

# TK-lizer 500

500 series dual mono EQ with M/S function



Congratulations on buying the TK-lizer 500! It features all the power of the TK Audio's flagship TK-lizer, including the M/S functionality that has made it such a staple in studios all over the world.

It's manufactured and assembled by hand in Sweden and thoroughly tested before leaving the factory.

The three bands have a cut/boost range of +/-8dB in 41 steps. The low and high bands can be switched between peak or shelving mode. A high pass filter with a 12dB slope is also provided, and each channel has it's own level control with a range from infinity to +6dB.

Using the built in M/S function, you can adjust the middle and side signals separately before it is decoded back to a normal L/R signal. In M/S mode you can also adjust the stereo width using the level controls.

#### **Parameters:**

Low band Frequency: 28Hz, 48Hz, 72Hz, 132Hz, 195Hz, 255Hz Boost/cut: +/-8dB Peak or Shelf

## Mid Band

Frequency: 400Hz, 630Hz, 870Hz, 1.3kHz, 2.4kHz, 4.8kHz. Boost/cut: +/-8dB

## **High Band**

Frequency: 4kHz, 7.2kHz, 12kHz, 16kHz, 20kHz, 25kHz, switchable between shelf or bell. Boost/cut: +/-8dB Peak or Shelf

### **High Pass Filter**

Frequency: 25Hz, 30Hz, 35Hz, 40Hz, 45Hz, 100Hz, 12dB / octave. In/Out Level: Infinity to +6dB (Unity gain at 12'o lock) EQ in/out. (LED red for out, green for in) M/S in/out.

## M/S mode:

When M/S mode is selected, the signal is encoded into M=mid (L+R) and S=Side (L-R), and after the EQ filters the signal is decoded back to conventional L and R.

By using the high pass filter in M/S mode you can affect the lower range in two ways:

1. HPF on M channel cuts the low energy on the mid signal – useful on program material such as bass, drums and vocals.

2. HPF on S channel - frequencies below the selected frequency will be in mono, a technique used when cutting records and to get a more focused low range.

In M/S mode you can also use the level controls to alter the stereo images. More S channel will widen the image, and less S channel will reduce the stereo images.

If you turn down the "side" level all the way the signal will be mono.

## Tip:

When working in stereo, to achieve the same settings on both channels you can use the M/S function to ensure that L and R will be set the same way.

## Installing:

Press on the left side of the panel when inserting the unit in a lunchbox!



#### **Specification:**

Power requirement: +190mA / -80mA (extended over two slots) Frequency response: 20Hz to 50kHz +/-0.2dB THD @ +4dBu less than 0.0006% THD+N @ +26dBu is less than 0.001% Signal to noise ratio: 95dB Cross talk: -89dB Input impedance: 24kohm Output impedance: 50ohm Max input level: +26dBu Max output level: +27dBu  $Q \sim 0.5$