

CV TAPE STATION MANUAL

(FOR V2.5 > V2.7)



WHAM

INTRODUCTION

Hello. Thanks for your purchase.

CV TAPE STATION is a 28HP eurorack module created for cassette tape lovers and modular artists who are looking for lofi magnetic sound & experiments with CV control in their eurorack modular.

FEATURES

- potentiometer for manual tape SPEED management (from very low to high speed)
- CV IN for tape speed
- ATTENUVERTER for CV IN
- OFFSET for CV IN
- mono AUDIO OUT
- mono RECORD IN : 3 options
 - :: audio in jack (can be use as mixer in)
 - :: electret mic record on panel
 - :: record radio directly on cassette
- CV TUNER for radio (experimental bonus) act as chopper/modulation
- AM/FM switch
- antenna to improve radio signal and because it's beautiful
- mixer external audio/cassette (with REC IN knob/jack)

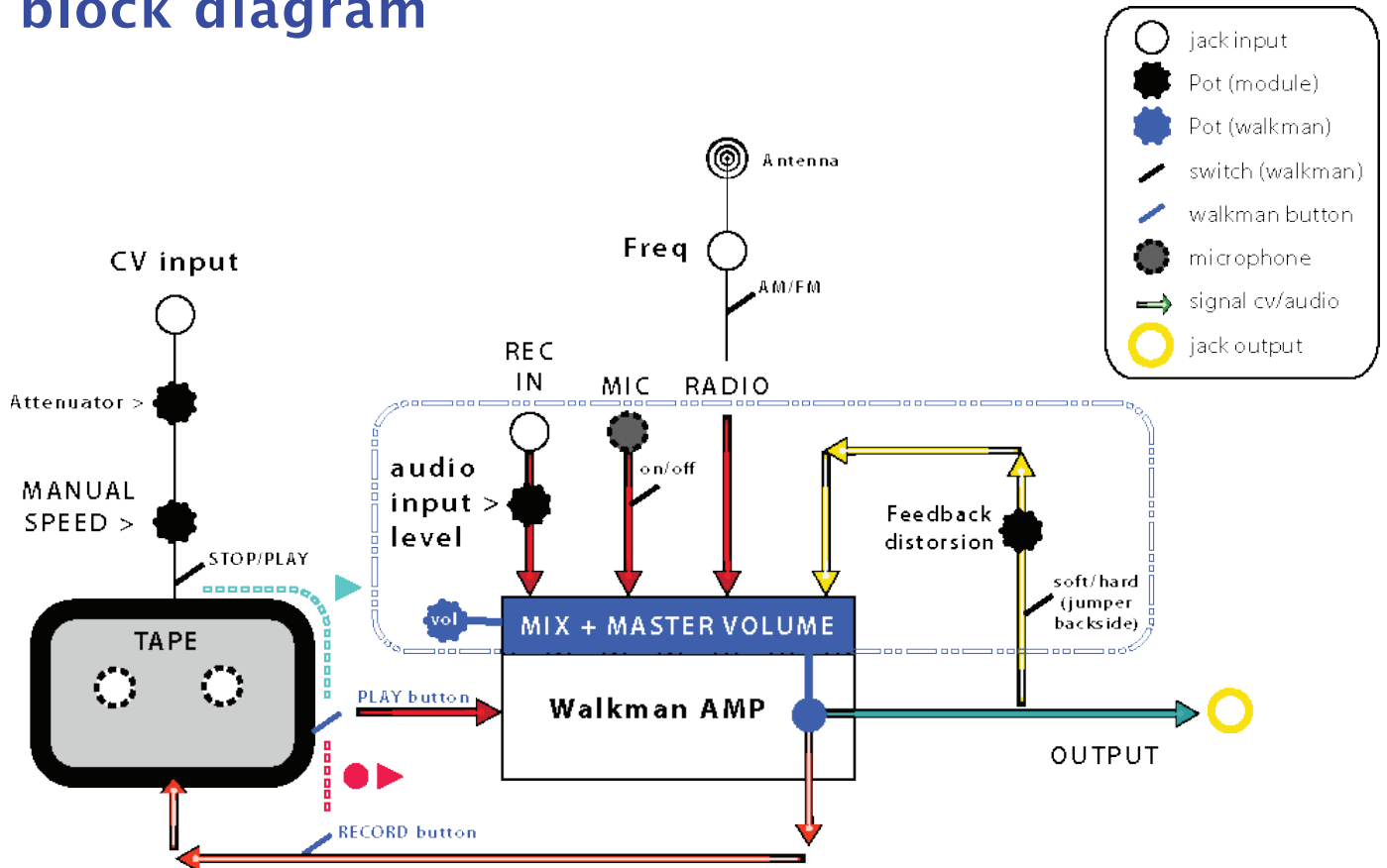
EURORACK 28HP

-- consumption : +- 150/250 ma @+12V / 0 ma @ -12V / 0ma @5V

rem : with hard/fast modulations you can have peak to 350/400ma

– BLACK PANEL 2mm matte varnished with gold and white silkscreen

block diagram



FUNCTIONS

- playing manually with motor tape speed from high speed to very low speed (osc, noise, field recording, FX,...)
- create monophonic melody with cassette (CV IN) / not 1V/oct
- create 'cassette beat' (for example : record noise and change drastically the cv speed > Hi-HAT (tremolo/gate with CV IN))
- record LOFI TAPE LOOP (w/ cassette loop) with in-build microphone or with REC IN jack then play with it
- record the RADIO STATION DIRECTLY on the tape (also with CV TUNING, with control speed, etc)
- control motor speed with analog osc
- disturb radio frequencies with CV radio TUNING
- etc

WARNING

Mechanism

We made the electronic interface with a lot of protections but we didn't make the walkman. It's a good quality walkman but mechanism can be fragile if you don't take care about.

Use the play switch instead walkman play button if you can. Be cool when you push the buttons, transport your case, etc

Also it's better to use good quality cassettes instead of cheap china tape cassette.

If you change the speed range to extreme speed, you take more risk to use mechanism.

To avoid problems with walkman and module :

- don't use it with extreme speed
- When you're using rewind or forward button you'll have a current peak at the stop (400ma) so you need to verify your total power supply to avoid current over consumption
- be cool with the mechanism buttons

WALKMAN

tape/radio : switch to choose radio or tape player function

volume : general volume of the walkman and module. You have to know that distortion and record level are correlated with master volume. More info below.

tuning : to choose FM/AM frequencies and stations.

rec : you need to push play button with record button for recording

PLAYING TAPE CASSETTE

Manual speed : the speed knob manage global speed.

The **CV IN** is connected to the speed knob. So if you want more radical speed change, you need to decrease manual knob (anti-clockwise).

It's like with a VCA, you can manually increase volume amp and with CV but if you want only CV IN (with adsr for example), you need to turn off manual volume.

CV RANGE

The CV TAPE STATION CV is positive voltage and the range starts at 1,5V and reach maximum speed at 5V but it depends on how is your original manual speed.

If you're using LFO, it's more efficient with 0/+5V range.

RECORDING TAPE CASSETTE

Rec IN : You can record external source on the tape. There is a knob to adjust volume of source.

You can make tape saturation if your audio IN knob is at maximum but if you want "clean" recording, make some test to adjust as you like. **Don't forget that Master volume influence recording level so it's better to work with less volume as reference for the CV tape player.**

The REC IN JACK + potentiometer can be use as mixer. So you can mix external source during playing or listening to the radio. It can be usefull for live act or live recording.

Mic IN

There is an electret microphone on the panel to record external acoustic source.

If you don't use it, you need to use the on/off switch to avoid undesirable sounds from the microphone during recording.

RADIO CV IN

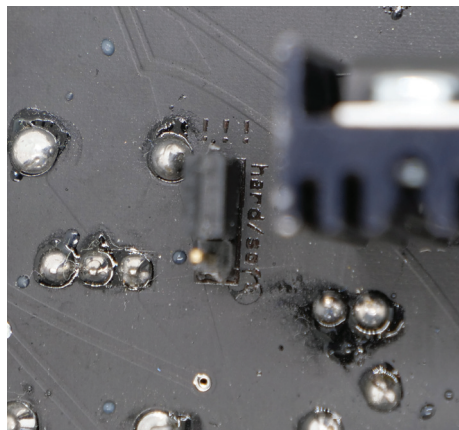
The radio CV IN is an experimental bonus added for radio tuning frequencies experiments (AM/FM). It's a kind of chopper effect. The walkman tuning knob defines the offset of the modulation. So don't hesitate to change it to find a good spot for you and don't hesitate with different waveforms (square, triangle, etc) and also attenuator.

RADIO can be recorded directly on the tape (PLAY + REC button).

Feedback Distortion (!!!)

We added a feedback distortion with two options (switch jumper is on the back) : soft and hard.

Don't forget that the level is also correlated with master volume.



TRIMMER for motor speed

You can change the motor speed range with the blue trimmer on the back. Pay attention that if you use too fast speed you can have problem with cassette.



MANUAL V0.8
for updates visit here :

WWW.WHAMELECTRONICS.COM