No Assign
- Sustain
- Sostenuto
- Soft
- Portamento
- Modulation (Alt) Right 1
- Modulation (Alt) Right 2
- Modulation (Alt) Right 3
- Modulation (Alt) Left
- Articulation 1 Right 1
- Articulation 1 Right 2
- Articulation 1 Right 3
- Articulation 1 Left
- Articulation 2 Right 1
- Articulation 2 Right 2
- Articulation 2 Right 3
- Articulation 2 Left
- Articulation 3 Right 1
- Articulation 3 Right 2
- Articulation 3 Right 3
- Articulation 3 Left
- Effect Right 1
- Effect Right 2
- Effect Right 3
- Effect Left
- Effect Mic
- Keyboard Harmony/Arpeggio On/Off
- Vocal Harmony On/Off
- Vocal Harmony Effect On/Off
- Talk
- Score Page +
- Score Page –
- Lyrics Page +
- Lyrics Page –
- Text Viewer Page +
- Text Viewer Page –
- Song A Play/Pause
- Song B Play/Pause

- Style Start/Stop
- Tap Tempo
- Synchro Start
- Synchro Stop
- Intro 1
- Intro 2
- Intro 3
- Main A
- Main B
- Main C
- Main D
- Fill Down
- Fill Self
- Fill Break
- Fill Up
- Ending 1
- Ending 2
- Ending 3
- Fade In/Out
- Fingered/Fingered On Bass
- Bass Hold
- Percussion 1
- Percussion 2
- Percussion 3
- Right 1 Part On/Off
- Right 2 Part On/Off
- Right 3 Part On/Off
- Left Part On/Off
- One Touch Setting +
- One Touch Setting –
- One Touch Setting 1
- One Touch Setting 2
- One Touch Setting 3
- One Touch Setting 4
- Registration Sequence +
- Registration Sequence –
- Registration 1
- Registration 2
- Registration 3
- Registration 4
- Registration 5
- Registration 6

- Registration 7
- Registration 8
- Registration 9
- Registration 10
- Transpose +
- Transpose –
- Multi Pad 1
- Multi Pad 2
- Multi Pad 3
- Multi Pad 4
- Multi Pad Stop
- Song Control SP1
- Song Control SP2
- Song Control SP3
- Song Control SP4
- Song Control Loop

You can trigger these functions either by sending a Control Change Number or a MIDI Note Number.

You need to specify the MIDI Port and MIDI Channel.

Here is the default CC# and MIDI Note pairings for the Factory Preset = **All Parts**.

CC#	Note	MIDI Note	Default Mapping
CC 0	C# -1	13	Style Start/Stop
CC 5	D -1	14	Fill Down
CC 6	Eb -1	15	Fill Self
CC 8	E -1	16	Fill Break
CC 9	F -1	17	Fill Up
CC 10	F# -1	18	Synchro Stop
CC 11	G -1	19	Main A
CC 12	Ab -1	20	Main B
CC 13	A -1	21	Main C
CC 14	Bb -1	22	Main D
CC 15	B -1	23	Style Start/Stop
CC 16	C 0	24	Fill Down
CC 17	C# 0	25	Fill Self
CC 18	D 0	26	Fill Break
CC 19	Eb 0	27	Fill Up
CC 20	E 0	28	Synchro Stop
CC 21	F 0	29	Intro 1
CC 22	F# 0	30	Intro 2
CC 23	G 0	31	Intro 3
CC 24	Ab 0	32	Tap Tempo
CC 25	A0	33	Style Start/Stop
CC 26	Bb 0	34	Fill Down
CC 27	B 0	35	Fill Self
CC 28	C 1	36	Fill Break
CC 29	C# 1	37	Fill Up
CC 30	D 1	38	Synchro Stop
CC 31	Eb 1	39	Ending 1
CC 32	E 1	40	Ending 2
CC 33	F 1	41	Ending 3
CC 34	F# 1	42	Fade In/Out

You are free to create your own map and save your custom MIDI template as a User Preset.

You can create up to 10 User Presets.

Last Revised: 5/30/2021