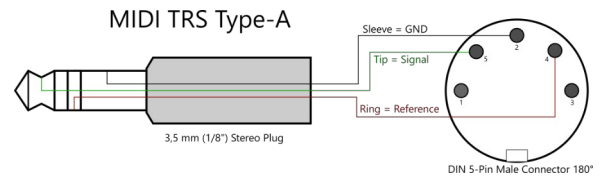


MINERVA

Quick Reference

Connections

- **Stereo Out:** A 1/4" stereo jack for the output of the sample playback. Output impedance 500Ω.
- **Stereo In:** A 1/4" stereo jack for a guitar, bass, synth or the output of other effects devices that is mixed with the sample playback. This input is buffered with an input impedance of 1MΩ. Since it bypasses all digital circuitry, it cannot be controlled by MIDI. It'll always pass through unaltered.
- **Power:** 9VDC only, Center Negative, Boss Style power supply. Min. 150mA.
- **MIDI In:** 3.5mm (1/8") MIDI Input according to MIDI Standard *MIDI TRS Type-A*.



Status LED

The Status LED shows the state of the *MINERVA*. It can either be:

- **Green:** The *MINERVA* is ready and waits for MIDI commands to start playback.
- **Orange:** The *MINERVA* currently plays back a file.
- **Red:** An error occurred. Refer to the user manual.

Supported Files

The *MINERVA* can play .wav and .aiff-Files with the following attributes:

- **Channels:** Up to 2 (Mono and Stereo).
- **Sample Rate:** 44.1kHz or 48kHz.
- **Bit depth:** 16-Bit, 24-Bit or 32-Bit

SD Card

The *MINERVA* works with all **microSD** and **microSDHC** cards with up to 32GB. MicroSDXC cards (all cards larger than 32GB) are not supported. The SD cards have to be formatted with the **FAT32** filesystem. Always restart the *MINERVA* after inserting a SD Card.

File Names

The files are assigned to the MIDI commands **alphabetically**. For easy use, name your files with leading numbers like that: *000-file_a.wav*, *001-file_b.wav* etc. The number in front of the files will be your PC/ CC commands argument

How to Use A: The Easy Way

Copy your files into the root folder of the SD card. To play back one of the files use the MIDI PC command. The files are assigned to the PC commands alphabetically. That way you can play back up to 127 files.

How to Use B: The CC Way

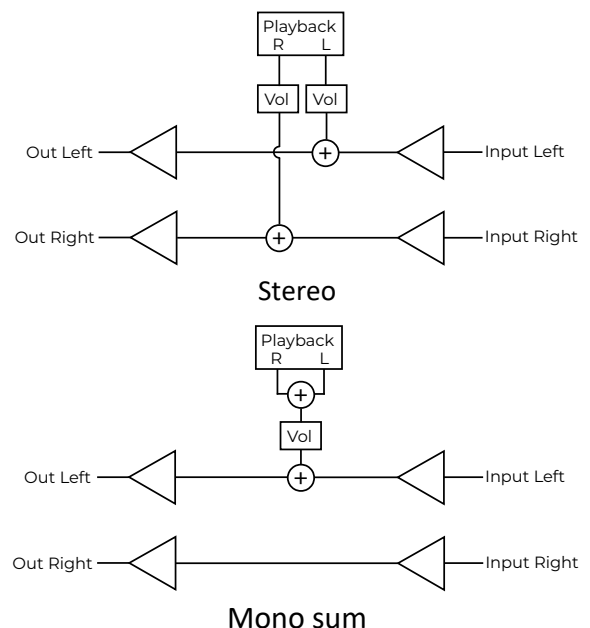
Create a folder on the SD card with the name **CC followed by a number**. For example CC31. The files in that folder are played back with the CC command 31. The files are assigned to the argument of the CC command alphabetically.

How to Use C: The Notes Way

To play files by sending MIDI Note commands, create a folder named **Notes** and place your note files there. Note files are named after the note and octave they represent. For example, if your file contains the note A# on the second octave, it has to be named **A#2.wav** or **A#2.aiff**. If you want to use more than one sound, you can name your folders **Note** followed by a number (**Note10** for example). To use that folder send PC10.

How to Use D: The PC Increment Way

Create a folder named **PC followed by a number**. For example PC1. Files placed in that folder are played one after another with every time PC1 is sent.



MIDI Command for Playback Modes

CC	#	Function
102	0	Stop playback
	1	Resume playback
	2	Play Mode: Single . Playback is ended with the end of the track (Default)
	3	Play Mode: Repeat . The track starts over at the end.
	4	Play Mode: All . All tracks in the respective folder are played alphabetically. After the end of the last track, playback is ended
	5	Play Mode: Repeat All . Like <i>Play Mode All</i> , but after the end of the last track the playback continues at the first track in the folder.
	6	Set playback to forward direction
	7	Reverse playback
	8	Reverse playback temporarily (sets back to forward with next start of file)
	10	Play Mode: MIDI Clock 1/4th notes . The playback restarts the file in the beat of MIDI clock 1/4th notes
	11	Play Mode: MIDI Clock 1/8th notes . The playback restarts the file in the beat of MIDI clock 1/8th notes
	12	Play Mode: MIDI Clock triplet notes . The playback restarts the file in the beat of MIDI clock triplet notes
	13	Play Mode: MIDI Clock dotted 1/8th notes . The playback restarts the file in the beat of MIDI clock dotted 1/8th notes
	14	Play Mode: MIDI Clock half notes . The playback restarts the file in the beat of MIDI clock half notes
	15	Play Mode: MIDI Clock whole notes . The playback restarts the file in the beat of MIDI clock whole notes
	16	Play Mode: MIDI Clock 2 whole notes . The playback restarts the file in the beat of MIDI clock 2 whole notes
	17	Play Mode: MIDI Clock 4 whole notes . The playback restarts the file in the beat of MIDI clock 4 whole notes

MIDI Commands for Playback Volume

CC	#	Function
103	0-127	Set volume of both tracks (0=mute, 127=full volume)
104	0-127	Set volume of left track (0=mute, 127=full volume)
105	0-127	Set volume of right track (0=mute, 127=full volume)

Configuration File

There are some options that can be set via a configuration file. This configuration files has to be placed into the root folder of the SD Card and named *minerva.cfg*. You can download the default configuration file here:

<https://oscillatordevices.com/doc/minerva.cfg>

These are the default settings when no configuration file is present:

- MIDI Channel 6
- CC commands start at CC102
- Volume relative to volume knob
- Mono sum off
- Note sustain off
- Note volume off
- PC increment wraps around after last file of folder
- PC increment resets when sending a new PC command
- Arm files instead of playing off
- Automatic metronome off
- Note substitution on
- Diagnose mode off

Refer to the full user manual with all MIDI commands at

https://oscillatordevices.com/doc/oscillator_devices_minerva_user_manual_en.pdf