



# Layers<sup>™</sup> Pedal

The MXR Layers Pedal blooms with rich, organic sustain that imbues every strum and pluck with resonance and depth—pull off chord voicings you never thought possible, compose transcendent melodies, orchestrate harmonic ensembles, create lively stereo pads, and more—all from a standard MXR housing.

jimdunlop.com/m307

## **External Controls**



- 1 CTR jack can be used to connect an expression pedal or external footswitch or to send a dry output signal when using Dry/Wet Split mode (see Advanced Operation).
- 2 FOOTSWITCH governs creation and deletion of sustain layers. Pressing the footswitch engages a layer. Holding the footswitch holds a layer indefinitely until released. Upon release, the layer fades out according to the DECAY setting. A double tap will clear all layers and put the pedal in bypass.
- **3** ATTACK knob sets the attack, or fade in, time of each layer.
- 4 MIX knob controls the level of the wet signal.

- 5 SINGLE button limits sustain effect to a single layer. By default, there are 3 simultaneous layers that overlap with each other. When SINGLE button is engaged, only one layer will be active at a time.
- 6 TRIG knob sets the sensitivity for auto triggering layers with your pick attacks. When TRIG is in the OFF position (fully counterclockwise), auto triggering is disabled, and only the FOOTSWITCH can activate layers. The TRIG LED is red by default when auto triggering is enabled; when the input signal exceeds the set threshold, the TRIG LED will turn green. Note that, for a layer to be triggered, the signal must exceed the threshold (i.e. the TRIG LED is green), and the pedal must detect a pick attack.

## External Controls (cont.)



- 7 DECAY knob sets the decay, or fade out, time of each layer. For a given DECAY setting, higher frequencies will decay faster than lower frequencies, just like they do for a physical vibrating string. When TRIG knob is in the OFF position, the effect signal will automatically bypass once all three layers have fully decayed. The three layers LEDs and the main bypass LED will turn off to indicate bypassed status.
- 8 SUB OCT button transposes new layers down an octave. Previously created layers will not be affected. This allows you to have some layers at the normal transposition and others shifted down an octave. This mode can be adjusted on the fly using an expression pedal to morph between different settings (see Advanced Operation). There is also a setting for only transposing the lowest frequencies of a layer down an octave (see Advanced Settings)—useful for adding bass to a layer without having the whole chord or note transposed down.

# **Basic Operation**

#### Power

The MXR<sup>®</sup> Layers<sup>™</sup> Pedal requires a 9-volt (300mA) center-negative power supply and can be powered by the Dunlop ECB003 9-volt adapter or the MXR<sup>®</sup> Iso-Brick<sup>™</sup> the Iso-Brick<sup>™</sup> Pro, and the Iso-Brick<sup>™</sup> Mini Power Supplies. This pedal cannot be powered by a battery.

#### **Bypass**

The pedal always operates with a buffered analog dry signal, mixing in the wet signal when the effect is engaged. This scheme ensures seamless transitions between engaged and bypassed states.

## **Advanced Operation**

#### USE A KEYBOARD SUSTAIN PEDAL OR OTHER EXTERNAL SWITCH TO TRIGGER LAYERS

A keyboard sustain pedal or other external switch can be used to trigger layers instead of the built-in footswitch if the built-in footswitch is inaccessible (e.g. during desktop use) or a different tactile response is desired. First, set the CTR switch to its TAP/EXP (left) position. Next, run a standard instrument cable from the external pedal/ switch to the MXR Layers Pedal's CTR jack. Note that the external pedal/switch must be a normally-open discrete switch and not a continuous TRS switch.

### USE AN EXPRESSION PEDAL TO BLEND BETWEEN TWO SETTING CONFIGURATIONS

An expression pedal such as the DVP5 Volume (X)<sup>™8</sup> Pedal can be used to toggle and sweep between two different setting configurations. First, set the CTR switch to its TAP/EXP (left) position. Next, run a TRS cable from the expression pedal to Layers Pedal's CTR jack. Set rocker to its heel-down position. Adjust knobs, and set mode buttons as desired. Move rocker to its toe-down position. Adjust knobs and mode buttons as desired to a different setting configuration. Moving the rocker back and forth will transition smoothly between the sounds created by the two settings.

Note that SINGLE button Advanced Settings are expression controllable while SUB OCT button Advanced Settings are not (see Advanced Settings).

## **STEREO INPUT**

To operate in Stereo Input mode, remove the MXR Layers Pedal's bottom plate, locate the MONO/STEREO input switch, and set it to the STEREO (left) position. It is recommended to also enable Stereo Output when using the Stereo Input feature.

## **STEREO OUTPUT**

To operate in Stereo Output mode, run a TRS splitter cable from the Layers Pedal's OUTPUT jack to your chosen inputs, and set the CTR switch to its TAP/EXP (left) position. Next, press and hold the SUB OCT button, and rotate the DECAY knob fully clockwise to select Stereo Output mode. Center LEDs will flash to confirm. To change back to Mono Output mode, follow the same steps, and rotate the DECAY knob counterclockwise. With Stereo Output enabled, the three layers will be panned left, center, and right, represented visually by the layers LED positions. When modulation is enabled (see Advanced Settings), it is possible to auto pan the layers across the stereo field.

### **DRY/WET SPLIT**

The MXR Layers Pedal can split its dry and wet signals to run each signal into its own effect chain or to operate within a dry/wet stereo rig. First, set the CTR switch to its AUDIO (right) position. Run the wet signal from the OUT jack and the dry signal from the CTR jack to your chosen inputs. Note: Stereo Input and Stereo Output modes must be disabled for Dry/Wet Split mode to work properly.

# **Advanced Settings**

#### INTRODUCTION

By pressing and holding the SINGLE or SUB OCT buttons while adjusting any of the pedal's knobs, you can finetune various functions. These functions allow you to add modulation and/or delay to your layers, route your dry signal through a delay, enable Stereo Output, and more. The MXR Layers Pedal's delay and modulation effects are based on those of the MXR Joshua<sup>®</sup> Ambient Echo but with darker tonality to allow your layers to stand out.

CONTROL	SINGLE	SUB OCT
MIX	<b>MODULATION AMOUNT</b> Sets the depth and rate of the modulation effect. As the MIX knob is rotated clockwise, rate increases and depth decreases. Setting the knob to its minimum position turns the modulation effect off.	<b>MUTE DRY SIGNAL</b> Rotate clockwise to mute dry signal or counterclockwise to restore dry signal. SINGLE LED will flash to confirm. Note that no sound will be heard if MIX knob is fully counterclockwise and that CTR jack will be completely muted if in dry/wet split mode.
TRIG	<b>DELAY TIME</b> Adjusts time between repeats. Setting the knob to its minimum position turns the delay off. Delay regen is tied to the DECAY knob.	<b>DRY SIGNAL DELAY SEND</b> Rotate clockwise to increase amount of dry signal sent to delay effect.
ATTACK	<b>MODULATION BLEND</b> The modulation effect consists of chorus and tremolo. Fully counterclockwise provides only the chorus effect, while fully clockwise provides only tremolo. The midpoint setting provides an equal blend of both. With Stereo Output enabled, the tremolo effect will pan layers across the stereo field.	ROOT NOTE SUB OCTAVE Rotate clockwise to engage Root Note Sub Octave mode or counterclockwise to disengage it. SUB OCT LED will flash to confirm. With SUB OCT button engaged, this mode will only apply the sub octave effect to the lowest frequencies of a layer.
DECAY	<b>DIFFUSION</b> Rotate clockwise to add diffusion to the layers for a textural effect. Fully counterclockwise turns the diffusion effect off.	<b>STEREO OUTPUT</b> Rotate clockwise to engage Stereo Output or counterclockwise to disengage it. Center LEDs will flash to confirm.
SUB OCT	<b>TAP TEMPO</b> Tap SUB OCT button while holding SINGLE to set delay time.	N/A
	<b>RESTORE DEFAULTS</b> To return all parameters to their default settin	

press and hold SINGLE and SUB OCT buttons for five seconds—the main LED will flash to confirm.

## **Specifications**

Input Impedance	1ΜΩ
Output Impedance	100 Ω
Maximum Input Level	+5 dBV
Noise Floor	-97 dBV
Current Draw	300 mA
Power Supply	9 volts DC

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