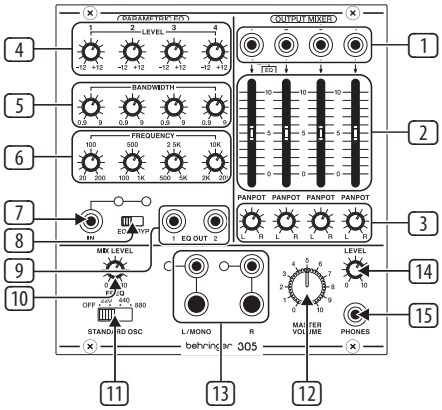
Quick Start Guide

305 EQ/MIXER/OUTPUT

Legendary Analog Parametric EQ,
Mixer and Output Module for Eurorack

EN

Controls



1 **MIXER INPUTS (1 / 2 / 3 / 4) –** Use these jacks to route audio signals into the OUTPUT MIXER section via cables with 3.5 mm connectors. Channel 1 includes a pre-wired, normalled connection from the parametric EQ section, so the PARAMETRIC EQ output can directly enter the Channel 1 signal path just before the volume slider. If a 3.5 mm connector is inserted into the MIXER INPUT 1 jack, the EQ output is disconnected and replaced by the incoming jack signal from MIXER INPUT 1.

2 **VOLUME SLIDERS –** Use these sliders for independent volume control of each input channel.

3 **PANPOT –** These knobs control each channel's placement in the stereo field.

4 **LEVEL (1 / 2 / 3 / 4) –** Use these knobs to cut or boost each of the PARAMETRIC EQ's four frequency bands.

5 **BANDWIDTH –** These knobs control the width or narrowness of the parabolic filter curve for each frequency band. Higher values narrow the curve, while lower values produce a wider, gentler parabolic curve.

6 **FREQUENCY –** Use these knobs to adjust the placement of each EQ filter around the center value shown just above the knob.

7 **IN –** Use this input to route external signals into the PARAMETRIC EQ section via cables with 3.5 mm connectors. The IN jack's associated signal and clip LEDs read the input signal level when BYP is selected on the EQ/BYP sliding switch. When EQ is selected on the EQ/BYP sliding switch, the LEDs read the EQ output level.

8 **EQ/BYP –** This sliding switch turns the PARAMETRIC EQ circuit on or off. When the switch is in the BYP position, and the EQ circuit is inactive, the signal coming in through the IN jack will be passed through unaltered to the Channel 1 mixer channel.

9 **EQ OUT (1 / 2) –** Use these parallel output jacks to send the PARAMETRIC EQ section's processed signal out for use elsewhere via cables with 3.5 mm connector. When the EQ/BYP switch is in the BYP (bypassed) position, the signal coming in through the IN jack will be duplicated at the EQ OUT outputs.

10 **MIX LEVEL –** Use this knob to adjust the volume of the STANDARD OSC output before the adjusted signal is then sent to the headphone LEVEL control and the final MASTER VOLUME control.

11 **FREQ (OFF / 220 / 440 / 880) –** This sliding switch turns the onboard oscillator (STANDARD OSC) on or off and chooses the oscillator's frequency. The oscillator's output goes to the OUTPUT MIXER section as a pre-wired parallel connection, like an additional fifth mono channel, that is blended into the mixer section's output using the MIX LEVEL control.

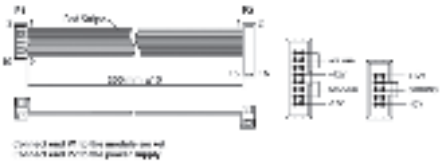
12 **MASTER VOLUME –** Use this knob to make final level adjustments before the mix goes to the MASTER OUTPUTS.

13 **MASTER OUTPUTS –** Use these outputs to send out the final mix via separate left and right jacks via cables with either 3.5 mm or ¼" connectors. For a single mono output, use only the output labeled L/MONO.

14 **LEVEL (PHONES) –** Use this knob to control the volume level for the PHONES output.

15 **PHONES –** This output sends out the final mix for headphones with a 1/8" stereo connector.

Power Connection



The 305 EQ/MIXER/OUTPUT module comes with the required power cable for connecting to a standard Eurorack power supply system. Follow these steps to connect power to the module. It is easier to make these connections before the module has been mounted into a rack case.

1. Turn the power supply or rack case power off and disconnect the power cable.

2. Insert the 16-pin connector on the power cable into the socket on the power supply or rack case. The connector has a tab that will align with the gap in the socket, so it cannot be inserted incorrectly. If the power supply does not have a keyed socket, be sure to orient pin 1 (-12 V) with the red stripe on the cable.
3. Insert the 10-pin connector into the socket on the back of the module. The connector has a tab that will align with the socket for correct orientation.
4. After both ends of the power cable have been securely attached, you may mount the module in a case and turn on the power supply.

Installation

The necessary screws are included with the module for mounting in a Eurorack case. Connect the power cable before mounting.

Depending on the rack case, there may be a series of fixed holes spaced 2 HP apart along the length of the case, or a track that allows individual threaded plates to slide along the length of the case. The free-moving threaded plates allow precise positioning of the module, but each plate should be positioned in the approximate relation to the mounting holes in your module before attaching the screws.

Hold the module against the Eurorack rails so that each of the mounting holes are aligned with a threaded rail or threaded plate. Attach the screws part way to start, which will allow small adjustments to the positioning while you get them all aligned. After the final position has been established, tighten the screws down.

Specifications

Inputs	
EQ input	
Type	3.5 mm TS jack, AC coupled
Impedance	40 kΩ, unbalanced
Max input level	+18 dBu
Mixer input	
Type	4 x 3.5 mm TS jacks, AC coupled
Impedance	> 25 kΩ, unbalanced
Max input level	+21 dBu
Outputs	
EQ output	
Type	2 x 3.5 mm TS jacks, DC coupled
Impedance	330 Ω, unbalanced
Max output level	+18 dBu
Noise with EQ set flat	< -90 dBu, 22 Hz to 22 kHz
Master output	
Type	2 x 3.5 mm TS jacks 2 x ¼" TS jacks AC coupled
Impedance	700 Ω, unbalanced
Max output level	+8 dBu
Noise with 1 channel open	< -100 dBu, 22 Hz - 22 kHz
Phones output	
Type	3.5 mm TRS stereo jack, AC coupled
Impedance	50 Ω, unbalanced
Max output level	+18 dBu
Controls	
EQ level	±12 dB, 0 dB center detent
EQ bandwidth Q range	0.9 to 9
EQ frequency range 1	20 Hz to 200 Hz
EQ frequency range 2	100 Hz to 1 kHz
EQ frequency range 3	500 Hz to 5 kHz
EQ frequency range 4	2 kHz to 20 kHz
EQ bypass switch	Off / on
OSC frequency switch	Off / 220 Hz / 440 Hz / 880 Hz
OSC mix level	-∞ to unity gain
Mixer input fader	-∞ to unity gain
Mixer panpot	-∞ to unity gain, -3 dB center detent
Master volume	-∞ to -10 dBu
Phones level	-∞ to +10 dBu
Power	
Power supply	Eurorack
Current draw	120 mA (+12 V), 100 mA (-12 V)
Physical	
Dimensions	53 x 122 x 129 mm (2.1 x 4.8 x 5.1")
Rack units	24 HP
Weight	0.28 kg (0.62 lbs)

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