TouchOSC Control Surface Layout for Cantabile© 3 Performer

1 - Layout Tabs
2 - Set List Grid and General Navigation
3 - Show Notes Up and Down Scroll Encoder
4 - View Buttons and Tablet Initialize
5 - Global & Common Gain Levels and Media Player #1 Gain and Speed Control
6 - Metronome Tempo Select and Display
7 - Metronome Time Signature Preset Select and Display
8 - Metronome Volume and LED Indicators with Switch
9 - Next and Previous Song State Switches
10 - Main Transport Controls
11 - Next and Previous Instant and Delayed Song Switches

The Navigation Arrows and the Select Button work on all pages of C3. To select and deselect use the select button. To adjust a slider navigate to it and then press and hold select while using the right and left arrows to make the adjustment.

An Apple iPad or Android tablet is required hardware.

The **TouchOSC** app for the tablet or pad is available at the app store for $ 5.00
TouchOSC Editor and **TouchOSC Bridge** for PC are also required and can be downloaded free at

https://hexler.net/software/touchosc

CCStepper is available from **CodeFN42** Software @

http://www.codefn42.com/ccstepper/index.html

Installation Instructions and MIDI Implementation Chart

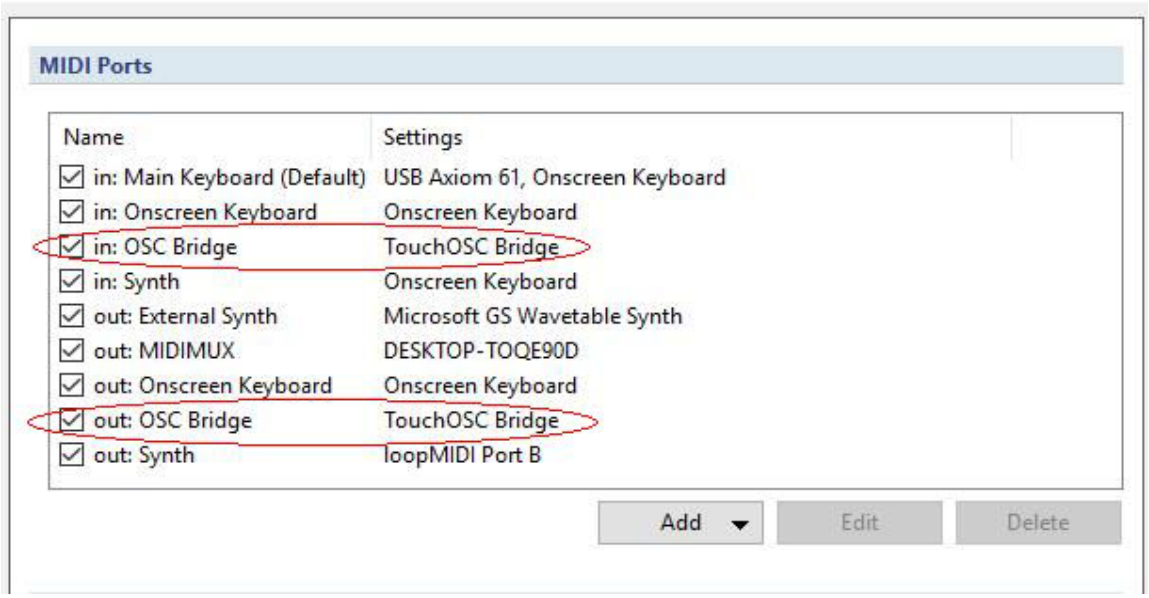
* Cantabile© 3 build 3520 or later required for all metronome functions to operate

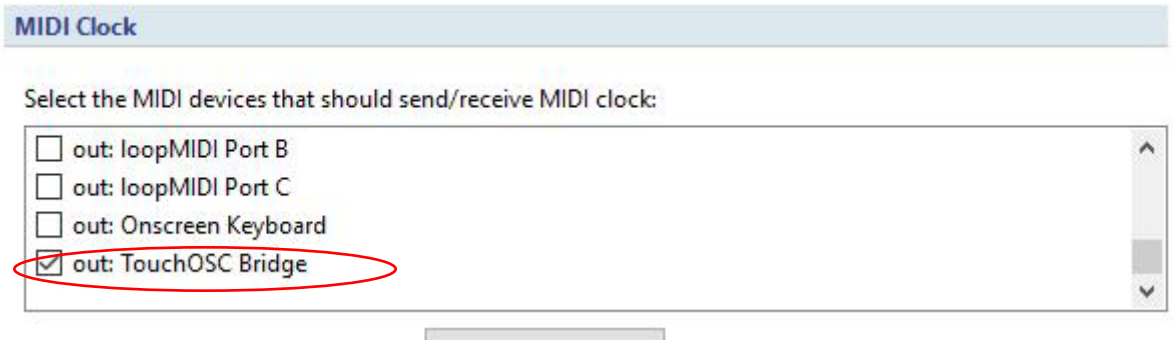
Step 1. Install TouchOSC Bridge and TouchOSC editor on the PC or Laptop. Create a start folder shortcut for the Touch OSC Bridge program so it runs automatically at start-up.

Step 2. Unzip the install file to reveal the C3 Generic 35xx Touch OSC Template file, the CC Stepper dll, the"touchoscgeneric" rack file, test racks 1 through 8 and a Sample Song called "test touch 35xx" to help get it tested on your system.

Step 3. Place the CCStepper VSTi in your Vst plugin folder, the "test touch 35xx" sample Song file in the Cantabile Root Folder and the "touchoscgeneric" rack and the test racks 1 through 8 into the Cantabile\Racks folder. (Paths are important)

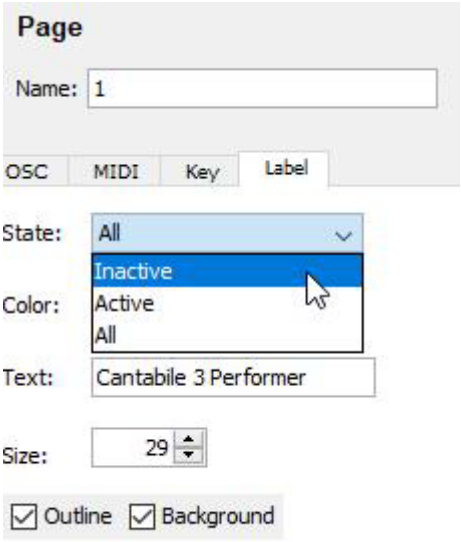
Step 4. Open Cantabile 3 and create a MIDI In and Out port for the TouchOSC Bridge in Tools>Options>MIDI Ports Call them "OSC Bridge" for both the input and output routes and also set the check-box for the MIDI Clock for the TouchOsc Port.





Step 5. Open the TouchOSC PC Editor (requires Java to run) and open the new C3 TouchOSC file

Step 6. Find the label tab for the first page. It's the default view when you open. Open the State drop down and choose "Inactive". Click on the middle tab (Indexed Controls) and do the same thing and also do it for the Keyboard tab. If these "active" and "inactive" tab label colors and size for the 3 pages are not set then the active and inactive fonts and colors for the layout tabs will not be preserved upon Syncing to the tablet. This is a limit of the Touch OSC Java Editor provided so we have to work with it.



Step 7. Start Touch OSC up on your Pad

Step 8. Press 'Sync' in the TouchOSC PC editor

Step 9. On the tablet or iPad go to Layout and click Add, you will be prompted to save the new or edited file

Step 10. Select the new layout in TouchOSC on the tablet

Step 11. Back on the PC the metronome time signature section are designed to use presets. As a result we need to finish populating the Cantabile Settings file (usually found in C:\Users\Owner\AppData\Local\Topten Software\Cantabile 3.0 (x64)) with the time signatures that were not loaded as part of the default install (there's about a dozen of them in the default setting) as shown below.

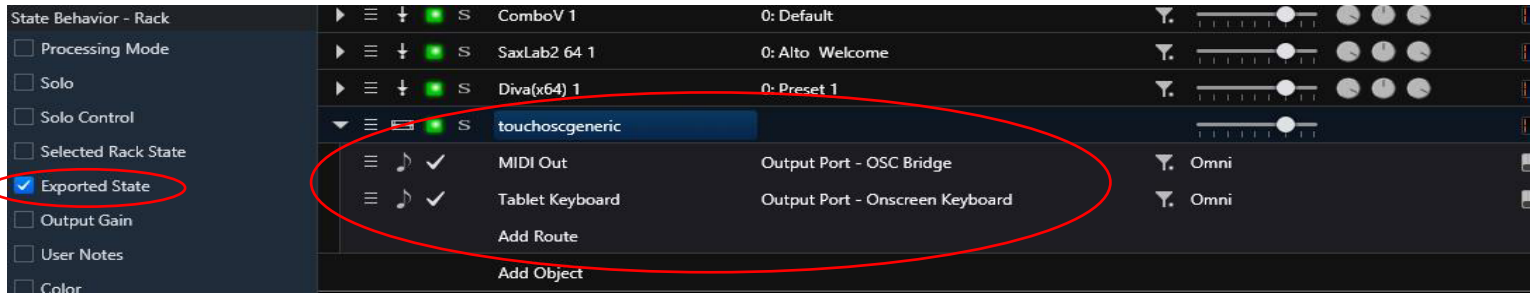
```
true,                    "flashTempoWhenStopped": false          }       },
"metronome":    {                "timeSignaturePresets":                 [
"2\/2",                  "4\/2",                  "2\/4",                 "3\/4",
"4\/4",                  "5\/4",                  "3\/8",                 "6\/8",
"7\/8",                  "9\/8",                  "12\/8"          ],
"tempoPresets":                  [                        60,                     96,
        108,                     120,                     140             ]       }}
```

Using a text editor you can replace these entries with the ones in the provided text file (time signature settings.txt) as opposed to loading the rest of them one at a time in Cantabile. Just copy and paste over the default entries with the ones in the file. It should look like this when you are done then do a full restart of Cantabile to allow the new settings to take effect. The song to song settings must be synced up with the rack logic for it to recall properly on the pad so each song the touchoscgeneric rack is loaded into should be checked for the proper Time Signature and Tempo and then saved, after that C3 and the touchpad will be in sync.


```
 programNumberFormat :  CombinedBanks ,                    octaveOffset : 2
},              "tempoIndicator":                {                    "enableFlashing":
true,                   "flashTempoWhenStopped": false          }       },
"metronome":    {               "timeSignaturePresets":                 [
"2\/1",                 "3\/1",                 "4\/1",                 "5\/1",
"6\/1",                 "7\/1",                 "8\/1",                 "9\/1",
"10\/1",                        "11\/1",                        "12\/1",
"2\/2",                 "3\/2",                 "4\/2",                 "5\/2",
"6\/2",                 "7\/2",                 "8\/2",                 "9\/2",
"10\/2",                        "11\/2",                        "12\/2",
"2\/4",                 "3\/4",                 "4\/4",                 "5\/4",
"6\/4",                 "7\/4",                 "8\/4",                 "9\/4",
"10\/4",                        "11\/4",                        "12\/4",
"2\/8",                 "3\/8",                 "4\/8",                 "5\/8",
"6\/8",                 "7\/8",                 "8\/8",                 "9\/8",
"10\/8",                        "11\/8",                        "12\/8",
"2\/16",                        "3\/16",                        "4\/16",
"5\/16",                        "6\/16",                        "7\/16",
"8\/16",                        "9\/16",                        "10\/16",
"11\/16",                       "12\/16",                       "2\/32",
"3\/32",                        "4\/32",                        "5\/32",
"6\/32",                        "7\/32",                        "8\/32",
"9\/32",                        "10\/32",                       "11\/32",
"12\/32"                ],              "tempoPresets":                 [
60,                     96,                     108,                    120,
140             ]       }}
```


Step 12. Load test Template Song in C3 and check routing. The input route should look as shown below. OSC Bridge > touchoscgeneric rack

The output routes from the rack are shown below (next page) for the MIDI Out to the OSC Bridge and the tablet keyboard as well as the check box for the Exported State Behavior for the touchoscgeneric rack so it can react to state changes in tempo,routing etc .... note: the tempo and time signature are saved with the song so you must initialize each song by selecting and saving a tempo and time signature save to sync for the flashing led vsti. When adding to existing songs remember these routes and check box settings.



Next, replace the VSTI plugins to ones from your system (I left placeholders that probably don't work on your system) and load some songs in the media players to ones from your system.

You also can route the **Tablet Keyboard** output port of the rack to your choice of output routes.

Use the Red **'Init'** button on the main page to cycle the C3 Engine re-start to upload all the current song's controls on C3 to the tablet.

The LED lights on the tablet can be turned on or off using the supplied toggle switch below the LED's on the pad layout.

You can use the test file once it is loaded to help initialize and also link the C3 and touchpad together functionally and check the different controls. In all your songs you use it in always load The touchoscgeneric control rack as the bottom Rack in the output list (since it's a rack it would be addressed by the controller) so keep your Instrument and effects racks stacked above it in the list!

Hope you enjoy it!

made by David Doré for the Cantabile© Community 2/11/2018

MIDI Implentation Chart

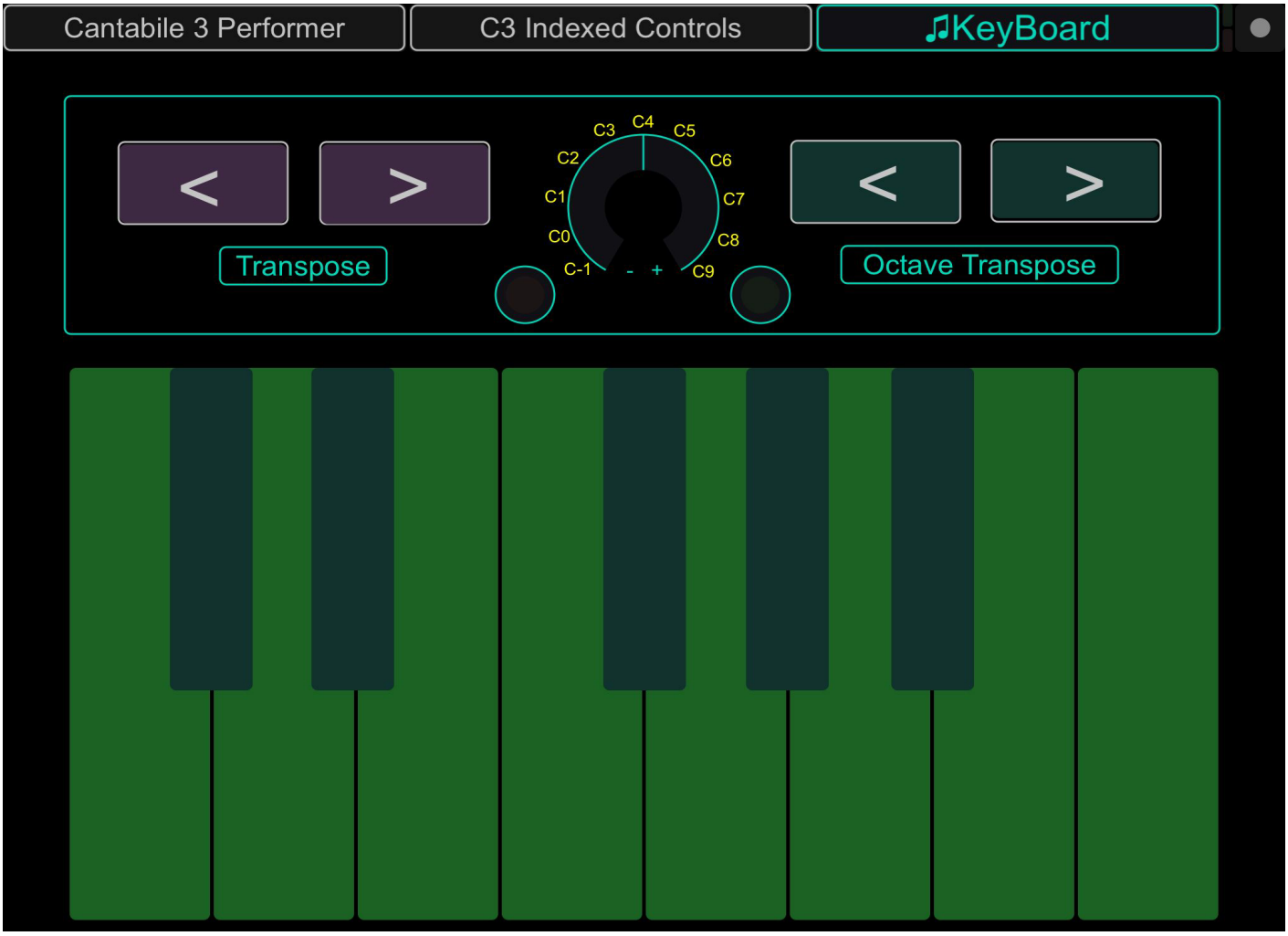
cc#	MIDI In	Midi Out
0	Tablet LED On/Off	-
2	Prev Song State	-
3	Next Song State	-
12	Master Output Gain	same
13	Master Input Gain	same
14	Song Output Gain	same
15	Media Player #1 Gain	same
16	Media Player #1 Speed	same
17	Metro Tempo	same
18	Metro Volume	same
19	Song Input gain	same
20	Transport Pause	same
21	Transport Stop	same
22	Transport Play	same
23	Recorder Stop Start	same
119	-	Transport Play led
120	-	Transport Stop led
121	-	Transport Pause Led
122	-	Recorder Led
24	Metronome Tempo -	same
25	Metronome Tempo +	same
26	Metronome Tempo mute	same
27	Metronome Tempo Tap	-
30	View set list grid	-
31	Set List Prev Song	-
32	Set List Next Song	-
33	Set List Prev Song (Delayed)	-
34	Set List Next Song (Delayed)	-
35	Left	-
36	Up	-
37	Right	-
38	Down	-
39	Enter	-
40	View Live Mode	-
41	View Controller Bar	-
42	View Toolbar	-
43	View Show Notes	-
44	Scroll Notes (Cantabile logo enncoder)	
45	Prev time sig preset	-
46	Next time sig preset	-
47	Time sig rack state	same
48	Time sig NUM	-
49	Time sig DENOM	-
50	Init (engine restart full)	-
51	Plugin 1 Gain	same
52	Plugin 1 Wet/Dry	same
53	Plugin 1 Pan	same
54	Plugin 1 Fade	same
55	Plugin 2 Gain	same
56	Plugin 2 Wet/Dry	same
57	Plugin 2 Pan	same
58	Plugin 2 Fade	same

cc#	MIDI In	Midi Out
59	Plugin 3 Gain	same
60	Plugin 3 Wet/Dry	same
61	Plugin 3 Pan	same
62	Plugin 3 Fade	same
63	Plugin 4 Gain	same
65	Plugin 4 Wet/Dry	same

66	Plugin 4 Pan	same
67	Plugin 4 Fade	same
68	Media player 1 Gain	same
69	Media player 1 Speed	same
70	Media player 1 Pan	same
71	Media Player 1 Fade	same
72	Media player 2 Gain	same
73	Media player 2 Speed	same
74	Media player 2 Pan	same
75	Media Player 2 Fade	same
76	Media player 3 Gain	same
77	Media player 3 Speed	same
78	Media player 3 Pan	same
79	Media Player 3 Fade	same
80	Media player 4 Gain	same
81	Media player 4 Speed	same
82	Media player 4 Pan	same
83	Media Player 4 Fade	same
84	Rack 1 Gain	same
85	Rack 2 Gain	same
86	Rack 3 Gain	same
87	Rack 4 Gain	same
88	Rack 5 Gain	same
89	Rack 6 Gain	same
90	Rack 7 Gain	same
91	Rack 8 Gain	same
92	Plugin 1 resume/sus	same
93	Plugin 2 resume/sus	same
94	Plugin 3 resume/sus	same
95	Plugin 4 resume/sus	same
96	Player 1 play/resume	same
97	Player 2 play/resume	same
98	Player 3 play/resume	same
99	Player 4 play/resume	same
100	Rack 1 Run/Sus	same
101	Rack 2 Run/Sus	same
102	Rack 3 Run/Sus	same
103	Rack 4 Run/Sus	same
104	Rack 5 Run/Sus	same
105	Rack 6 Run/Sus	same
106	Rack 7 Run/Sus	same
107	Rack 8 Run/Sus	same
110	Song Transpose dn	same
111	Song Transpose up	same
112	Song Octave dn	same
113	Song Octave up	same
114	Transpose Indicator	
115	Tick beat led	
116	Marker beat led	

MIDI Implentation Chart

cc#	MIDI In	Midi Out
119	Play led	-
120	Stop led	-
121	Pause led	-

Indexed Controls Page

Keyboard Page