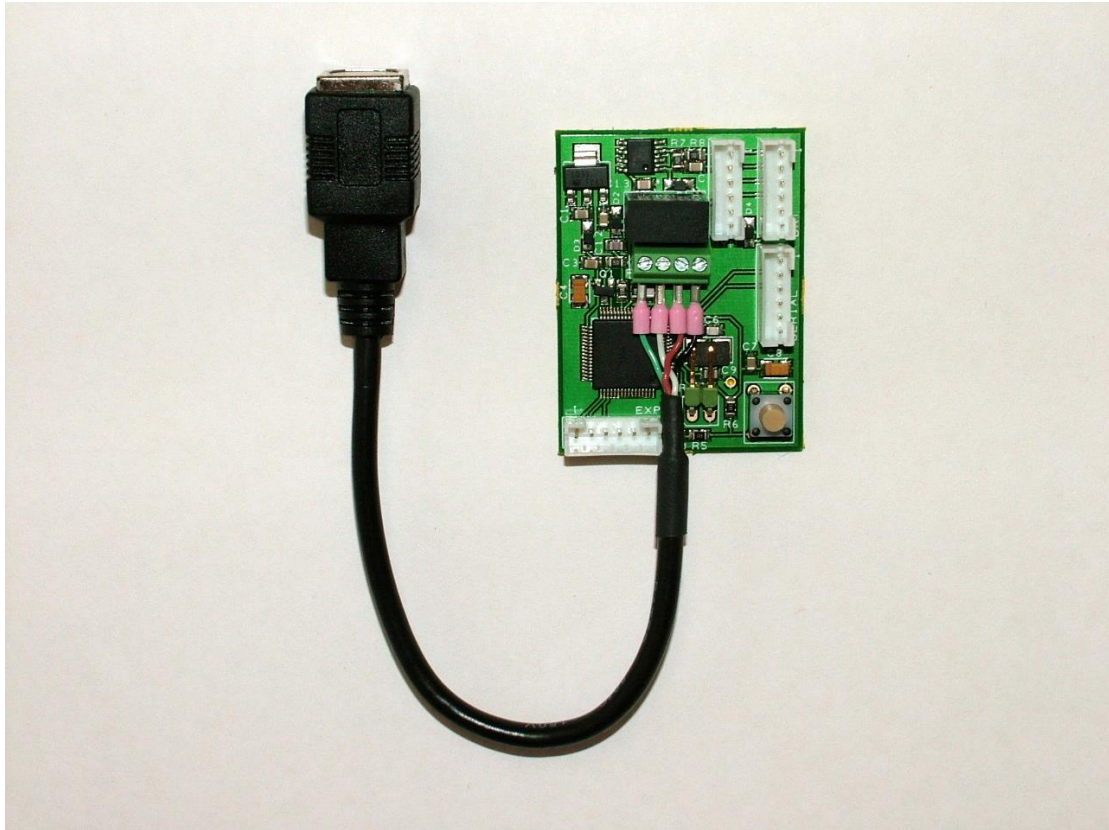


USBtribe The only USB connected Monotribe MIDI interface.



MONOTRIBE MIDI I/O, Sync and Power Supply with just one cable!

USBtribe

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MIDI interface.

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Introduction

Thank you for purchasing the USBtribe, USB MIDI interface mod. To help you get the most out of your new interface, please read this manual carefully.

MONOTRIBE MIDI sync, MONOTRIBE MIDI I/O and USB MONOTRIBE power supply with just one cable. The USBtribe is a MONOTRIBE MIDI kit which has been designed and built specifically to integrate with the KORG MONOTRIBE Analog Ribbon Station. With a USBtribe, MONOTRIBE MIDI mod installed in your synthesizer you can exchange MIDI Note, Controller, Sync and Transport Messages between your synthesizer and your computer, via a single USB cable. No 1980s DIN MIDI connectors or external computer interfaces required. The USBtribe midi kit will also allow you to power your MONOTRIBE via that same USB cable, thus eliminating the need for batteries or an external PSU, although you can still use them if you want to. You get classic, KORG, analogue sounds with modern, USB standard convenience.

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Quick Installation Instructions

This is the quick and easy method of installation. It requires no alteration of the MONOTRIBE housing, but does not allow for cable strain relief. It will also prevent you from using battery power as the USB socket exits the MONOTRIBE housing through a slot intended to take the clip on the battery cover.

Step one



Take one Korg Monotribe Analog Ribbon Station.

Step two



Flip it over and carefully remove the rubber feet, the screws underneath them and the battery cover.

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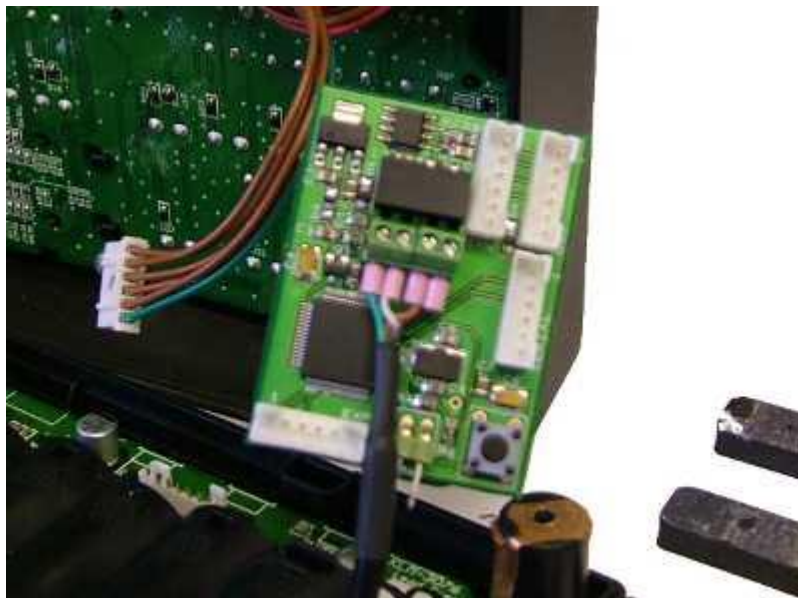
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Step three



Rotate the base of the box downwards, as if there were a hinge along the bottom edge of the Monotribe. Unplug the 6 way cable from the Monotribe's base.

Step four

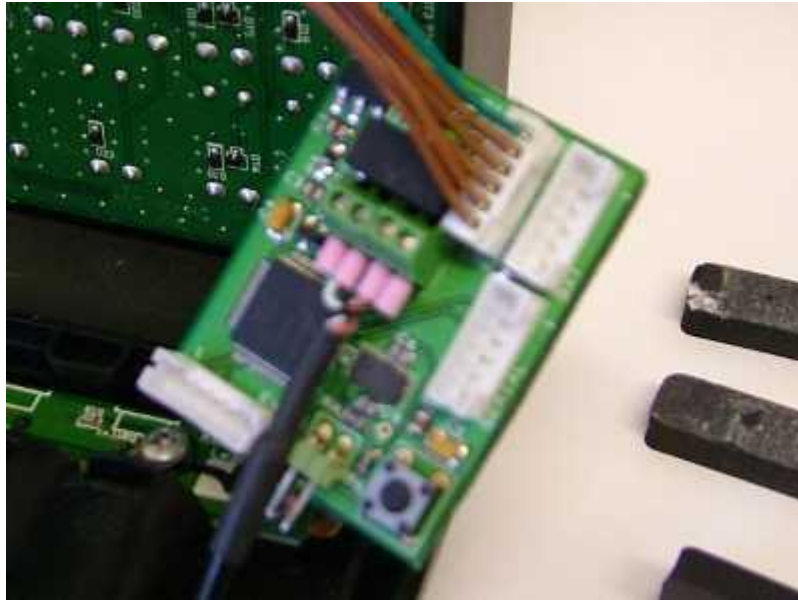


Take the USB socket cable that came with the USBtribe, and feed the wire ends through the hole by the battery compartment, from the outside. Connect the wires to the terminal block as shown in the photo. The order, from left to right, should be: -
Green, White, Red, Black.

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Step five



Connect the 6 way cable, previously disconnected from the Monotribe's base, to the USBtribe connector marked 'SYN'.

Step six



Take the long, 3 way cable that came with the USBtribe, and connect one end to the USBtribe connector marked SERIAL and the other end to the serial connector inside the Monotribe.

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Step seven



Connect the short, 6 way cable that came with the USBtribe to the USBtribe connector marked 'BAT'. Connect the other end to the circuit board in the Monotribe's base.

Step eight



Ensuring that the USBtribe remains seated in the lower right corner of the Monotribe, rotate the base back into position. Try to keep the wires tidy in order to ensure that the case closes easily.

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Step nine



Pull the excess USB cable to the outside.

Step ten



Replace the four screws and rubber feet.

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Step eleven



Your Monotribe is now equipped with USB MIDI I/O.

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Permanent Installation Instructions

This is the recommended method of installation. Although it requires, very minimal, alteration of the MONOTRIBE housing, it allows for some cable strain relief and will also allow you to use the battery compartment normally.

Step one



Take the USB cable, that came with your USBtribe interface, and it connect to the green terminal block. As shown in the photo, the order should be: - Green, White, Red and Black.

Step two



Flip it over and carefully remove the rubber feet and the screws underneath them.

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Step three



Stand the Monotribe up, with the power switch on top and the base facing toward you. Rotate the base of the box downwards, as if there were a hinge along the bottom edge of the Monotribe. Unplug the 6 way cable from the Monotribe's base and put the base to one side.

Step four



Position the USBtribe in the lower right corner. The USB cable should point straight up, under the right hand side of the upper board, toward the top right corner.

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Step five



Take the long, 3 way cable that came with the USBtribe. Connect one end to the USBtribe connector marked SERIAL and the other end to the Monotribe connector marked SERIAL, located on the left side of the Monotribe board. Connect the 6 way cable, previously disconnected from the Monotribe's base, to the USBtribe connector marked 'SYN'.

Step six

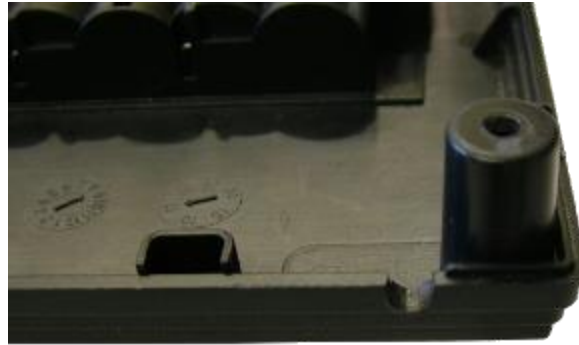


Now we need to make a small, semi-circular opening, in the wall of the base, to pass the USB cable through. You'll need a round file, of similar diameter to the USB cable. With the base oriented as shown in the photo, carefully file the opening in the lower right corner, on the horizontal edge, close to the screw pillar. File a little at a time, regularly checking the size against the cable.

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Step seven



You need to end up with something like this.

Step eight



Connect the short, 6 way cable that came with the USBtribe, to the USBtribe connector marked 'BAT'. Connect the other end to the circuit board in the Monotribe's base.

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Step nine



Rotate the base back into position and, ensuring that nothing gets trapped, replace the four screws and rubber feet.

Step ten



Job done! Rock some phat beats, and so on.

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Power supply

The USBtribe takes power from the 5VDC USB bus power and is powered up as soon as a USB cable is connected. This 5VDC is stepped up to 9VDC in order to supply the MONOTRIBE. The USBtribe is designed in such a way that you may safely leave your batteries in whilst using USB power. Please note that the MONOTRIBE may still be powered from either batteries or external 9VDC supply when no USB cable is connected.

MONOTRIBE OS 2.0 Update

Control of the VCA using CC#7, CC#11 or MIDI Velocity and availability of 16 synthesizer sequencer steps requires that you update to the MONOTRIBE OS 2.0. Check the KORG website for instructions on how to update your Operating System.

Connecting to a sequencer

Using a standard USB cable, connect the MONOTRIBE to a free USB port on your computer. Now, before switching on the Monotribe, start your sequencer and set up your MIDI i/o, making sure to avoid creating a MIDI feedback loop. MIDI feedback will upset poor Monotribe and result in it behaving unpredictably. If this happens, simply switch the Monotribe off and on.

The MONOTRIBE's Internal Sequencer

MIDI Beat Clock

The internal sequencer may be used as a sync master or slave. On power up, the MONOTRIBE is sync master, and begins generating MIDI beat clock messages and transmitting them via USB and via its sync out connector. The tempo knob flashes to the tempo of the messages generated. If the MONOTRIBE receives MIDI beat clock messages, however, it will automatically switch to sync slave mode and stop generating these timing messages. This is indicated by the tempo knob ceasing to flash. The MONOTRIBE is now slave to external timing messages and must be powered off and on in order to begin producing its own messages again.

The MONOTRIBE will convert MIDI beat clocks, received via MIDI, to timing pulses, and output them on its sync out connector. Conversely, the MONOTRIBE will also convert timing pulses, received via its sync in connector, to MIDI beat clock messages.

MIDI In

The MONOTRIBE sequencer will record incoming notes from MIDI channel 1 to the synthesizer part and from MIDI channel 10 to the rhythm part.

MIDI Out

Front panel knobs and switches variously send MIDI Note messages and Continuous Controllers 1, 7, 11, 16, 17, 80, 81, 82 and 83 out on MIDI channel 1, as detailed in the MIDI implementation chart, below.

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NoteStep

NoteStep is a feature added in the 09/04/13 firmware update. It enables you to advance the Monotribe's internal sequencer one step at a time by sending notes on MIDI channel 2. To enable this mode, send 4 note on messages, any note, all on midi channel 2. The tempo knob will then stop flashing, indicating that the Monotribe is no longer generating its own timing signal. Now press the play button. The Monotribe will just sit there, waiting for timing pulses or midi clock messages. Subsequent note on messages, on midi channel 2, will advance the sequencer one step at a time, allowing you to vary the timing of the sequence stored in the Monotribe.

This mode may also be used for step programming of a sequence. Put the Monotribe in record mode, hold the desired note, either via midi on channel 1 or via the Monotribe ribbon and then send a note on message on channel 2. The note is stored in the internal sequencer when the timing message is received. This allows for a much more controlled method for inputting a note sequence.

There is one known issue with this feature, being that this only really works well in 8 step mode. If you try this in 16 step mode, it still steps on but the Monotribe also plays the second 'in-between' step and so the results are less predictable.

MONOTRIBE Synthesizer Part MIDI Implementation Chart

Control Name	Type	Range	TX	Rx	Function	Notes
LFO INT	CC#01	0-127	y	y	LFO Range	
na	CC#07	0-127	n	y	VCA Level	
Active Step + Ribbon	CC#11	0-127	y	y	VCA Level	Hold Active Step whilst sliding Ribbon
LFO Rate	CC#16	0-127	y	y	LFO Rate	
Synthesizer + Gate Time + Ribbon	CC#17	0-127	y	y	Note Length	With Synthesizer selected, hold Gate Time whilst sliding Ribbon
EG	CC#80	32,64 or 96	y	y	EG Shape	
Target	CC#81	32,64 or 96	y	y	LFO Target	
Mode	CC#82	32,64 or 96	y	y	LFO Mode	Fast (32), Slow (64) or 1shot (96)
1Shot + Gate Time + Step 5	CC#82	96 or 127	y	y	LFO Mode	1shot (96) or S&H (127)
Wave	CC#83	32,64 or 96	y	y	LFO Waveform	
Synthesizer	Note	0-127	y	y	Trigger Synthesizer	

MIDI Note and Controller messages, as detailed in the MIDI implementation chart, are transmitted and received on channel 1.

NOTE: Synthesizer steps, output by the sequencer, are retriggered every 1/16th step. Turning steps off on the MONOTRIBE won't silence these retriggers. In order to do so you must use the ribbon, whilst holding down "Active Step". You may then control the Volume of each step, assuming that the equipment receiving the messages responds to MIDI CC#07 as volume. This situation only occurs with the synthesizer part. The rhythm part outputs a single Note message per active step, as one would expect. You must have MONOTRIBE OS 2.0 installed in order to enable 16 sequencer steps and VCA control.

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MONOTRIBE Rhythm Part MIDI Implementation Chart

The rhythm part transmits and receives MIDI Note messages, via MIDI Channel 10, as detailed below: -

Drum Sound	MIDI Note#	Key
BD	36	(C1)
SN	40	(E1)
HH	42	(F#1)

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USBtribe Firmware update

The USBtribe firmware is user upgrade-able via USB. All you need do is follow the simple procedure detailed below.

Note: Firmware updates MUST be performed using a machine running Windows. An Apple computer, running Windows under Bootcamp, or similar, will work just fine. Attempting firmware upload using OSX, however, will wipe the existing firmware without uploading the new one. If this does happen, don't panic! Just connect to a Windows machine and upload the latest firmware again.

Step one



With the USB unplugged, you need to slide the jumper onto the two gold pins, next to the reset push button. It should go on without removing wires from the terminal.

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Step two



Now connect the USB cable. The USBtribe powers up in firmware update mode.

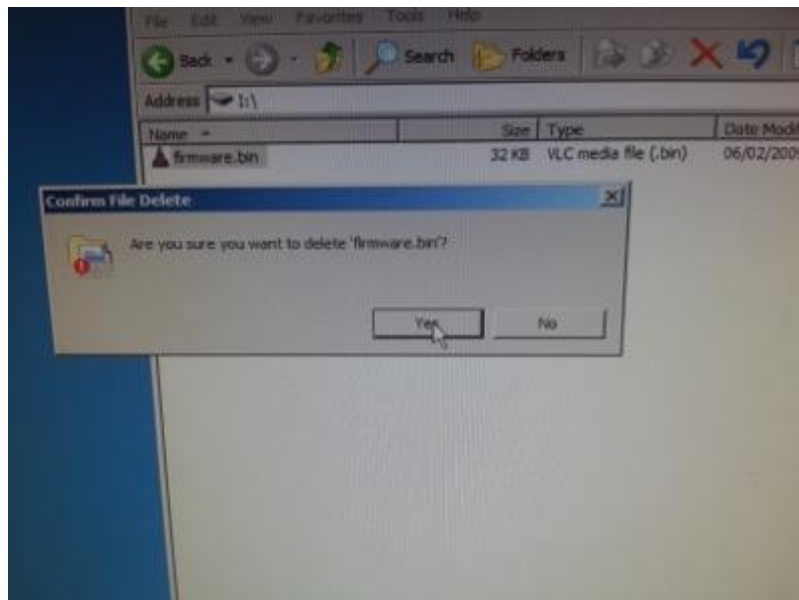
Step three



The USBtribe will show up as a disk drive called CRP_DISABLED.

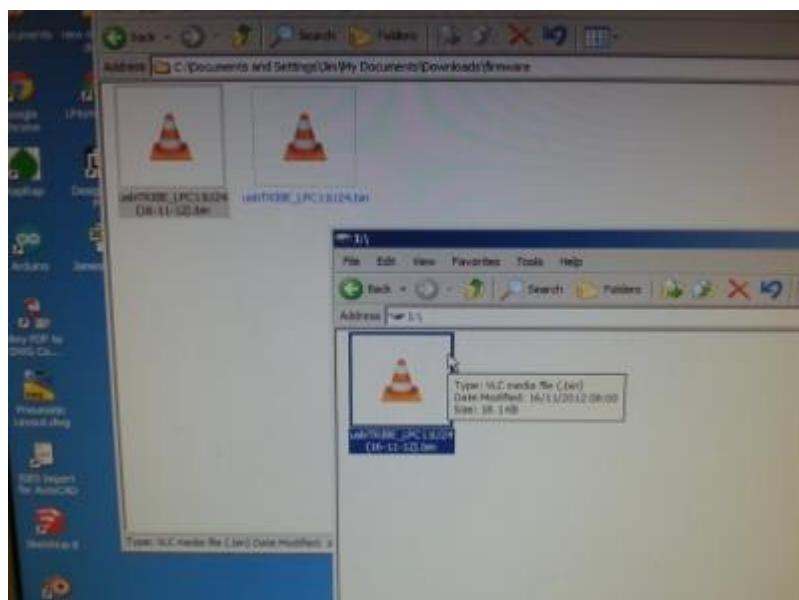
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Step four



Open the disk and delete the file firmware.bin.

Step five



Paste the new firmware onto the drive.

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Step six



Disconnect the USB cable and remove the jumper from the pins.

Step seven



Re-connect the USB cable to run the new firmware.

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USBtribe Specification

The vital statistics of the USBtribe USB MIDI interface mod for the KORG MONOTRIBE Analog Rhythm Station are as follows: -

Operating temperature -40 – +85°C (dry, non-condensing conditions)

Connectors

SYN 6way, 2mm pitch
BAT 6way, 2mm pitch
SERIAL 6way, 2mm pitch
USB 4way, screw terminal
EXP 6way, 2mm pitch

Power supply USB bus (+5VDC)
Dimensions (W x D x H) 35 x 46 x 13 mm / 1.378 x 1.811 x 0.512 inches
Weight 30g / 0.066 lbs. (excluding synthesizer)
Included items Inline USB B socket; 10cm, 6way cable assembly, 30cm, 3way cable assembly; tiny screwdriver; 2way, closed housing, 2.54mm pitch jumper.

* Specifications and appearance are subject to change, without notice, for improvement.