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# ML622

1U RACK MIC/LINE MIXER Item ref: 953.026UK User Manual





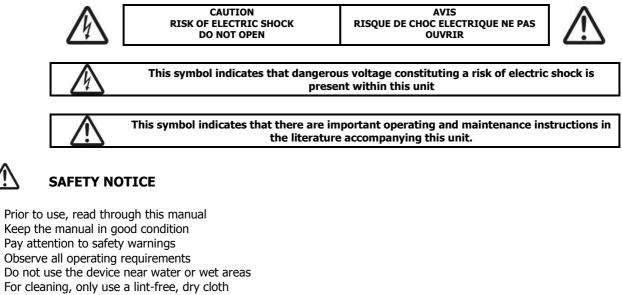
Caution: Please read this manual carefully before operating Damage caused by misuse is not covered by the warranty



# Introduction

Thank you for choosing an Adastra ML mic/line mixer as part of your sound reinforcement system. This unit is designed to offer high quality, dependable service for audio mixing and distribution. Please read this manual to gain the best results from your product and avoid damage through misuse.

# SAFETY SYMBOL AND MESSAGE CONVENTIONS



- 7. Install according to the specifications
- 8. Place away from heat sources or heating appliances
- 9. Use mains lead provided and avoid damage to cable or connectors
- 10. Unplug power from mains during stormy weather or if unused for long periods
- 11. In case of malfunction, water ingress or other damage, consult qualified service personnel
- 12. Do not place in damp areas or near liquids or moisture. Do not spill liquids on the housing
- 13. Please pay attention to warning symbols during transit and placement
- 14. Terminals marked with the *k* symbol are HAZARDOUS LIVE and should only be connected by qualified personnel
- 15. Ensure that the apparatus is connected to a mains socket with a protective EARTH connection
- 16. Ensure correct operation of the mains switch

#### Warning

1.

2.

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6.

To prevent the risk of fire or electric shock, do not expose any components to rain or moisture.

If liquids are spilled on the casing, stop using immediately, allow unit to dry out and have checked by qualified personnel before further use. Avoid impact, extreme pressure or heavy vibration to the case

No user serviceable parts inside – Do not open the case – refer all servicing to qualified service personnel.

#### Safety

Check for correct mains voltage and condition of IEC lead before connecting to power outlet

#### Placement

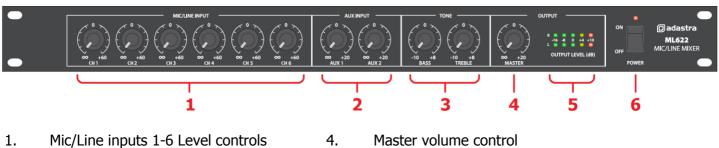
- This unit can be used free-standing or fixed into a 19" rack
- Ensure adequate support and access to controls and connectors when rack-mounting

### Cleaning

- Use a soft cloth with a neutral detergent to clean the housing as required
- Use a vacuum cleaner to clear ventilation grilles of any dust or debris build-ups
- Do not use strong solvents for cleaning the unit

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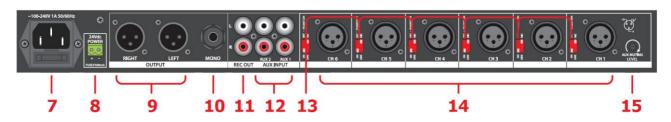
# **Front panel**



- 2. Aux 1 + Aux 2 Level controls
- 3. Global Tone controls

- Master volume control
- L+R output meters 5.
- Power on/off switch and indicator 6.

# **Rear panel**



12.

13.

14.

15.

- 7. Mains inlet IEC and fuse holder
- 24Vdc power contacts 8.
- 9. Left + Right XLR balanced outputs
- Mono 6.3mm unbalanced jack output 10.
- 11. RCA Recording outputs (L+R)

Aux 1 + Aux 2 RCA line inputs (L+R)

Mic/Line & Phantom Power DIP switches

- Mic/Line channel 1 6 balanced XLR inputs
- Aux muting level control Mic/Line 1 Priority

# Connection

Ensure the Power (6) is switched off until all input and output connections are in place. Turn all rotary level controls (1,2,4) fully down (anti-clockwise) to avoid loud noises when switching on. Set the BASS and TREBLE Tone controls (3) to the vertical position (zero)

Connect microphones to the balanced XLR inputs on the rear panel (14). For microphone inputs, set the Mic/Line DIP switch (13) to "MIC" Where condenser microphones are used which require phantom power, set the PHANTOM DIP switch to "ON"

Alternatively, mono line inputs can be connected to any of the XLR inputs by setting this DIP switch to "LINE" Stereo line level sources can be connected to AUX1 and AUX2 RCA inputs (12)

A recording output is provided on 2 RCA connectors (11), which is not governed by the MASTER level (4) This can be connected to recording equipment or be used as an additional main output if required. Main output is available via left and right balanced XLR sockets (9) and mono unbalanced 6.3mm jack (10) Use any or all of these outputs to connect to the amplifier(s) or active speakers as required for the system.

Connect the rear IEC inlet (7) to the mains using the supplied mains lead (or an equivalent approved type). Ensure that the supply voltage is correct for this equipment and that the mains outlet is switched on.

For mobile operation or away from mains supply, a 24Vdc input is provided on screw terminals (8). Make sure the power switch is turned off before connecting to a 24Vdc power source and observe correct polarity before powering up the unit on DC power.



# Operation

Ensure that amplifier(s) or active speaker(s) are switched off before powering up the ML622 mixer. Switch on the power and the Power LED indicator should light (6) Now switch on power to the amplifier or active speaker(s) and turn the volume(s) up part way. Turn up the MASTER volume control (4) half way.

If connected, speak into a microphone whilst gradually turning up its channel level control (1) If no microphones are connected, play a line level signal into a channel whilst gradually turning up its level. The L+R output meters (5) should light up and the sound should be heard through the connected speakers. Increase the MASTER volume if required and set the channel level control to the required volume. Repeat the above steps for all connected inputs whilst balancing levels between channels as required. For the AUX inputs, a single rotary control for each (2) adjusts the level of both left and right RCA inputs.

Sensible use of the output meters (5) will help to avoid overdriving the outputs and/or connected amplifiers. The +10dB LED should only light briefly on percussive or transient parts of the sound (i.e. bass drum) If the +10dB LED is lit for any longer than short bursts, the level controls will need to be turned down. This will avoid signal clipping and overdrive, which can be damaging to equipment connected to the outputs.

For overall tone adjustment, moving the Tone controls (3) up or down can help improve the sound quality. If the sound is too thin sounding, turn up the BASS rotary. If it is too deep sounding, reduce the BASS level. If the sound is not very clear, turn up the TREBLE rotary. If it is too harsh sounding, reduce the TREBLE level.

An AUX MUTING function can be set to suppress both AUX1 and AUX2 when a signal is present on Mic/Line 1. Speaking into a microphone connected to Mic/Line 1 will cause the signals in AUX1 and AUX2 to be reduced. When Mic/Line 1 is silent, AUX1 and AUX2 will resume normal volume level. The amount by which this function mutes the AUX channels is set by a rotary control (15) on the rear panel.

Turn down amplifiers or active speakers before powering down the ML622 mixer to avoid loud noises.

# **Specifications**

Power supply	100-240Vac, 50/60Hz (IEC) or 24Vdc (terminals)
Fuse	T1AL 250V (mains) or F500mA (24Vdc)
Phantom power	+20V (switchable)
Inputs : mic/line	6 x balanced XLR
Inputs : aux	2 x L+R RCA
Outputs	L+R XLR, mono 6.3mm jack, L+R RCA (REC)
Controls	6 x Mic/Line level, 2 x Aux level, Treble, Bass, Master
Input impedance	3.3k Ohms (mic/line), 10k Ohms (aux)
Frequency response : mic	20Hz - 18kHz
Frequency response : line	14Hz - 20kHz
Frequency response : aux	10Hz - 23kHz
Input sensitivity : mic	-45dBV
Input sensitivity : aux/line	-10dBV
Signal to noise ratio : mic	55dB
Signal to noise ratio : aux/line	60dB
THD	0.05%
Dimensions	482 x 130 x 44mm
Weight	1.43kg



**Disposal:** The "Crossed Wheelie Bin" symbol on the product means that the product is classed as Electrical or Electronic equipment and should not be disposed with other household or commercial waste at the end of its useful life. The goods must be disposed of according to your local council guidelines.

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