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CN Remote Panel – User Guide

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Overview

It is a lightweight tool that sends MIDI messages and Key Commands from button panels, to Cubase, Nuendo, Wavelab, and any other applications that accept MIDI input. It also passes standard keyboard input through to the DAW, even when the panel is set to “Always on Top.”

This is very different from a remote control that works on a tablet or external device, as it sits on the same system as your DAW Host.

The goal is simply to allow us to access some of the features that may be hidden away in menus or hidden behind complex key commands.

The button panels can be collapsed to a single button and expanded when hovered, so that they do not take up screen real estate when not in use.

You can visit the CN Remote Website here: <https://www.everythingcreative.biz/cnremote/>

And if you have a Google account you can visit The [CN Remote Knowledgebase on Notebook LM](#)

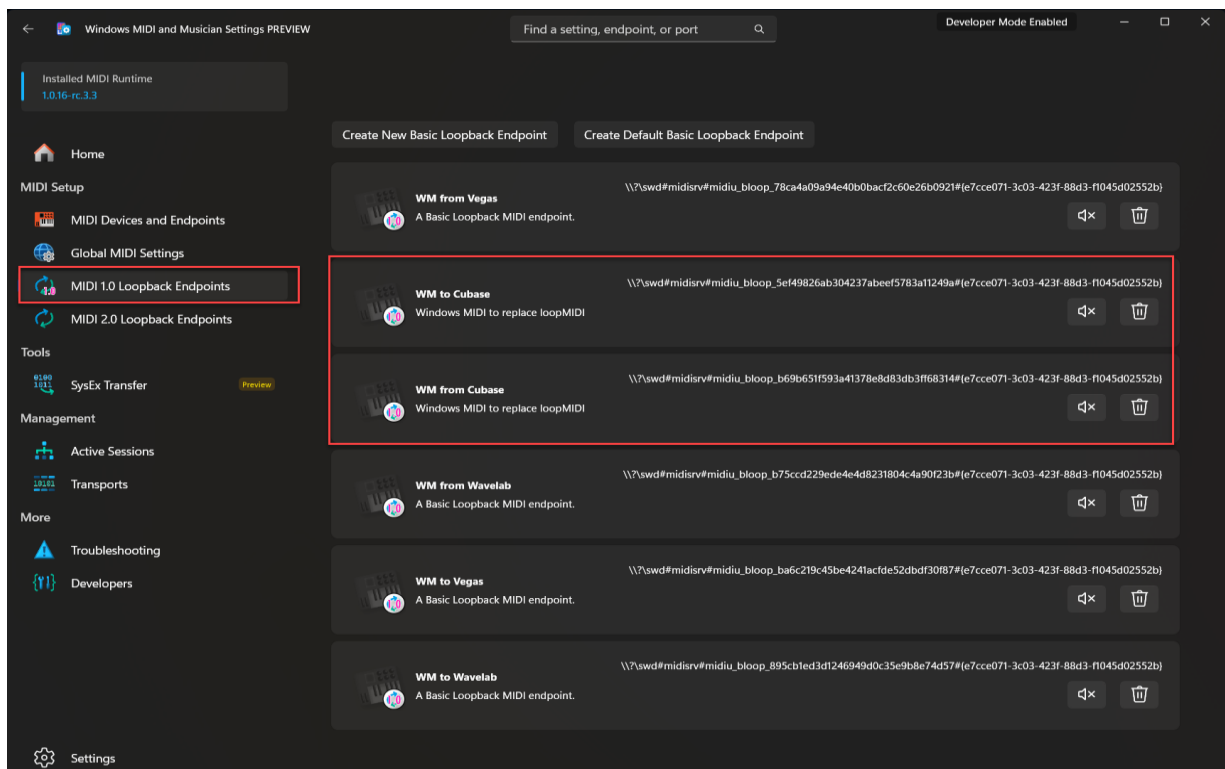
Installation and Setup

V5: Set up Ports in Windows MIDI (or install loopMIDI)

- Open the Windows MIDI and Musicians Settings
- Configure MIDI 1.0 Endpoints (Ports)
 - Create virtual ports:
 - WM to Cubendo is the default port that will **send** MIDI from our panel to your DAW Host (Cubase, Nuendo)
 - WM from Cubendo
 - WM From Cubendo is the default port that our panel will receive MIDI **from**.
- If you want to use separate MIDI ports for different DAW applications you can also add them here: (Cubase, Nuendo, Wavelab etc.)
 - We will later configure this in the settings.ini file

Refer to the following setup screenshots:

Windows MIDI 1.0 Loopback Endpoints



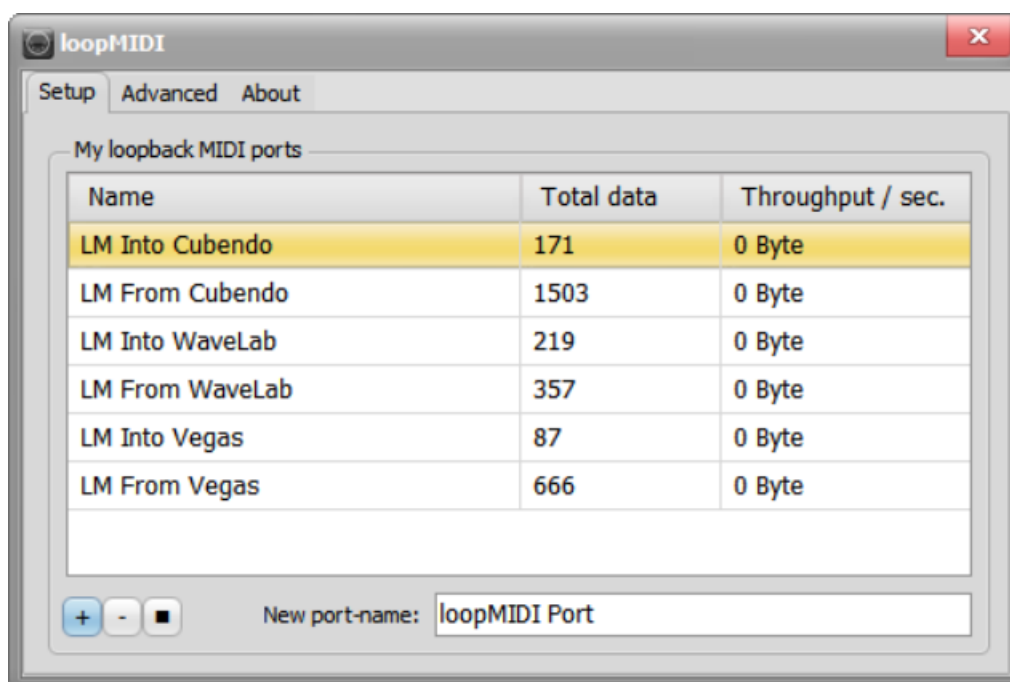
V5: Set up Ports in Windows MIDI (or Install loopMIDI)

It is preferable to use the new Windows MIDI functionality. But if you do not have it, you can use loopMIDI instead.

- Download from: <https://www.tobias-erichsen.de/software/loopmidi.html>
- Configure loopMIDI Ports
 - Create virtual ports:
 - LM Into Cubendo
 - LM Into Cubendo is the default port that will **send** MIDI from our panel to your DAW Host (Cubase, Nuendo)
 - LM From Cubendo
 - LM From Cubendo is the default port that our panel will receive MIDI **from**.
- If you want to use separate MIDI ports for different DAW applications you can also add them here: (Cubase, Nuendo, Wavelab etc.)
 - We will later configure this in the settings.ini file

Refer to the following setup screenshots:

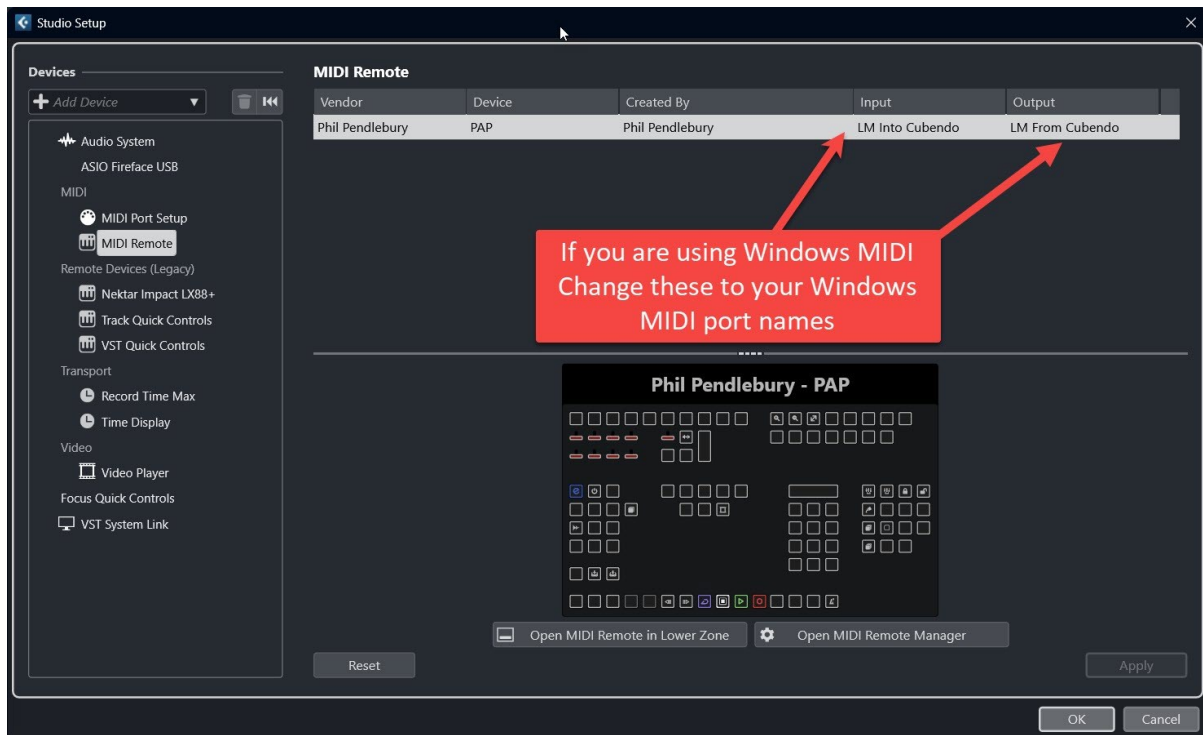
Loop MIDI



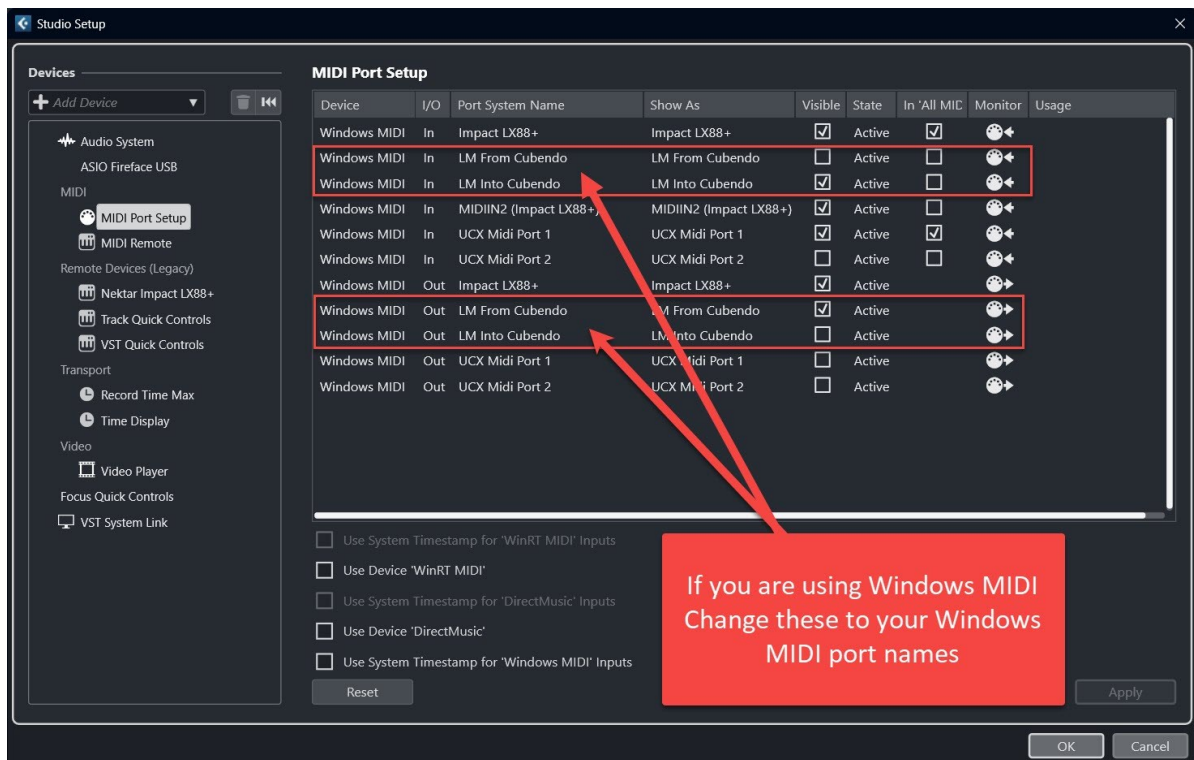
Configure Cubase / Nuendo

Import the MIDI Remote Panel or create your own configuration.

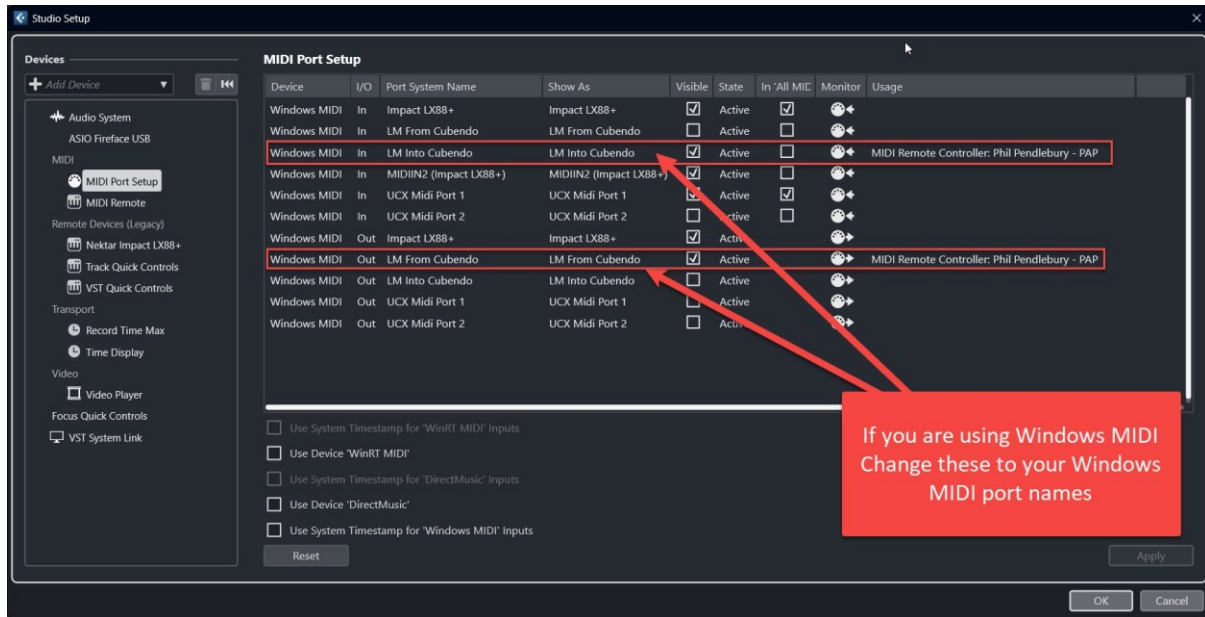
MIDI Remote



Cubase MIDI



Cubase MIDI with Remote Connected



Launch the Panel

Run the CN Remote Panel.

The application will check that your default endpoints (WM to Cubase / WM from Cubase) have been setup.

If the endpoints are not found, you will get an option to run the application without MIDI functionality. (This is to avoid crashes when trying to use MIDI calls when no MIDI device is found).

If you select this option, you will have to restart the application to use the MIDI functionality, after setting up the Windows MIDI ports (and adding the correct endpoints)

Go to the Edit Global Settings dialog and set up your preferred processes and general behaviour and language of the application (See Editing Global Settings)

The last button file you had open will be remembered

Customisation

The panel itself is very easily customisable; you can customize these settings for each set of buttons

You can add a new buttons panel by selecting Create New Button Panel from the Right-click menu

Settings are in the buttons related ini file, for example **buttons cubase.txt** settings are stored in **buttons cubase.ini**

- You can right click on the buttons to view or edit their behaviour
- You can move a button LEFT or RIGHT
 - **When you move buttons, using the right click menu, you cannot move a button past a section header**
- You can Add a new button by right clicking on an existing button, entering its values and clicking Add (and Yes on the following confirmation dialog)
- You can Delete an existing button by right clicking on it and selecting Delete (and Yes on the following confirmation dialog)
- To enter a value that is sent on Mouse UP use the Up Value area.
 - This will show a Red X if there is no Up Value assigned.
 - If you assign a value to Mouse Up the X will become grey
 - If you do NOT want to send a value on mouse up, you can click the X again, the value will be removed, and the X will again become Red
- Note: You cannot delete ALL buttons, there must always be at least 1 button in the panel
- To add new Section Headers, you need to edit the button text file manually

To select what kind of action the button has, use the dropdown list to choose between:

CC,NOTE,KEY

CC and NOTE are MIDI Values. KEY will send Key Commands (see next section)

The screenshot shows the 'Edit Button Action' dialog box. It has a dark blue title bar with the text 'Edit Button Action' and a close button (X). The main area has a red background. At the top, there are two buttons: 'Move Left' and 'Move Right'. Below these are several input fields: 'Name' with a play icon, 'Tooltip' containing the text 'Play', 'Channel' with a dropdown set to '1', 'Type' with a dropdown set to 'CC', 'Value' with a spinner set to '60', 'Press' with a spinner set to '127', and 'Release' with a spinner that is empty and has a red 'X' icon next to it. At the bottom, there are four buttons: 'Add', 'Delete', 'Save', and 'Cancel'.

Sending and Editing Key Commands (Hotkeys)

If you are using the KEY type button action, you can double click to open the **Key String Editor**. This will show all key entries on separate lines. When you hit OK, the + to join the keys will be added automatically. (You can also add delays on separate lines)

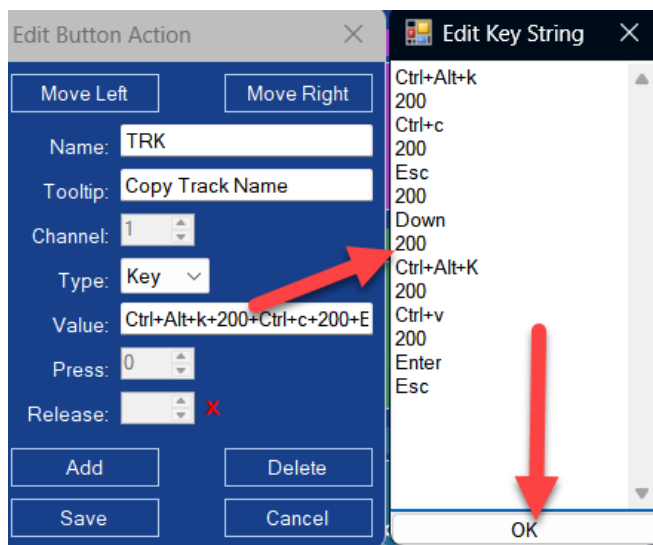
- You can enter full strings to be sent by using **“This is #1” [more commands] “string#2”**
- Note that to enter an actual quote character you must use **quote** or **speechmark**: See the [Key Assignment Reference](#) for more information

Repeating Key Command set

- If you are using the KEY type button action you repeat the action by adding [Repeat=xx] at the **start** of the list of commands, (be careful with this, test it with small values first)
- You can also enter that repeat number as variable in your string. For example:

[Repeat=2]+“My String %r% Number”

- Will result in 2 loops, sending “My String Number 1” and “My String Number 2”



Button Files

- Example file: buttons.txt
- Settings for **buttons.txt** = **buttons.ini**
- Additional files: Name them according to the application, e.g., buttons wavelab.txt, buttons vegas.txt and switch between button files based on the active application

Editable Settings (within button (txt) files)

Section Headers

As well as being a title header for each section of buttons, Section Headers are what give the sections in your panel different colours.

You can choose to show or hide them, using the **Display Section Headers** option.

If you wish to make a section a different colour, you can show the section headers and then **right click on the header and rename it and give it a colour** of your choice.

Each Section Header MUST have a unique ID. See this example:

```
#1,Transport / Locators,LightYellow
// Section headers and colours also accept hex values
Buttons go here
#2,Workspaces,#002790
Buttons go here
#3,Another Header,DeepPurple
More Buttons
```

Example Button Actions [in buttons.txt type files]

```
Play,Transport Play,1,CC,60,127,
Stop,Transport Stop,1,CC,61,127,
Record,Record Now!,1,NOTE,12,127,0
Loop,Start Looping,1,CC,63,127,0
VA,Wavelab\nVisual Analysis,1,KEY,ALT+F8,0,
// You can add comments into button files, like this
```

The button data works like this, each field separated by a comma:

- Button Name (The name of the button)
- Button Tooltip (Tooltip you will see when hovering over a button)
 - Tooltips can be broken into multiple lines by adding “\n”
 - For example: This is my tooltip\nThis is the second line
- MIDI Channel (MIDI Channel the button will send on)
- CC, Note or KEY (Send a MIDI CC or Note, or Key Command)
- CC, Note or Key Value (The actual Note or CC that is sent, or The Key combo)
- Mouse Down Value (The value of the cc or note that is sent on mouse down)
- Mouse Up Value (The value of the cc or note that is sent on mouse up – leave blank for none)

MIDI Channel, Mouse Down Value & Mouse Up Value are ignored when the button is sending a key

Right-Click Menu Options

- Always On Top: Keeps panel above other windows
- Show Title Bar: Toggle visibility of the main title bar
 - When **Show Title Bar** is active, the **Make Collapsible** state will be switched off
- Show Status: Toggle visibility of the bottom status bar
- -----
- Display Section Headers: Toggle visibility of section headers
- Panel Transparency: You can use a slider to adjust transparency of the panel
- Make Collapsible (or Make Collapsible!):
 - The panel will shrink down to a single control button
 - When you hover over a collapse control button - it will expand to the full panel size - and collapse when you leave the button area
 - The control button is styled by the settings in **Edit Button Panel Settings** dialog
 - When **Make Collapsible** is active, the **Title Bar** will be switched off
- Auto Switch: Will attempt to switch panels automatically depending on which application has focus.
 - The panels are defined in the Global Settings dialog (see below)
- -----
- Select Button Panel File: Loads a different button panel layout
- Refresh Current Panel: Reloads the current button file (in case you edited it manually)
- Create New Button Panel...: Creates a new button panel based on the currently open one
- -----
- Edit Buttons File: Opens the current buttons in text editor
- Edit Buttons Settings: Opens a dialog that enables editing of the current panel settings
- Edit Global Settings: Opens a dialog that enables editing of the global settings
- -----
- Move Panel to Centre: In case the panel is off screen you can move it the screen centre
- Show MIDI In From Host: Opens a small dialog that shows MIDI messages **from** the DAW
- -----
- View README: Opens a README text file
- View PDF Manual: Opens the PDF manual in your default PDF reader
- About: View the splash screen
- Exit: Closes the application

Note: It is not possible to make a panel Collapsible and have the Title Bar visible at the same time!

Edit Button Panel Settings

Use this dialog to edit the general settings of your button panel

Dialog box titled "Edit Button Panel Settings: buttons".

Main Button Panel Settings

- Button Width: 90
- Button Height: 26
- Button Gap: 2
- Background: [Purple color swatch]
- Button Border: [Cyan color swatch]
- Button Font: Pick... Source Sans Pro
- Button Font Size: 8.0
- Top Margin: 4
- Left Margin: 6

Collapsible Control Button Design

- Button Width: 120
- Button Height: 50
- Button Colour: [Red color swatch]
- Background: [Purple color swatch]
- Button Border: [Black color swatch]
- Button Font: Pick... Segoe UI
- Button Font Size: 10.0
- Top Margin: 4
- Left Margin: 4

Preview: A red button with a black triangle pointing down.

Buttons: Cancel, Save

- Button Width: The width of the buttons
- Button Height: The height of the buttons
- Button Gap: The gap between buttons
- Background Colour: The panel background colour
- Button Border: Border colour of buttons
- Button Font Name: Font name for buttons
- Button Font Size: Font size for buttons
- Top Margin: Margin between top of panel and first button
- Left Margin: Margin between panel edge and first button

Defining the style for the collapsible button

If you use the right click menu item, Make Collapsible, the collapsible control button will take its settings from the Collapsible Control Button Design.

Note: You can right click on the colour value boxes and use Copy and Paste to set the colours instead of opening the colour picker.

Editing the Global Settings (IMPORTANT)

Use this dialog to setup the application's global settings

The screenshot shows the 'Edit Global Settings' dialog box. It has a dark title bar with a close button. The main area is light gray and contains several sections. 'Default MIDI Ports' has two dropdowns. 'MIDI Activity Buttons' has three color pickers. 'Tooltip Settings' has a background color picker and a text input. 'Processes' has a list of processes (currently 'Cubase') with 'Add' and 'Delete' buttons, and fields for process-specific settings. 'Auto Switch (Expert!)' has two spinners for 'Auto Switch Check' and a 'Fallback Panel' dropdown. At the bottom are 'Cancel' and 'Save' buttons.

MIDI

- Panel Midi Out: The default MIDI Port that sends MIDI to your DAW
- Panel Midi Out : The default MIDI Port that receives MIDI from your DAW
- MIDI In Activity Colour: Colour of button if MIDI is received
- Button Press Glow Colour: This is the colour a normal button will "glow" when pressed
- Button Release Glow Colour: This is the colour a button will "glow" when pressed, if it has a value assigned to MIDI UP
- Tooltip Background: The background colour of tooltips
- Tooltip Text: The text colour of tooltips

Application Detection & Auto Switching

- Process Name: The DAW we will look for "Cubase" will find "Cubase Pro" for example
- Default Panel: Default Panel for this DAW if you use Auto Switch
- Process Midi Out: MIDI Port to send data to the DAW
- Process MIDI In: MIDI Port to receive data from the DAW
- Language: Choose your default language here. Once chosen, restart the application
- Auto Switch Check: How often the application check for a new focussed DAW
- Fallback Panel: The button file that will be chosen if no DAW is in focus

Note: You can right click on the colour value boxes and use Copy and Paste to set the colours instead of opening the colour picker.

Adding other DAWs or Applications

For detection, or auto switching of panel and MIDI ports

These are what the panel will look for an attempt to send MIDI Messages and Keyboard Keys to, so it is important that you list your DAW here.

The app will still send MIDI to the default MIDI Port without these but there will be no way for it to know which specific MIDI Port to attempt to use, or which DAW to send your actual keyboard pressed keys to.

If using **Auto Switching**, you must list the button file that you want to activate when the application has focus.

If you want to use **specific MIDI Ports** depending on the active DAW application, you need to add that here too.

If Auto Switching is active the app will check what is in focus and attempt to switch to it, using the above settings.

If you do not have a button file listed after the process name “:” then the panel will simply not Auto Switch.

If you plan to edit a button file while a DAW or other app is open, it is a good idea to disable Auto Switching.

Advanced: To set the button panel that loads when there is no active DAW, and Auto Switching is on, use the **Fallback Panel** option or set it to **None**, if you want the current panel to stay active.

Tray Item

The tray icon offers right click options and can be clicked once to show and hide the panel.

- Always On Top: Keeps panel above other windows
- Show Title Bar: Toggle visibility of the main title bar
- -----
- Move Panel to Centre: In case the panel is off screen you can move it the screen centre
- Select Button Panel File: Loads a different button panel layout
- -----
- Show / Hide (also works with single Left Click on the Tray Icon)
- Exit: Closes the application

Notes:

- The panel has no scroll bars, but can be scrolled vertically with the mouse wheel
- The panel has no Maximize and Minimize buttons, this is by design
- For KEYS you can string together large key strings and add delays, like this:

1+1+Y+1000+ALT+F8+5000+1+1+Y+1000+ALT+F8

Double Check

The names of the ports in Windows MID (or loopMIDI) are correct and entered in onto the settings.ini file

For basic one-way communication, (sending MIDI signals from the buttons on the panel), make sure your DAW host is set to receive MIDI from the port: LM Into Cubendo.

For the buttons on the panel to sync with your DAW host, (receiving MIDI signals from the DAW host), make sure your DAW host is set to send MIDI from the port: LM From Cubendo.

Unfortunately, not all commands from any DAW can be sent to the panel (to make the buttons sync with actions). Most transport commands work, as do some others, depending on the host.

Highly Recommended

It is highly recommended that you Install the .NET 4.8.1 Runtime which this App was built on:

<https://dotnet.microsoft.com/en-us/download/dotnet-framework/thank-you/net481-web-installer>

Acknowledgments

- Tobias Erichsen – loopMIDI
- Mark Heath – NAudio MIDI library
- Amazing Andrew – AHK Interop dll
- Simon, Alberto, Mike for support, ideas and testing

Phil Pendlebury
EVERYTHING CREATIVE

Key Assignment Reference

How to Use Special Keys in Button Commands

To insert a special key as a command, use one of its recognised aliases.

Example: To send the “Page Up” key, you can use **pgup** or **pageup**.

Refer to the table below for supported keys and their aliases.

Key Name	Alias 1	Alias 2	Alias 3
Modifier Keys			
Ctrl	ctrl		
Alt	alt		
Shift	shift		
Win	win		
Navigation and Control Keys			
Tab	tab		
Enter	enter		
Escape	esc	escape	
Space	space		
Backspace	backspace		
Delete	delete	del	
Insert	insert		
Home	home		
End	end		
Page Up	pgup	pageup	
Page Down	pgdn	pagedown	
Up Arrow	up	uparrow	
Down Arrow	down	downarrow	
Left Arrow	left	leftarrow	
Right Arrow	right	rightarrow	
Numpad Keys			
Numpad 0	numpad0	num0	
Numpad 1	numpad1	num1	
Numpad 2	numpad2	num2	
Numpad 3	numpad3	num3	
Numpad 4	numpad4	num4	
Numpad 5	numpad5	num5	
Numpad 6	numpad6	num6	
Numpad 7	numpad7	num7	
Numpad 8	numpad8	num8	
Numpad 9	numpad9	num9	
Numpad Add (+)	numpadadd	numpad+	
Numpad Subtract (-)	numpadsub	numpad-	
Numpad Multiply (*)	numpadmult	numpad*	
Numpad Divide (/)	numpaddiv	numpad/	
Numpad Enter	numpadenter		
Numpad Dot (.)	numpaddot	numpad.	

Key Name	Alias 1	Alias 2	Alias 3
Punctuation and Symbol Keys			
Comma	comma		
Semicolon	semicolon		
Backslash	backslash		
Forward Slash	forwardslash		
Hash	hash	hashtag	
Period/Full Stop	period	fullstop	.
Colon	colon	:	
Apostrophe	apostrophe	'	
Quote	quote	"	
Backtick	backtick	`	
Open Bracket	openbracket	leftbracket	[
Close Bracket	closebracket	rightbracket	]
Open Brace	openbrace	leftbrace	{
Close Brace	closebrace	rightbrace	}
Pipe	pipe		
Dash/Minus	dash	minus	-
Equals	equals	=	
Plus	plus	+	
Underscore	underscore	_	
At	at	@	
UK Pound	pound	pounds	£
Dollar	dollar	dollars	\$
Percent	percent	%	
Caret	caret	^	
Ampersand	ampersand	&	
Asterisk	asterisk	*	
Question	question	?	
Exclamation	exclamation	!	
Less Than	less	lessthan	<
Greater Than	greater	greaterthan	>
Special			
Insert a Delay in ms	No. Greater than 9	Example 2 seconds	Key+2000+Key