



vMix Panel Builder

User Guide

-30 Jan 2019-

Introduction:

This application is made for users who wish to design their own controller layout. It sends HTTP commands to vMix as per the shortcuts listed in the “vMix User Guide”. It does not send midi commands so you don’t have to program midi shortcuts in vMix. Please refer to the vMix guide to better understand how to use the commands.

Installation for Mac Users:

Select and run the file “vMix Panel Builder.app” located in the Mac folder you downloaded.

Note: If the app doesn’t open, then Ctrl-Click the file and choose ‘Open’ from the shortcut menu. Depending on your security settings, this might have to be done the first time you open the file in order to allow it to run. The next time you open it, you can simply open it from its icon.

Installation for Windows users:

Copy the downloaded the complete “Windows folder” to the location of your choice (Desktop or a folder where you store your apps). Keep the folder intact as the externals are required. You can create a shortcut to the “vMix Panel Builder.exe” file.

Note: If it doesn’t open because of some windows settings, Right-Click and select ‘Properties’ then ‘Compatibility’ tab. Check “Run this program as an administrator” and “Change default settings for all users”. Click “Apply” and OK. This only needs to be done the first time you run it.

Using the app:

The App is designed to operate in two modes “Run” and “Edit”. The mode is selected by clicking on ‘Edit’ in the menu bar. The InfoBox will appear at the top of the screen. The “InfoBox” can be moved around the screen by click-dragging it. ‘Edit’ mode is used for designing your layout. Commands will not be sent to vMix in “Edit” mode. Commands will only be sent to vMix in ‘Run’ mode.

Adding objects:

There are several types of objects (Buttons, Labels, Faders, T-Bars, Sliders). To add an object, select ‘Edit’ mode then right-click on the canvas and select the type of object you want to add. Each object can be sized and positioned to wherever you like. They can be ‘sent to back’ or ‘brought to front’ and aligned as necessary. When the object is selected, the available parameters will appear in the InfoBox. You can then adjust the color, text size, text color, border etc., of the buttons and labels. Buttons and labels can contain multiple lines of text.

Buttons:

There are three types of buttons (Colored, Clear and Icon). The Colored Button type will brighten up when tallied, whereas the Clear button will change to the selected color when tallied (assuming the command is “tally able”). The Icon Button can contain a “Transition, Input, Media or a User icon”. You can add your own User icons using the + - buttons in the Infobox. They must be .png or .jpg format. They will be loaded into memory, so be careful of the file size (a 500 x 500 px (40k) image is sufficient). If an icon is in a .png format, the transparent background will change to the chosen color when Tallied if the command is “tally able”. If the icon is a .jpg, it will not tally.

Button objects contain vMix commands that it will be sent when in ‘Run’ mode. **To add a command, click on the (?) icon in the Info Box.** This will open a menu with all the available vMix shortcuts. Select the command that you wish to execute when the button is pressed. Refer to the ‘Shortcut Function Reference’ in the vMix User Guide for instructions on each command. Some are intended for use with Faders. Enter the ‘Input’ and ‘Value’ information in the appropriate field in the InfoBox. The ‘SelectedName’ field is only applicable in certain cases, mostly when dealing with titles. (consult vMix User Guide)

Labels:

Labels do not execute vMix commands. They are simply labels that are used for identification or background boxes. The labels can be sized, positioned and colored as desired. They can also be set to opaque or transparent by clicking the ‘opaque’ button in the ‘InfoBox’. They can be ‘send to back’ or ‘bring to front’ to allow you to overlap labels (as you might do when using a label as a background for other objects).

Faders:

Faders can be used for commands such as (Input/Bus/Master Volume). To add a command, click on the (?) icon in the Info Box. This will open a menu with all the available vMix shortcuts. Some commands only apply to buttons and do not apply to faders. Select the command that you wish to execute when the fader is moved. Refer to the ‘Shortcut Function Reference’ in the vMix User Guide for instructions on each command. Enter the ‘Input’ and/or ‘Value’ information in the appropriate field in the ‘InfoBox’. Faders can be sized and positioned as you like. Faders include VU meters. They can be controlled in Preferences. You can choose to hide only muted VU’s or turn them off altogether.

T-Bar:

T-Bars can be used for commands such as (SetFader, ReplaySetSpeed). The parameters for top and bottom values can be set according to the selected vMix command. You can choose the T-Bar style to either ‘Traditional’ A/B type fader or ‘Snap Back’ type as used in vMix. The default T-Bar command is set to ‘SetFader’ with “Traditional” style.

Centered Slider:

Center Sliders are used for commands that require +/- values, such as Color Correction. These sliders can be sized to be vertical or horizontal as required.

Cloning objects:

If you have an object that you wish to clone, right-click on the object and select 'clone'. This will place an identical object to its side. Position it to wherever you like and modify its parameters as required. You can also lasso or shift-click multiple object to clone them as a group. Ctrl-C to copy and Ctrl-V to paste also works and is quicker than right-click cloning.

Aligning objects:

Multiple objects can be selected by click-dragging the cursor "lassoing" around a group of objects. They can also be selected by shift-clicking individual objects. They can then be aligned to top or bottom of the first selected object. They can be moved around by dragging the group or using the keyboard arrows. They can also be sized and moved by using the up/down arrows in the 'position' window

Infobox:

When in 'Edit' mode, the 'Infobox' can be moved around by 'click-dragging' it, in order to allow you to see objects that might be below it.

File menu:

Select 'New' to erase the canvas and start a fresh design.

Select 'Open Last' to load the last used template.

Select 'Open' to erase the current canvas and open a previously saved template.

Select 'Save' to save the current design to the same file name as currently opened

Select 'Save as' to save the file under a new name.

The files are saved as a .csv and are not encrypted. You can easily share the files.

Preferences:

Always on top: check this if you want the app to remain on top of other windows.

Open Last Template on Startup: check this if you want to automatically open the last used file

Theme: Choose preferred background. Choosing "custom" will allow you to select a background color.

Audio Tallies = "Mute": This will show the Audio Button tally as a "Mute" function rather than a "Channel On/Off" for those who prefer this mode.

Window Zoom: Select the zoom percentage if using a template that was created on another computer and may not fit your current computer's screen size. This setting is temporary and not saved in the preferences.

Note: The current canvas size and position will be saved when saving preferences.

Connect Button (beside lock icon):

This will toggle the visibility of the 'IP' information box. You must enter the correct vMix IP into the 'IP' field in order to send commands to vMix. You can enter either the local IP or the name of your DDNS server if you are connecting from outside your network (eg: myDomain.com). Once connected, the button will turn green. The IP information will be saved when saving your panel layouts. It should reconnect automatically when opening a file (assuming the IP of vMix hasn't changed since the time you built your template).

Tallies:

Buttons that contain one of the following commands (CutDirect, ActiveInput, PreviewInput, Fade to Black, Audio, AudioOff, AudioBus, MasterAudio, BusAAudio, BusBAudio, Solo, OverlayInputx, StartStopRecording, StartStopExternal, StartStopStreaming, StartStopMulticorder, Play, Pause, FullScreen, ReplayStartRecording, ReplayLive) will be hilited when the corresponding tally is active. Panel Designer Tallies will reflect the status of vMix even if switched from multiple controllers. (eg: x-keys or directly from vMix program)

Invert Tallies:

Each individual button can have an inverted tally if desired. For example, this can be used to invert tallies on commands such as such as "Audio" to behave like a 'mute' button instead of 'channel On' button.

Script Builder:

When a button contains the command "StartScriptDynamic" it will open a script builder window. This is a simple list field where you enter the vMix commands in the order you wish to execute them. Choose a command from the drop-down menu and add the appropriate data in the corresponding fields next to the command. Refer to the VMix User Guide for required data for each command. All the vMix shortcuts are available. One exception is the "Sleep" command which is basically a "Wait" command in milliseconds. Use this to pause before executing the next command when necessary. Add and delete lines as required to build your script.

Grouping objects:

The grouping feature is designed so a Button can dynamically control the parameters (Command, Input, Value) of other Buttons within the group, thus allowing you to change the parameters of several buttons at once. To program the Buttons into a group, enter a "Group" name or number in the "Group" field for each of the Buttons that you wish to control. Check the "Group Control" box for the Button(s) that will control the parameters of that particular group. The "Group Control" button can now change the parameter of (Command, Input, Value) of the other buttons in the same group. You can have several Groups by giving each one a distinctive name.

Timer Feature:

Buttons have a field in the Infobox where you can program a specified time (uses computer time) to trigger the commands within that button. Use format {9:00:00 PM}. Useful for starting recordings etc. (if you're like me and sometimes forget 😊).

Hotkeys:

Keyboard Hotkeys can be added to Buttons. Click the "Hotkey" field in the Button's Infobox and enter the corresponding keyboard key. (Tab, Arrowkeys and Function) keys are accepted. Modifier Keys (Shift, Ctrl, Cmd, Opt) are not accepted.

Lock Icon:

Clicking the lock icon will lock the objects into place when editing and prevent them from being moved, sized or deleted. However the objects properties and commands can still be edited in the InfoBox.

Undo:

There is only one undo step.