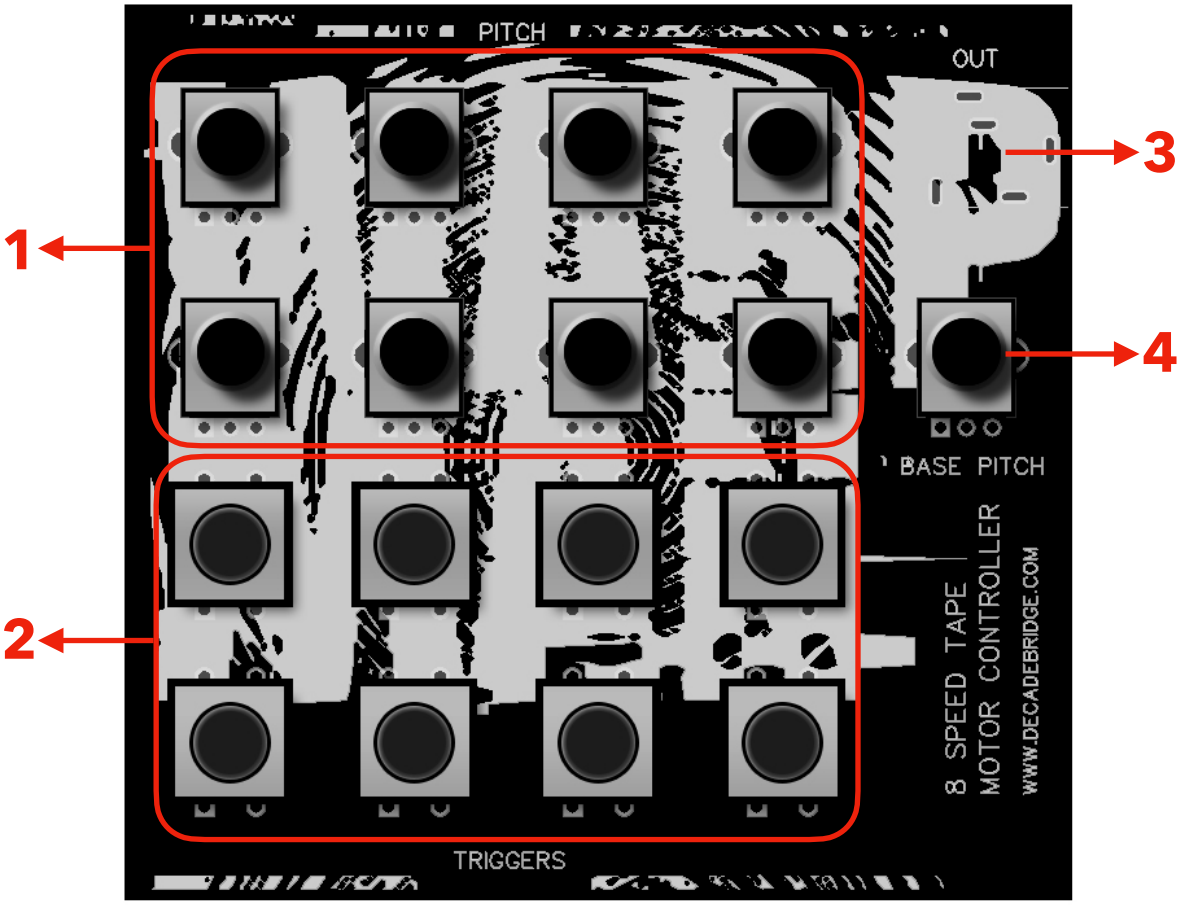
Cassette tape motor controller.

Warpman is designed to tap into the cassette tape motor to adjust the speed of the motor. This then changes the pitch of whatever audio is recorded to the cassette tape/tape loop essentially turning the cassette player into an instrument. The end of this document has a few examples and ideas of practical use to create drones, rhythmic sounds, textural progressions, glitchy sequences and sound effects.

Warpman comes with a modified cassette player and ‘factory sounds’ cassette tape. The cassette tape has 4-5 minute recordings of sustained chords, pads and drones to use with Warpman. The first few minutes of side A have a recording of a single sawtooth waveform for the purpose of ‘tuning’ the Warpman board.



Warpman requires no power to operate, the controller board sends resistance to the cassette player motor to restrict the voltage the motor receives.

1. 8 potentiometers each of which can be set to different resistance values. The further left the pot is turned the more resistance is sent to the cassette motor resulting in a lower pitch. When turned fully left the motor will stop altogether.

2. 8 triggers corresponding to the 8 potentiometers. When a button is pressed the value from the corresponding pot is sent to the cassette motor.

3. Out. This is where the modified cassette player's mono jack is connected. The values from the pots are sent to the output when a button is pressed.

4. Base pitch. This sets the overall base pitch for the motor. The pitch of the cassette player can also be accessed, via a small hole on the back of the player, with a small flat head screw driver.

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Vimeo
Instagram
Twitter

Warpman YouTube playlist.

Warpman has been designed in such a way as to be compatible with future decade bridge instruments. I have aimed to keep the format as simple as possible and to leave the cassette player in a functioning state when Warpman is not connected.

Suggestions:-

Record single sounds to tape loops and play back at different speeds.

Record a sync signal to the left channel and a drum beat to the right channel. Use the left channel to sync other equipment that will then play in time with the recorded beat. The noise from the tape will introduced irregularities whilst still retaining a sense of time and relationship.

Use the lofi mic on the cassette player as a field recorder then pitch them to create interesting soundscapes.

Use Warpman to change the motor speed whilst recording.

Record radio static and frequencies by tuning the radio and changing the motor speed at the same time.

Record textures or percussion then use Warpman to play back interesting rhythmic loops at really slow speeds, or, record sounds at a extremely slow speed so when playing back at normal speed they will be quicker.

The resistance of two or more buttons will be combined when pressed together. This can help to create different scales or to create notes that are very close in pitch but slightly detuned.

Check the decadebridge YouTube channel. I'll be posting more ideas online.

If you come up with any interesting ways to use it I would love to see it. You can get in touch through social media or email me through the links at the top of this page.

Enjoy!!

Steve