Installation and User Guide

Auteldac 6

**Zone 1 / Zone 21 Ex Certified
Hazardous Area VoIP Telephone**

IMPORTANT

**THIS PRODUCT MAY NEED TO BE CONFIGURED
PRIOR TO INSTALLATION**

PLEASE READ THIS GUIDE FIRST

**GAI-TRONICS**

A Division of Hubbell Ltd

CONTENTS

1   Safety Information

▲ **IMPORTANT:**
ALL POSSIBLE MEASURES MUST BE TAKEN TO ENSURE WATER, FLUID OR DUST DOES NOT CONTAMINATE THE INTERNAL COMPONENTS OF THIS TELEPHONE WHILST UNPACKING, PREPARING OR INSTALLING IT, OR BY NEGLIGENCE.
FAILURE TO OBSERVE THIS PRECAUTION WILL INVALIDATE CERTIFICATION AND YOUR WARRANTY

▲ **Please read these instructions thoroughly before starting installation. These products must be installed by competent personnel familiar with electrical and network installations, as well as the hazardous area regulations.**

▲ **The case must not be opened in the hazardous area unless all connections are isolated outside the hazardous area.**

▲ **This product may need to be configured prior to installation. See section 4 for details**

▲ **All glands and blanking plugs must be fitted with appropriate seals to maintain the required IP rating.**

▲ **CAUTION: small metal objects may stick to the handset: please check before use**

▲ **Failing to install and use this product as described in this manual may invalidate its CE marking and could possibly compromise the safety of the user.**

▲ This equipment relies on non-metallic materials for safety. Consideration must be given to the performance of these materials with respect to chemicals which may be present in the hazardous area. Refer to manufacturer for more details.

▲ **Some versions of this product are supplied with long handset or headset cables, which could present a trip hazard.** Therefore care must be taken when using the handset/headset at extended distances, so that personnel or equipment in the vicinity are not impeded, trapped or entangled by the cord. Also, care must be taken to stow these long cord handset/headsets so they do not pose an entanglement or tripping hazard.

▲ **Noise level hazard.** The telephone ringer can develop a sound level in excess of 90dBA @ 1 metre. Therefore, it is

the installer's responsibility to take the necessary measures to comply with any applicable regulations, for example the UK Statutory Instrument SI 2005 No. 1643 on the The Control of Noise at Work Regulations 2005 or the European directive 2003/10/EC on the minimum health and safety requirements regarding the exposure of workers to the risks arising from physical agents (noise).

2 Product Description

Rear case

Ringer

Main PCB

Keypad

Handset

User terminals

Gland entries

Front case
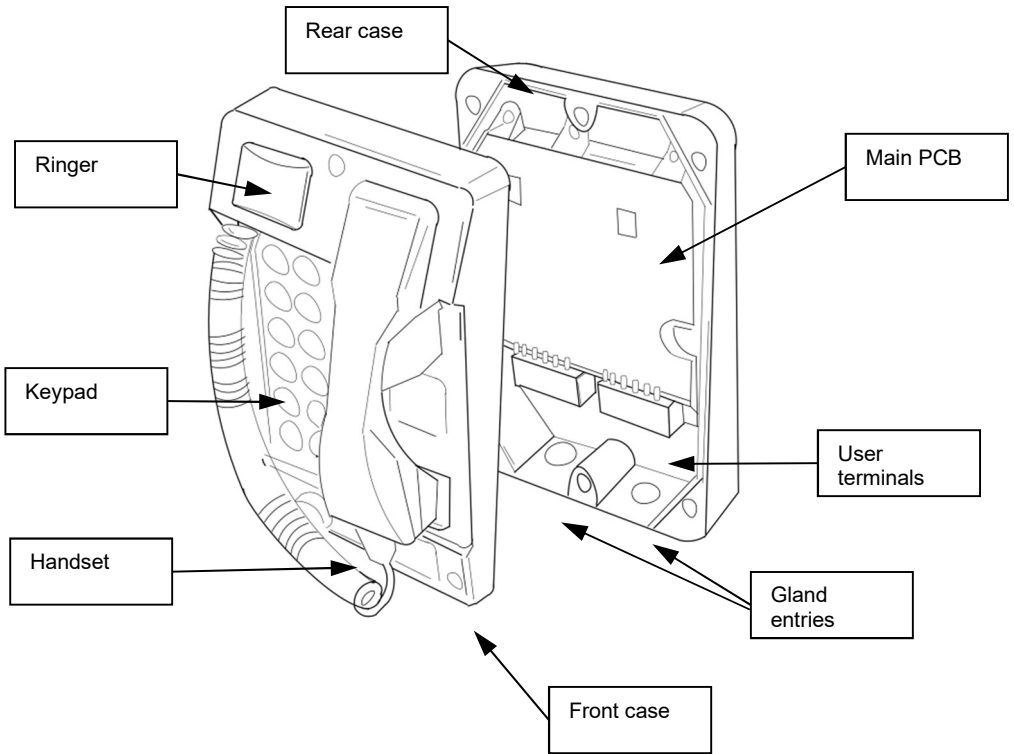
*Auteldac 6 Hazardous Area Telephone at a glance*

3   Features

This manual describes the Auteldac 6, an Ex certified, voice over internet protocol (VoIP) telephone, built to withstand arduous industrial atmospheres and environmental extremes. Features include:

- IEC Ex / ATEX / UKEX certified for safe operation in hazardous areas
- Carbon loaded glass filled polyester body - rugged and corrosion free.
- Weather resistant up to IP66
- Certified for use in ambient temperatures of -40°C to +60°C (NB refer to certification details)
- Rugged handset with curly cord or armoured stainless steel cord.
- Hearing aid compatible inductive coupling as standard
- Headset option available.
- Integral 90dBA ringer with volume adjustment.
- Programmable, volt-free contact output
- One touch dial memories
- SIP compatible (RFC3261)
- Automatic outgoing call diversion (memory list)
- Real-time alarm reporting via SNMP
- Power over Ethernet 802.3af compatible (spare pair only)
- Configurable via web page, SNMP or configuration file

4   Quick Start Guide

Full programming and configuration details are contained in the Configuration guide, available from

**www.hubbell.com/gai-tronics/en/voip-support**
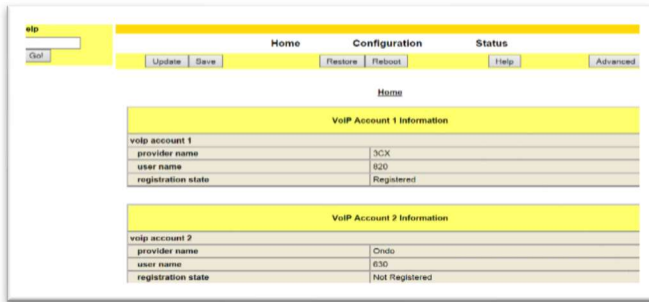
The factory defaults will generally be sufficient in most cases, but the following steps must be taken as a minimum:

- Provide an Ethernet connection and power (either 24-48Vdc or PoE)
- **NOTE – PoE must be on spare pairs only** (not data pairs)
- Ensure that a DHCP server is available on the network, and that the IP address allocated to the telephone can be discovered (DHCP is the normal factory default provisioning method). If DHCP fails (or there is no DHCP server) the telephone will revert to a default IP address of 192.168.1.2 after a few minutes
- Using a web browser, browse to the IP address.
- When prompted, enter the user name and password (Defaults: **user** & **password**)
- From the Home Page, select the Configuration section, and from that the VoIP Accounts main page
- On the VoIP Account 1 Information sub-page, enter:
    o The user name (the extension number or name used by the SIP server for this telephone)
    o Domain name, Proxy domain name and Register domain name – set all of these to the domain name or IP address of the SIP server
    o Auth user password – set to the authentication password for the extension on the SIP server if required.
    o Ensure Provider enable and Register enable are both set to enable.
    o Update the changes, then save the changes.
    o Check that the registration state changes to "registered"
- Program any speed dial memories using the User Configuration main page

5   Installation

Please read all these instructions thoroughly before starting installation.

5.1 Dimensions
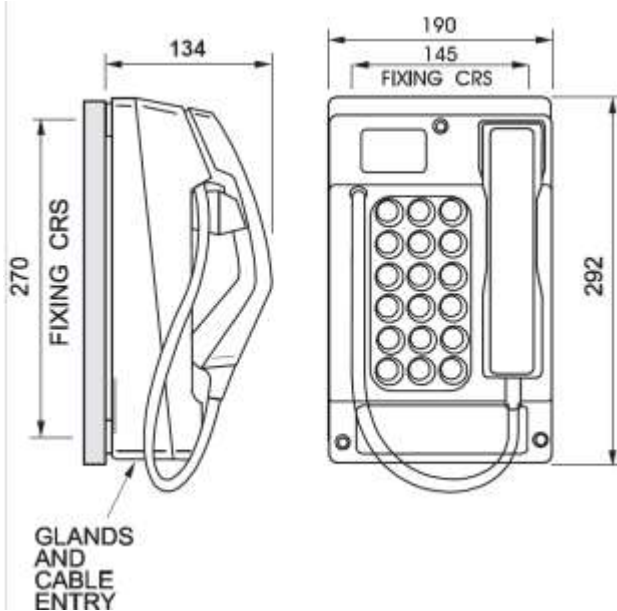
Four 7mm-clearance holes in the Rear Casing (outside the environmental seal) allow it to be screwed or bolted to a wall, or to a pole-side mounting kit (part no 100-02-0208-001).

The holes are arranged in a rectangle, as follows -

- Horizontal separation between centres: 145.0mm (5.7in)
- Vertical separation between centres: 270.0mm   (10.6in). The lower pair are about 10mm (0.4in) up from the bottom edge of the unit.

Handset cord lengths:

Standard curled cord: 320mm extending to 1m (13 to 39in).

Standard stainless steel cord: 755mm (29.7in).

Other cord lengths are available as special options: contact GAI-Tronics for details.

5.2 Pre- installation

The Auteldac 6 telephone is connected by hard-wiring - (unlike a plug and socket on internal telephones). Because of this, installation must be carried out by trained, competant personnel. Contact GAI-Tronics if installation service is required.

The telephone is supplied suitable for vertical mounting only. Before installing the unit, please take note of the following:

- **Glands.** Glands are not supplied. All glands and cables must meet 'Increased Safety' ('e' type) requirements. Only 'e' type glands and suitable cables should be used and must be fitted correctly. **Glands must meet IP66 minimum and be certified Ex eb tb. Glands must be suitable for -40°C to +70°C**

- **Earth connection.** The unit **must** be connected to an equipotential bonding system for the whole area in which the intrinsically safe equipment is being used. See section 5.4.3 for details.

- **Cable entries** - Auteldac 6 has two M20 cable entry gland positions. Before installing, give consideration to the options available to ensure that the required connections can be made using the available glands.

  If a high voltage is connected to the relay contacts (for example to activate a mains-powered beacon) then that cable **must** be segregated from all other cables and routed through its own gland.

  Upon installation care should be taken to ensure that incoming cables are cleanly routed with a view to maintaining segregation between hazardous voltage cabling and the telephone's internal wiring (i.e. handset, hookswitch, ringer and headset if fitted).

ALL POSSIBLE MEASURES MUST BE TAKEN TO ENSURE WATER, FLUID OR DUST DOES NOT CONTAMINATE THE INTERNAL COMPONENTS OF THE TELEPHONE WHILST UNPACKING, PREPARING AND INSTALLING IT IN INCLEMENT WEATHER CONDITIONS OR BY NEGLIGENCE.

FAILURE TO TAKE THIS PRECAUTION WILL INVALIDATE YOUR WARRANTY AND CERTIFICATION

The telephone body must **NOT** be opened, nor glands removed or cables disconnected unless all supplies to the telephone, including network cables, power cables and external devices have been isolated outside the hazardous area. Terminals for incoming cables are 'e' type and must be carefully connected so as to make an 'e' type termination.

The Code of Practice for 'e' type enclosures is specified in IEC60079-14. The installer and all service personnel should be familiar with the relevant sections of these documents.

If only one gland entry is used, the black Ex e sealing plug must be fitted to the unused entry.

1. Place the telephone on its base on a firm horizontal surface.
2. Using a 5mm Allen key, release the Front Casing from the Rear Casing. The screws are not captive in the Front Casing.
3. Noting their positions, disconnect the ribbon cable(s) and the ringer cable from the front section. See 5.5.
4. Take care when removing the Front Casing from the Rear Casing and storing the Front Casing not to damage the internal electronics or connections. To do so will violate the certification of the telephone product.
5. Check the condition of the sealing gasket (in the recess running round the edge of the front section), especially if the telephone has been previously used. If this seal shows any sign of damage or deterioration, it must be replaced prior to installing the telephone.
6. Remove the RED blanking plug from the cable entry hole leaving the Ex e certified (usually BLACK) blanking plug in situ.
   NOTE: The Ex e plug must be used to seal the unused gland hole; failure to do so will invalidate the certification of the telephone product.
7. Select the appropriate size Ex gland for the cable used.
8. Take care when inserting the selected gland into the threaded cable entry hole. Follow the gland manufacturer's instructions particularly with respect to sealing, installation and earthing.
9. After the glands have been fitted, select the required mounting method and follow the appropriate instructions below.

5.3 Mounting Methods

5.3.1 Wall Mounting

To ensure weatherproof integrity when wall mounted, external cables should enter the enclosure from the bottom via the two 20mm gland entries provided.

IMPORTANT WARNING:

DO NOT DRILL ANY EXTRA HOLES AS THIS WILL INVALIDATE YOUR WARRANTY AND THE CERTIFICATION.

1. Ensuring that the cable entries are at the bottom, offer the Rear Casing up to the vertical surface and mark through the fixing holes. **Do not use the Rear Casing as a template to drill the holes. Work only from the marked positions**.

2. Drill the holes in the vertical surface to suit the best method of fixing.

3. Ensure the Rear Casing is securely attached to the vertical surface using the four 7mm diameter screw holes provided. No sealing washers are necessary.

   IMPORTANT: Do not use countersunk headed fixing screws. Only use round head, socket cap head or pan head screws. Take care not to over tighten the screws as doing so may damage the case and will invalidate your warranty and the certification.

4. Remove the terminal cover to allow access to the cable glands and terminals. Retain the cover to refit prior to putting the telephone into use.

5. Pass the cable through the gland and tighten, following the gland manufacturer's instructions.

6. Continue the installation procedure with the connection of individual wires from the cable as described under sections 5.4 onwards.

5.3.2 Pole-side Mounting

Kit No 100-02-0208-001

This accessory kit is for mounting GAI-Tronics telephones on to the side of round poles of 100mm to 200mm diameter, or on to square or rectangular section uprights of 100mm to 150mm across the mounting surface. For flat mounting on surfaces greater than 150mm across use the wall mounted method.

MOUNTING
CLAMP
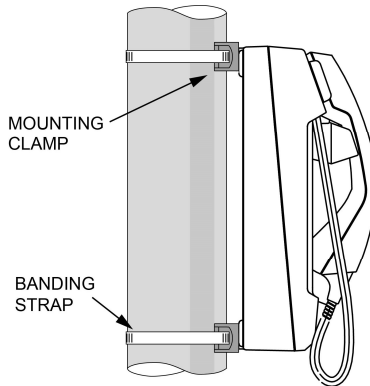
BANDING
STRAP

Pole side mounting

NOTE:

Banding straps (large scale worm-drive clamps) are not included in this kit and must be obtained separately. For details of where mounting kits can be obtained, refer to GAI-Tronics .

1. Attach the pole mounting clamp assemblies to the Rear Casing using the M6 x 25 screws provided. Tighten to a torque of 4.5Nm (3.3 ft-lbs) max.
   IMPORTANT: avoid the use of power tools. Spinning the nuts too quickly can cause a rapid increase in heat which can cause the nuts to seize as a result of galling or cold-welding.

2. Ensuring that the glands are at the bottom, pass a proprietary banding strap round each of the pole mounting clamps and the support pole. Tighten securely.

3. Remove the terminal cover to allow access to the cable glands and terminals. Retain the cover to refit prior to putting the telephone into use.

4. Continue the installation procedure with the connection of individual wires from the cable as described under sections 5.4 onwards.

5. Secure the telephone Front Casing to the Rear Casing (refer to 5.5).

6. Re-tighten the straps firmly and trim off any excess band material. For security the driving head of the band may also be sawn off.

5.4 Connections and Cabling

IMPORTANT WARNING:-

ISOLATE POWER AND NETWORK OUTSIDE THE HAZARDOUS AREA BEFORE OPENING THE CASE.

ALL TERMINALS MUST BE CONNECTED IN ACCORDANCE WITH THIS INSTALLATION GUIDE. ANY DEVIATION FROM THIS MAY RESULT IN AN UNSAFE INSTALLATION AND VIOLATE THE CONDITIONS OF THE CERTIFICATION.

The connections to the Auteldac 6 are made via 2 terminal blocks below the main PCB. The cabling between the entry glands and the terminal blocks is covered by a terminal cover, secured by 2 screws as shown. Remove this cover to allow access to the terminals.

Cable selection must be appropriate to application: Solid wire 0.5 to 4.0mm² (20 to 12AWG), stranded wire 1.5 to 4.0mm² (16 to 12AWG). Torque to 0.5-0.6Nm (0.37-0.44 lbf.ft).

Any unused terminals must be fully tightened.

The terminal cover must be secured in place before re-assembling the telephone prior to use. The terminal cover provides the required isolation between the cabling in the rear section and the circuitry in the front section and is critical to the product's certification.
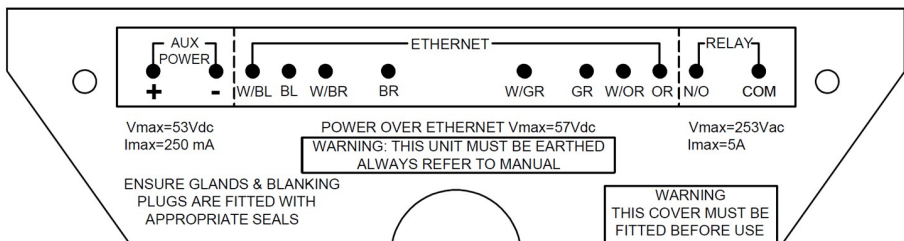
5.4.1 Connection to the network

The terminal cover identifies the function of each of the terminals.

The middle eight terminals are for the Ethernet connection identified by wire colour:

W/BL	White / Blue
BL	Blue
W/BR	White / Brown
BR	Brown
W/GR	White / Green
GR	Green
W/OR	White / Orange
OR	Orange

Note: the Ethernet cable termination is to TIA/EIA-568 T568B

5.4.2 Power

Power can be provided by either

- PoE (Vmax=57Vdc) using option B - spare pairs **only**. Auteldac 6 cannot use PoE on data pairs.
- DC power input (AUX POWER) Vmax=53V , Imax=250mA.

If both power supplies are connected the telephone will give preference to Aux power. If Aux power is disconnected the telephone will reboot to renegotiate PoE. If PoE power is lost while Aux power is connected the telephone will not reboot.

5.4.3 Earth connection

IMPORTANT: Auteldac 6 **must** be connected to an equipotential bonding system for the whole area in which the intrinsically safe equipment is being used.

Auteldac 6 is provided with an externally facing earth bonding screw for this purpose.
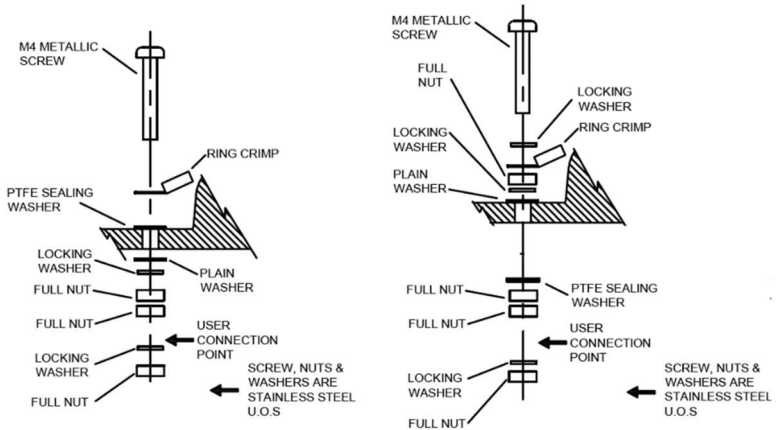
This earth bonding screw can also be used as a continuity connection between glands if 2 metal glands are used.

Note that there is a second screw adjacent to the earth bonding point. This screw must not be used as an earth bonding point and must not be removed.

5.4.4 Relay Contact

(Galvanically isolated, volt-free contact)

The connection from the telephone to the external load must be installed such that the apparatus continues to comply with the requirements of IEC 62368-1.
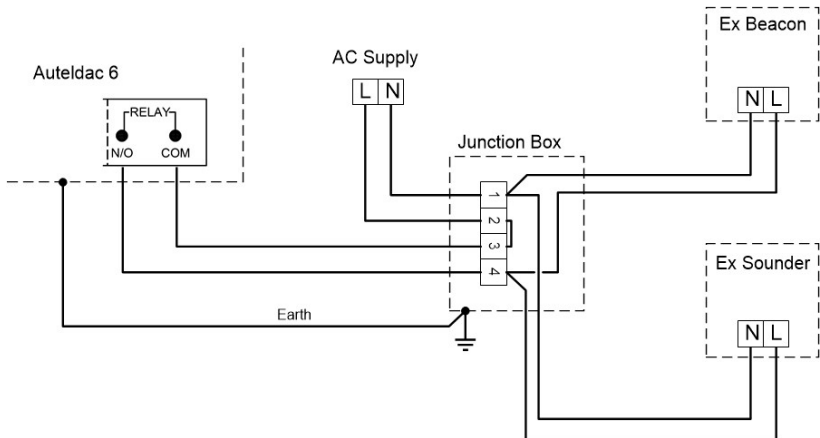
Typical connection scheme for a beacon and sounder

CONTACT RATING:

Maximum voltage = 250V rms (nominal 230V)

Maximum current = 5A rms

Note: the telephone does not include any fusing or transient protection for the relay contact; this must be provided externally.

The relay fitted to the Auteldac 6 has a continuous current rating of 5A. It has been brought to our attention that some beacons, whilst having a current rating well below this figure, actually generate current spikes far in excess of this during making and breaking of the relay contacts. These current spikes can cause the relay contacts to fail.

GAI-Tronics have been working closely with a leading beacon manufacturer to resolve this issue and our recommendations are:

- Restrict the use of beacons to non AC variants only or those with a maximum flash intensity of 5 joules.
- Where beacons with greater than 5 joule flash intensity are required, the beacons should be purchased directly from GAI-Tronics, who will ensure compatibility with the Auteldac 6 and that certification parameters are not compromised.

5.4.5 Headset

If a headset is required, an adapter cable must be connected internally. The adapter cable is fed into the telephone through one of the gland entries (via a suitable gland) and has an external, cable-mounted socket to connect a certified headset.

After feeding into the the telephone, the wires in the adapter cable are fitted to a 7-way Molex housing, which is then connected to the mating part labelled CON5 on the circuit board in the front section as shown:
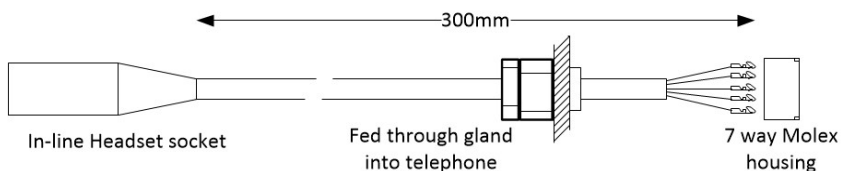
When fitting the crimped wires into the housing, ensure that each contact clicks fully home.
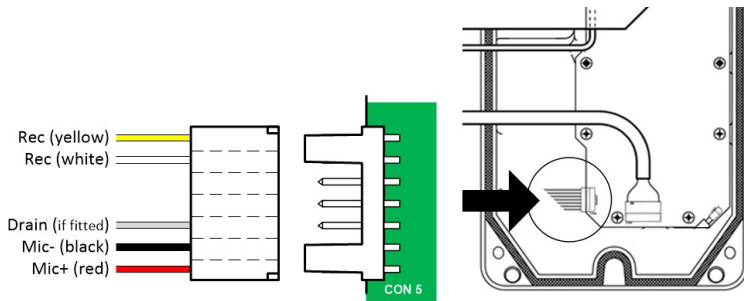
Adapter cables are available for different types of approved headset. Some types have 5 wires (including a drain wire), whilst others have 4 wires (without drain wire).

The headset adapter cable should lie **over** the terminal cover, leaving enough cable inside the telephone to allow the front and rear sections to be separated without straining the connection.

The headset interface of the Auteldac 6 has been certified as intrinsically safe. Therefore, it is permissible to connect and disconnect the headset from the socket on an adapter cable in a hazardous area.

The headset connection (internal) is defined with the following apparatus terminal parameters:

$U_o = 6.5V$

$I_o = 0.097A$

$P_o = 0.157W$

$C_i = 0$

$L_i = 0$

The capacitance and either the inductance or inductance to resistance ratio (L/R) of the load connected to the hazardous area terminals for the headset must not exceed the following values:

Group	Capacitance (µF)	Inductance or (mH)	L/R ratio (µH/Ω)
IIC	25	3.78	225
IIB	570	15.1	902
IIA	1000	30.2	1804

The above load parameters apply where:

1. The external circuit contains no combined lumped inductance L_i and capacitance C_i greater than 1% of the above values, or
2. The inductance and capacitance are distributed as in a cable, or
3. The external circuit contains either only lumped inductance or lumped capacitance in combination with a cable

In all other situations e.g. the external circuit contains combined lumped inductance and lumped capacitance, up to 50% of each of the L and C values is allowed. The reduced capacitance of the external circuit (including cable) shall not be greater than 1μF for Groups I, IIA and IIB, or greater than 600nF for Group IIC.

The headset must be used in accordance with the manufacturer's instructions and certification (supplied with headset).

Only certified headsets supplied by GAI-Tronics may be used.

5.4.6 Optional Headset Extension lead

A separate headset extension lead is available as an optional extra, allowing the operator to extend the headset cord by up to a further 4 metres. Note: Refer to section **Error! Reference source not found.** for hazard warnings regarding long corded headsets & handsets.

5.5 Reassembling the telephone enclosure

1. Check the condition of the sealing gasket (in the recess running around the edge of the front section), especially if the telephone has been previously used. If this seal shows any sign of damage or deterioration, it must be replaced prior to installing the telephone.
2. Reconnect the internal cable(s) from the Rear Casing to the Front, making sure each connector is correctly orientated. There is a keyway on each connector to help. Do not forcibly fit the connector(s).

IMPORTANT – FAILURE TO ENSURE THE CORRECT ORIENTATION OF THE CONNECTOR(S) WILL VIOLATE THE CONDITIONS OF THE CERTIFICATION

Internal cable positions

3. Upon installation, care should be taken to ensure that incoming cables are cleanly routed with a view to maintaining segregation from the telephone's internal wiring (i.e. handset, hookswitch, ringer).

4. Ensure that the terminal cover is fitted. The terminal cover provides the required isolation between the cabling in the rear section and the circuitry in the front section and is critical to the product's certification.

5. Offer the Front Casing to the Rear Casing, with the internal cables arranged as shown above; ensure that the cable(s) will not be trapped when the Front Casing is tightened down. Take care that the large ribbon cable can lay flat and that the insulation can not become damaged.
   IMPORTANT - DAMAGED INSULATION WILL VIOLATE THE CONDITIONS OF THE CERTIFICATION.

6. The telephone cover has three M6 fixings which need to be tightened gradually in turn in order to prevent distortion of the cover and to ensure an even compression of the sealing gasket. Starting from the bolt in the bottom left, and working in a clockwise direction, gradually tighten the bolts until a snug fit is achieved between cover and gasket and the gap between the enclosure halves is even. Then tighten each

screw to 2Nm, checking that the gap between the enclosure halves is even.

7. Auteldac 6 is now ready for use.

6   OPERATION

Certain features are user-programmable.   Please see the configuration guide for full details, available from

www.hubbell.com/gai-tronics/en/voip-support

Please note: the configuration guide covers all models of GAI-Tronics VoIP telephone. In particular Auteldac 6 does not include the following features:

- External inputs
- LEDs
- USB port
- Relay 2 (only a single relay, RELAY1, is fitted

Also note that the procedure for restoring to the factory default configuration is different for Auteldac 6, and is described separately in the configuration guide.

6.1 Making and Receiving Calls
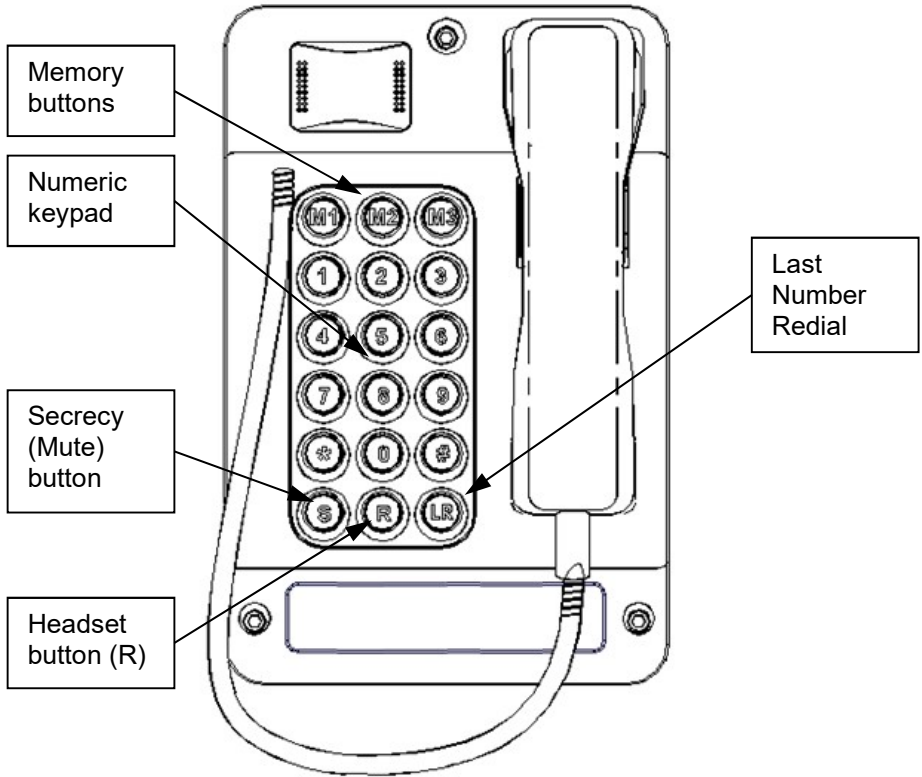
- To make a call, lift the handset, wait for dial tone, dial required digits (or press required memory button or Last Number Redial) and wait for connection.
- Hot dial functionality (where the telephone automatically dials a number as soon as the handset is lifted) can be programmed if required – refer to the configuration guide.
- To end a call, replace the handset in its cradle.
- To receive a call, lift the handset when ringing is heard.
- Take care, if using a model with either a long handset cord or optional headset, not to allow cables to tangle or snare around the body or neck.

6.2 Secrecy or Mute Function

(If configured)

During a call, press and hold the S button to mute the microphone.

6.3 Headset Operation

Note that, for the headset to operate, a button (usually the "R" button) must be configured to take the telephone on and off hook. Since the headset adapter cable is not factory fitted, the button must be configured by the user to enable use of the headset.

The required configuration change is to the button map string (on the System | Input/Output Configuration page). The code for the 17th button position should be changed from "0" to "7", ie the button map string should be changed from

2m1 2m2 2m3 1c1 1c2 1c3 1c4 1c5 1c6 1c7 1c8 1c9 1c* 1c0 1c# 3 **0** 4 0 0 0 0 6

to

2m1 2m2 2m3 1c1 1c2 1c3 1c4 1c5 1c6 1c7 1c8 1c9 1c* 1c0 1c# 3 **7** 4 0 0 0 0 6

Refer to the configuration guide for full details.

Once configured, pressing the R button will take the telephone off hook and allow calls to be made and received using the headset. Pressing the button a second time will put the telephone back on hook.

Note that, once configured, the button will take the telephone on and off hook whether or not a headset is connected.

The headset interface of the Auteldac 6 has been certified as intrinsically safe. Therefore, it is permissible to connect and disconnect the headset in a hazardous area.

6.4 Last Number Redial

(If configured)

Press LR to redial the last dialled number.

7   MAINTENANCE

The Auteldac 6 is based on highly reliable integrated circuits.

Under normal operation, the telephone is maintenance free.

7.1 Procedures

A programme of regular external visual inspection and cleaning is recommended, with particular attention being paid to -

On all models:

- Overall cleanliness of the telephone:
  Wipe clean as necessary with a cloth dampened with clear water.
  If heavily soiled, a little dishwashing liquid may be used in addition.
  NOTE: high pressure hoses should not be used for cleaning.

- Security of the installation on wall, pole or post.

- Security and integrity of cable entries.

- Security of the three body screws.

- Cleanliness, integrity and condition of the handset:

  Wipe clean as necessary with a cloth dampened with clear water, and disinfect the handset.

  Note that the handset has an anti-static coating – take care not to damage this by excessive rubbing or the use of chemicals or solvents (e.g. petroleum spirit). Do not allow liquid to penetrate the earpiece or mouthpiece.

- Security and condition of the handset cable.

  On headset models, refer to headset manufacturer's manual for cleaning, hygiene and maintenance of headset.

7.2 Possible Operating Faults

The following operating and installation conditions could give rise to faults. During installation, or in the event of a fault, please ensure that the following do not occur:

- Water ingress
- Incorrect positioning of internal cables (Section 5.5)
- Damage to any internal components
- Overstressing of screws
- Insecure fixing
- Incorrect installation of glands (Section 5.20)
- Incorrect wiring or cable connections (Section 5.4)
- Improper reassembly following connection
- Additional holes drilled in casing

7.3 Fault Finding & Field Repairs

The Auteldac 6 contains no user serviceable parts and in the event of damage or failure must be replaced with a tested telephone of the correct type.

8 TECHNICAL SPECIFICATIONS

8.1 Hazardous Area Certification

It is the responsibility of the installer or user to determine whether or not Auteldac 6 is suitable for use in a given location or particular circumstances. Certification details are listed below.

8.1.1 IEC Ex Certification

Certificate number: IECEx CML19.0187

Certification details:

Ex eb ib mb IIC T4 Gb (-40°C ≤ Ta ≤ +60°C)
Ex ib tb IIIC T135°C Db (-40°C ≤ Ta ≤ +60°C)

A copy of the IECEx certificate is available from https://www.hubbell.com/gai-tronics/en.

8.1.2 ATEX Hazardous Area Certification

Certificate number: CML 19 ATEX 5496

Certification details:

⟨Ex⟩ II 2 G   Ex eb ib mb IIC T4 Gb (-40°C ≤ Ta ≤ +60°C)
Ex ib tb IIIC T135°C Db (-40°C ≤ Ta ≤ +60°C)

A copy of the ATEX certificate is available from https://www.hubbell.com/gai-tronics/en.

8.1.3 UKEX Hazardous Area Certification

Certificate number: CML 21 UKEX 5883

Certification details:

⟨Ex⟩ II 2 G   Ex eb ib mb IIC T4 Gb (-40°C ≤ Ta ≤ +60°C)
Ex ib tb IIIC T135°C Db (-40°C ≤ Ta ≤ +60°C)

A copy of the UKEX certificate is available from https://www.hubbell.com/gai-tronics/en

8.2 Regulatory Compliance and Related Standards

Auteldac 6 is fully compliant with the following:

8.2.1 European Directives:

2014/34/EU	Equipment and protective systems intended for use in potentially explosive atmospheres (ATEX) Directive	CE
2014/30/EU	Electromagnetic Compatibility Directive.	
2014/35/EU	Electrical equipment designed for use within certain voltage limits (Low Voltage Directive)	
2011/65/EC	Restriction of the use of certain hazardous substances in electrical and electronic equipment (recast) (RoHS 2) Directive	

A copy of the EU Declaration of Conformity is included with each telephone, and is also available from https://www.hubbell.com/gai-tronics/en.

8.2.1 UKCA Statutory Instruments:

SI 2016 No. 1107	Equipment and Protective Systems Intended for use in Potentially Explosive Atmospheres Regulations 2016	UKCA
SI 2016 No. 1091	Electromagnetic Compatibility Regulations 2016	
SI 2016 No. 1101	Electrical Equipment (Safety) Regulations 2016	
SI 2012 No. 3032	The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012	

A copy of the UKCA Declaration of Conformity is included with each telephone, and is also available from https://www.hubbell.com/gai-tronics/en.

8.2.2 EMC

EN 55022 (Class B)	Information technology equipment. Radio disturbance characteristics.
EN 55035	Information technology equipment. Immunity characteristics

8.2.3 Electrical Safety

EN 60950-22	Information Technology Equipment - Safety - Part 22: Equipment to be Installed Outdoors
EN 62368-1	Audio/video, information and communication technology equipment - Part 1: Safety requirements

8.2.4 Other standards and testing

Suitable for inductively coupling to Hearing Aids having a `T' switch position. Use of this facility for any other purpose than that for which it was intended may cause degradation in quality of a connection.

Tested to ETS 300-381

The GAI-Tronics Quality Management System has been approved by LRQA to ISO9001.

8.3 Physical characteristics

Casing material	Carbon loaded glass filled polyester body - rugged and corrosion free
Handset Material	Cycoloy (2800) with stainless steel or polyester curled cord.
Weight	3.2kg (7lbs)
Dimensions	190W x 292H x 140D mm overall (7.5 x 11.5 x 5.5 in) Standard handset cord lengths: Curled cord: 320mm extending to 1000mm (13-39in) Armoured steel cord: 755mm (29.7in)

8.4 Environmental specifications

Storage temperature range	-40ºC to +60ºC (-4°F to 140°F)
Operating temperature range	-40ºC to +60ºC (-4°F to 140°F) NB refer to certification details
Maximum relative humidity	95% non condensing
Telephone enclosure IP Rating:	IP66 *(NB the handset itself is excluded from this rating)*
High pressure hoses should not be used on this product.	

8.5 Recycling information.

The symbol shown here and 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 working life.

The Waste Electrical and Electronic Equipment Regulations 2013 (Statutory Instrument No. 3113), and all subsequent amendments has been put in place to recycle products using best available recovery and recycling techniques to minimise the impact on the environment, treat any hazardous substances and avoid the increasing landfill.

Business users should contact their suppliers and check the terms and conditions of the purchase contract and ensure that this product is not mixed with other commercial waste for disposal.

GAI-TRONICS

A division of Hubbell Ltd.

Brunel Drive

Stretton Park

Burton upon Trent

Staffordshire

DE13 0BZ

https://www.hubbell.com/gai-tronics/en

Tel: +44 (0)1283 500 500

Fax: +44 (0)1283 500 400

If you have any difficulties, please call.

The policy of GAI-Tronics is one of continuous improvement,
therefore the Company reserves the right to change
specifications without notice.