

# ***X/M32 to Wing Converter***

<https://sourceforge.net/projects/xm32-to-wing-converter/>

## *User Manual*

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Paul Vannatto  
(donations accepted [paypal.me/PVannatto](https://www.paypal.com/merchot?p=PVannatto))

Version 1.0.1  
September 2020

*Note: This app is now part of the [Wing Snipshot Toolbox](#)*

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## **Acknowledgments**

Many thanks to the following:

- The Behringer Forum members for their many suggestions and encouragement. It was because of the numerous discussions on the forum that this X32 online set of tools were created and developed.
- Music Tribe for creating the new Wing console from the popular X32/M32 and X-Air eco-systems and providing their implementation of the JSON protocol so that developers can provide enhancements beyond the standard capabilities of this amazing digital console.

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## History and Purpose

When the X32 was initially launched in 2012, scenes were a method of storing snapshots of the consoles, then reloading those snapshots when required. Later cues and snippets were introduced (January 2014) that brought a whole new way of managing settings of the console. Over the years users have created (and stored) a wealth of scenes, snippets and shows that could be re-used over and over again.

When the Wing was released in December 2019, only loading and storing snapshots were provided. And to everyone's surprise, they are not OSC protocol based. Instead it uses an implementation of the JSON protocol. It would have been a tragedy to have to throw out the wealth of time and expertise investment in the large library of scenes when migrating to this new amazing console. For this reason, this converter was developed.

## Installation and Setup

The XM32 to Wing Converter app is a self contained executable program developed and compiled using the Lazarus and Free Pascal open source development environment. Unzip the files to a folder and run the app. For some linux flavors, you may need to make the file an executable. Currently the converter is available for Windows, Mac, linux, and Raspberry Pi.

## Quick Start Guides

### *Scene preparations for conversion to the Wing snapshots*

- ✦ The X32/M32 channels are mono in nature. Wing channels are stereo in nature. The converter can now correctly convert stereo linked channels, buses and matrixes to the Wing equivalent. So preparation for this is no longer required.
- ✦ The Wing only has 8 local XLR inputs. Any channel assignments beyond that (local 9-32) from the X32/M32 should be reassigned to inputs from a stagebox.
- ✦ Some output assignments, such as Direct Out Channels 1-32 do not have equivalent settings in the Wing. Therefore these settings will be turned OFF in the Wing snapshot.
- ✦ Before loading the converted snapshot into the Wing, it is recommended that the console be initialized first.
- ✦ After loading the converted snapshot, please review all settings in the Wing. Remember this is still in beta stage (and I occasionally do make mistakes).

### *Converting scenes to snapshots*

- ✦ Select the scene or scenes to be converted. Multiple files can be selected (using Ctrl, Shift, etc. keys).
- ✦ Select the output directory.
- ✦ Select the desired filters. These are in the order of the sections in the snapshot file.
- ✦ Choose the Card Out option. On the X/M32, the USB and Card get the same outputs. On the Wing, they are separate outputs.
- ✦ Save to a snapshot. The scene filename will be transferred to the snapshot file (but with the .snap extension) and saved in the selected output directory. Please note that this app generates a partial snapshot (snippet like) file that only includes specific settings from the X/M32.
- ✦ When the app is closed, the filename (or first on the list), output directory and app location and size will be stored in an ini file in the same folder as the app. This info will be automatically loaded when the app is run.

## Screens

### *Main Screen*

The screenshot shows the 'Main Screen' of the X/M32 to Wing Converter. It features a 'Filters' section with eight checked options: Preamps, Outputs, Channels, Aux In, Buses, Mains, Matrixes, and DCA/Mutegrp. To the right, the 'Card In/Out' section has three radio buttons: 'USB' (selected), 'Card', and 'Both'. Below these are two text input fields: 'Scene Filename(s)' with the path '/home/paul/Documents/X32 Files/Scenes 4/Conn...' and 'Snapshot Directory' with the path '/home/paul/Documents/Wing Files/Snapshots'. At the bottom, there is an information icon and a 'Save Snapshot File(s)' button.

**Filters:** Select the desired filters of sections to be converted before saving the snapshot file. These are the only sections of the X/M32 that have equivalent sections in the Wing.

**Card In/Out:** Select the desired option of the X/M32 Card Out (the Wing has these separated).

**Scene Filename(s):** Select the desired scene or scenes to be converted. Multiple scene files can be selected (using the OS multiple file selection process) and processed in bulk. The resulting output snapshot files will take on the same name, but with the different directory and snapshot extension (currently .snap).

**Snapshot Directory:** Select the snapshot directory where the resulting snapshot file will be saved.

**i:** This loads the About box that provides the version number and copyright of the app.

**Save Snapshot File(s):** This starts the process of converting the various scene settings to their Wing snapshot equivalent. It will process each scene file selected one at a time and will save appropriately (in the snapshot directory with the scene filename, but with the snapshot extension .snap).

## *About Screen*



This is currently the only other screen available with this app. It does provide the current version number and date of release. Many thanks to the many users that have supported the many free open-source apps that I have developed over the years.

## Glossary

- ✚ **OSC Protocol:** Open Sound Control (OSC) is a protocol for communication among computers, sound synthesizers, and other multimedia devices that is optimized for modern networking technology. The X32 is based Behringer's implementation of this protocol, as defined in the OSC Remote Control Protocol v1.01 (Oct 17, 2012). This has recently been updated by Patrick-Gilles Maillot with his X32 OSC Protocol. Both scenes and snippets use multiple value OSC commands.
- ✚ **JSON Protocol:** (JavaScript Object Notation) is also an open standard file format (text), first specified by Douglas Crockford in the early 2000. The latest standard was published in 2017. It consists of attribute-value pairs and array data type.
- ✚ **Scenes:** These typically comprise of over 2000 lines of multi-value type OSC commands. They store nearly all aspects of the X32 and can be saved and recalled when necessary.
- ✚ **Snapshots:** The Wing implementation follows the JSON protocol relatively closely. It does not include arrays. It consists of a single line of over 40,000 characters and stores all console settings.