PATCHING PANDA

EPHEMERE
USER MANUAL

INTRODUCTION:

This is a high-resolution dual-channel recording interface for your signals mainly focused on recording control voltages.

You can record from 1014 sec at 172Hz up to 4 sec at 44.1kHz of signal on each channel, change the playback speed and scan through the recorded CV.

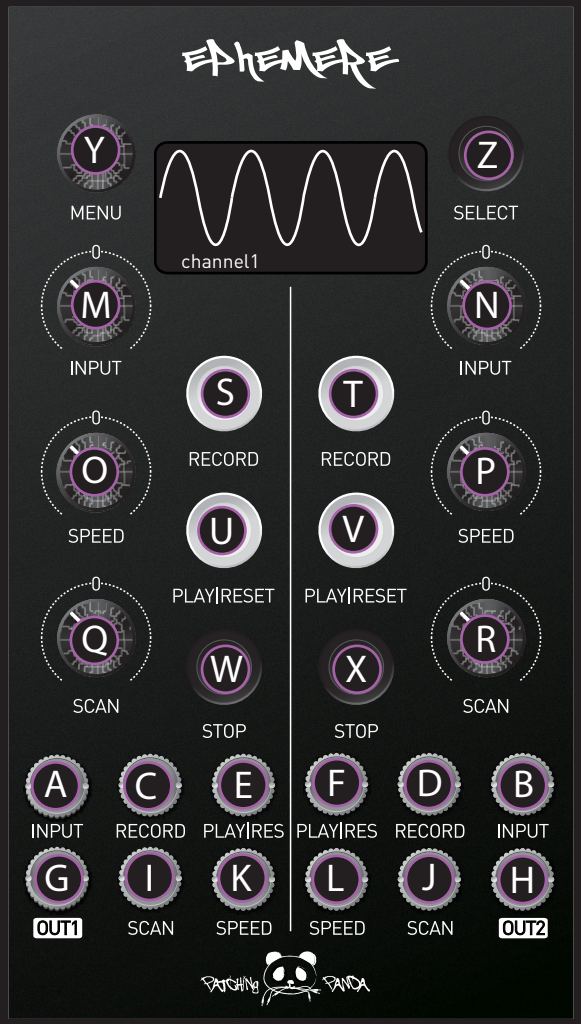
There is a dedicated attenuverter pot for your incoming signals. When nothing is patched to the input you can use the input pot as an offset/cv generator and record pot movements into the module.

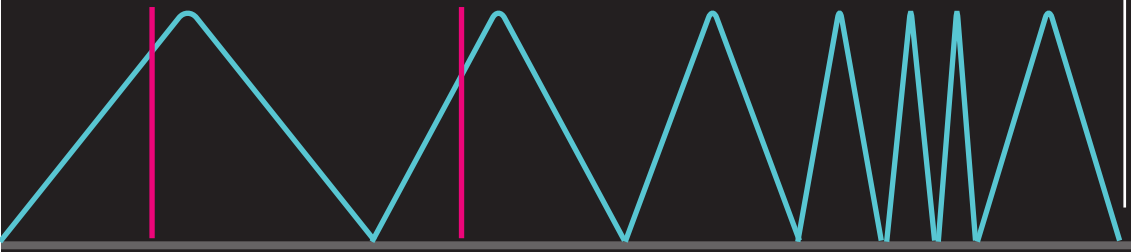
It´s possible to save, load your signals and settings on the SD card up to 16GB of space
There are 4 different recording modes to choose from to make more complex signals to prepare your live performances.

INSTALLATION:

* Disconnect your synth from the power source
* Double check polarity from the ribbon cable
* After connecting the module check again you have connected the right way, the red line should be on the -12V
* BE CAREFUL THE PINS FROM THE BACK OF THE PCB SHOULD NOT TOUCH ANYTHING WHILE IS POWERED

BEWARE IF YOU DON´T FOLLOW THE STEPS DESCRIBED ABOVE DAMAGING THE MODULE, WARRANTY WILL NOT BE COVERED





INSTRUCTIONS

- (A) Signal input 1
- (B) Signal input 2
- (C) Record input trigger 1
- (D) Record input trigger 2
- (E) Play/Reset input trigger1
- (F) Play/Reset input trigger2
- (G) Outout channel 1
- (H) Outout channel 2
- (I) Scan CV input 1
- (J) Scan CV input 2
- (K) Speed CV input 1
- (L) Speed CV input 2
- (M) Attenuverter/Attenuate pot1

(if nothing patched deliver´s VDC)

- (N) Attenuverter/Attenuate pot2

(if nothing patched deliver´s VDC)

- (O) Speed control pot 1
- (P) Speed control pot 2
- (Q) Scan control pot 1
- (R) Scan control pot 2
- (S) Record button 1
- (T) Record button 2
- (U) Play/Reset button 1
- (V) Play/Reset button 2
- (W) Stopt button 1
- (X) Stopt button 2
- (Y) Rotatory Encoder
- (Z) Select button

Hold press select button for 2 sec will change the channel

UPDATE FIRMWARE V 21.51

Menu diving has been changed for a better experience. Practical way to choose from different ways of recording, playing signals.

There are 2 rules to follow so everything will be easier when you start to dive into the module architecture settings.

Rule 1 “Select button go inside the menu then select the setting”
Rule 2 “ Pressing encoder exits the menu, also in the app it changes the OLED display from showing the recorded signal to show the live ADC signal”

To access the main menu hold press select button for 1 sec,
rotate the encoder to scroll through the menus, press select to enter.
To exit the menu simply press encoder.

There is a new menu called “show in menu” by choosing a menu from the list, you will enable 1 specific menu for quick access in the app by pressing select button, this way you can have the most useful setting chosen for the signal you are working on at that moment.

Every signal saved in the SD card will also keep the settings chosen for that specific signal

1. PLAY MODE:
a) Loop: The playback of the signal will play in loop until STOP is pressed.
b) One shot: The playback of the signal will stop when it reaches the end or if STOP is pressed.

Hold pressing PLAY button for 2 sec, triggers to Play are ignored LED will blink, this is useful for REC Sync mult-G, repeat to disable.

2. PLAY DIRECTION
a) Forward
b) Backward
c) Pendulum

3. SPEED MODE:
a) Quantized: Playback stepped speed from /5, /4, /3, /2, x1, x2, x3 ,x4, x5.
b) Lineal: Playback speed from /5 to x5

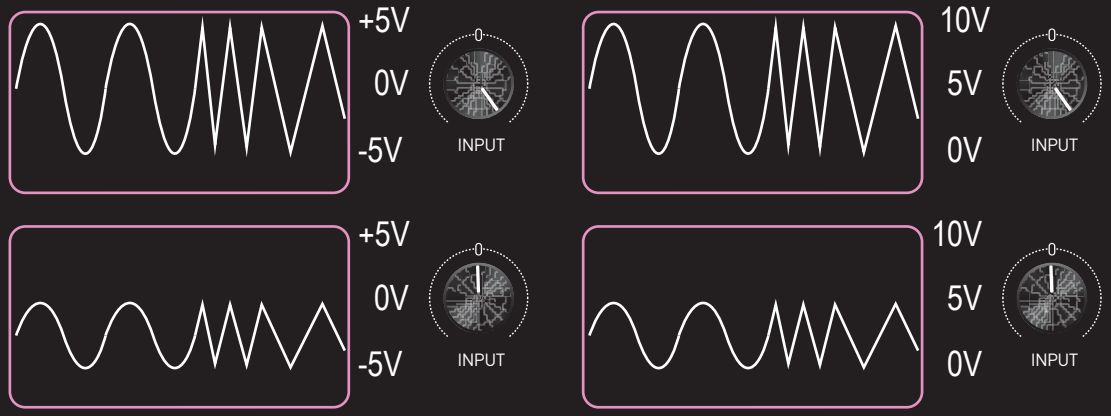
4. REC MODE :
a) Manual: Pressing REC will start recording, pressing REC again will finish recording.
b) Manual mult: Pressing REC will start recording, pressing REC again will finish recording.
(If PLAY is pressed during recording, or trigger is received to PLAY input recording proccess will be paused, pressing PLAY again or receiving a trigger to PLAY input jack will continue recording)
c) Sync: Pressing REC will wait for a trigger from REC trigger input to start recording, when a second trigger is received to REC input again will finish recording

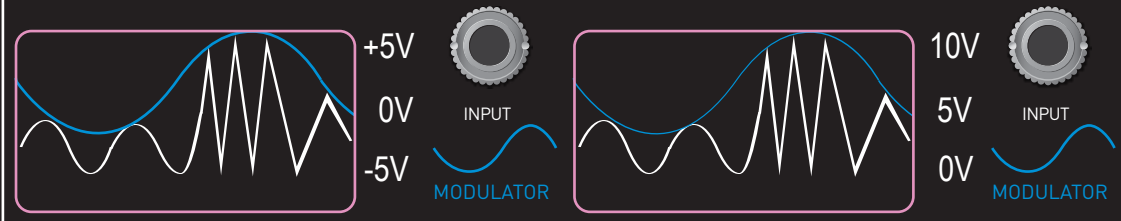
d) Sync mult: Pressing REC will wait for a trigger from REC trigger input to start recording, when a second trigger is received to REC input again will finish recording (If PLAY is pressed during recording, or trigger is received to PLAY input recording proccess will be paused, pressing PLAY again or receiving a trigger to PLAY input jack will continue recording)

e) Manual mult-G: Pressing REC will start recording, pressing PLAY will pause recording setting the end of grid, pressing REC finish recording

f) Sync mult-G:Pressing REC will wait for a trigger from REC trigger input to start recording, when a second trigger is received to REC input again will finish recording (while is recording if trigers to PLAY are received will set the grids in the recording process)

5.When VCA is enabled, the input pot or input signal becomes attenuation control for the PLAYBACK SIGNAL. It´s important to understand the CV RANGE in combination with the VCA feature, if you are working with 0V-10V signals make sure the offset switch behind the PCB matches the CV RANGE too, the same applies to -5V/+5V signals.





6. QUANTIZER: Enabling Live CV input/ Recorded CV quantized 1V/oct

7. SCALES: Keyboard menu to enable/disable notes

8.SAMPLING RATE: Select between different sample rate modes and time length of recording

9. CV Range: Change the offset of the incoming signal from -5/+5V or 0/10V, it can also change the offset of the playback signal.

10. FILE:
File Load: Loads signals saved on the SD card
File Erase: Erases signals saved on the SD card
File Save: Saves and names signals on the SD card

11. SHOW IN MENU: By choosing a menu from the list, you will enable 1 specific menu for quick access in the app by pressing select button, this way you can have the most useful setting chosen for the signal you are working on at that moment.

11. CALIBRATION: Enter to calibrating ADC/DAC menu

12. SELECT GRID AXIS: When REC MODE MANUAL MULT G is selected with this option you can adjust the end of the grid too

CALIBRATION:

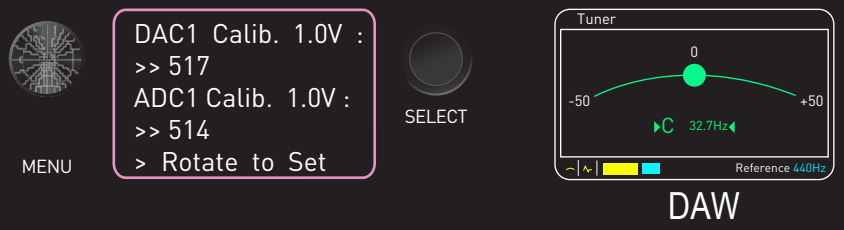
·Before you start calibration:

Connect the CV out from your sequencer to Ephemere input, the output from Ephemere to your VCO, VCO out to your DAW, in your DAW open tuner VST to monitore notes. Ephemere input pot´s at MAX.

a) Go inside the calibration menu, start calibration proccess.

b) Menu 0.0V, send C0 from your sequencuer, DAW can´t reach C0 you simly rotate encoder to match the DAC value with ADC value. Press 1 time only to go to the next step.

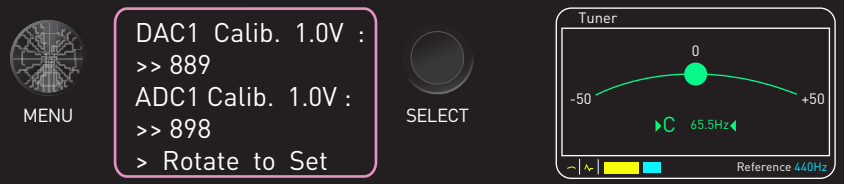
c) Menu 1V, send C1 from your sequencer, rotate the encoder while monitoring your DAW to reach C1



DAW

Pressing SELECT button one time will register the value, will jump to the next voltage setup. Make sure not to press until you send desired voltage to register, don´t press 2 times otherwise you will need to start again.

c) Menu 2V, send C2 from your sequencer, rotate the encoder while monitoring your DAW to reach C2



DAW

d) Repeat the same process except 10V, because DAW can´t reach C10 you will need to match ADC and DAC values.

e) Save calibration, exit by pressing encoder, reboot the module

f) Check if calibration is ok, make sure CV range is set to 0-10V and quantizer is enabled.