



ALTA MODA



The **Unicomp**
Audio Compressor

Operators Manual

www.altamodaaudio.com

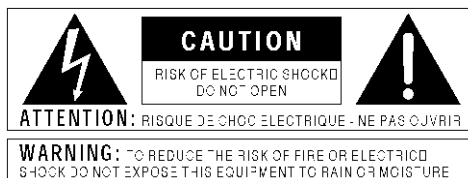
H I G H P E R F O R M A N C E A U D I O



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The symbols shown above are internationally accepted symbols that warn of potential hazards with electrical products. The lightning flash with arrow point in the equilateral triangle means that there are dangerous voltages present within the unit. The exclamation point in the equilateral triangle indicates that it is necessary for the user to refer to the owner's manual.

These symbols warn that there are no serviceable parts inside the unit. Do not open the unit. Do not attempt to service the unit yourself. Refer all servicing to qualified personnel. Opening the chassis for any reason will void the manufacturer's warranty. Do not get this unit wet. If liquid is spilled in the unit, unplug it immediately and return it to the manufacturer for service. Disconnect the unit during storms to avoid damage.

WARNING

FOR YOUR PROTECTION, PLEASE READ THE FOLLOWING:

WATER AND MOISTURE - Appliance should not be used near water (e.g. near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc). Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

POWER SOURCES - The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

GROUNDING AND POLARIZATION - Precautions should be taken so that the grounding or polarization means of an appliance are not defeated.

POWER CORD PROTECTION - Power cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.

SERVICING - To reduce the risk of electric shock or fire, the user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to the manufacturer.



FOR UNITS EQUIPPED WITH AN EXTERNALLY ACCESSIBLE FUSE RECEPTACLE -
Replace fuse with same type and rating only.

MULTIPLE INPUT VOLTAGES - This equipment may require the use of a different line cord, attachment plug, or both, depending on the available power source at installation. Connect this equipment to the power source indicated in the equipment rear panel. To reduce the risk of fire or electric shock, refer service to the manufacturer.

WARNING: THIS APPLIANCE MUST BE EARTHED:



Do not disable or modify the chassis ground in any way. Doing so may place lethal voltages into the chassis under certain fault conditions. Do not ever use a "ground lift" or any other method or device which defeats the safety ground of this unit under any circumstances!



Quick Install Instructions

General installation points:

Connection: The inputs of this unit are electronically balanced, 3-pin XLR connectors. Pin 2 is hot, pin 3 is cold, and pin 1 is shield.

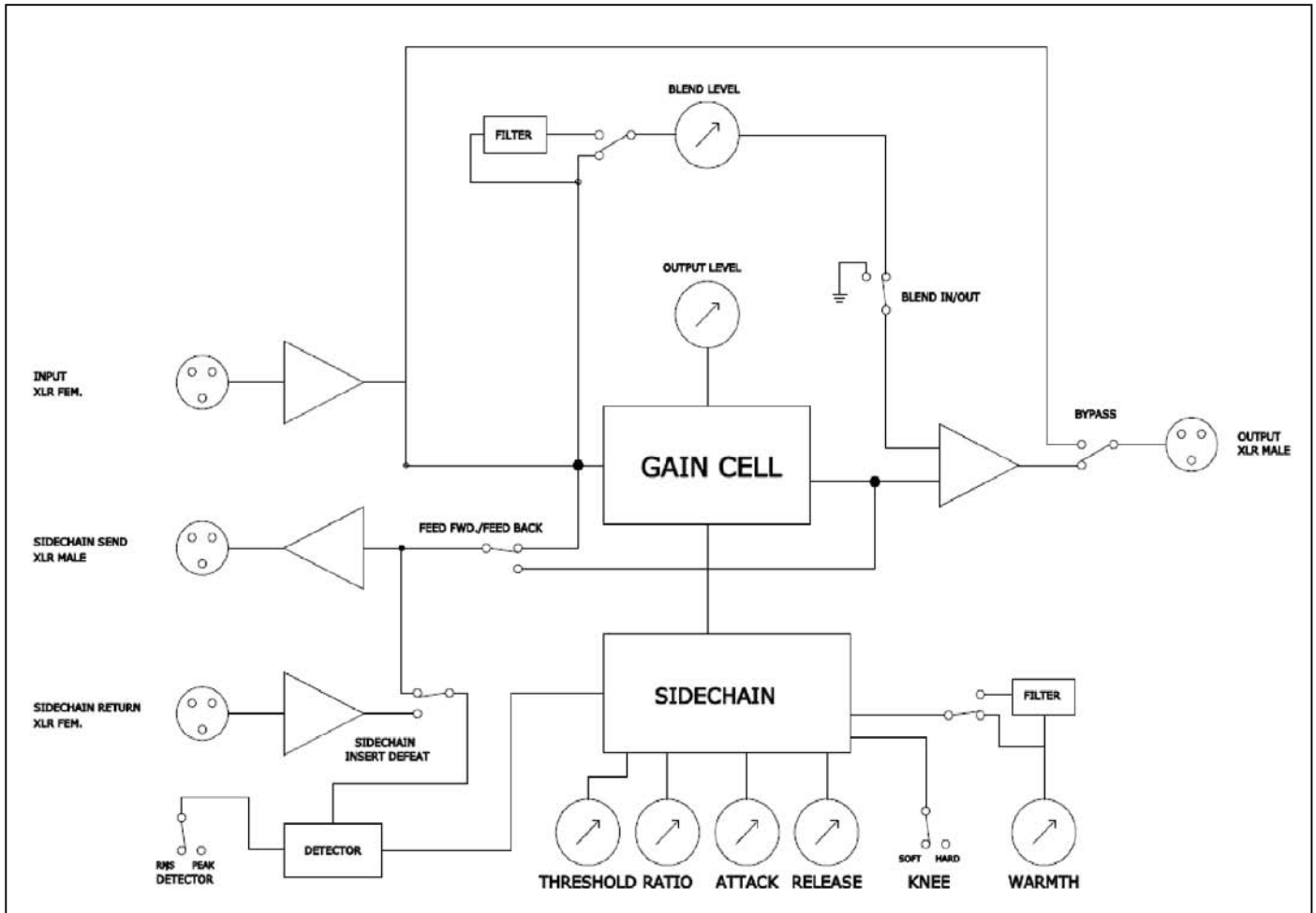
The output is a male XLR; pin 2 hot, pin 3 cold, and pin 1 is shield.

This is a single-ended output, meaning that signal is present only on pin 2 of the XLR. It is also an impedance balanced output in which the impedance at pin 3 of the output XLR is matched to pin 2.

As far as interconnecting to other devices; treat this output as a typical balanced output and connect in the same fashion as any balanced input/output device using typical shielding conventions.

Be sure that the level selector switches (if so equipped) at the rear of the chassis are in the same positions on both the left and right sides of the unit.

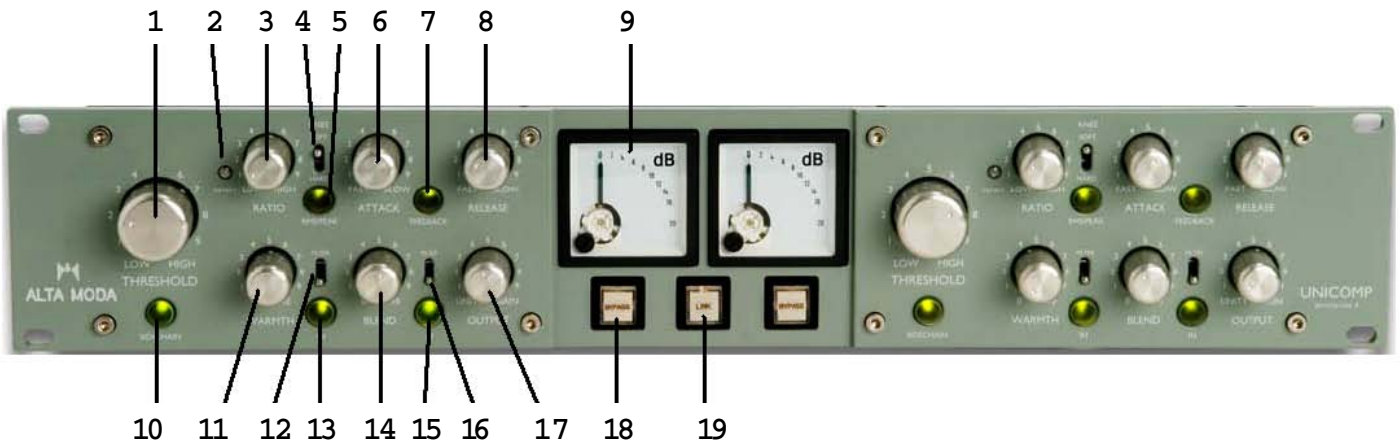
Mounting: Proper ventilation is important for the longest service life of components, and it is recommended that the Unicomp be mounted with at least one full rack space above and below the unit. When not racked, be sure to allow adequate air flow through the unit. Space the unit up off the surface so that air can flow freely through its bottom. Do not place any thing on top of the unit which may restrict airflow through the chassis.



GAIN CELL - Amplifier circuit which varies its gain in relation to an applied dc control voltage.

DETECTOR - Circuit which detects audio signal and converts it to a scaled dc voltage.

SIDECHAIN - Circuits and controls which process detector output signal and drive the control input of the gain cell.



Control Functions

1. **THRESHOLD** - Adjusts the signal level point at which compression begins. Turning the control clockwise raises this set point. The range of this control varies depending on operational mode selected. Typically, its range varies between -44dB to +25dB as control is turned clockwise.
2. **DETECT** - When illuminated, indicates that the signal threshold has been passed and that compression is occurring.
3. **RATIO** - Sets compression ratio; i.e. the ratio of the input level needed to increase the output level a specific amount.
4. **KNEE** - Affects how compression engages once the signal passes the threshold point. When selected to "HARD", compression starts immediately as the signal passes the threshold point. When the switch is in the "SOFT" position, the compression actually starts somewhat below the threshold point and increases gradually as the signal level increases. The threshold control moves the range over which this occurs.
5. **RMS/PEAK** - When switch is out, the detector is in RMS mode. RMS stands for root-mean-square, and is a mathematical averaging of the detected signal. In this mode, the detector is responding to the average level of the signal. When the switch is depressed (illuminated), the detector is responding to the peak level of the signal. The detector also responds faster while in peak mode.
6. **ATTACK** - Sets the amount of time before the compressor reacts to the signal. Turning clockwise increases the amount of delay. This is a dynamic control which is affected by other control settings and modes.
7. **FEEDBACK** - Selects whether detector is receiving signal pre or post of the gain cell. When the switch is out, the detector receives signal pre-gain cell (FEEDFORWARD). When the switch is in, the detector receives signal post-gain cell (FEEDBACK).



8. RELEASE - Affects how long the gain cell takes to return to unity gain. Turning clockwise increases the amount of time the gain cell takes to return to unity after compression occurs. This is a dynamic control which is affected by other control settings and modes.

9. METER - Indicates gain reduction on a decibel scale. Analog meters cannot accurately display peak responses, and typically indicate a lower level of compression than is actually occurring, especially with more percussive material.

10. SIDECHAIN - This switch inserts a "signal loop" into the detector path located on the back of the unit. This allows outboard processors to effect how the compressor reacts to signal. Techniques for using sidechain inserts are well covered in most practical recording references and should be referred to.

11. WARMTH - Adds 2nd harmonic distortion to the gain cell. This distortion is at a constant level, but increases relative to the compressed signal; i.e. as compression increases, the ratio of distorted signal-to-compressed signal increases.

12. FILTER (WARMTH) - In the "up" position, this switch rolls off the low frequency response of the Warmth generator, so higher frequency signals are less affected by lower frequency signal. The cut-off point is approximately 1.5kHz.

13. IN (WARMTH) - Engages (illuminated) Warmth control.

14. BLEND - Mixes uncompressed ("dry") input signal into the compressor output with the compressed signal ("wet"). Clockwise rotation increases the dry level from zero. As with the Warmth signal, the relative level of "dry" to "wet" will increase as compression increases.

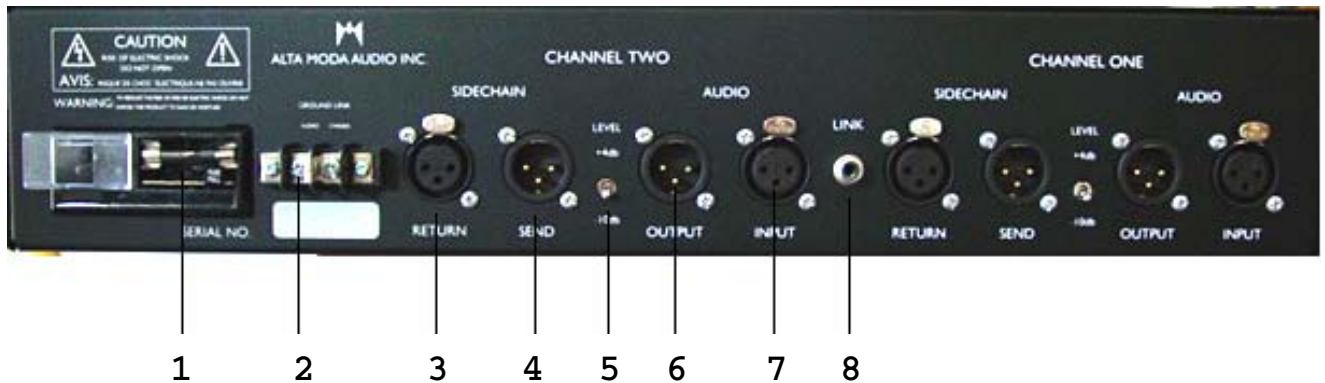
15. IN (BLEND) - Engages (illuminated) Blend control.

16. FILTER (BLEND) - When in the "up" position, a high-pass filter is inserted into the BLEND signal path, mixing only higher frequency material in with the compressed signal. The cut-off frequency is approximately 650Hz.

17. OUTPUT - Boosts output level to compensate for lost overall signal level while compressing. Signal level is unity when control is full counterclockwise and increases when turned clockwise. The available "makeup gain" is approximately 22dB.

18. BYPASS - This is a hard wire bypass. When engaged, effectively removes the compressor from the signal path by rerouting the signal input XLR jacks to the output XLR jacks.

19. LINK - Merges the outputs of the two detectors into a single signal that feeds the left-side sidechain which controls both gain cells. **IMPORTANT:** In link mode, the lower controls are still independent. WARMTH, BLEND, AND OUTPUT controls still affect their respective channels independently.



1. **Power entry module** - combination A.C. cord inlet, voltage selector and line fuse holder. For 120V operation, replace fuse with 250mA, TT-type (Slo-Blo) fuse. For 240V operation, replace fuse with 200mA, TT-type (slo-blo). Line voltage can be selected to operate at either 120V or 240V only. Insert proper A.C. line cord for selected input voltage.

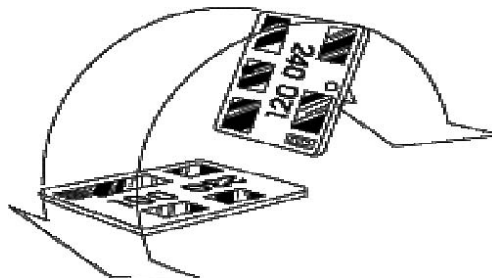


WARNING: Replace fuse with same type and rating specified for selected input operating voltage. Failure to do so can create a safety and/or fire hazard. If plastic fuse cover is damaged or missing, do not insert a line cord for any reason! Refer to factory for repair.

Voltage Selection



ATTENTION: Currently, Unicomp compressors only operate at 120V or 240V. The unit will not operate if the voltage selector card is rotated to any other position.



Open cover door and rotate fuse-pull lever to left. Select operating voltage by orienting voltage selection card, desired voltage on top left side. Push card firmly into module slot. Selected operating voltage will be visible. Rotate fuse-pull lever back into normal position and re-insert fuse into holders. Use caution in selecting correct fuse value.

2. **Ground strap** - Removing this strap breaks the internal connection between the audio ground system and the chassis ground. If removed, a ground system wire must be attached to the audio ground point.



WARNING: Do not disable or modify the chassis ground in any way. Doing so may place lethal voltages into the chassis under certain fault conditions. Do not ever use a "ground lift" or any other method or device which defeats the safety ground of this unit under any circumstances.

3. **Sidechain return** - Return audio signal from an outboard sidechain processor. Nominal +4dB balanced input level. XLR female connector, pin 2 hot.

4. **Sidechain send** - Output audio signal sent from sidechain circuitry to an outboard processor. Electronically unbalanced/impedance balanced, +4dB nominal level. XLR male connector, pin 2 hot. Signal follows Feedback switch; i.e. signal is sent pre gain cell when in feedforward mode, and sent post gain cell when in feedback mode.

5. **Level switch** - Switches between nominal +4dB or -10dB internal operating level. Input and output levels remain unaffected but internal audio and sidechain processing levels are altered.

6. **Audio output** - Electronically unbalanced/impedance balanced male XLR connector, pin 2 hot.

7. **Audio input** - Electronically balanced, XLR female, pin 2 hot.

8. **Link jack** - Used to link two Unicomps together for multi-channel operation. 2-conductor, shielded cable. When linked via this connector, both units should be placed in Link mode via the front panel switch. Each unit's left side controls control the compression functions interactively between the units, and care must be taken to properly match settings.

Contact

Alta Moda Inc.

Constantine Psorakis

USA: (818) 237 5430

Australia: +61 412 929 494

sales@altamodaaudio.com