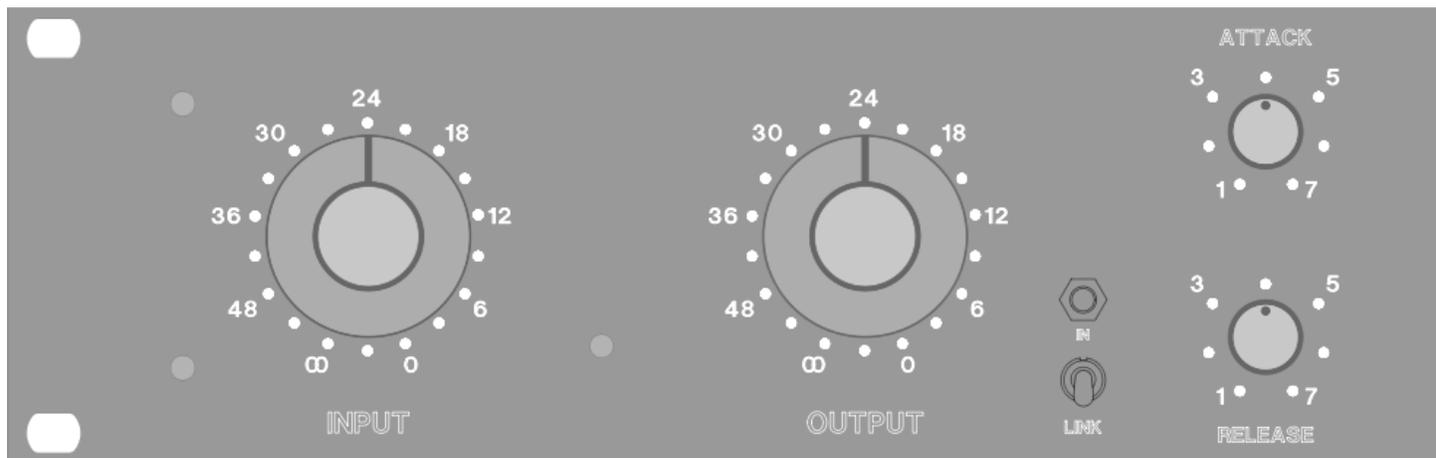


Vintage Audio

M76



*Discrete Fet Limiting
Amplifier*

Vintage Audio

M76 Discrete Fet Limiting Amplifier Compressor



Congratulations on your purchase of your new Vintage Audio M76 Discrete Fet Limiting Amplifier.

The M76 is based on the beloved 1176 Compressor and Rivals even the finest designs. These wonderful sounding compressors offer an all discrete design coupled with Cinemag input and output transformers. The custom input transformer is modeled after the original Ouncer transformer and has great bandwidth and color making it excellent at track stacking.

Compression character is one of the main reasons engineers reach for a certain piece to do the job and the M76 is no exception. Reach for it when you want that classic Fet Limiter sound!

We put tremendous effort into all of our preamps and compressors to make your music more enjoyable and your sessions less drroll. Each unit is hand built to our specifications and is constructed of nothing but the highest quality parts.

All transistors are hand selected for lowest noise and best bandwidth as well.

Let's read on!

Caution!

As with all professional equipment, please be sure to read all necessary literature prior to hooking devices up and powering them on. All units are set for voltage based on the original sale destination. Please consult the tag below the AC inlet if you purchased a unit “used” or second hand to make sure it is set for the right voltage before applying AC voltage.

About Vintage Audio

Vintage Audio is a small group of folks who love electronics and music. All are musicians and Geeks at heart. Johnny Five is a screen saver and Star Wars and Star Trek share the airspace. We have been building pro audio gear for years and have a real passion for offering affordable, extremely well made reproductions to the audio community.

Note!

We are not re-inventing the wheel; Vintage Audios mission is to recreate the best sounding modern reproductions of some of the most sought after classic circuits in the world. We have a lot of experience on what it takes to make an excellent sounding preamp or compressor. We hand select all of our components, pieces and parts based on the character they impart and reliability. Most parts are Mil Spec, are designed to last and provide years of unparalleled performance.

All of our designs are set up to be extremely simple to use and obtain great results.

On to the good stuff!

So about your new compressor

The Vintage Audio **M76** is a single channel Fet limiting amplifier that is based on one of the most beloved audio pieces of all time.

The **M76** has all of the features offered by the original including: Selectable Ratio, Variable Attack and Release, Stereo linking and Aggro mode which models the All Buttons in Mode. This feature provides great character and an aggressive compression. The Aggro Ratio position is nice for effects, squashing room mics or other sources.

The Mystery of Design

This classic circuit has some very unique operating properties that when properly understood opens a lot of doors to the user. Unlike a lot of modern compressors that have variable thresholds, this circuit has an internally set threshold that requires the user to push the input signal into the threshold using the input control. Just like the original, the M76 uses a line amp card to accomplish just this task.

The signal is sent from the input, thru the input attenuator, into the transformer and finally the amp card. The gain is set on the line amp card and essentially what you are doing is allowing more level to pass thru the attenuator by turning up the input control. This effectively pushes the input signal into the threshold and induces compression. As a side note, the M76 line amp card can be used as a microphone preamp. It delivers around 45db worth of gain and sounds very smooth indeed!

This design uses Rotary controls instead of the classic pushbutton banks and makes it easy for the engineer to bypass compression without adjusting the attack control. This saves some time, makes adjustments easy and is very ergonomic

The design is very simple and easy to use to obtain excellent results.

In the next section you will find a list of all controls to help you get started.

Front Panel Controls Overview



Input Control: Here the user is able to adjust the amount of input level sent into the M76's internal circuitry. The input level attenuator determines how much of the signal is over the threshold and therefore compressed.

Output Control: The output control allows the user adjust the amount of level that is being sent to the output section and output transformer. This is post compression and only affects the output level of the M76. The user can also choose to drive the transformer and output section.

Zero Adjust: Between the Input and Output control is a small hole. Using a small flat blade screw driver the user can adjust the Gain Reduction Zero point. The M76 is a sensitive device and generally will require that the meter be zeroed once the device is settled in the rack after unpacking. While VU meters are not completely accurate they do provide a good general reference and occasional will need to be calibrated.

Attack Control: The attack control is completely variable and allows for attack times of: 20uSec - 800uSec.

Release Control: The release control is completely variable and offers release times of 50 mili Sec - 1.1 Sec's.

Link Switch: (See Linking)

Note one unit must be set internally to Slave and the other to Master for the link to be active. If you bought a Stereo Pair they should already be set accordingly.

Just like on the original 1176 the link merely sums the Sidechain Detection. All controls are still need to be independently set for stereo operation.

Ratio Select: The Ratio control allows the user to select from: 4:1, 8:1, 10:1, 20:1 and Aggro (All Buttons In) compression ratios.

Meter Select: Here the user can select to see Gain Reduction (GR), Output, or Bypass the compression circuit on the VU Meter.

VU Meter: Here we find our Reference in terms of what is happening inside the M76. The Meter select control determines what the user sees on the VU meter.

Power Switch: The M76 is powered on whenever a Meter Select position is selected other than OFF. To power off simply select OFF.

Basic Setup: Letting your Ears do the Work

Setting up the M76 is fairly straight forward. For signal to pass the M76 needs an input and output that is balanced since it is transformer balanced. If using your M76 in a send return unbalanced configuration you will need to have a Pair of Pseudo Balanced connections or a balancing box in order for your M76 to work correctly. Pseudo-Balancing requires that Pin1 and Pin3 be tied together at both the input and output of the M76.

If you are a first time user of this classic design, Start with the input all of the way down and the output at 12 O'clock. Attack and Release controls should also be set at 12 O'clock as it is simply the best baseline. Set the ratio at 4:1, the meter to Gain Reduction and then send the M76 input signal. Once signal is sent to the M76 start turning up the input signal until Gain Reduction is shown on the meter. From there, simply use your ears and season to flavor.

The M76 is capable of very heavy compression with little artifacts and is an incredibly diverse tool for compressing, limiting and overall tonal shaping.

Stereo Linking the M76

The M76 comes built with its Internal Stereo Link Loop set to Master. If you bought two units at the same time New from Revive Audio, your units will already be set up and ready for stereo use. Simply connect the ¼ TRS cable (provided when a stereo pair is purchased) between the units Sidechain inputs and set both units to Link (Red Led should illuminate).

If you bought one unit and are looking to add a second for stereo operation, the new unit must have its internal loop switch set to slave. This requires you to remove the lid and flip the toggle on the MU76 Mainboard. It is simple and straight forward. If purchasing a second unit directly from Revive Audio merely request that it be set to slave. Note that the Slave and Master Switch positions will not affect the units operation in anyway unless the link switch is engaged. The M76 will function normally when unlinked. However if the switches are not set correctly, stereo operation will not be successful.

Back Panel Overview



Input: Signal input for left and right channels

Output: Signal output for left and right channels

External Sidechain Input: External Sidechain input for stereo linking. The Link selector must be turned on when Stereo linking two M76's.

AC power inlet: Simply plug in the provided AC cable and away you go.

Specifications

Input Impedance: 600 Ohm floating, transformer coupled.

Output Impedance: 600 Ohm Floating transformer coupled

Frequency Response: 20-20Khz+/- 1db

Gain: 45 db of total gain at full input no limiting

Distortion: >.5% T.H.D at +22 dbm

Signal to Noise Ratio: >82db at Limiting threshold

Attack Times: Variable times of: 20uSec - 800uSec.

Release Times: Variable times of 50 mili Sec - 1.1 Sec's.

Fuse: 250V Slow Blow 5x20mm, 315ma (120vac), 175ma (240vac).

Dimensions: 19x3.5x12 inches

Weight: 15 lbs boxed

Note: Mains voltages are set when the unit is constructed. All units are wired for their Destination.

The Serial label contains information on what voltage the unit is wired for as well as the correct 250v fuse rating.

DO NOT CONNECT AC MAINS IF THE VOLTAGE LISTED ON THE LABEL IS DIFFERENT THAN YOUR LOCAL MAINS VOLTAGE!

Vintage Audio

All Vintage Audio products come with a full One Year warranty against defect and are built to the highest standard.

For more info on this or other Vintage Audio products or to request service please see us at ReviveAudio.com

Again, Thanks for your purchase!

We are confident that you will enjoy your new Vintage Audio unit for years to come.

Made in the USA

Vintage Audio

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83605

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