

# CARNABY

## harmonic eq<sup>®</sup>

### 1. INPUT LEVEL CONTROL

[±20dB, 1dB steps]

Adjusts the input level of the module and internal saturation circuits. Set around 0dB for nominal settings or push higher for more harmonic saturation.

### 2. HI LEVEL CONTROL

[±10dB, 0.5dB steps]

Adjusts up to 10dB of boost/cut for the *high shelf filter* at the frequency set using the **HI FREQUENCY CONTROL** [7]. This control progressively increases the amount of harmonic saturation added to the signal above the selected frequency in boost and cut positions.

### 3. MID LEVEL CONTROL

[±10dB, 0.5dB steps]

Adjusts up to 10dB of boost/cut for the *mid peaking filter* at the frequency set using the **MID FREQUENCY CONTROL** [9]. This control progressively increases the amount of harmonic saturation added to the signal within the selected frequency in boost and cut positions.

### 4. LO LEVEL CONTROL

[±10dB, 0.5dB steps]

Adjusts up to 10dB of boost/cut for the *low shelf filter* at the frequency set using the **LO FREQUENCY CONTROL** [10]. This control progressively increases the amount of harmonic saturation added to the signal above the selected frequency in boost and cut positions.

### 5. OUTPUT LEVEL CONTROL

[±20dB, 1dB steps]

Adjusts the output level of the module post processing. Set in accordance to the **INPUT LEVEL CONTROL** [1] to maintain unity through the module.

### 6. SIGNAL INDICATOR

[RGB LED]

Displays the *output* level of the module post **OUTPUT LEVEL CONTROL** [5]. LED lights **GREEN** from -12dBu and **RED** [CLIP] at +24dBu.

### 7. HI FREQUENCY CONTROL

[5kHz - 25kHz]

Adjusts the corner frequency of the *high frequency shelf filter* and sets the start frequency where the harmonic saturation is filtered into the dry signal.

### 8. BAND SATURATION INDICATOR

[RGB LED]

Indicates how hard the saturation stages are being driven and how much harmonic saturation is being added to the dry signal for each Harmonic EQ™ band. LEDs start illuminating at ~3% THD measured at the output.

### 9. MID FREQUENCY CONTROL

[200Hz - 6.2kHz]

Adjusts the mid-point frequency of the *mid peaking filter* and sets the start frequency where the harmonic saturation is filtered into the dry signal.

### 10. LO FREQUENCY CONTROL

[20Hz - 420Hz]

Adjusts the corner frequency of the *low frequency shelf filter* and sets the start frequency where the harmonic saturation is filtered into the dry signal.

### 11. OPTOSYNC SWITCH

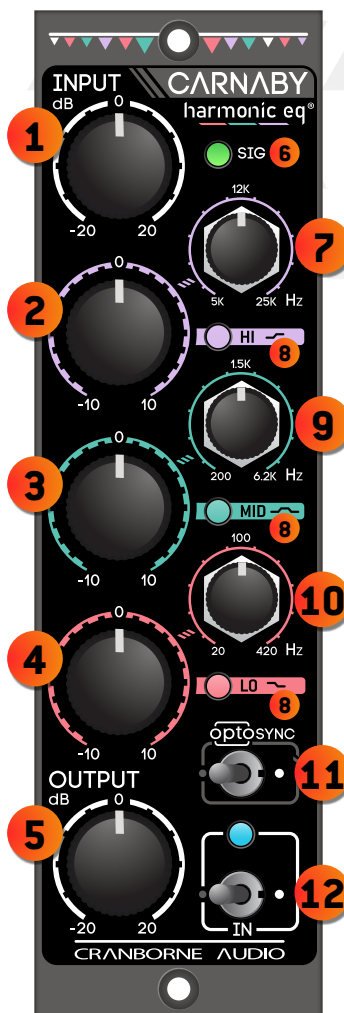
[↘ OFF - ↗ ON]

Switches OPTOSYNC ON or OFF. When the switch is ON, the module syncs its physical controls to a second Carnaby 500 to its left. When ON, the IN LED changes to WHITE and pulses when controls are adjusted on the master module. Multiple modules can be synced for surround mastering or summing.

### 12. IN SWITCH

[↘ OFF - ↗ ON]

Switches the module IN and OUT of the entire circuit. LED will illuminate **BLUE** when the unit is switched IN. LED will illuminate WHITE when module is IN and slaved via OPTOSYNC.



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### 13. DIP SWITCH

[DEFAULT: ALL DOWN/OFF]

1. SYNC MODE: UP=TRS, DOWN=OPTOSYNC
2. SYNC TRIM CONTROLS: UP=OFF, DOWN=ON
3. SYNC IN/OUT SWITCH: UP=OFF, DOWN=ON
4. BYPASS MODE: UP=PRE-OUTPUT CONTROL, DOWN=ALL
5. BAND LEDS: UP=OFF, DOWN=ON
6. START-UP AUTO CALIBRATION: UP=ON, DOWN=OFF

