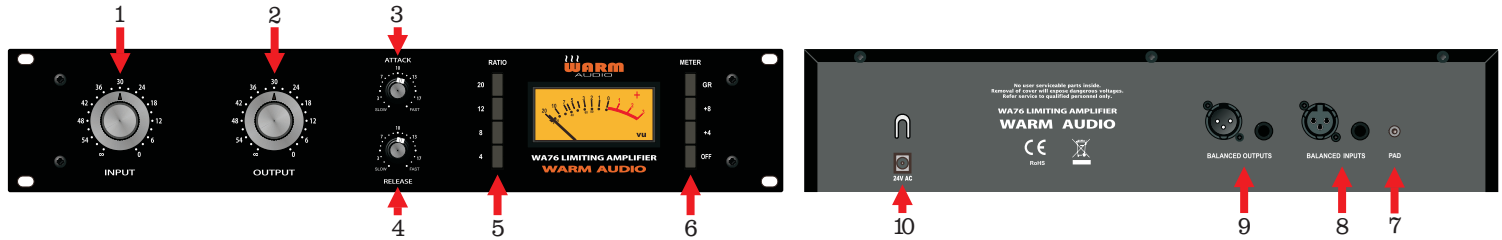


## Thanks for purchasing a WA76 discrete compressor! This manual provides general information and operating instructions. Enjoy your new sound!

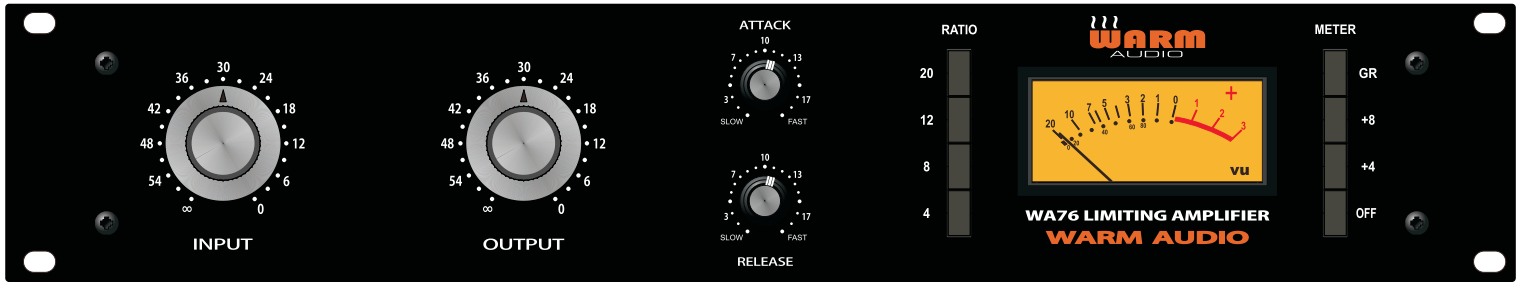
First off we invite you to experiment with your WA76 by selecting different Ratio settings, and by trying the “All-Buttons in” mode (pressing in all four Ratio buttons simultaneously). The “All-Buttons in” mode acts more as a limiter than a compressor and achieves a very high compression setting.

All settings on the WA76 (other than the Meter settings) contribute to different compression and limiting characteristics. Some suggested starting points could be a 4:1 compression ratio for vocals, 8:1 for electric bass and guitars, and higher settings such as 12:1 and 20:1 for drums. Placing the Release function to its fastest setting, and the Attack to the 12 o'clock position are often good starting points.



- 1. Input Knob** - This determines the level of the signal entering the WA76, as well as the compression threshold. Higher settings will result in increased amounts of limiting or compression.
- 2. Output Knob** - This determines the final output level of signal leaving the WA76. Once the desired amount of limiting or compression is achieved with the use of the Input control, the Output control can be used to make up any gain lost from the gain reduction.
- 3. Attack Knob** - This sets the amount of time it takes the WA76 to respond to an incoming signal and begin compressing. Having too fast of an attack time can sometimes cause a recording to sound less “life-like” or “open.” The WA76 attack time is adjustable from 20 microseconds to 800 microseconds. Both of these settings are very fast.
- 4. Release Knob** - This sets the amount of time it takes the WA76 to return to its initial (uncompressed) level. The WA76’s release time is adjustable from 50 milliseconds to 1100 milliseconds (1.1 seconds). If the release time is too fast, “pumping” and “breathing” can occur due to the rapid rise of background noise during gain restoration. On the flip-side if the release time is too slow a loud section of the recording may cause compression to occur and continue through a soft section of the recording (where it is un-needed), making the soft section quiet and difficult to hear.
- 5. Ratio** - These four buttons determine the severity of the gain reduction. (A ratio of 4:1, for example, means that whenever there is an increase of up to 4 decibels in the loudness of the input signal, there will only be a 1 dB increase in output level. A ratio of 8:1 means that any time there is an increase of up to 8 dB in the input signal, there will still only be a 1 dB increase in output level.) When higher ratios (12:1 or 20:1) are selected, the WA76 is limiting instead of compressing. Please note that higher Ratio settings also set the compression threshold higher.
- 6. Meter** - The four buttons under the Meter label power the unit on (or off) and determine what the WA76’s front panel meter displays. The VU Meter displays either the amount of gain reduction (GR), or the compressor’s output level which is either +8 or +4. When “+8” is selected, a meter reading of 0 corresponds to a level of +8 dBm at the rear panel outputs. When “+4” is selected, a meter reading of 0 corresponds to a level of +4 dBm at the rear panel outputs. Engaging the OFF switch powers off the WA76 entirely.
- 7. Input Pad** - This switch sits on the backside of the unit near the inputs. When engaged it lowers the incoming signal by -23db. This feature is handy when using a high gain preamp before the WA76 that does not have output attenuation (like the WA12). When sending a loud line-level signal into the WA76 input, this feature will provide greater flexibility to the WA76 input control, allowing you to turn it up higher before compression begins.
- 8. Inputs** - 2 inputs are provided on the backside of the WA76 for flexibility. One is a balanced TRS connection, the other is a balanced XLR. You can connect many line-level sources directly to the WA76. Preamps such as the Warm Audio WA12 and TB12 are great sources to feed directly into the WA76 input. These inputs can be used simultaneously but note that having both connected at the same time could create unwanted noise if one source is not actively carrying a signal to the WA76.
- 9. Outputs** - 2 outputs are provided on the backside of the WA76 for flexibility. One is a balanced TRS connection and the other is a balanced XLR. These outputs can be used simultaneously and put out line-level signal.
- 10. AC Power** - The WA76 is designed to use a 24V AC power transformer. Warm Audio recommends that you use the transformer supplied with the unit or another of identical spec.

# WA76 Discrete Compressor



- True to the Classic 1176 compressor in design and performance
- Completely discrete signal path
- Modeled after the D revision
- Utilizes USA made CINEMAG input and output transformers
- Supports the famous "all buttons in" ratio setting
- Ultra fast attack time
- Class A line level output amplifier
- Input impedance - 600 ohms, bridges-T control (floating)
- Frequency Response  $\pm 1$  dB 20 Hz to 20kHz
- XLR and TRS inputs. XLR and TRS outputs
- 55db of gain
- Less than 0.4% total harmonic distortion from 50 Hz to 20 kHz with limiting
- Signal to noise ratio is greater than 74 dB at +25 dBm
- EIN -104.1 dBm
- Attack time, 20 microseconds to 800 microseconds
- Release time, 50 milliseconds to 1 second
- Meter provides dB gain reduction and dB output
- Internal power supply, external 24v AC power transformer
- 19" Rackmount chassis, 2U
- 1-year warranty