

**MOOER**

# **OCEAN MACHINE II**

**Premium Dual Delay, Reverb and Looper Pedal**

**Owner's Manual**

## CONTENT


PRECAUTIONS.....	1
FEATURES .....	2
TOP PANEL.....	2
BACK PANEL.....	4
SETUP .....	4
Mono setup .....	4
Mono input and stereo output setup.....	5
Stereo input and stereo output setup.....	5
FX LOOP setup .....	6
EFFECT TYPES.....	6
Reverb .....	6
Delay B.....	7
Delay A.....	7
OPERATION.....	8
Play Mode.....	9
Display in Play Mode .....	9
Footswitch functions .....	10
Reverb / DelayB / DelayA .....	10
Freeze Feedback.....	10
Tap Tempo.....	10
Looper Mode .....	11
Menu control.....	11
Navigation .....	11
Master Mix .....	11
Parameter screen .....	11
PingPong effect.....	12
Tempo subdivisions .....	12
Positioning effects in the signal chain .....	12
Storing settings as preset .....	12
Patch Mode .....	13
Footswitch functions .....	13
Preset selection screen.....	14
Patch control screen.....	14
Storing presets.....	14

LOOPER Mode .....	15
Footswitch and control functions.....	15
Menu control.....	15
REC / PLAY /STOP (Reverb footswitch).....	15
HALF SPEED (DelayB footswitch).....	15
REVERSE (DelayA footswitch) .....	15
Looper positioning.....	16
SETTINGS MENU.....	16
F4 Pairing.....	16
Bypass & Trail .....	17
Bypass type.....	17
Trails .....	17
Exp. ....	17
Calibrate .....	18
IN & OUT.....	18
Merge .....	18
Global EQ.....	18
MIDI .....	19
Reset.....	19
EXPRESSION PEDAL .....	20
WIRELESS FOOTSWITCH .....	20
MIDI .....	20
FIRMWARE UPDATE .....	22
SPECIFICATIONS.....	23

## PRECAUTIONS

### PLEASE READ CAREFULLY BEFORE PROCEEDING

#### Power supply

Please use a designated pedal power supply adapter supplying 9V DC ( $\pm 10\%$ ), 500 mA, and center negative. 

Unplug the power adapter when not in use or during electrical storms. Please use a power supply that meets UL, CSA, VDE or CCC standards.

#### Cleaning

Clean only with a soft, dry cloth. If necessary, lightly moisten the cloth. Do not use abrasive cleaners, cleaning alcohol, paint thinners, wax, solvents, cleaning fluids, or chemical-impregnated wiping cloths.

#### Connections

Always disconnect the power to the device and any other equipment before connecting or disconnecting signal cables. This will help prevent malfunctions and / or damage to other devices. Also make sure to disconnect all connection cables and the power supply before moving the device.

#### Operation

- Please do not use excessive force to operate the control elements of the unit.
- Please do not drop the unit, and avoid heavy blows.
- Please do not modify the unit without authorization.
- Should repairs be required, please contact the MOOER support team for more information.

#### Storage and usage locations

To avoid deformation, discoloration or other serious damage, do not expose this device to any of the following conditions:

- |                                   |                               |
|-----------------------------------|-------------------------------|
| • direct sunlight                 | • locations                   |
| • extreme temperature or humidity | • magnetic fields             |
| • excessively dusty or dirty      | • high humidity or moisture   |
|                                   | • strong vibrations or shocks |

#### FCC certification

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

#### Interference with other electronic devices

Radios and televisions placed nearby may experience interference with reception. Operate this device at a suitable distance from radios and televisions.

## FEATURES

- Based on the first generation; we have further improved the algorithm in the ambient performance
- Two standard modes of operation: Play Mode for quick parameter editing and Patch Mode for quick preset access
- Two independent delay modules with 9 different delay types available for each module (total of 15 different delay types), 0 - 2 seconds of delay time and optional ping-pong effect
- High fidelity Reverb module with 9 different reverb types and shimmer effect
- Freeze feedback effect for Delay and Reverb modules
- Tap Tempo functionality with independent, relative tempo options
- For quick and easy adjustment, all main delay and reverb parameters can be adjusted on the fly using dedicated control knobs
- Improved audio Looper providing a total of up to 120 seconds of recording time
- Programmable parallel/serial effect chain, with selectable order of effects; the secret weapon of Devin Townsend's tone creation
- Various additional programming options via LCD menu
- Adjustable Global EQ settings plus adjustable input and output levels for easy integration in any setup and great results with all different kinds of instruments and venue configurations
- 8 storage banks with 3 presets each, providing a total of 24 storage spaces for presets
- Full stereo inputs and outputs
- Switchable circuit design for true bypass or DSP (buffered) bypass
- Supports external parameter control via expression pedal
- Upgraded MIDI control with clock sync, allowing the pedal to sync with other MIDI devices
- Supports external control with MOOER F4 wireless footswitch controller
- USB-C port for firmware updates

## TOP PANEL



1. **LCD screen:** Display screen, showing the current status and setting parameters.
2. **Pre-Dly:** Rotate to adjust the pre-delay of the reverb effect.
3. **Decay:** Rotate to control the decay time of the reverb effect.
4. **Tone:** Rotate to adjust the tone color of the reverb effect:

- 12 o'clock for flat EQ; clockwise (1-5 o'clock) low pass filter (20 Hz ~ 500 Hz); counterclockwise (11-7 o'clock) high pass filter (20 kHz ~ 3 kHz)
5. **R. Mix:** Rotate to adjust the dry/wet ratio of the reverb effect.
  6. **FeedbackB:** Rotate to adjust the feedback value of the DelayB module (repeats).
  7. **TimeB:** Rotate to adjust the delay time of the DelayB module.
  8. **SweepB:** Default adjustment of the bandpass sweep for the DelayB delay effect. Turned all the way left, the bandpass filter is turned off. Rotate the control to the right to open up the bandpass sweep with a center frequency range of 80 Hz - 10 kHz and a Q value range of 0.3 - 5. Press and hold the Setting knob while you rotate the Sweep control to adjust the Q value.
  9. **D.MixB:** Rotate to adjust the dry/wet ratio of the DelayB module.
  10. **FeedbackA:** Rotate to adjust the feedback value of the DelayA module (repeats).
  11. **TimeA:** Rotate to adjust the delay time of the DelayA module.
  12. **SweepA:** Default adjustment of the bandpass sweep for the DelayA delay effect. Turned all the way left, the bandpass filter is turned off. Rotate the control to the right to open up the bandpass sweep with a center frequency range of 80 Hz - 10 kHz and a Q value range of 0.3 - 5. Press and hold the Setting knob while you rotate the Sweep control to adjust the Q value.
  13. **D.MixA:** Rotate to adjust the dry/wet ratio of the DelayA module.
  14. **Menu:** Rotate/press the knob to select the parameters. (See section Menu control)  
During standard operation, rotate the Menu control to adjust the Master Mix.  
Press to access the screen menu. Rotate to navigate, press to enter.
  15. **Reverb:** Rotate to select a reverb type. (See section EFFECT TYPES)
  16. **DelayB:** Rotate to select the delay type of DelayB. (See section EFFECT TYPES)
  17. **DelayA:** Rotate to select the delay type of DelayA. (See section EFFECT TYPES)
  18. **Home:** Press to return to the main interface screen.
  19. **Setting:** Press to enter the Settings menu.
  20. **Store:** Press to store the current preset setting.
  21. **Preset:** Press to switch between Play and Patch modes.  
The blue LED inside the button is lit when Patch mode is active.

#### Footswitches:

22. **Reverb footswitch:**  
Play mode: press to turn the Reverb on/off, hold for frozen feedback effect  
Patch mode: activates all effects used in the selected preset / bypass for all effects (global bypass)  
Looper mode: controls the REC/PLAY/STOP/CLEAR functions of the Looper
23. **DelayB footswitch:**  
Play mode: press the footswitch to turn DelayB on/off, hold for frozen feedback effect  
Patch mode: scroll down between presets  
Looper mode: 1/2 speed mode on/off
24. **DelayA footswitch:**  
Play mode: press the footswitch to turn DelayA on/off, hold for frozen feedback effect  
Patch mode: scroll up between presets  
Looper mode: Reverse mode on/off

#### Tap Tempo Mode

When in Play mode, press **Reverb** and **DelayB** footswitches at the same time to enter the Tap Tempo mode. Then use the **Reverb** footswitch for Master Tap Tempo or the **DelayA** / **DelayB** footswitches for their respective tap tempos. (See section Tap Tempo)

#### Looper Mode

Press the **DelayB** and **DelayA** footswitches simultaneously to access the Looper functions.  
(See section LOOPER Mode)

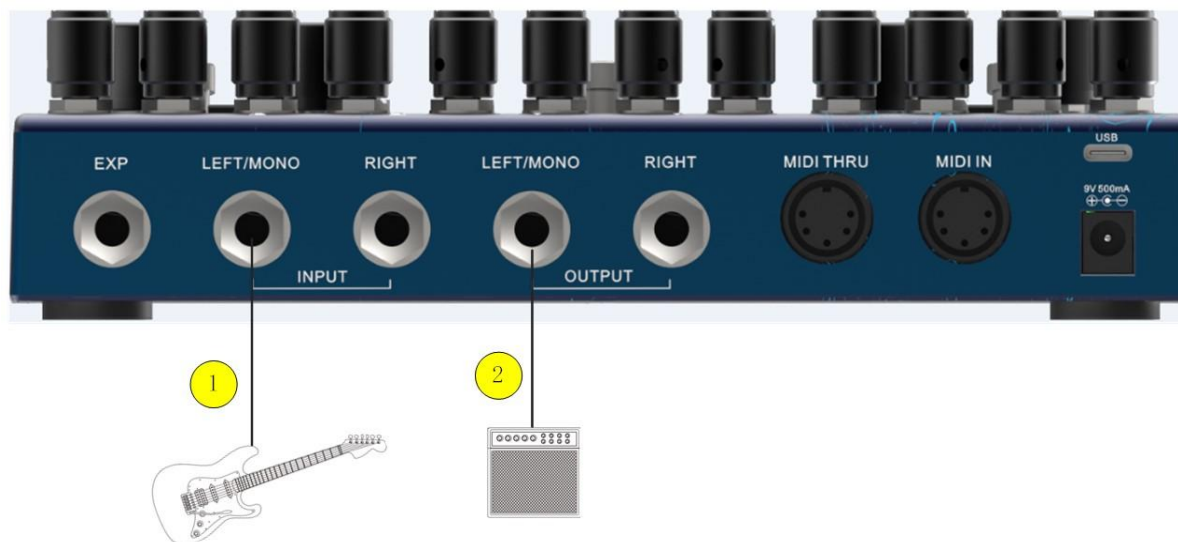
## BACK PANEL



1. **EXP:** 1/4" stereo audio jack, connection to external expression pedal (please use a TRS cable for the connection)
2. **LEFT INPUT:** 1/4" mono audio jack, input for the left channel
3. **RIGHT INPUT:** 1/4" mono audio jack, input for the right channel
4. **LEFT OUTPUT:** 1/4" mono audio jack, output for the left channel
5. **RIGHT OUTPUT:** 1/4" mono audio jack, output for the right channel
6. **MIDI THRU:** 5-PIN MIDI port, transfers and outputs the received MIDI signal from other MIDI devices connected to MIDI IN
7. **MIDI IN:** 5-PIN MIDI port, receives the MIDI signal from other MIDI devices
8. **DC IN:** power supply connector (9V DC, 500 mA, center negative)
9. **USB:** USB-C port, connection to a computer for firmware update

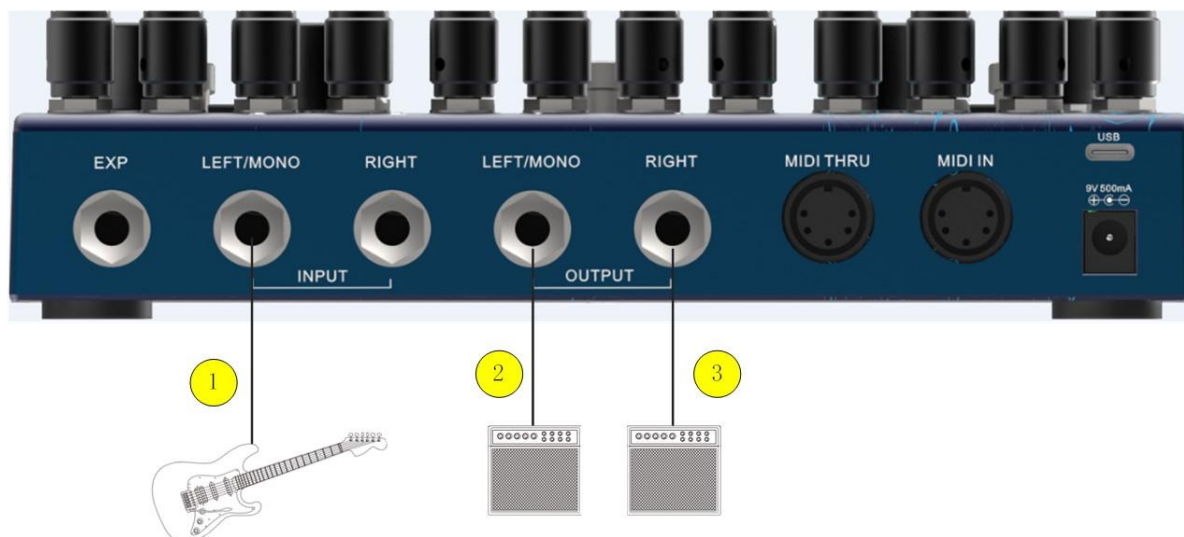
## SETUP

### *Mono setup*



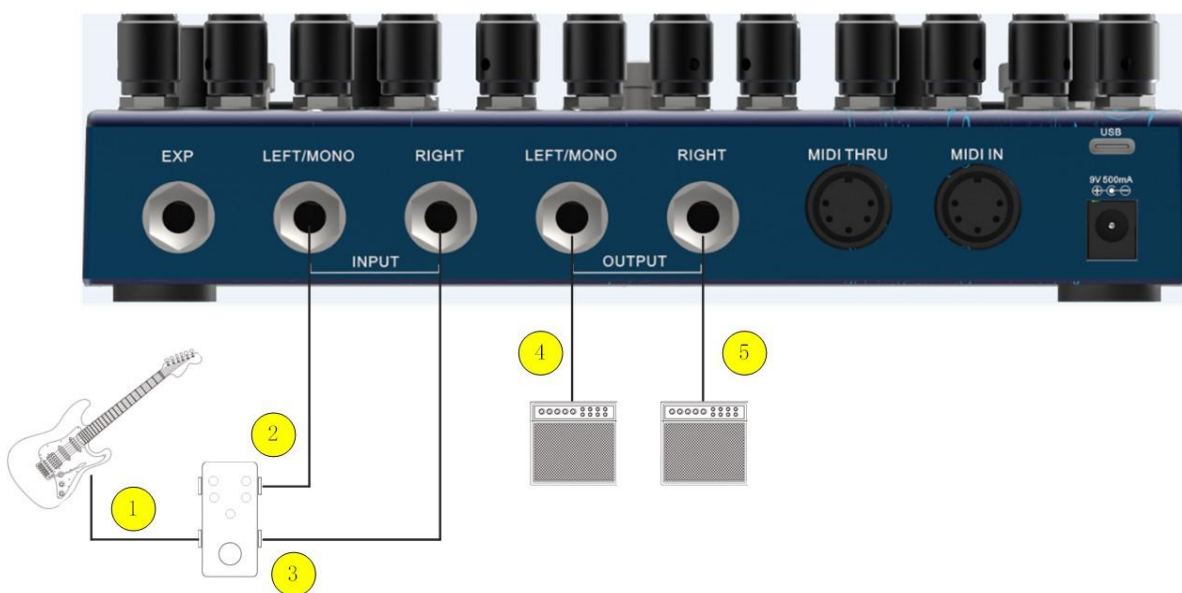
1. Guitar connects to the LEFT/MONO input jack
2. LEFT/MONO output jack connects to the INPUT of the amplifier

## ***Mono input and stereo output setup***



1. Guitar connects to the LEFT/MONO input jack
2. LEFT/MONO output jack connects to the INPUT of the amplifier
3. RIGHT output jack connects to the INPUT of another amplifier

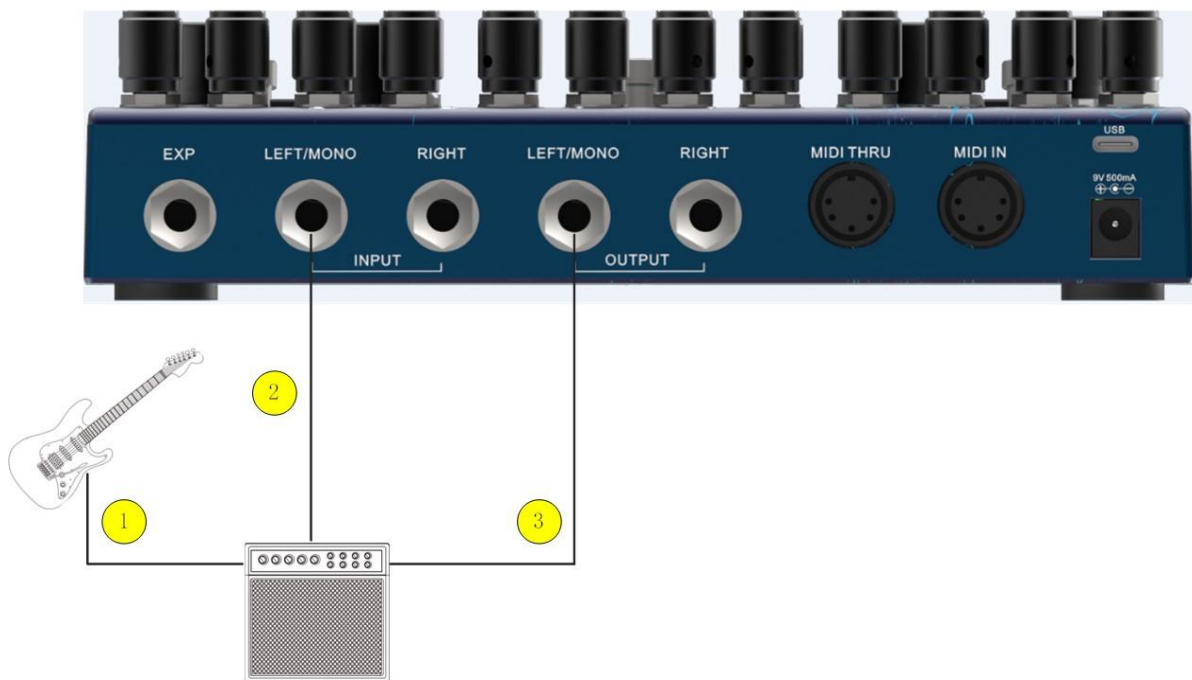
## ***Stereo input and stereo output setup***



1. Guitar connects to the INPUT of a stereo pedal
2. LEFT output jack of the stereo pedal connects to the LEFT/MONO input jack
3. RIGHT output jack of the stereo pedal connects to the RIGHT input jack
4. LEFT/MONO output jack connects to the INPUT of the amplifier
5. RIGHT output jack connects to the INPUT of the other amplifier



## FX LOOP setup



1. Guitar connects to the INPUT of the amplifier
2. LEFT/MONO input jack connects to the SEND of the amplifier
3. LEFT/MONO output jack connects to the RETURN of the amplifier

## EFFECT TYPES

### Reverb

**Room:** Small room reverb with a short decay

**Hall:** Large spacious reverb with a long decay

**Plate:** Based on a traditional mechanical plate reverb

**Ds-Verb\*:** Distorted reverb

**FL-Verb\*:** Reverb with a modulated Flanger effect

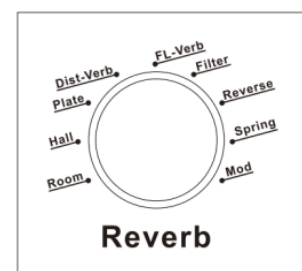
**Filter\*:** Reverb with a modulated envelope follower

**Reverse:** Backwards reverb

**Spring:** Based on a vintage, large tank, spring reverb

**Mod\*:** Reverb with a modulated Chorus effect

**\*Note:** All effects marked with an asterisk have additional parameters available for adjustment via the Menu control. (See section [Menu control](#))



## DelayB

**Digital:** High fidelity delay with clean repeats

**Analog:** Vintage BB style delay with warm degrading repeats

**Tape:** Based on a classic reel to reel tape echo

**Real:** Clear delay with natural sounding repeats

**Dyna:** Dynamic delay

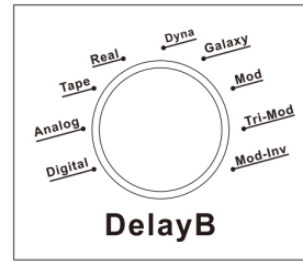
**Galaxy:** Delay with swelled repeats and a light modulation

**Mod\*:** Delay with modulated repeats

**Tri-Mod\*:** 80's style delay with thick modulated repeats

**Mod-Inv\*:** Reverse delay with modulation

***\*Note:** All effects marked with an asterisk have additional parameters available for adjustment via the Menu control. (See section Menu control)*



## DelayA

**Digital:** High fidelity delay with clean repeats

**Analog:** Vintage BB style delay with warm degrading repeats

**Tape:** Based on a classic reel to reel tape echo

**Echo:** Based on a vintage Echorec

**Liquid\*:** Digital delay with modulated Phaser repeats

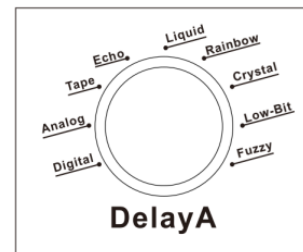
**Rainbow\*:** Special effect pitch delay with modulation

**Crystal\*:** Special effect pitch delay with glistening highs

**Low-Bit\*:** Delay with bit crusher

**Fuzzy\*:** Delay with Fuzz

***\*Note:** All effects marked with an asterisk have additional parameters available for adjustment via the Menu control. (See section Menu control)*



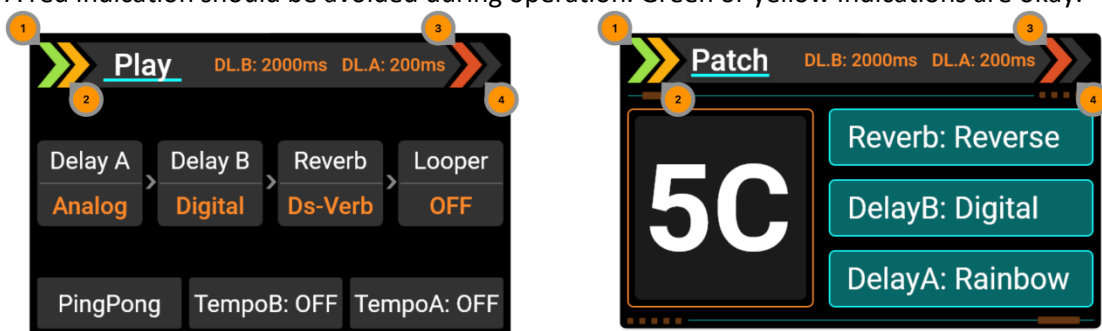
## OPERATION

Plug your guitar into the INPUT of the OceanMachine II and use audio cables to connect to your amplifier. (See section SETUP). Connect the power adapter (9 VDC, 500 mA, center negative) to the DC IN jack.

The main interface shows arrow graphics to indicate input and output levels. The color of the arrows indicates the signal status:

- dark arrow: no signal or signal too weak
- green: signal of moderate strength
- yellow: signal strength close to the critical value
- red: signal distortion

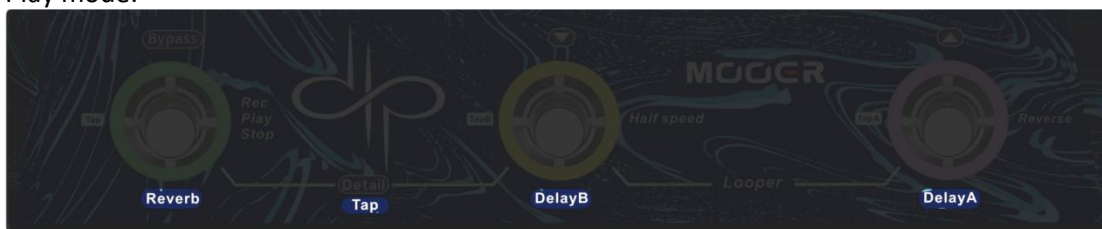
A red indication should be avoided during operation. Green or yellow indications are okay.



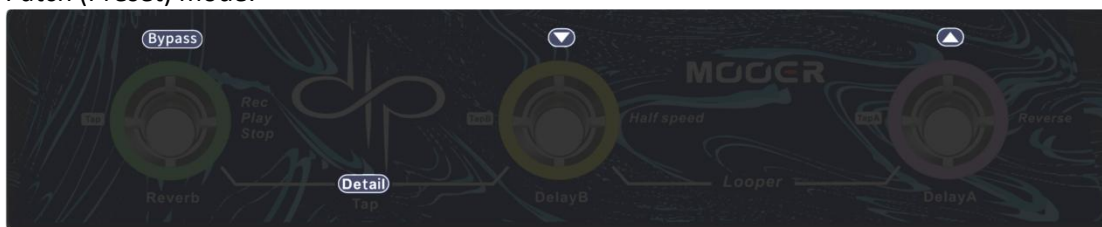
1. left input level
2. right input level
3. left output level
4. right output level

The labeling of the footswitches to the functions they perform in different modes of operation:

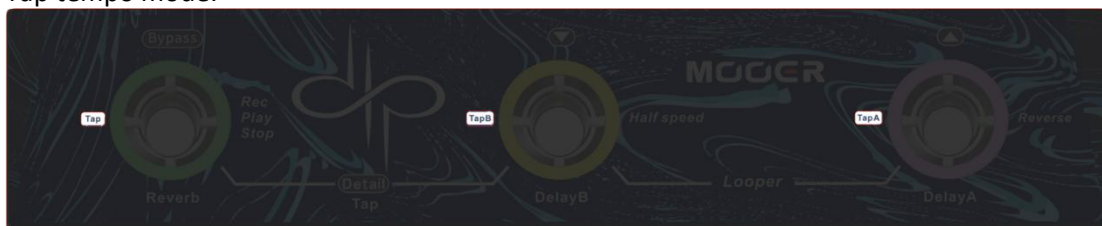
Play mode:



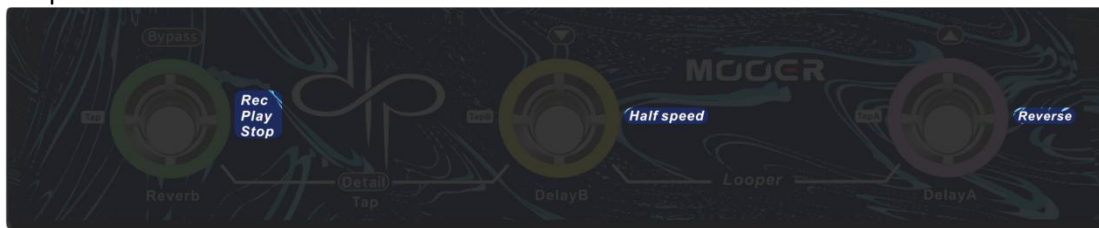
Patch (Preset) mode:



Tap tempo mode:



Looper mode:



The Ocean Machine II features two main operation modes for using the delay and reverb effects in different ways plus a Looper Mode.

Press the **Preset** button to change the main mode of operation. The blue LED in the Preset button is unlit in **Play Mode** and lit in **Patch Mode**.

When booting up, the pedal will remember the mode it was in before it was turned off (power supply removed).

## Play Mode

In this mode the Ocean Machine II operates like a traditional effects pedal. You can use the Reverb, DelayB and DelayA footswitches as if the effects were individual pedals. The footswitch LED indicate whether the respective effect is ON or OFF.

The values of the main effect parameters correspond to the settings indicated by the physical knobs.

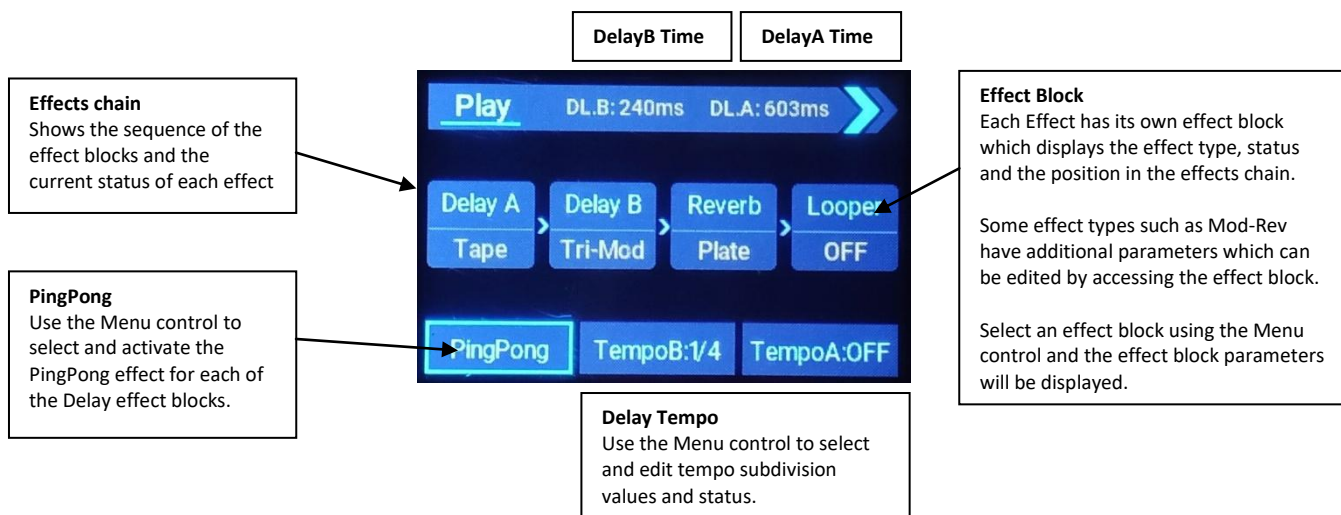
For some effect types, additional parameters can be set using the **Menu** button. These are indicated only in the display. (See section *When the* main interface (Play or Patch Mode) is displayed, rotate the **Menu** control to adjust the master output effect mix of the Ocean Machine II (ratio of the effect signal / dry signal).

Parameter screen)

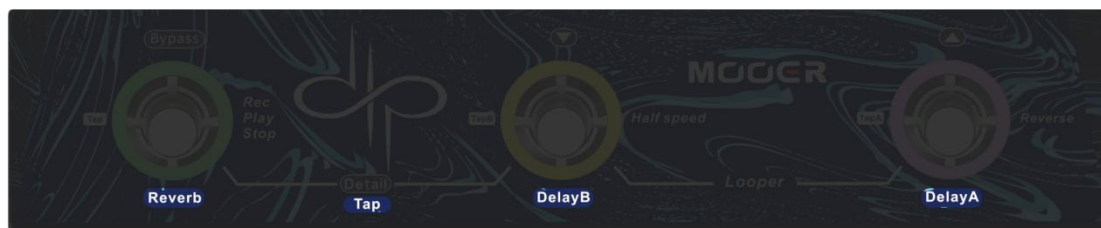
All of the basic effect parameters can be changed directly by adjusting the respective control knobs.

Additional effect parameters, tempo subdivisions, ping pong effects, sequence of the effects chain, etc. can be edited and adjusted in the menu screen. (See section *Menu control*)

## Display in Play Mode



## Footswitch functions



### Reverb / DelayB / DelayA

Pressing any of the footswitches once will turn the respective effect ON or OFF.

If one of the effects is active, it will show its selected effect type in the display and the respective footswitch LED is lit and, in case of the delays, blinking to indicate the selected tempo.

If an effect is not active, the respective footswitch LED is off and the module in the display shows OFF.

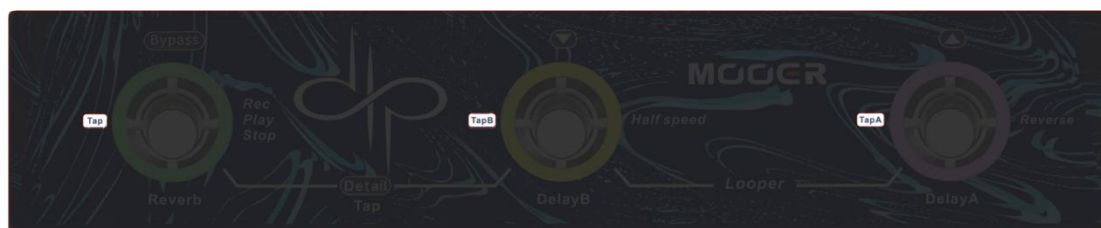
### Freeze Feedback

Holding down any of the footswitches while its respective effect is turned on will put the effect into a state of **infinite feedback** until the footswitch is released. This can result in oscillating feedback in some cases. The feedback will decay again as soon as the footswitch is released.

### Tap Tempo

Simultaneously press the **Reverb** and **DelayB** footswitches to access tap tempo control. The green LED for the Reverb footswitch will blink to indicate that the Tap Tempo Mode is active. The blinking rate indicates the speed of the MASTER TAP TEMPO.

You will then have a few seconds to tap your desired tempo in.



### Reverb footswitch = Master Tap Tempo:

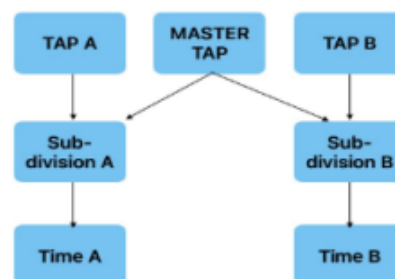
Sets the Master Tap Tempo for DelayA and DelayB simultaneously. The subdivision settings for DelayA (TempoA) and DelayB (TempoB) will then be applied to the Master Tap Tempo. (See section [Tempo subdivisions](#))

The Master Tap Tempo has no effect on DelayB or DelayA if the subdivision settings are set to OFF.

While setting the Master Tap Tempo, the display screen shows the BPM value for the Master Tap Tempo and the blinking rate of the Reverb LED also indicates the tempo.

You can set the value by rotating the **Menu control** or by tapping the **Reverb footswitch** several times.

**DelayB footswitch** = Sets an individual tap tempo for DelayB.



**DelayA footswitch** = Sets an individual tap tempo for DelayA.

The BPM value for each tempo is indicated in the display and the respective footswitch LED blinks to indicate the selected tempo. The top line of the display screen shows the tempo values for DelayA and DelayB in milliseconds.

Values for automatic tempo subdivision can be set for each delay separately by accessing the **TempoA** and **TempoB** fields in the menu screen. (See section [Tempo subdivisions](#))

The tap tempo mode is automatically closed after a few seconds without tapping.

The LED for the Reverb footswitch will then stop blinking. The LED for DelayB and DelayA will continue blinking in the selected tempo.

### ***Looper Mode***

Press **DelayB + DelayA** footswitches simultaneously to enter/exit the Looper mode.

See section [Looper Mode](#) for a description of the Looper functions.

### **Menu control**



#### ***Navigation***

- Press the **Menu** control once and rotate it to navigate the menu screen. The selected module or parameter is highlighted by a blue frame.
- Press the **Menu** control to access the respective parameter screen for each module. Rotate and press **Menu** to select and edit parameters (only those not controlled by physical knobs) or to set states.
- Press the **Home** button to return to the main menu screen (main interface for Play Mode or Patch Mode).
- The Menu control will then act as a master mix control.

#### ***Master Mix***

When the main interface (Play or Patch Mode) is displayed, rotate the **Menu** control to adjust the master output effect mix of the Ocean Machine II (ratio of the effect signal / dry signal).

#### ***Parameter screen***

The parameter screen is opened by selecting a module by pushing the **Menu** control once, then rotating it to highlight the desired module and then pushing the **Menu** control again to open the module.

The top row in the display shows the selected effect type.

In Play Mode, the indicated parameters correspond to the physical settings of the knobs. The main parameters can only be adjusted by rotating the corresponding knobs. The parameter values are indicated as dials and digital readouts (in percent).

#### **"Hidden" parameters**

Some effect types (e.g. "Mod" or "Filter" types) may have additional parameters that can only be selected and adjusted using the **Menu** control. Rotate the **Menu** control to select the additional parameter (highlighted by a blue frame), then press **Menu** to access the parameter (highlighted by a red frame) and then rotate **Menu** to adjust the parameter. Press **Menu** again to return to parameter selection.

Return to the main screen by pressing the **Home** button.

### ***PingPong effect***

The PingPong effect will alternate the delay repeats between the right and left side in a stereo panorama.

- Use the **Menu** control to select the **PingPong** field in the bottom row of the main menu screen and push **Menu** to open the **PingPong** screen.
- Use the **Menu** control to select and activate/deactivate the PingPong effect for DelayB and/or DelayA.
- Return to the main screen by pressing the **Home** button.

### ***Tempo subdivisions***

For DelayB or DelayA, tempo subdivisions will be applied to the tap tempo that was entered for each individual delay or to the Master Tap Tempo entered with the help of the Reverb footswitch.

**Example:** If TempoA is set to 1/2, the tempo for DelayA will be half of the tap tempo value.

- Use the **Menu** control to select one of the **Tempo** fields in the bottom row of the main menu screen and push **Menu** to open the respective screen.
- Push the **Menu** control to activate / deactivate subdivisions for the tempo of DelayB or DelayA. Rotate the **Menu** control to select the desired subdivision (if activated).
- Return to the main screen by pressing the **Home** button.

The selected subdivision (or OFF status) is indicated in the respective Tempo field for DelayB or DelayA.

### ***Positioning effects in the signal chain***

The effect modules and the Looper module can be positioned **in series** in the signal chain. This is indicated by showing the modules behind each other in the menu screen.

Delay and Reverb effects can also be positioned **in parallel** to each other. This is indicated by two modules shown on top of each other in the menu screen.

The Looper module can only be used in series in the effect chain.

- Use the **Menu** control to highlight the effect module you wish to move (blue frame).
- Hold the **Menu** control down and rotate it to move the effect module to the desired position.
- Release the **Menu** control to confirm effect module placement.

### **Storing settings as preset**

All setting configurations can be saved as presets for later recall in Patch Mode.

- Press the **Store** button.
- The screen will display a preset number.
- Rotate the **Menu** control to select a preset slot where you want to save your settings.
- Press the **Save** button one more time to confirm or press **Home** to cancel the saving process.

**Note:** Previously saved settings in the selected slot will be overridden.



## Patch Mode

In this mode, the Ocean Machine II recalls saved presets. The OMII features 8 banks with 3 presets each for a total of 24 presets.

All main effect parameter values correspond to the values saved in the preset, **not** to the physical values indicated on the respective knobs.

The parameter values will revert to the value indicated on a knob as soon as an adjustment is made on the respective knob. During adjustments, a digital readout of the adjusted value is shown in the respective effect field in the display.

Adjusted values must be saved in the preset or they will return to the previously stored value as soon as the preset is changed.

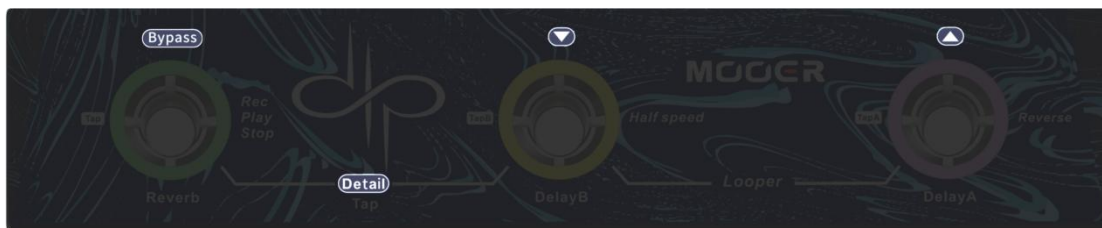
Other effect parameters such as additional parameters, relative tempos, ping pong effect, sequence of effects in the chain, etc. can all be edited the same way as in Play Mode. (See section [Menu control](#))

**Note:** All changes must be stored in the preset or they will get lost as soon as the preset is switched.

Rotating the **Menu** control will adjust the Master Mix.

Pressing the **Menu** control opens the Patch control screen to allow the same adjustments as in Play Mode. (See section [Play Mode](#))

### Footswitch functions



**Reverb (Bypass)** - activates the pedal:

- footswitch LED for effects that are active in the selected preset are lit
- DelayA and DelayB LED blink to indicate the respective tempo
- the preset number in the display is shown in blue
- or switches the pedal to global bypass:
  - all effects are switched to bypass
  - all footswitch LED are off
  - the preset number in the display is shown in white

**DelayB (down)** - switches to the previous preset,  
- hold to scroll and release when desired preset is reached  
- activates the pedal if it is in bypass mode

**DelayA (up)** - switches to the next preset,  
- hold to scroll and release when desired preset is reached  
- activates the pedal if it is in bypass mode

If the **Patch Control Screen** (see below) is shown, all three footswitches can be used to **activate / disable the respective effect** for this preset. The status is indicated by the respective footswitch LED



and in the patch control screen (Effect type / OFF).

The On/Off status of each individual effect is stored separately for each preset.

Press **Reverb + DelayB** footswitches simultaneously to toggle between the preset selection screen and the patch control screen.

Press **DelayB + DelayA** footswitches simultaneously to enter/exit the **Looper** mode.

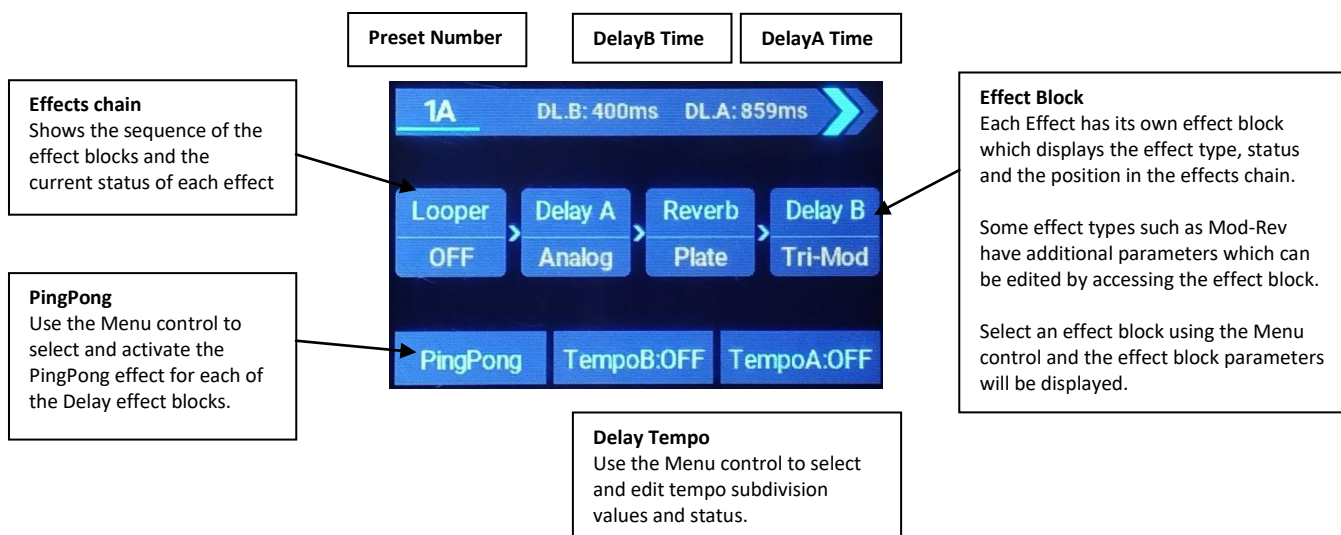
### Preset selection screen



### Patch control screen

When the display shows the preset selection screen, press the **Menu** control to open the patch control screen. Alternatively you can press the **Reverb + DelayB** footswitches simultaneously to toggle between the patch control screen and the preset selection screen.

When the patch control screen is open, all footswitches and controls will have the same functions as in Play Mode (except tap tempo) and can be used to perform the same adjustments as in Play Mode. (See section Play Mode). The footswitches can now be used to activate / disable the individual effects for this preset.



### Storing presets

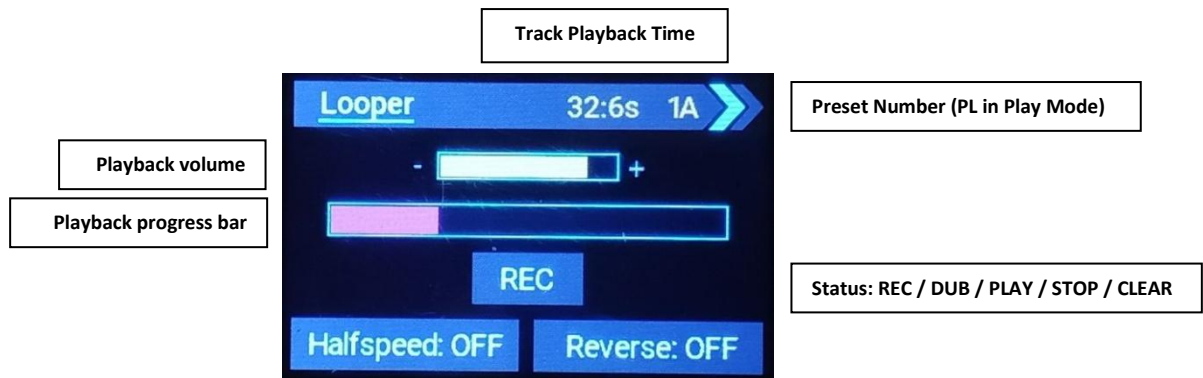
- After changing settings for a preset, press the **Store** button to save the changes.
- The screen will display a preset number.
- Rotate the **Menu** control to select a preset slot where you want to save your settings.
- Press the **Save** button one more time to confirm or press **Home** to cancel the saving process.

**Note:** Previously saved settings in the selected slot will be overridden.

## LOOPER Mode

The Ocean Machine II pedal features a Looper with up to 120 seconds of recording time, overdubbing, independent level control and full featured half speed + reverse effects.

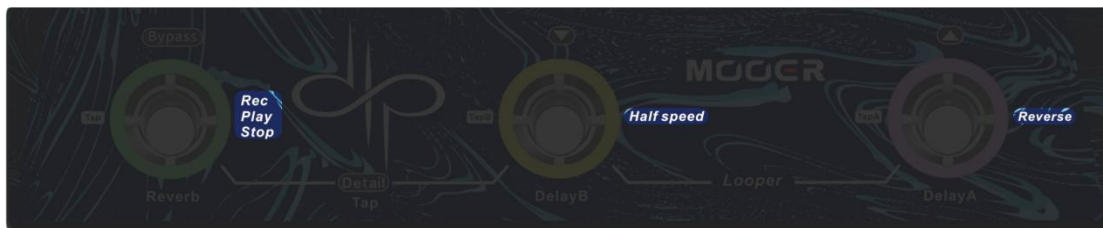
Press footswitches **DelayB** + **DelayA** simultaneously to access the Looper mode.



### Footswitch and control functions

#### Menu control

Rotate **Menu** to adjust the Looper playback volume level. This is independent from the master mix.



#### REC / PLAY / DUB / STOP / CLEAR (Reverb footswitch)

- **Tap once** for Record, tap again for Play, tap again for Dub...
- **Double-tap** for Stop (when Looper is in Play mode)
- **Hold** for Clear All (when Looper is in Stop Mode)

##### Reverb footswitch LED indication:

- **Off:** nothing recorded (e.g. after Clear All)
- **Blinking slowly:** the Looper is recording or over dubbing
- **Continuously lit:** the Looper is playing back
- **Blinking quickly:** the Looper is in Stop-Mode

#### HALF SPEED (DelayB footswitch)

- Half-Speed on / off  
When half-speed is active, the footswitch LED is lit and the status is indicated in the screen.

#### REVERSE (DelayA footswitch)

- Reverse loop on / off  
(this effect is available after the first loop was recorded)  
When reverse loop is active, the footswitch LED is lit and the status is indicated in the screen.

#### Notes:

While the Looper is operating, you can go back and forth between the Looper and your current operation mode by simultaneously pressing the **DelayB** and **DelayA** footswitches.

You cannot change the operating mode (i.e. use the **Preset** to switch between Play and Patch) while in Looper mode.

If the Looper is playing a recording and the pedal is in **Play Mode**, the loop will continue playing, even if all effects are turned off. In **Patch Mode**, however, the playback will be turned muted, if the pedal is switched to global bypass (Reverb footswitch).

### **Looper positioning**

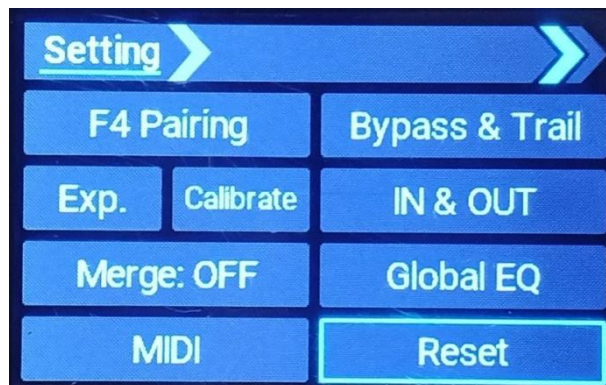
The Looper can be placed at different positions in the effects chain. (See section *Positioning effects in the signal chain*)

- **In front of the chain**, the Looper will record (and then play) the dry signal directly from the input. This can be used to record a dry signal of the instrument and apply Delay / Reverb effects after the Loop was recorded. This "clean" recording can then be moved further back in the chain so different or no effects (end of chain) will be applied to the loop as compared to the live input from the instrument.
- **In the middle of the chain**, the Looper will record any effects that have been applied to the signal before the Looper position. These effects will remain recorded in the loop and always be audible even if the recorded loop is moved in the signal chain and even if all effects on the pedal are turned off after the recording was made.
- **At the end of the chain**, the Looper will record the wet sound of the entire effects chain.

## SETTINGS MENU

Press the **Settings** button to open the menu screen for global settings. These settings are not stored within the presets and are effective regardless of the selected operation mode or the selected preset.

- Press the **Setting** button to enter the settings menu.
- Press the **Home** button to return to the main menu screen (main interface for Play Mode or Patch Mode).



- Rotate the **Menu** control to navigate the settings menu.
- Press the **Menu** control to access parameter screens, enter parameters and set states.

### **F4 Pairing**

Use this setting to pair your Ocean Machine II with an optional wireless MOOER F4 series footswitch.

Switch the footswitch to pairing mode (see footswitch manual) and press the **Menu** control to activate pairing. After successful pairing, the field will show "F4 paired" in green letters.

Once paired, the wireless footswitch will automatically connect to the OMII as soon as both devices are turned on.

## Bypass & Trail

Use this screen to select the bypass type (**DSP** or **True** bypass).

**Note:** When the INPUT has only LEFT/MONO connected, but the OUTPUT has both LEFT/MONO and RIGHT connected, the system will automatically switch to **DSP** bypass.

The user can select between **DSP** and **True** bypass if both inputs are connected or if only one input and one output are connected.

### Bypass type

**DSP bypass** (Digital Signal Processing) buffers the signal in the bypass.

**True bypass** does not buffer the signal and provides a direct connection between input and output.

- Rotate the **Menu** control to select the Bypass field.
- Press the **Menu** control to select the desired bypass type (True or DSP).

### Trails

**Trails** can only be activated when DSP bypass is selected.

With **Trails active** the repeats of the delay effects or the echo of the reverb effect are allowed to naturally decay after the respective effect has been switched off, but no new repeats or echoes will be generated.

With **Trails deactivated** the repeats of the delay effects or the reverbs echoes will be cut off as soon as the respective effect is switched off.

- Rotate the **Menu** control to select the Trail field.
- Press the **Menu** control switch Trail On/Off.

## Exp.

Use this page to select which parameter is controlled by an external expression pedal and adjust the minimum value for the parameter when the expression pedal is in the heel down position (in case you do not want the minimum value to be zero).

(Note: P1 and P2 in the sub-interface are the two hidden parameters in the effect model, such as Dist and Level of Dist-Verb; Min Value is the minimum value for setting the external pedal).



- Rotate the **Menu** control to select which parameter you want the expression pedal to control. This will be a global setting and cannot be changed per preset.
- Press the Menu control to confirm your selection. The selected Parameter will be highlighted

in red. (**Note:** P1 and P2 in are the two hidden parameters in the effect model, such as Dist and Level for Dist-Verb.)

- Select the "**Min Value**" field at the bottom of this screen to change the minimum value in percent that is applied to the effect when the expression pedal is in the heel down position.

## Calibrate

Use this screen to calibrate the connected expression pedal. Follow the instructions on the screen.

For best results, use an expression pedal with a max potentiometer resistance of 10 kΩ ~ 50 kΩ.

Use a 1/4" TRS (stereo) cable to connect your expression pedal and your OMII.

An expression pedal only needs to be calibrated once. You only need to re-calibrate when you switch expression pedals.

To calibrate your pedal:

- Open the **Calibrate** screen in the OMII settings menu.
- Open your expression pedal all the way to the "**heel down**" position.
- Press **Menu** on the OMII.
- Close your expression pedal all the way to the "**toe down**" position.
- Press **Menu** on the OMII again.

This completes the calibration process. Press **Home** to return to the main screen.

## IN & OUT

Use this screen to adjust the global input and output levels.

- Press the **Menu** control to change between Input level (**IN**) and Output level (**OUT**).
- Rotate the **Menu** control to adjust the level.



## Merge

With Merge activated, trails (repeats and echoes) of the delays and reverb will blend into each other when the effect type or a preset is changed.

- Press the **Menu** control to switch Merge on/off.

## Global EQ

The Ocean Machine II is equipped with a Global EQ section which will affect both your dry guitar signal and the sound of the effects. This can be switched on or off. The Global EQ can be used for quick adjustments to the sound conditions at the venue. The Global EQ settings are independent of presets and affect all presets.



- Rotate the **Menu** control to select the On/OFF field or the parameter you wish to change (blue frame).
- Press the **Menu** control to adjust the selected parameter (red frame).
- Rotate the **Menu** control to change value.
- Press the **Menu** control again to finish adjustments (blue frame).



**1. ON/OFF:** Switches the Global EQ on or off

**2. L.FREQ:** Adjustable low frequency cut.

The following options are available: OFF, 27 Hz, 47 Hz, 82 Hz, 150 Hz and 270 Hz.

The default setting for the LOW frequency cut is OFF.

**3. EQ:** Cut or boost BASS, MID or TREBLE frequencies up to +/- 12dB  
(12 O'clock is 0 dB boost or cut).

**4. H.FREQ:** Adjustable high frequency cut.

The following options are available: OFF, 18 kHz, 12 kHz, 8.2 kHz, 5.6 kHz and 3.9 kHz.

The default setting for the HIGH frequency cut is OFF.

## MIDI

Use this screen to configure settings for MIDI control.

**CHANNEL:** select one of MIDI channels 1-16 or OMNI.

**PC MAP:** map PC# to presets to be able to change presets using PC commands.

**CC TABLE:** shows a table of CC commands, the functions they control and the respective value ranges.

**MIDI SYNC:** activates / deactivates MIDI clock sync with other devices.

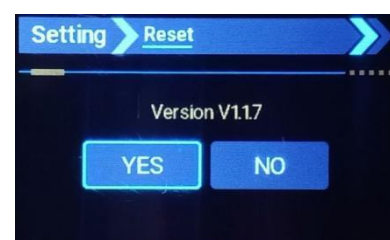
If MIDI SYNC is active, the Master Tap Tempo of the OMII will be synched with the connected MIDI device.

## Reset

This will perform a factory reset of your Ocean Machine II.

- Rotate the **Menu** control to select **YES**.
  - Press the **Menu** control to perform factory reset.
- You will be prompted to press again for confirmation.

Select **NO** or press the **Home** button to cancel the factory reset procedure.



**Note:** A reset will delete your stored presets and set them back to factory settings.

## EXPRESSION PEDAL

- An external expression pedal can be used to control various parameters of the Ocean Machine II.
- Use a 1/4" TRS (stereo) cable to connect an expression pedal to the EXP input of the OMII.
- For best results, use an expression pedal with a maximum potentiometer resistance of 10 kΩ ~ 50 kΩ.
- You can select the parameters which the expression pedal controls on the Exp. screen in the Settings menu (see section SETTINGS MENU).
- Please calibrate your expression pedal before you use it for the first time on your OMII. (See section Calibrate in the Settings menu)

## WIRELESS FOOTSWITCH

The Ocean Machine II supports wireless footswitches of the MOOER F4 series (to be purchased separately).

Please consult the manual for the F4 footswitch for battery specs and charging requirements.

The Ocean Machine II can only be connected to one wireless footswitch at a time.

- Open the **Settings** menu on the OMII.
- Power the F4 footswitch on, press and hold footswitch **A and C** to enter pairing mode (LED blinking).
- Select **F4 Pairing** in the settings menu and press the **Menu** control.
- After successful pairing, the field in the settings menu will show "**F4 paired**".

The F4 wireless footswitch can be used to perform the following functions:

- **Footswitch A** controls the Master Tap Tempo.
- **Footswitches B / C** control the tap tempo for DelayB / DelayA.
- **Footswitch D** simultaneously turns ALL effects on the OMII on/off (global bypass). This works in Play mode and in Patch mode.

The Display on the wireless footswitch will indicate the Preset number in Patch mode or "PL" in Play mode.

If the Effects are active on the OMII, the LED on the wireless footswitch will blink to indicate their respective tempo.

## MIDI

The Ocean Machine II can receive MIDI signals but cannot generate its own MIDI commands.

Incoming MIDI commands can be routed through the OMII to the MIDI TRU port and forwarded to other devices.

Incoming Program Change signals (PC) can be used to recall presets. Incoming Control Change signals (CC) can be used to switch effects on/off, control parameter values, etc. (See table below.)

Function	CC	Value Range
Reverb On/Off	23	0-127 (OFF < 64 < ON)
Reverb type	3	0-8
Pre-Dly	66	127
Decay	47	0-127
R.Tone	48	0-127 (Low pass: $\geq 73$ ; Flat: 55-72; High pass: $\geq 54$ )
R.Mix	49	0-127
R.P1	50	0-127
R.P2	51	0-127
Delay B On/Off	25	0-127 (OFF < 64 < ON)
Delay B Type	9	0-8
Feedback B	59	0-127
Time B	60	0-127
Sweep B	61	0-127
D.Mix B	62	0-127
B.P1	63	0-127
B.P2	64	0-127
Pingpong B	65	0-127 (OFF < 64 < ON)
TempoB	20	0-14
Delay A On/Off	24	0-127 (OFF < 64 < ON)
Delay A Type	12	0-8
Feedback A	52	0-127
Time A	53	0-127
Sweep A	54	0-127
D.Mix A	55	0-127
A.P1	56	0-127
A.P2	57	0-127
Pingpong A	58	0-127 (OFF < 64 < ON)
TempoA	21	0-14
Looper In&Out	26	0-127 (OFF < 64 < ON)
Rec/Dub	27	0-127
Play	28	0-127
Stop	29	0-127
Clear All	30	0-127
HalfSpeed	31	0-127 (OFF < 64 < ON)
Reverse	32	0-127 (OFF < 64 < ON)
Looper Level	45	0-60
Expression	34	0-19
Min Value	35	0-100
Trail On/Off	70	0-127 (OFF < 64 < ON)
EQ On/Off	36	0-127 (OFF < 64 < ON)
L.FREQ	37	0-5
BASS	38	0-24
MID	39	0-24
TREBLE	40	0-24
H.FREQ	41	0-5
Input Level	42	0-100
Output Level	43	0-100
Master Mix	44	0-100
Merge	69	0-127 (OFF < 64 < ON)
R.Freeze	4	0-127 (OFF < 64 < ON)
B.Freeze	5	0-127 (OFF < 64 < ON)
A.Freeze	6	0-127 (OFF < 64 < ON)
TAP Master	71	0-127
TAP A	72	0-127
TAP B	73	0-127

Preset	Midi program No.
1A	Midi program #1
1B	Midi program #2
1C	Midi program #3
2A	Midi program #4
2B	Midi program #5
2C	Midi program #6
3A	Midi program #7
3B	Midi program #8
3C	Midi program #9
4A	Midi program #10
4B	Midi program #11
4C	Midi program #12
5A	Midi program #13
5B	Midi program #14
5C	Midi program #15
6A	Midi program #16
6B	Midi program #17
6C	Midi program #18
7A	Midi program #19
7B	Midi program #20
7C	Midi program #21
8A	Midi program #22
8B	Midi program #23
8C	Midi program #24



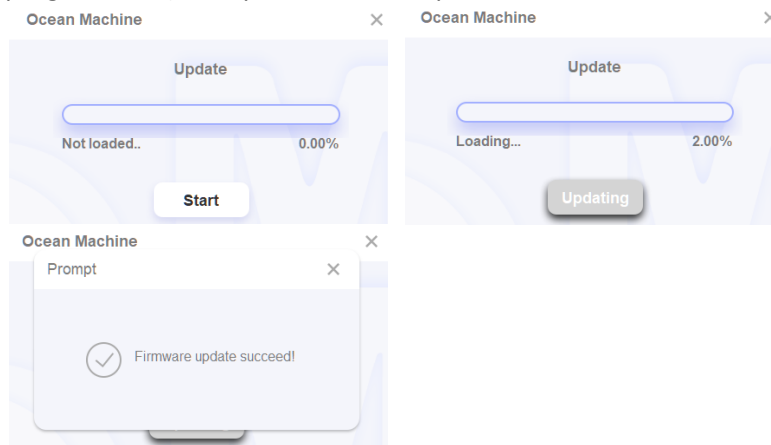
## FIRMWARE UPDATE

From time to time, MOOER will release new firmware updates for your Ocean Machine II which will include new features or bug fixes based on user feedback. The current firmware version of the OMII is shown in the **Reset** screen. (See [Reset](#) in the Settings menu)

**Note:** A firmware update will reset all settings and stored presets to factory settings!

You will need a USB Type C to USB Type A cable to complete the firmware update.

1. Download the latest update-software for the Ocean Machine II from the Download Center on the official MOOER Website ( <https://www.mooeraudio.com/Downloads.html> ) and install the application on your computer.
2. Use the USB-C to USB-A cable to connect your computer to the USB port on your OMII.
3. Disconnect the power supply on your OMII.  
**Press and hold the Menu control knob while you re-connect the power supply.** The blue LED in the Preset button will blink quickly to indicate that the pedal is in **Firmware Update Mode**.
4. Open the software on your computer and click **Start**. The update progress will be shown in a progress bar. (If the pedal is not in Update Mode, the software will show a connection error.)



5. After a successful update, the pedal will switch to Play Mode and is ready for use again.

**Caution:** Do not disconnect the USB cable or the power supply on your pedal while an update is in progress. This could cause unexpected errors.

## SPECIFICATIONS

<b>Input:</b>	6.35 mm (1/4") TS audio interface, impedance 1 MΩ
<b>Output:</b>	6.35 mm (1/4") TS audio interface, impedance 100 Ω
<b>External expression pedal:</b>	TRS device, impedance 10 kΩ ~ 50 kΩ
<b>Sampling rate:</b>	44.1 k
<b>Sampling accuracy:</b>	24 bit
<b>Power supply:</b>	9 VDC, 500 mA power adapter (center negative)
<b>USB:</b>	Type C for firmware updates
<b>Dimensions:</b>	215 x 127 x 56 mm (LxWxH)
<b>Weight:</b>	1.1 kg
<b>Accessories:</b>	USB-C to USB-A cable, power adaptor, stickers, artist signature card

Disclaimer: Parameter updates will not be notified separately.