

## CA-SERIES

Compact Mixer-Amplifiers

Item ref: 953.103UK, 953.104UK

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 CA compact mixer-amplifier as part of your public address system. This unit is designed to offer high quality, dependable service for installed PA systems. Please read this manual to gain the best results from your product and avoid damage through misuse.

### SAFETY SYMBOL AND MESSAGE CONVENTIONS



**CAUTION**  
RISK OF ELECTRIC SHOCK  
DO NOT OPEN

**AVIS**  
RISQUE DE CHOC ELECTRIQUE NE PAS  
OUVRIR



This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit



This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.



### SAFETY NOTICE

1. Prior to use, read through this manual
2. Keep the manual in good condition
3. Pay attention to safety warnings
4. Observe all operating requirements
5. Do not use the device near water or wet areas
6. For cleaning, only use a lint-free, dry cloth
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  $\frac{1}{2}$  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

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
- Use double insulated speaker wire with adequate current rating for 100V speaker connections
- Use either 8Ω or 100V output – do not use both simultaneously
- Do not connect 8Ω speakers to the 100V terminal or 100V speakers to the 8Ω terminal
- Do not allow any foreign objects to enter the case or through the ventilation grilles

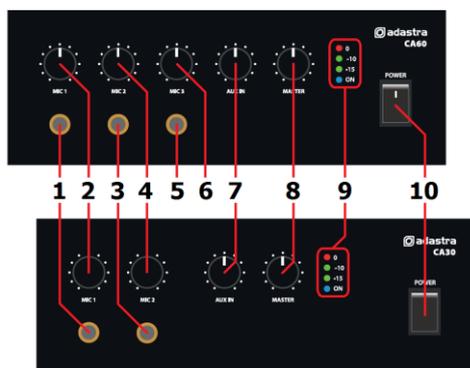
### Placement

- For rack-mounting, use an appropriate support shelf (e.g. 853.055UK)
- Ensure adequate air-flow and do not cover cooling vents
- Ensure adequate access to controls and connections

### Cleaning

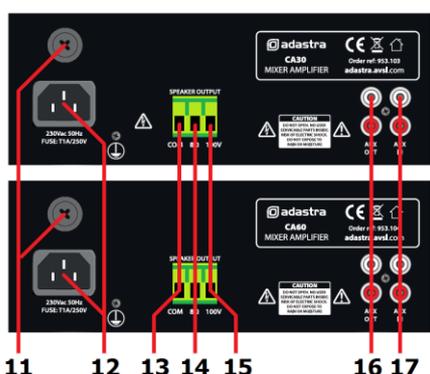
- Use a soft cloth with a neutral detergent to clean the housing as required
- Use a vacuum cleaner to clear ventilation grilles of any dust or debris build-ups
- Do not use strong solvents for cleaning the unit

## Front panel



1. MIC 1 level control and 6.3mm input
2. MIC 1 6.3mm jack input
3. MIC 2 level control and 6.3mm input
4. MIC 2 6.3mm jack input
5. MIC 3 level control (CA60 only)
6. MIC 3 6.3mm jack input (CA60 only)
7. AUX IN level control
8. Main output level control
9. Main output level indicator
10. Power on/off switch

## Rear panel



11. Mains fuse holder
12. Mains inlet IEC
13. Common speaker output terminal
14. 8Ω speaker output terminal
15. 100V speaker output terminal
16. Auxiliary output 2 x RCA
17. Auxiliary input 2 x RCA

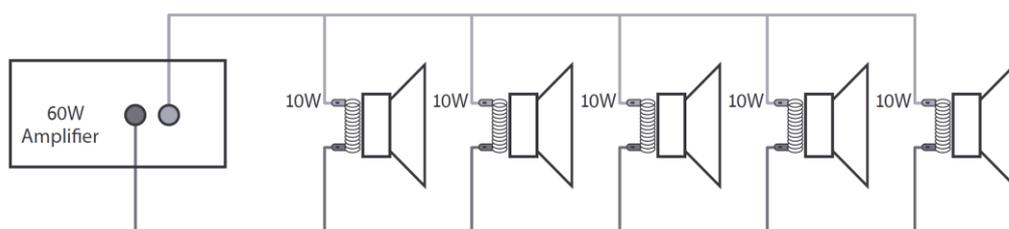
## Connection and setup

Connect the rear IEC inlet (12) 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. Ensure the Power (10) is switched off until all input and speaker connections are in place.

Connect any microphone(s) to be used to the unbalanced MIC input jacks on the front panel (1, 3, 5). Each of these MIC inputs has a level control, which should be turned down before powering on (2, 4, 6). Connect any line input to the AUX IN RCA connectors (17) and turn down the AUX IN level control (7). If there are further amplifiers or active speakers to be connected to the system, these can be connected from the AUX OUT RCA connectors (16). The MASTER level control (8) should also be turned fully down.

## 100V line systems

For 100V line systems, connect the amplifier to the first speaker in the system using double-insulated speaker wire which has adequate current rating to handle the total output of the amplifier. Connect the "100V" output terminal (15) to the positive (+) connection of the speaker and "COM" output (13) to the negative (-) connection of the speaker. Connect further speakers in parallel to the first speaker with all positive terminals and connected together and all negative terminals connected together as shown below.



A 100V line speaker system can comprise of many speakers connected together. The determining factor for how many speakers can be used on a single amplifier is the power rating. For most purposes, it is advised to connect as many speakers as needed with a combined wattage of no more than 90% of the amplifier's output power rating.

The terminals of a 100V speaker are connected to a transformer and in some cases, this transformer may be "tapped" for different power ratings. These tapings can be used to adjust the wattage (and output volume) of each speaker in the system to help achieve the ideal total power of the system for the amplifier.

## Low impedance systems

For use with a single 8Ω speaker, connect the "8Ω" output (14) to the positive (+) speaker connection and "COM" output (13) to the negative (-) speaker connection. It is important to ensure that the speaker load is no less than 8Ω and that the power handling of the speaker is equal to or greater than the output power of the amplifier.

## Operation

When all connections to the amplifier are made, switch on the power, then turn the MASTER rotary control up part way for testing.

If a line input is connected to the AUX IN connectors, make sure that the source signal is playing and gradually turn up the AUX IN level control (7) until the playback is heard. Turn up the MASTER level until the maximum required level is achieved and turn down the AUX level to control the volume.

For any microphones that are plugged in, speak into each microphone in turn whilst turning up the relevant MIC level control until it is heard through the speakers. Increase the MIC level control until the required volume is achieved.

The output of the amplifier is represented on the level meter LEDs (9) and care should be taken that the Red "0" LED is only lit momentarily during use. Anything longer than a short flash of this LED may be indicating distortion or clipping of the output signal and the MASTER level should be turned down to avoid this.

Turn the MASTER level fully down before switching power off to avoid damage to speakers

## Specifications

Model	CA30	CA60
Power supply	230Vac, 50Hz (IEC)	
Output power: RMS	30Wrms	60Wrms
Outputs : Speaker	100V / 8 Ohm / COM	
Output: Line	RCA signal output	
Inputs	2 x mic 6.3mm jack + aux (2 x RCA)	3 x mic 6.3mm jack + aux (2 x RCA)
Volume controls	Mic 1, Mic 2, Aux, Master	Mic 1, Mic 2, Mic 3, Aux, Master
Input impedance: Mic	1.8kΩ	
THD	<1.0% nominal	
Dimensions	255 x 220 x 84mm	285 x 220 x 84mm
Weight	3.37kg	4.35kg



**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.