AMPETRONIC C Series Quick Start Guide

Box Contents

- 1 x C Series Driver including:
  - 1 x Loop connectors (2x for dual channel drivers)
  - 1 x DC connector
  - 1x Status relay connector (C10/14 only)
  - 2 x Input connectors
  - 1 x 100V line connector
- 1 x Line out connector
- 2 x 2mm steel 1U rack mount brackets

Also includes:
- 1 x C Series quick start guide
- 1 x Power cable (region specific)
- 1 x Induction Loop Sign
- 4 x self adhesive feet

⚠ **This symbol is used to alert the user to important operating or maintenance instructions.**

⚡ **The Lightning bolt triangle is used to alert the user to the risk of electric shock.**

1. SAFETY

1. It is important to read these instructions, and to follow them.
2. Keep this quick start guide in an accessible place.
3. Clean only with a dry cloth. Cleaning fluids may affect the equipment.
4. ⚠ Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
5. Do not install this equipment near any heat sources such as radiators, heating vents or other apparatus that produces heat.
6. ⚡ WARNING – THIS APPARATUS MUST BE EARTHED / GROUNDED.
7. Only power cords with the correct power connector may be used to maintain safety. Cables incorporating the UK 13A fused plug, Schuko with earthing contacts and UL approved "grounding type" are acceptable. These must be plugged into power outlets which provide a protective earth.
8. C10 and C14 amplifiers incorporate a mains voltage switch by the power socket on the rear of the unit. Ensure this is set accordingly to the local mains supply voltage before connecting. Failure to do so may damage the unit and would not be covered by warranty.
9. Refer all servicing to qualified personnel. Servicing is required when the apparatus has been damaged in any way, such as a power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to any rain or moisture, does not operate normally or has been dropped.
10. ⚡ WARNING – To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. The apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.
11. ⚡ Warning: Connection to a 100V line system may involve the risk of electric shock and therefore must be carried out by an instructed or skilled person.

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

TO PREVENT ELECTRIC SHOCK DO NOT REMOVE THE COVER. THERE ARE NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL

2. TOOLS AND EQUIPMENT

Small hand tools including a wire stripper, small flat blade and posi screwdrivers will be required.

A magnetic field strength meter, Loopworks Measure App & R1 Reciever, or at minimum an induction loop receiver is vital to check that the loop system is providing the desired level of performance.

3. FIRMWARE

It always recommended to ensure your amplifier is on the latest firmware before installation.

On the front menu go to Driver Status > About and check the version number against the latest update available at www.ampetronic.com/firmware-upgrades

4. INPUTS AND OUTPUTS

The driver has two **inputs** labelled 1 and 2. Each input can be separately configured to mic or line signal level using a rear panel push switch. Global 24V phantom power can be enabled to supply any input set to mic level. Alternatively input 2 can accept a 100V line using a dedicated 2 pin socket. **Do not use both input 2 sockets at the same time.**

Warning: Connection to a 100V line system may involve the risk of electric shock and therefore must be carried out by an instructed or skilled person.

The driver has either one or two loop **outputs** labelled Loop A and Loop B. In order to achieve correct operation it is recommended the loop and feed resistance should be between 0.2 and 10Ω (at DC).
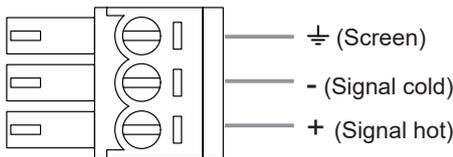

⏚ (Screen)
− (Signal cold)
+ (Signal hot)

Figure 1: Input connections

−
−
+
+

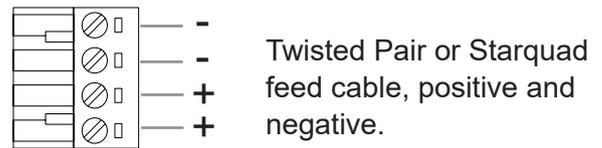Twisted Pair or Starquad feed cable, positive and negative.
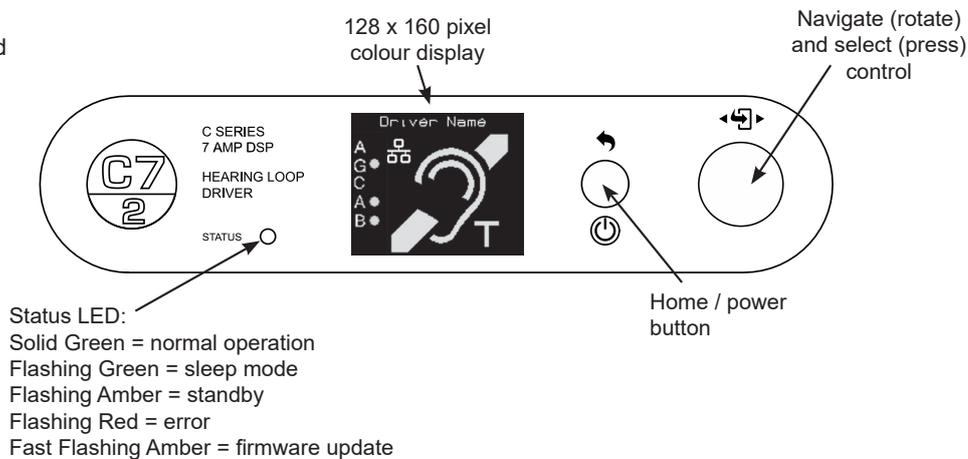
Figure 2: Output connections

⚠ **Do not run input and output cables close together**

Dante enabled models have a dedicated RJ45 socket which acts as Input 3.

5. SETTINGS

The C Series drivers have their adjustments set in decibels (dB). A setting of 0dB equates to maximum current or to maximum input gain. A negative value will reduce the current or input gain accordingly.

Figure 3: Front panel display and control

128 x 160 pixel colour display

Navigate (rotate) and select (press) control

C SERIES
7 AMP DSP

HEARING LOOP
DRIVER

STATUS

Home / power button

Status LED:
Solid Green = normal operation
Flashing Green = sleep mode
Flashing Amber = standby
Flashing Red = error
Fast Flashing Amber = firmware update

From the factory the drivers are provided with the following setting:

- Current: -20dB from full output
- Metal Loss Compensation (MLC) OFF
- Input Gain Channel 1 -80.0dB
- Input Gain Channel 2 -80.0dB

- Input Gain Channel 3 -80.0dB (Dante enabled drivers only)
- Driver Name blank - reports model number
- Phase Shift ON (dual channel drivers)
- Ethernet Parameters Set by DHCP

6. ADDITIONAL FEATURES

- **Home screen timeout** – if no action is taken in a mode screen after 30s the home screen is displayed. For a value screen the timeout is 60s.
- **Sleep mode** – After a 30 minute period of user or audio inactivity the driver turns on the 'Loop outputs disabled' test signal and turns off the screen to save power. The Status led flashes green to indicate this. Any user activity or presence of audio signal brings the driver out of sleep. The inactivity time can be changed via the website (where network option fitted)
- **Lock screen** – A long press on the home button brings up the lock menu. This gives access to standby, re-start (same as in settings menu) & lock. Selecting lock makes the user controls inactive. Any user input results in a padlock being displayed. To unlock the unit press the home button six times. Unlock instructions are shown briefly when lock is selected.
- **Standby** – This is a user imposed sleep. Only user activity (not audio signal) brings the driver out of standby.

7. NETWORK CONNECTION (OPTION)

Where fitted C Series drivers feature a web interface that can be viewed in a web browser. Although optimised for the Chrome browser, any browser can be used to view the interface. The web interface is used to monitor and adjust the driver. You will be asked for the User Name and Password for the driver as a deterrent to unauthorised parties. These values are case sensitive and need to be entered once per session to access the driver.

User Name = superadmin, netadmin, audioadmin

Passwords = ampetronic (default)

For security purposes, it is recommended that the default password is changed to a strong password at the earliest possible opportunity. This can be done using the web interface.

Four levels of access are available:

1. superadmin - allows access to all settings
2. netadmin - access the network settings page only
3. audioadmin - access the audio settings pages only
4. no login - allows access to status page

8. TROUBLESHOOTING

The driver performs a series of diagnostics on start-up as well as constant fault monitoring once active. Errors will show on the front screen, in the status menu and on the web interface of network enabled drivers.

Note: Some errors relate to the loop circuit rather than the amplifier itself and indicate further troubleshooting of the installation is required.

For a list of all error messages and troubleshooting see the full C-Series handbook.

If assistance is required, contact Ampetronic Support Team with a note of the exact error text.

9. ASSOCIATED DOCUMENTS

- UP19801 – C Series Installation Handbook & User Guide
- UP39801 – C Series Datasheet
- UP39808 – C Series Protocol Guide

Associate documents are available as a download from www.ampetronic.com, in Loopworks Learn or can be requested by contacting support@ampetronic.com / +44 (0) 1636 610062

10. WARRANTY

This product carries a five year parts and labour warranty from date of shipment from Ampetronic. To qualify for the five year warranty, the product must be registered at www.ampetronic.com (products/warranty), without which the warranty will be valid for two years only.

The warranty could be invalidated if the instructions in this handbook are not followed correctly, or if the unit is misused in any way.

11. DECLARATION OF CONFORMITY

Hereby, Ampetronic declares that the radio equipment type Ampetronic Induction Loop Driver C5-1, C5-2, C7-1, C7-2, C10-1, C10-2, C14-2, including network (N) & DANTE (D) variants, are in compliance with

Directives:

2014 / 53 / EU Radio Equipment Directive and its amending directives

2014 / 35 / EU The Low Voltage Directive and its amending directives

2014 / 30 / EU The Electromagnetic Compatibility Directive and its amending directives

2011 / 65 / EU The RoHS Directive and its amending directives

and Statutory Instruments:

2017 No. 1206 Radio Equipment Regulations and its amending directives

2016 No. 1101 Electrical Equipment (Safety) Regulations and its amending directives

2016 No. 1091 Electromagnetic Compatibility Regulations and its amending directives

2012 No. 3032 RoHS in Electrical and Electronic Equipment Regulations and its amending directives

The full text of the EU & UK declaration of conformity is available at the following internet address: www.ampetronic.com/declarationofconformity

FC CAUTION: Changes or modifications not expressly approved by Ampetronic or an authorised partner could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.