Installation and User Guide

PHP400 GSM Help Point

With Ampetronic HLS-DM2 Induction Loop Amplifier
230V AC power supply

GAI-TRONICS

A division of Hubbell Ltd.

CONTENTS

1. Safety and Care Information

▲ **Please read these instructions thoroughly before starting installation. These products must only be installed and maintained by competent personnel familiar with electrical and telephone installation.**

▲ **IMPORTANT: THIS EQUIPMENT CONTAINS HAZARDOUS VOLTAGES**

▲ **THIS EQUIPMENT MUST BE EARTHED**

▲ **MAINS SUPPLY MUST BE ISOLATED ELSEWHERE BEFORE OPENING THE CASE.**

▲ **Cabling and connections must be in accordance with local electrical safety regulations (such as BS7671 IEE regulations, latest edition).**

▲ **Mains connection must be made via a 2 pole disconnection device, with a minimum contact clearance of 3mm in accordance with EN 62368-1 Annex L.**

▲ **IMPORTANT! This phone, like any wireless phone, operates using radio signals and the wireless network, which cannot guarantee connection in all conditions. Therefore, you should never rely solely upon any wireless phone for essential communications (e.g. medical emergencies).**

Remember, to make or receive any calls, the phone must be switched on, appropriately configured and in an area with adequate cellular signal strength. Emergency calls may not be possible on all wireless phone networks, when certain network services or phone features are in use or on phones without a full keypad unless an auto-dial button is programmed to call an emergency number. Check with local cellular service providers. Emergency calls may be made even when a SIM card is not installed (subject to network availability) using a recognised emergency dialling code such as 112.

▲ **Operating environment**

Make sure that no special regulation is in force that imposes restrictions on the use of mobile phones. Restrictions to mobile phones would also apply to this telephone. Most modern electronic equipment is shielded from radio frequency (RF) signals. However, certain electronic equipment may not be shielded against the RF signals from your phone.

▲ **Pacemakers**

Pacemaker manufacturers recommend that a minimum separation of 20 cm (8 inches) be maintained between a handheld wireless phone and a pacemaker. The same restriction should apply to the external antenna of this phone, where fitted. If you have any reason to suspect that interference is taking place, switch off the phone immediately.

▲ **Hearing aids**

The phone's radio signals may interfere with some hearing aids. In such cases move the antenna as far away as practical or consult your hearing aid supplier.

▲ **Other medical devices**

Operation of any radio transmitting equipment, including the phone, may interfere with the function of inadequately protected medical devices. Consult a physician or the manufacturer of the medical device to determine if they are adequately shielded from external RF energy or if you have any questions. Switch off the phone in health care facilities when any regulations posted in these areas instruct you to do so. Hospitals or health care facilities may be using equipment that could be sensitive to external RF energy.

▲ **Radio transmission equipment**

While GAI-Tronics GSM products are designed to conform to international standards regarding the acceptance of radio frequency interference, certain installation locations may interfere with their proper operation. We recommend that GAI-Tronics GSM equipment is not installed in close proximity to any equipment that generates RF signals (for example, radio transmitters), and is located as far as possible away from it or in a separate room.

▲ **Potentially explosive atmospheres**

Do not install the phone or site the antenna in any area with a potentially explosive atmosphere and obey all signs and instructions. Areas with a potentially explosive atmosphere are often but not always clearly marked. They include chemical transfer or storage facilities; vehicles using liquefied petroleum gas (such as propane or butane): areas where the air contains chemicals or particles, such as grain, dust or metal powders.

▲ The fitted aerial is rugged but has limited resistance to deliberate damage or vandalism. The aerial can be mounted remotely if appropriate, see section 4.7

2. Product Description and Features

This manual describes the GSM (cellular) version of the GAI-Tronics 400mm circular Help Point, with features including:

- 230Vac powered
- Weather and vandal resistant casing
- Large, palm-operable, vandal resistant buttons
- Raised text and Braille legends
- Internal induction loop
- Integral, vandal resistant aerial (can also be mounted remotely).
- Remote programming and diagnostics via SMS
- Auto-dial numbers are remotely programmable
- Automatic acoustic path mic and speaker testing
- "Rollover" feature to try alternative numbers if the first autodial call does not connect.
- Penta band WCDMA (3G), quad band GSM (2G) communication, takes standard (2FF) 2G/3G SIM card (not supplied)

Models are available with different pushbutton options.

The Help Point casing is a two-part construction with electronics in both sections. The 2 sections are held together with 4 security screws though the sides, and there are several cables between the 2 sections. Cable entry points are provided to top and bottom of the casing. Blanking plugs are provided for unused cable entries.
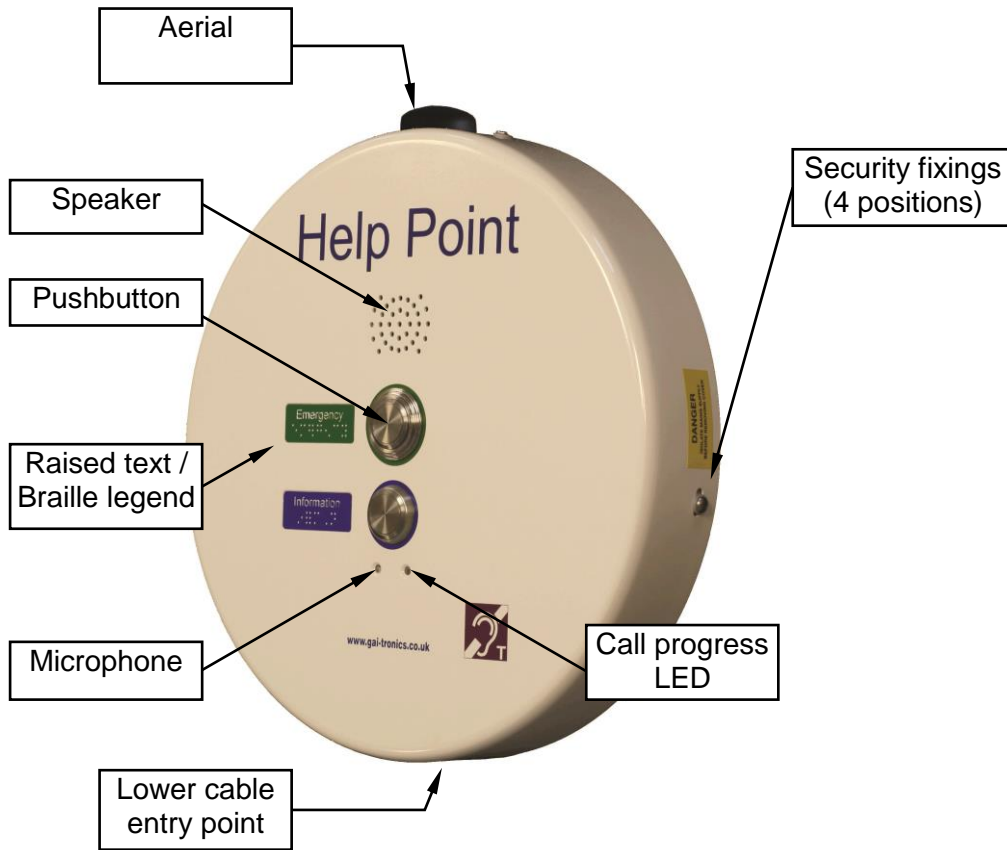
Note: PHP400 Help Points are usually permanently powered from an external power source, and are therefore not normally fitted with internal batteries. Elements of the diagnostic software may therefore indicate "battery fault" or similar messages. These messages do not indicate actual faults if batteries are not fitted.

3. Operation / Testing

3.1. Making a Call

To make a call, press the required button and wait for connection. A brief burst of tones is heard to signify that the call has been placed to the pre-programmed number.

3.2. Answering calls

To receive a call, press any button when ringing is heard.

3.3. Ending the Call

There is no direct way for a user to end a call from the unit. Calls can only be terminated by the called party, or by expiry of the call duration timer (CFG6)

3.4. Receiving calls

To receive a call, press a memory dial button or the ON/OFF button when ringing is heard. The phone can also be configured to automatically answer incoming calls (CFG26).

Note: It is possible to configure the phone to inhibit incoming calls (CFG5). If so configured, the sounder will not sound, but the phone can still receive SMS commands, acknowledge commands via SMS and communicate via USB.

3.5. Operating at extreme temperatures

The telephone has a wide operating temperature range, but there are some points to note at the very extremes:

Cold temperature performance:

If the transmitter circuit is colder than -39°C when the phone is first turned on, it will enter a warm up state. It is not possible to make or accept calls in the warm up state. When the phone is operating, it will suspend low power sleeping to prevent the transmitter circuit temperature falling below -38°C. The power consumption will rise slightly to provide the required small level of localised self-heating, in order to maintain the transmitter circuit at a temperature of at least -39°C.

High temperature performance:

if the main PCB temperature is greater than 68°C when the phone is first turned on, it will enter a protection state. It is not possible to make or accept calls in the protection state. When the phone is operating, it will allow any non-emergency calls to continue while the transmitter circuit is less than 91°C. For emergency calls, there is no thermal restriction and the phone will continue the emergency call which may result in irreversible damage to the circuit. This is only likely to occur if the ambient temperature were significantly above 60°C.

3.6. Testing the GSM module

To check that the GSM module is operating correctly, send an SMS message to it (ie to the telephone number of its SIM) as follows:

1234stat

It will respond with an SMS containing the following diagnostic information:

*   Signal level (must be between -90dBm and -50dBm)

- Charger status (should say "on")

- Battery voltage (normally 0V)

- Temperature (now, min & max) Note that min and max will show 127 or 128 on first reading after power up.

- IMEI (the IMEI number of the GSM module)

- Firmware version

This information will verify that the unit is on the network and can help diagnose various problems.

In particular if the Signal level is between -110dBm and -91dBm then it is too low – Help Point operation will not be reliable until the signal level is increased, for example by repositioning the antenna or choosing a different network.

4. Installation and dimensions

4.1. General

IMPORTANT

All possible measures must be taken to ensure water, fluid or dust does not contaminate the internal components of the unit whilst unpacking, preparing and installing it in inclement weather conditions or by negligence.

Do not drill any additional holes in the casing. Make sure any unused cable entry or mounting holes are properly sealed against water or dust ingress.

Failure to do so may result in an unsafe condition and will invalidate your warranty.

4.2. Units dimensions and weight

Overall diameter	405mm
Depth (rear surface to front face)	88mm
Pushbutton height from front face	10mm
Unit weight	6.5kg
Mounting centres	4 x 7mm holes on 145 x 270mm centres, see drawing 112-11-0081-001 appended to this manual.
Cable entries	5 off 20mm gland entry points are provided, with blanking plugs to blank off any that are not used: 2 x rear 2 x lower 1 x upper (used for aerial) Positions are detailed on drawing 112-11-0081-001 appended to this manual.

4.3. Site requirements

Ensure that the following are available before installation:

1. Survey the proposed site for GSM signal strength. Using an appropriate testing device, establish that there is sufficient signal strength at the proposed location for the network provider being proposed. Note that GSM performance can vary widely between different providers' networks and can be affected by building structures. Occasionally there can be "dead spots" where signal is low, but may be adequate a short distance away. If signal strength is too low it may be necessary to either re-site the unit, choose a different provider or site the aerial remotely (see below).

2. Ensure that a suitable SIM card is available (no SIM is supplied with the Help Point). **IMPORTANT:** Ensure that the SIM is activated and not locked. If the SIM is locked there is no way of unlocking it from the Help Point and the Help Point will not function. It is also recommended to disable voicemail on the SIM.

3. Ensure that power is available: 230Vac @ 0.5A (cables must be capable of carrying 5A min).

4. This is normally a two-person installation, due to the size/weight of the unit and due to the need to connect cables between the 2 sections.

4.4. Important Notes for Installers and Maintainers

- **Qualified personnel only**
  Installation and maintenance must only be carried out by appropriately qualified and trained personnel. Contact GAI-Tronics if installation service is required.

- **Mains supply**
  Mains connection must be made via a 2 pole disconnection device, with a minimum contact clearance of 3mm in accordance with EN 62368-1 Annex L.

- **Test tools required**
  During the testing and commissioning of the GSM Help Point telephone, the use of another mobile phone will be required in order to send status and configuration commands via SMS text messages. Alternatively, a laptop computer can be used connected to the internal USB port, see section 6.2.

- **Avoid contamination during installation**
  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 the telephone in inclement weather conditions or by negligence. Failure to do so may invalidate your warranty. Please retain any screws removed during installation or maintenance - make sure the correct screws are refitted to ensure the integrity of any seals.

- **Emergency Services warning**
  If the telephone is configured so that it cannot make a direct call to the emergency services, check with your telephone service provider or infrastructure maintainer whether it is necessary to warn users, and if so provide a suitable warning notice.

4.5. Opening the Unit

To open the case, undo the 4 security screws around the edge of the unit. These screws are normally Torx type with a centre security pin.

The front section is fitted over the rear section and can be gently lifted clear.

Take care when separating the 2 sections – there are 4 cable sets between the 2 halves:

1. Induction loop audio (2 conductors)
2. DC power (2 conductors)
3. Earth cable
4. Antenna cable.

These cables are deliberately short, but will allow the front section to sit to the **left** of the rear for set-up purposes if required.

4.6. Installation method

The Help Point is intended for vertical installation to a solid wall or suitable post as detailed below.

1. Choose a suitable location for the Help Point, bearing in mind the weight of the unit, and that the operating button(s) should normally be in the range 1200 – 1400mm from the ground for ease of access by people in wheelchairs.

2. Mark the wall or surface with fixing centres as shown above. If necessary use the rear section to help mark the centres. Do not use the rear section as a drilling template.

3. Select fixing screws or bolts appropriate to the type of wall or surface, suitable to support the unit. Drill fixing holes to suit.

4. Separate the front and rear sections of the Help Point, taking care to disconnect interconnecting cables as described in section 4.4.

5. Secure the rear section to the wall, making sure that the fixing holes are sealed to prevent water ingress using nylon washers or other appropriate sealing methods.

6. Bring the power cable into the unit through one of the cable entry holes. Cables will normally be contained in conduit, but glands may also be used.

7. The power cable is terminated directly to the terminal block provided, and secured using the cable restraint. **Do not apply power until the SIM is fitted.** If necessary remove the fuse to disconnect power until the SIM has been fitted.

8. Ensure that all cable entries are sealed to prevent water ingress. The blanking plugs fitted to unused cable entry positions must be left in place.

9. Fit the SIM to the main GSM PCB in the front section as described below.

10. Connect induction loop audio, dc power, antenna and earth cables between the front and rear sections of the case as shown below.

11. Apply power.

12. Configure and test the Help Point referring to the appropriate sections below.

13. Fit the front section over the rear section and secure in place using the 4 security screws.

4.7. Remote aerial.

Occasionally it may be necessary to site the aerial remotely from the Help Point either to improve signal reception or to reduce the risk of vandal damage. For this reason the unit is supplied with 3m of aerial cable, tied up inside the casing. In this case, disconnect the aerial cable from the top of the GSM PCB, free the cable and unscrew the aerial itself from the Help Point casing. The aerial has a 20mm threaded adapter which will allow it to be mounted remotely up to 3m away, for example on conduit, and the cable fed back to the help

point. GAI-Tronics can provide a 2.5m mounting pole that can support the Help Point and position the aerial at height, to improve reception and make it less vulnerable. Please contact GAI-Tronics for details.

5. Connections & Set-up

5.1. Connections between Front and Rear Sections

Wiring scheme showing interconnection points between front and rear sections
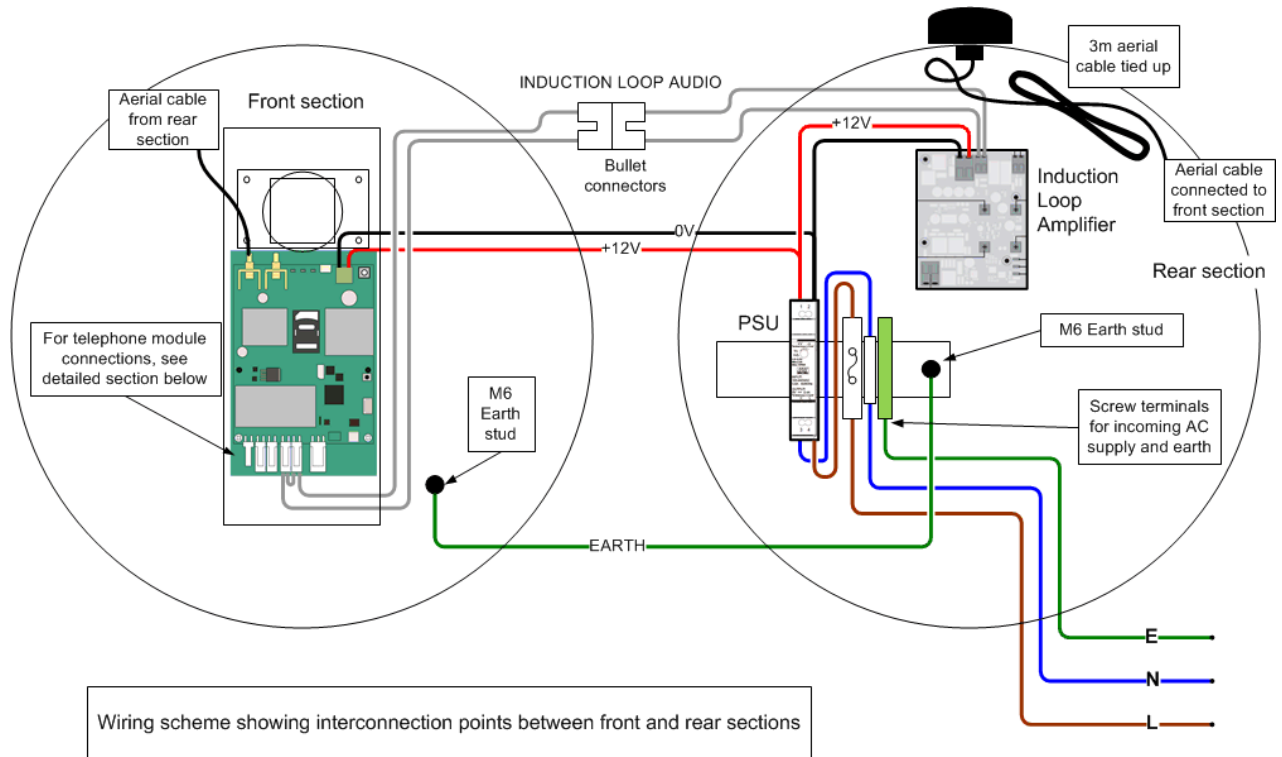
5.2. Power connections

Connect mains power to the terminal block as shown on the connection label. See drawing above.

The mains supply must be provided by a 2 pole disconnection device with a minimum contact clearance of 3mm.

The fuse must always be replaced by the correct type, ie 1A(T) HRC ceramic (20x5mm).

5.3. Earth connections

This equipment must be earthed

Important - during maintenance only disconnect the earth **after** the disconnection of all other components

The front and rear sections are connected together with an earth cable. Always ensure this cable is connected before putting the unit into service. The stack up of fixing nuts and washers on the earth stud in the rear section is important - ensure that fixings are in the sequence shown:

PHP400 HELP POINT

INPUT VOLTAGE SUPPLY:
100 – 240vAC, 50 – 60Hz

INPUT POWER: 120W Max

FUSE RATING:
1A(T) HRC. 20x5mm

L N E

SEE INSTALLATION INSTRUCTIONS BEFORE CONNECTING TO THE SUPPLY

To front case
To terminal block

Stack up of fixings on rear case earth stud
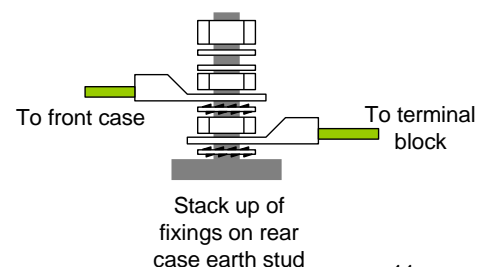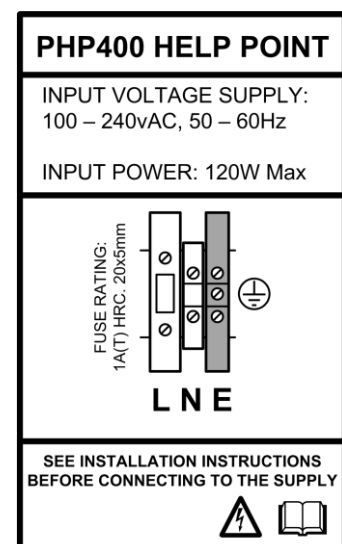
5.4. Internal power connections

The PHP400 Help Point is provided with a mains to 12V power supply unit, required to power the induction loop and telephone module itself.

The telephone power input is as shown and is connected to the PSU in the rear section via screw terminals in a 2 way push-in connector.

Power socket on main board

Lead from power adapter. The positive connection is marked with a continuous white stripe or white lettering.
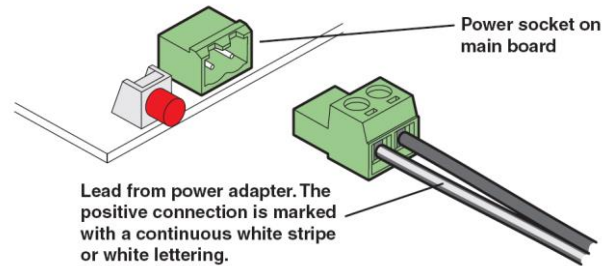
5.5. Relay outputs

As an option, the PHP400 GSM can be equipped with up to 2 external relay outputs, controlled by the telephone software. Contact GAI-Tronics for details.

The additional outputs are provided on terminal blocks TB1 & TB2 below the main PCB.

The installer must ensure that any connections do not exceed the following limits:

Max voltage:	30Vdc, 42.4V peak (resistive load)
Max switching current:	3A

5.6. Internal connections

With the exception of the 12Vdc input and the antenna, the internal connections do not need to be disconnected or disturbed during installation, but for reference they are shown below:

Without relays

With relays
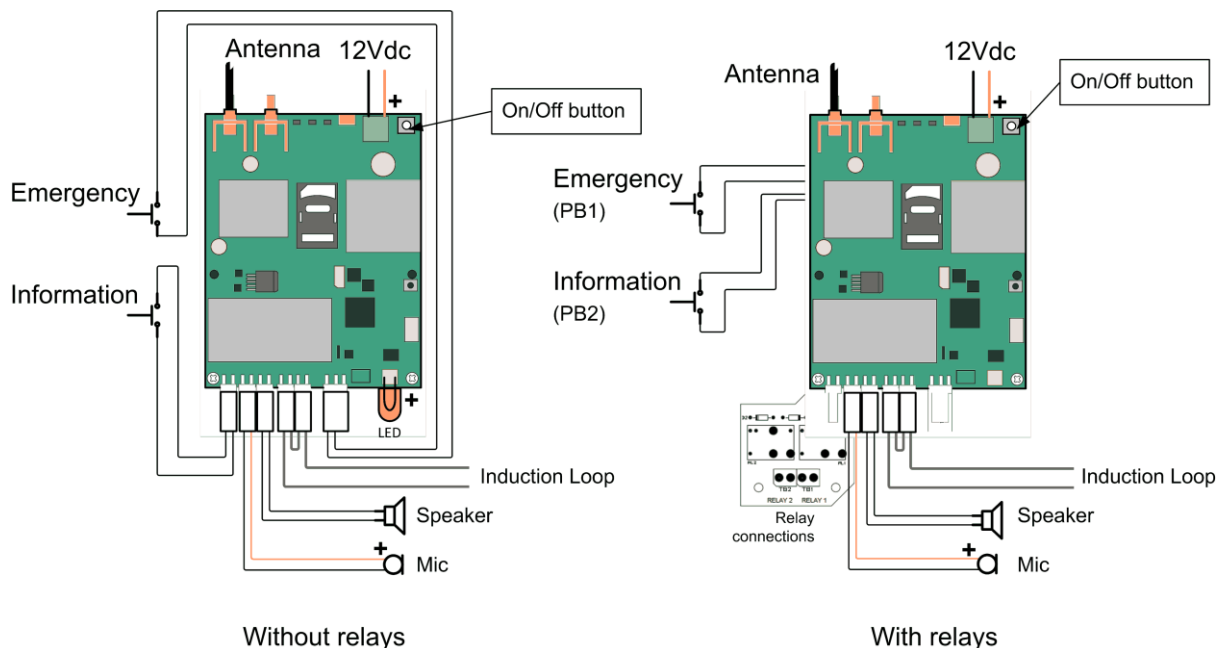
Note that connections differ slightly dependant on whether relays are fitted or not.

5.7. Installing the SIM

IMPORTANT: before installing or changing a SIM card, always make sure that the telephone is powered down by ensuring that the DC power source cable is disconnected from the main PCB.

Carefully insert a SIM card into the holder:
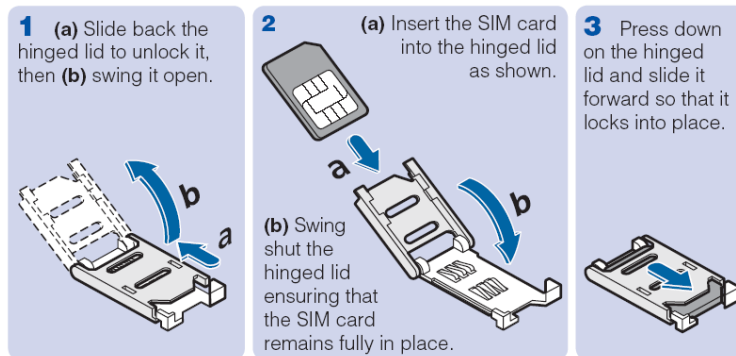
5.8. LED indications and operating states

Located at the base of the main circuit board are three red LED indicators that provide useful status information.

Note that, to save power, the LEDs will all go off after 5 minutes of inactivity. Pressing the ON/OFF button briefly will reactivate the LEDs for a further 5 minutes for diagnostic purposes.
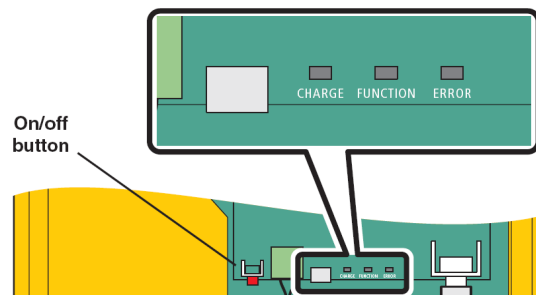
The indicator functions are as follows:

- CHARGE - On if internal batteries are fitted (and charging), flashing if batteries are not connected.

- FUNCTION - Indicates the current operation. See the table below.

- ERROR - Indicates problems with operation. See the table below.

FUNCTION	ERROR	Meaning
Off	Off	Phone switched OFF. (or power save mode – press ON/OFF button briefly to be certain)
Short/fast	Off	Initialising/searching.
Short/slow	Off	Standby – ready for use.

FUNCTION	ERROR	Meaning
Long/fast	Off	Incoming call.
On	Off	Call in progress.
Off	Long/Fast	SIM card is locked, PIN code required. *
Long/fast	Long/Fast	SIM card is blocked, PUK code required. *
Short/slow	Short/slow	Weak signal.
Off	Short/slow	Insufficient power to operate, but charging.
Off	On	Fault, such as no SIM.
On	On	Momentary indication to acknowledge a press of the On/Off button

* It is not possible to rectify these faults from the telephone itself. Please ensure that the SIM is not locked (or blocked) prior to use.

5.9. Switch on and test

1. Once the SIM card has been fitted and DC power connected, press and hold the On/Off button located next to the power connector. The FUNCTION and ERROR indicators will both light and will then go off, when this occurs release the button. The FUNCTION indicator will flash rapidly to indicate that the phone is initialising and is searching for a valid mobile network.

2. After several seconds, the FUNCTION indicator should flash less frequently to indicate that a call may be made or received. If there is an error, for example no SIM installed, the ERROR indicator will light. See the list above for a full list of indicator conditions.

3. Using a mobile phone, send an SMS status command to the phone requesting the current status. Use the following format for your outgoing message:

    1234STAT

    (where 1234 is the default PIN code.) The reply should be similar to the following:

    Signal: -93dBm
    Vin:11.97V
    Bat:0V
    Temp
    Now: 23
    Min: 19
    Max: 30
    Humidity: 40%
    Battery: Fault
    Audio test: Pass
    Ver: 1.0
    IMEI: 359998042484305

4. If all is well with the status response, record the information for reference, to compare with later status reports.

5. Fit the faceplate:

   a. Carefully place the front section over the rear section, taking care not to trap any cables.

   b. Insert the 4 fixing screws and tighten.

   c. Check that a good weatherproof seal exists between the front and rear sections.

6. Make a call to the phone to ensure the sounder operates. Then make an outgoing call from the phone to an external number. This will only be possible when an auto-dial number has been programmed, see section 6.

For many installations, the steps outlined so far will result in a fully functioning phone.

However, the GSM Help Point is also highly customisable for many situations. Detailed configuration is made possible by either sending specially formatted SMS messages from another phone or by connecting a computer via the USB port. For details, please see section 6.

5.10.   Switching the phone off (power down)

To power the phone down, press and hold the pushbutton until the FUNCTION and ERROR indicators extinguish. The phone will now be in the Off (Charge Only) state. If the phone is to be shipped or stored the battery (if fitted) should then also be disconnected.

5.11.   Operating states of the phone

GSM Help Point has the following operating states:

- On - The phone is fully powered and ready to make and receive calls.

- Charge only - This is the state that the phone will enter when external DC power is applied. If power is removed, the phone will enter the "Off" state.

- Off - This is the state in which the phone is shipped from the factory to prevent battery drain in transit and storage (if batteries are fitted).

The SIM card should only be fitted or removed if the telephone is in the OFF state.

If the phone is "Off" and has sufficient battery power or is in "Charge only" mode, pressing the on/off pushbutton will put the phone into the "On" state.

If the ERROR indicator is flashing Short/Slow, leave the external DC power connected to fully charge the battery, or at least until the ERROR indicator stops flashing.

Note: if batteries are fitted it may take in excess of 5 hours to fully charge it depending on the current charge state of the battery.

If the phone is "On" and the battery charge becomes exhausted, the phone will turn off. Once the external DC supply is restored, the phone will automatically enter the "On" state and also start charging the battery.

6. Programming, configuration and diagnostics

The GSM Help Point has numerous features that can be configured using commands sent to it either via SMS messages from another phone or by a computer connected to the internal USB port. Most commands entered via the USB port are also accepted

while the phone is in charge only mode, i.e. switched off but still powered by an external DC power source.

Note: PHP400 Help Points are usually permanently powered from an external power source, and are therefore not normally fitted with internal batteries. Elements of the diagnostic software may therefore indicate "battery fault" or similar messages. These messages do not indicate actual faults if batteries are not fitted.

6.1. Sending Commands by SMS

The first four characters of an SMS command must be the phone PIN code (the default is 1234). This is then followed by the command(s).

NOTE the PIN code referred to in this manual is a security code specifically for programming the GAI-Tronics GSM telephone via SMS commands – it is not a lock code and is not related to the SIM card. It is not required for making or receiving calls.

Example 1: 1234STAT will return status information about the phone.

Example 2: 1234CFG5=1 configures the phone to inhibit incoming calls.

Notes for SMS commands

- You can enter a space character after the PIN for clarity; this will be ignored by the phone.

- All commands that do not implicitly require a response are automatically replied to with a summary of the phone status. This automatic reply may be suppressed by placing a full-stop character after the pin number. For example, 1234.cfg5=1 will change the configuration without replying. An error in the command will always result in a reply.

- Commands may be concatenated by entering a semicolon delimiter, for example 1234CFG5=1;STAT

- Commands are not case sensitive.

- To read multiple parameters, a suffix wild card may be used, for example: CFG*?

6.2. Sending Commands via USB port

Note that the preferred method for sending commands is normally SMS. Use of USB commands requires a degree of technical skill, a familiarity with serial communications protocols, including the use of a suitable communication program (for example Hyperterminal (not supplied)). A micro USB connector lead (not supplied) will be required to connect the phone to a suitable USB port.

IMPORTANT: Before connecting the GSM Help Point to a computer via USB, ensure the Silicon Labs USB device driver software has been downloaded from

www.silabs.com/products/mcu/pages/usbtouartbridgevcpdrivers.aspx

Ensure that the correct version for your operating system is installed.

Configure a suitable communication program to connect to the virtual COM port assigned to the USB driver. Connect at 115200bps 8/N/1.

The first three characters of a USB programming command must be AT! This is then followed by the command(s).

Example 1: AT!STAT<cr> where <cr> is a carriage return/enter

Example 2: AT!CFG5=1<cr> sets the phone to inhibit incoming calls.

Notes for USB commands

- The AT! Commands are specific to this product range and are not related to the Hayes™ AT command set

- Commands may be concatenated by entering a semicolon delimiter, for example AT!CFG5=1;STAT<cr>

6.3. List of Commands (for use with either SMS or USB)

STATn Returns the status of the phone in one of three different formats specified by n. If n is omitted it is interpreted as zero. The resolution of the battery display is 10 millivolts, and the power supply resolution is 50 millivolts.

STAT (or STAT0) for general status, useful during installation:

Signal: -89dBm (or N/A)
Vin: 12.25V
Bat: 0V
Temperature – (in degrees Celsius)
Now: 20
Min: 18
Max: 26
Humidity: 51%
No fault/Fault
Ver: 1.0
IMEI: 357749031743900

Note that normally the signal should be between -90 and -50, the supply should be between 9 and 18V, and the Battery should be between 4.00 and 4.40V.

The list above is the information returned via SMS. If requested via USB, a STAT0 command will also return for example:

State: **n** (phone state, see table 3 below)
DCDC: 3.88V
Bat current: -100mA

If a fault is shown, send stat1 for more details.

State (**s**) value returned from a STAT0 command:

Value	Meaning
1	Outside operating temperature limits.
2	Charge only.
3	Insufficient power to operate in solar charge mode.
4	Error condition, communication failure with wireless module.
5	Phone is initialising.
6	Checking SIM present.
7	No SIM installed.
8	Checking SIM lock.
9	Waiting for SIM PIN.
10	Waiting for SIM PUK.
11	Post SIM unlock initialisation phase.
12	Settle time for reading SMS memory.
13	Flushing SMS memory.
14	Ready for call (**always in this state when replying via SMS**)

STAT1 for information about faults:

> Hook: On/Off
> Power break: No/Yes
> Loop: Pass/Fail
> Acoustic loop: Pass/Fail
> Keyboard: Pass/x stuck on
> Battery: OK/Fault

Explanation of stat1 fault results:

Hook: Reserved for handset phones (not applicable to Help Points). Will always report "On" for a Help Point.

Power break: No = normal, Yes = power has been interrupted

Loop: Pass = normal, Fail = the handset integrity loop is broken, meaning that the handset has been detached or vandalised

Acoustic loop: Pass = normal, Fail = either the microphone or speaker is not functioning.

Keyboard: Pass = normal, x stuck on = a pushbutton is permanently stuck in, preventing anyone from using the pushbuttons.

Battery: OK = normal, Fault = the battery is not holding charge properly, even if it has the correct voltage.

STAT2 All information in a format intended for a computer:

 index:val,index:val... to index 14

The index values are as follows:

0= Signal in –dBm (eg -89).

1= Supply voltage in volts (eg 12.3)

2 = Battery voltage (eg 4.1)

3 = Temperature now (in Celsius) (eg 22)

4 = Minimum temperature recorded (eg -6)

5 = Maximum temperature recorded (eg 37)

6 = Model/HW ver./Firmware ver. (eg 1/2/1.03)

7 = Hook switch state (0 is on-hook, 1 is off-hook)

8 = Power break (0 for none, otherwise 1. Cleared on read)

9 = Handset hardware loop state (0 for OK, 1 for fault)

10 = Acoustic loop test (0 for pass, 1 for fail, 2 for test not applicable)

11 = Keyboard (0 is OK, 1:n for fail where n is the key number)

12 = Call state (0 for idle, 1 for call in progress,)

13 = Battery state (0 for OK, 1 for fault)

14 = IMEI (eg 357749031743900)

STAT3 Network and power information:

Operator: "operator name"

Network: "network name"

Mode: GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA/HSPA

Signal: -89dBm

Avg battery current

When Idle: 10mA

During Call: 200mA

STAT4 Environmental information: Temperatures

Transmitter

Now: 25

Min: 23

Max: 43

Main board

Now: 25

Min: 23

Max: 43

Humidity

Now: 53%

Min: 42%

Max: 59%

(the values may be cleared using CLRFAULT or INIT commands)

STAT5 Fault status in a format intended for a computer/monitoring service:
Unlike the other status commands, this format does not send "Stat5:" preceding
the information. Otherwise the information is the same as type 1, but each item is
sent on one line with each field separated by a comma. This is intended for a
monitoring centre

Table 3 state value returned in STAT0 command via USB.

Value	*Meaning*
1	Too hot to make calls.
2	Too cold to make calls
3	Charge only
4	Insufficient power to operate.
5	Error condition, communication failure with wireless module.
6	Phone is initialising.
7	Checking SIM present.
8	No SIM installed (emergency calls possible).
9	Checking SIM lock
10	Waiting for SIM PIN.

11 Waiting for SIM PUK.

12 Post SIM unlock initialisation phase.

13 Settle time for reading SMS memory.

14 Flushing SMS memory.

15 Ready for call (always in this state when replying via SMS).

CLRTEMP   Clears the maximum and minimum temperature memories (as a result, they will initially show the current actual temperature).

CFGn=x Read and write configuration setting:

CFG0 My number sending. Determines whether the phone number is declared to the destination being called:

0 = Use the setting defined by the network (default).

1 = Number is always sent (if supported by the network).

2 = Number is always withheld.

CFG1 Dial delay for models with a full keypad, This determines the delay after dialling the last digit until the call is made:

1 to 9 seconds (default is 3).

CFG2 Ring cadence. Different cadences useful to differentiate between phones in close proximity:

0= Silent

1= UK style (default).

2 = UK alternate.

3 = US

CFG3 Tone region. The frequency and cadence used for progress tones:

0 =UK (default).

1 = Ireland.

2 = Holland.

3 = USA

.... others on request ....

CFG5 Call restrictions: Restrict use of the phone.

0 =No restriction (default).

1 = Inhibit incoming calls.

2 = Inhibit outgoing calls

3 = Inhibit incoming and outgoing calls.

4 = Restrict dialled numbers to match Memories 0-9 or 112/999/911

CFG6 Call Time restriction. Limit the duration of an outbound call. When only 30 seconds remain, a beep or announcement is heard in the handset to warn the caller.

0-120 minutes (default 0, no restriction).

CFG8 Call progress announcement mode. Instead of tones, voice announcements may be programmed to play according to the particular condition of the phone. For example "We are unable to connect your call, please try again later". Please note, these announcements must be specified at order time and factory programmed by GAI-Tronics. Please contact us for details. If programmed, this setting acts as follows:

0 = No announcement, only progress tones (default).

1 = Normal dial tone, then progress announcements.

2 = Prompt replaces dial tone then progress announcements.

CFG9 Automatic sending of SMS status. The status of the phone may be sent automatically when an error event occurs and also regularly at specified time. The time is set with the "STIME" command and the destination number for the SMS is set with "PNUM11".

0 = No status or error report (default).

1 = Reports STAT2 when event occurs.

2 = Reports STAT2 when event occurs and also status with or without errors at time or period specified.

3 = Reports STAT1 when event occurs.

4 = Reports STAT1 when event occurs and also status with or without errors at time or period specified.

5 = Reports STAT5 when event occurs.

6 = Reports STAT5 when event occurs and also status with or without errors at time or period specified.

The error conditions which initiate automatic sending of status may be selected with CFG22.

Note, this automated status message is a "STAT2" message intended to be read by a computer. It is a single string of text consisting of 15 codes with values, separated by commas, (0: <value>, 1:<value>, 2: <value>, …. eg:

STAT2: 0:-75, 1:11.95, 2:4.28, 3:22, 4:-6, 5:37, 6:1/2/1.3, 7:0, 8:0, 9:0, 10:0, 11:0, 12:0, 13:0, 14: 357749031743900

Where the codes are:

0 = Signal in dBm (eg -75)

1 = Supply voltage in volts (eg 11.95)

2 = Battery voltage (eg 4.28)

3 = Temperature now (in Celsius) (eg 22)

4 = Minimum temperature recorded (eg -6)

5= Maximum temperature recorded (eg 37)

6 = Model/HW ver./Firmware ver. (eg 1/2/1.3)

7 = Hook switch state (0 is on-hook, 1 is off-hook)

8 = Power break (0 for none, otherwise 1. Cleared on read)

9 = Handset hardware loop state (0 for OK, 1 for fault)

10 = Acoustic loop test (0 for pass, 1 for fail, 2 for test not applicable)

11 = Keyboard (0 is OK, 1:n for fail where n is the key number)

12 = Call state (0 for idle, 1 for call in progress,)

13 = Battery state (0 for OK, 1 for fault)

14 = IMEI (eg 357749031743900)

Note that faults are shown in the codes between 7 and 13.

For a more human-readable summary of faults, use STAT1 if required.

The error condition(s) which initiate(s) automatic sending of status are selected with CFG22

CFG10 SMS command enable (via USB only): If the phone is to be used with a PC connected via USB with software that handles SMS, disable the SMS commands.

> 0 = Disabled
>
> 1 = Enabled(Default)

CFG12 Maximum dialled number length. The maximum number of digits accepted may be changed (default 20).

CFG15 Activate relay for ring indication.

One of the relays may be used to activate an external sounder. The relays switch at selected ring cadence.

> 0 = No action (default).
>
> 1 = Use relay 1 with ring cadence.
>
> 2 = Use relay 1 continuously.
>
> 3 = Use relay 2 with ring cadence.
>
> 4 = Use relay 2 continuously.

CFG16 Power supply type. When selecting 1 for external battery, low voltage power alert provides notice for an external 12V battery requiring replacement/charging.

> 0 = Normal and solar DC supply (default).
>
> 1 = External battery

CFG17 Automatic send of call log at threshold: Calls are automatically logged to a total capacity of 240 entries on a first in first out basis. If the log is not automatically sent, or read using the "CLOG" command, the oldest entries will be overwritten. The call log data is mainly intended to be processed by computer software. See section on call log format.

> 0 = Automatic sending of call log disabled (default).
>
> 1 - 240 = number entries at which point call log sending is triggered

This function may also be enabled when the automatic sending is enabled, but normally only one method would be used

CFG18 Automatic timed sending of call log: When enabled, the call log will be sent at the time specified with **LTIME** default is midnight).

> 0 = Disabled (default).

1 = Enabled

CFG19 Speaker level. The output level may be adjusted:

    0 = -6dB

    1 = -3dB.

    2 = Normal level (default).

    3 = +3dB

    4 = +6dB

CFG20 Microphone gain. The microphone gain may be adjusted in 11 steps of 1.5dB.

    0 = Normal level (default).

    1 = +3dB

    2 = +6dB

    3 = +7.5dB

CFG21 Voice prompt level. The output level may be adjusted in 13 steps of 1dB.

    0 = -6dB.

    1 = -3dB.

    2 = Normal level (default)..

    3 = +3dB.

    4 = +6dB.

CFG22 Error conditions to report.

When reporting on error condition is enabled with CFG9=1, events that trigger a report may be controlled by setting bits with this command.

Fault	Decimal	Default setting	Bit
Handset loop failure	1	0	0
Stuck key	2	1	1
Battery failure	4	0	2
Low battery	8	0	3
Power break	32	0	5
On/Off/Restart	64	1	6

The default is therefore 66

Notes:

- Handset loop failure is not applicable to Help Points, but the fault bit is still present for compatibility.

- A stuck key is determined by a key being held down for in excess of one minute.

- Battery failure is determined by an abnormal rate of change of the battery voltage when subjected to charge current.

- Low battery is when there is less than 20% charge remaining.

- Power break is when power is lost (when previously externally powered).

- On/Off/Restart will report if:
  - The unit is turned on.
  - The unit is turned off by the user.
  - The unit has turned off due to battery exhaustion.
  - The unit had been reset.
  - The unit has restarted.
- Note that error states will latch until they have been reported – in other words if an error self-clears it will still appear in the next report. This is to ensure that intermittent faults are reported. "Reported" in this case means reported by any of the available methods, i.e. any of the available options of CFG9, or on a timed basis controlled by STIME, or by a manually issued STATn command. Error states can also be cleared with CLRFAULT or INIT commands.

CFG23 Call log enable:

This enables the storing of a call log into a non -volatile 240 entry FIFO memory.

  0 = Disable call logging (default).

  1 = Enable call logging.

CFG24 Tones level: The output level may be adjusted in 13 steps of 1dB.

  0 = -6dB

  1 = -4dB

  2 = -2dB

  3 = Normal level (default).

  4 = +2dB

  5 = +4dB

  6 = +5dB

  7 = +6dB

CFG25 Wireless mode:

The wireless mode can be controlled. It is   useful to fix to GSM in areas of weak WCMDA. The phone needs to be turned off then on again or the INIT command issued to invoke the mode of operation.

  0 = Automatic (default)

  1 = GSM (2G) only

  2 = WCDMA / UMTS (3G) only

CFG26 Automatically answer call:

Incoming calls to the help point may be answered automatically.

  0 = Do not automatically answer call (default).

  1 = Automatically answer call.

CFG27 Number of dial attempts: Number of attempts to connect an outgoing call If roll over numbers are provided, each roll over number is attempted in sequence before another sequence is repeated for the number of dial attempts.

1-4 attempts (default 1 attempt).

CFG28 Call connect timeout duration. Duration in seconds when outgoing call is not answered before the call is abandoned or dialling a roll over number is attempted. This applies to help point or auto dial modes

5 to 99 seconds (default 20 seconds).

CFG29 Ring volume: The ring volume from the speaker may be adjusted:

0 = -6dB

1 = -4dB

2 = -2dB

3 = Normal level (default).

4 = +2dB

5 = +4dB

6 = +6dB

CFG30 Power break period report threshold:

Minimum power break period before reporting power break.

0-1000 minutes (default 0 minutes).

If this value is not zero, the duration of the power outage is provided for STAT1 & STAT5 when power is restored.

CFG31 Number of days between sending automatic status:

1 to 28 days (default 1/daily).

CGF32 Call state activation of relay 1:

0 = No action (default).

1 = When an emergency call is dialled and during the call

2 = When auto-answered calls are connected.

3 = During any active call.

4 = When an incoming call is connected.

5 = When an outgoing call is connected.

6 = When an outgoing call is calling but not yet connected.

CFG33 Call state activation of relay 2:

0 = No action (default).

1 = When an emergency call is dialled and during the call

2 = When auto-answered calls are connected.

3 = During any active call.

4 = When an incoming call is connected.

5 = When an outgoing call is connected.

6 = When an outgoing call is calling but not yet connected.

CLOCK Only via SMS, sets the clock to the time recorded in the SMS delivery from the mobile network. For setting via USB, see ETSI" +CCLK" command.

CLOGn Returns n number of call log entries (oldest first) in multiple SMS as required. Once an SMS is accepted by the network, log entries in that SMS are deleted. To extract the entire log, n should be 250. CLOG? Returns the number of available log entries.

CLRLOGn Clears the n number of oldest log entries without reading them. If n is >= the number of currently stored entries, all entries will be deleted

CLRFAULT Clears any fault condition without restarting the phone.

CLRCALL Ends any call in progress.

CLRTEMP Sets the maximum and minimum temperature & humidity memory to the current temperature & humidity.

DRYSENS Invokes a "dry cycle" where the humidity sensor is heated until the humidity is less than 3% or for a maximum period of 5 minutes. The max/min pcb temperature and humidity levels are reset 5 minutes after completion.

HVER Returns the hardware version number.

INIT Restarts the phone (cold boot) and clears any hardware error states.

LTIME=n Time to send regular SMS call log 24h format. Default 0000: HHMM. For example: LTIME=2330.

OUTn ON/OFF Sets the output of relay 1 or 2 on or off. Same function as OUTPUT but different syntax for Gai-Tronics application. Responds with IMEI"OUT"n ON/OFF.

OUTPUTn=i Sets the output of relay 1 or 2 to 0(off) or 1(on). If a single bistable relay is installed, selecting relay one or two will make no difference

PHPIN=nnnn Read (only via USB) and write phone PIN, fixed length of 4 digits (default 1234). For example: PHPIN=4321.

PNUMn **Read and write phone numbers.**

There are 12 memory locations (PNUM0-PNUM11) which are used to store phone numbers.

For example: PNUM0=0123456789"Ace Taxis"

(The name field may be omitted.)

An existing number may be cleared, by entering a null value for example:

PNUM0=,11= (will clear numbers & names from memories 0 and 11).

3 locations (PNUM0 to PNUM 2) are reserved for memory keys/buttons. 6 locations (PNUM3 to PNUM8) are used for rollover numbers (see below). Locations PNUM9 and PNUM10 are not used in Help Points.

The following characters are allowed 0-9, *, #, +, A, B, C, D.

Phone numbers must start with 0-9 or + except for *31* and #31#.

Special dial codes:

- ***31***<phonenumber> - Forces sending of caller ID.

- **#31***<phonenumber> - Suppresses sending of caller ID.

- ***1** The character sequence "*1" can be used at the end of the memory number to add a one second pause after the call is connected. Any digits after the *1 are then sent as DTMF tones. Additional pauses may be added by including multiple *1s.

   For example, +4412345678901*1*123 will dial the UK (+44) to 12345678901, then pause for 2 seconds, then send DTMF tones 23.

- The ***** character maybe sent using ******

Memory allocations:

PNUM11 - Number to send automatic SMS.

PNUM0 – Help/Emergency/M1 primary number.

PNUM1 - Information/M2 primary number.

PNUM2 - M3 primary number.

PNUM3 - Help/EmergencyM1 1st rollover number.

PNUM4 - Information/M2 1st rollover number.

PNUM5 - M3 1st rollover number.

PNUM6 - Help/Emergency/M1 2nd rollover number.

PNUM7 - Information/M2 2nd rollover number.

PNUM8 - M3 2nd rollover number.

Special behaviour

Rollover

Each memory button can have up to 2 rollover numbers as shown above. If the call to the primary number fails (eg the call cannot be connected or is busy) or if it is not answered within the time defined by CFG28, the phone will then try to place the call to the 1st rollover number for that button. Again if that call fails it will try the 2nd rollover number. If all the rollover attempts fail the phone will retry the whole sequence again starting with the primary number – the number of retries is set by CFG27.

Emergency override

For two button Help Points with buttons designated "Emergency" and "Information", pressing the Emergency button when the phone is in an Information call will cause it to drop the current call and make a call to the designated Emergency (M1) number.

BPOWER Initiates a test of power consumption from the battery. If the battery is over 80% charged, the internal supply voltage is reduced to force the phone to draw power from from battery for 30 minutes. The average current taken during this time is recorded and may be read with STAT4.

REPORT=n Shorthand way of combining PNUM11=n and CFG9=3,where n is the phone number. For example REPORT=07123456789"Bobs mobile". The name field may be omitted. The STAT1 will be sent if an error condition occurs.

Entering REPORT without a number turns off the automatic error reporting and is equivalent to CFG9=0. For example, REPORT=

RESTORE=n Restore settings of the phone

n = 0 Restore all settings but retain phone numbers and call log.

n = 1 Also clear phone number memories

n = 2 Restore settings, phone number memories & call log (restore all)

RLYDUR=n   Duration before relay 1 is automatically turned off.

Default 0, maximum 65535 milliseconds. For example: RLYDUR=200**.** Note: The mechanical delay in relay activation is about 10ms, but the minimum coil activation period is restricted to 20ms to provide a wide margin.

STIME =n Time to send daily or interval status SMS, set in 24h format Default 0000:HHMM. For example: STIME=2315 will send status once per day at 23:15. STIME=2415 will send status every 15 minutes Maximum time set to 3600 (once per 12 hours).

VER Returns the firmware version number.

7. Troubleshooting

Use the following section to diagnose and remedy various common fault conditions.

7.1. Phone not responding to 1234stat0 request via SMS:

- If the unit is a full keypad version and the ON/OFF button is pressed, is there a dial tone (indicating the unit is ready to make a call) or is there pulsing dial tone (indicating no network connectivity)?

- With the faceplate removed check if any of the internal indicator lights are illuminated, if not, **briefly** press the On/Off button (see section 5.6) - do indicator lights come on? If yes, see Indicator functions under section 5.8 and the various FUNCTION and ERROR Light scenarios below;

- Check the unit is switched on by pressing the On/Off button, see section 5.9.

- If still no Indicator Lights on, check the unit is connected to an external DC power source. If necessary check the input voltage is in the range 9V to 18V.

7.2. ERROR light is permanently ON

- Check the SIM card has been installed and has been installed correctly, see section 5.7.

7.3. ERROR light flashing Long/Fast

- This indicates the SIM card is locked and a PIN code is required to unlock it. Replace the SIM with one that is not locked.

7.4. FUNCTION and ERROR lights flashing Long/Fast

- This indicates the SIM card is blocked and a PUK code is required from the service provider to unblock. Replace the SIM with one that is not blocked.

7.5. FUNCTION and ERROR lights flashing Short/Slow

- This indicates a weak GSM signal.

- If the unit has responded to the 1234stat0 SMS command, then compare the results of the reported signal with the table below.

- If the unit is not responding to the 1234stat0 SMS command connect a laptop or similar computer to the internal USB port. Please see the preconditions for using the USB port in section 6.2.

- Signal level – the following is a guide to the received signal level along with suggestion action to take.

Signal	Comment	Action Required
-104 to -100dBm	Very weak signal, connection not reliable	Essential to re-site the external antenna.
-99 to -90dBm	Poor signal, connection should be reliable but speech may be subject to interruption due to signal fading effects	Performance should be improved by re-siting the external antenna
-89 to -70dBm	Good signal condition	None specifically, re-siting antenna may give further improvement
-60 to -50dBm	Very good signal condition	None

8. Induction Loop Amplifier

The induction loop amplifier is factory set and should need no adjustment under normal circumstances. The amplifier is an Ampetronic HLS-DM2 unit, and its operating manual can be found at the following web address:

https://www.ampetronic.co/wp-content/uploads/2018/03/UP17902-3-HLS-DM2-Handbook-hi.pdf

9. Cleaning

Recommended cleaning methods are outlined below:

9.1. Normal Cleaning

For normal cleaning we recommend "Virosol", manufactured by Clover products. Carefully follow manufacturer's instructions for storage, handling and use.

9.2. Stainless Steel Push-buttons

Stainless steel push-buttons, where fitted, should be cleaned regularly especially if the Help Point is in a marine environment. The stainless steel may show signs of discolouration or rust – this will not damage the buttons or impair their performance but may look unsightly and can be cleaned off using normal cleaning agents as above. In extreme cases a mild abrasive may be necessary.

9.3. Graffiti

For graffiti, paint and ink we recommend the use of 3M GR2 graffiti stain remover. CAUTION: This is a very aggressive chemical. Pay close attention to the manufacturer's recommendations for storage, handling and use.

9.4. Anti-Graffiti Coating

Where polyurethane anti-graffiti coating or paint has been specified (as an option), it can be cleaned using Methylated Spirits or Methyl Isobutyl Ketone. Other cleaners can be used but should be tested on a small area first.

10. Aftercare

The purchase of your GAI-Tronics product does not end our commitment to you.

In addition to our warranty obligations, GAI-Tronics are able to offer various levels of maintenance packages, installation and commissioning packages and technical support, from ad-hoc repairs to full maintenance contracts.

By choosing GAI-Tronics as your aftercare provider you are ensured of manufacturer expertise and ISO 9001-certified quality control standards throughout the life of the product.

We can also supply a full range of accessories including mounting posts, beacons and high-volume sounders.

Contact GAI-Tronics for details. https://www.hubbell.com/gai-tronics/en/

11. Repairs and Spare Parts.

It is recommended that Help Points are returned to GAI-Tronics for service or repair, to ensure that any repairs are fully tested. In the event of work having to be carried out on site, the following spare parts are available:

| Part No	Description	Notes
234-02-xxxx-xxx	Complete Help Point	The part number will be unique to the particular project and will be printed on a label inside the case.
975-00-0099-000	Mains to 12V Power Supply	DIN rail mounted
610-99-0691-001	Induction loop amplifier	Ampetronics HLS-DM2
500-02-0723-001	GSM PCB	Supplied without SIM
100-02-0667-001	Replacement aerial kit	Includes sealing kit.

12. Technical Specifications

Operational Requirements	
GSM Systems.	• 2G GSM Quad-band GSM phase 2/2+ 850/900/1800/1900 MHz • 3G WCDMA Penta band 800/850/900/1900/2100 MHz
Signal sensitivity	-90dBm for reliable operation
Not suitable for connection to:	• 4G / LTE Networks without 3G or 2G layer • GSM-R Networks
Power supply	• Input requirement 88-264V, 47-63Hz, 0.5A typ. Inrush current (cold start at 230V) 45A typ. • Integral isolated mains to 12Vdc power supply provided as standard. • Internal fuse 1A (T) HRC. 20 x 5mm.
Product features	
Induction loop (if fitted)	Suitable for inductive coupling to Hearing Aids having a `T' switch position. Supplementary power required.
Ringer loudness	70dBA @ 1m
Monitored faults and sensors	• Power break • Acoustic path test • Stuck button • Battery condition • Supply voltage • Ambient temperature
Monitoring method	• Remote interrogation by SMS

Environmental limits	
Temperature:	Operating: -20ºC to +60°C (-4°F to 140°F) Storing: -40ºC to +70ºC (-40°F to 158°F)
Relative Humidity	Up to 95% (non-condensing)
Ingress Protection	IP65 to EN60529:1992 – Degrees of protection provided by enclosures.
Physical characteristics	
Casing material	Mild steel, zinc coated and polyester powder coated
Weight	6.5kg (11lbs).
Dimensions	405mm diameter. 88mm depth. Buttons may protrude a further 10mm from front face.

Compliance to standards	
European Directive	2014/53/EU Radio Equipment 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
EMC	EN55032 – Electromagnetic compatibility of multimedia equipment. Emission requirements.
	EN55024 – Information technology equipment. Immunity characteristics.
	EN 301489-1 - Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services. Part 1: Common technical requirements
	EN 301489-7 -ElectroMagnetic Compatibility and Radio spectrum Matters (ERM); EMC standard for radio equipment and services. Part 7: Specific conditions for mobile and portable radio and ancillary equipment of digital cellular radio telecommunications systems (GSM and DCS)
RF Spectrum Efficiency	3GPP TS 51.010-1 Mobile Station (MS) conformance specification;
	EN 301 511 Global System for Mobile communications (GSM); Harmonized EN for mobile stations in the GSM 900 and GSM 1800 bands
Safety	EN62368-1 – Audio/video, information and communication technology equipment. Safety requirements.

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 of Electrical and Electronic Equipment (WEEE) Directive 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.

13. CE Declaration

A copy of the current CE Declaration of Conformity is available from our website.
https://www.hubbell.com/gai-tronics/en/product-certificates-uk

FRONT VIEW

Information Point

EMERGENCY
www.gai-tronics.co.uk

Ø402

- M20 TOP ENTRY GLAND
FOR CABLE ENTRY AND
REMOTE ARIAL CABLE
EXIT OPTION.

- M20 BOTTOM ENTRY GLANDS
FOR CABLE ENTRY.

SIDE VIEW

82
90.0

**INTERNAL VIEW
REAR CASE (COVER REMOVED)**

2 BUTTON OPTION
1 BUTTON OPTION

162
105
134
270.00
145.00
25 25
25 25

- M20 REAR ENTRY GLANDS
FOR CABLE ENTRY.

42.5
Ø393.0 (OUTSIDE)
Ø373 (OUTSIDE)
60
25 25
60
50,5
75.0 OUTSIDE

50,5

**POST MOUNTING
OPTION**

Information Point

EMERGENCY
www.gai-tronics.co.uk

1066

POST 501-20-0697-002

NOTES:-
1 - ROUND HELP POINT:-
- VoIP HANDS FREE TELEPHONE 1 & 2 BUTTON OPTIONS
- GSM TELEPHONE HANDS FREE 1 & 2 BUTTON OPTIONS
- EUROPHONE HANDSFREE TELEPHONE 1 & 2 BUTTON OPTIONS

2 - THE ROUND HELP POINT HOLE FIXING PATTERN IS THE SAME AS
THE TITAN , COMMANDER, VR AND DDA RANGE OF TELEPHONES.

GAI-TRONICS
A division of Hubbell Limited

Hubbell Ltd.
Stretton Business Park,
Brunel Drive,
Burton-upon-Trent,
DE13 0BZ, England.
Tel: +44 (0)1283 500 500
Fax: +44 (0)1283 500 400

CERT AUTHORITY DETAILS:

CAN CODE:
STRIKE OUT
INAPPROPRIATE CODES

MANUFACTURING CODE:
0=FACT   4=SASY
1=RMAT   5=RNG
2=BOAT   6=PHM
3=MANP

TOLERANCES (U.O.S.):
TWO DEC. PLACES: ± 0.2
ONE DEC. PLACE: ± 0.5
NO DEC. PLACES: ± 1
HOLE TOLERANCES: ± 0.1
ANGLE TOLERANCES:± 0.1

DO NOT
SCALE
THIS PRINT

PAPER:
A3

SHELF LIFE:
N/A

GOODS-IN INSP.
YES

SINGLE SOURCE APPROVAL
- - - - - -

SCALE:
NTS

CAD Ref.:
11001A2

PROJ. REF.:
33848

ISSUE	DATE		DRAWN	CHECK	APPROVED
002	24-01-11	CN35732-002	HD	CM	RR
001	19-11-09	CN33848-021	HD	SS	TF
		CHANGE DETAILS	DRAWN	CHECK	APPROVED

TITLE:
ROUND HELP POINT
INSTALLATION INFORMATION
FOR VoIP & GSM VERSIONS

VOCAB/DRG. No:
112-11-0081-001

Sheet 1 of 1