



clearsonics

CLEARSONICS COMMUNICATIONS CATALOGUE



AWARDS



WayPhones are a series of vandal resistant, all weather digital telephones designed to operate hands-free in the harshest conditions. Using an innovative mechanical design the Pedestal style WayPhone is ideal for applications where high resistance to the elements are required. All fixings are internal and protected by dual high security locks. Designed for remote applications where reliability is essential, it features extensive diagnostics and configurable options to simplify maintenance and minimise site visits. All WayPhones, will provide clear, handsfree voice communications in high acoustic noise environments. WayPhones utilise digital voice enhancement and advanced Digital Signal Processing (DSP) techniques to provide clear intelligible communications where ambient noise levels reach 105dBA. This technology is trademarked VCE (Voice Clarity Enhancement). Typical Pedestal WayPhone applications are for outdoor emergency or safety communications where high noise levels, harsh environmental conditions or vandalism exist such as: roads, rail and bus interchanges, ports, car parks, industrial and mining plants or remote locations. A cellular (mobile) and solar version Pedestal WayPhone provides cable free alternative to traditional cabled systems, minimising installation costs.

CONTENTS

DEFINITIONS	3
CLEARSONICS HANDS FREE COMMUNICATION	4
WAYPHONE APPLICATIONS	7
WAYPHONE PLACEMENT	9
PEDESTAL WAYPHONE	11
WALLMOUNT WAYPHONE	13
WAYPHONE CUSTOMISED UNIVERSAL MOUNT	15
PANEL WAYPHONE	17
CLEARSONICS INTERCOM	19
VCE MODULE	21
WAYPHONE TESTER	23
WAYPHONE MANAGER	25
MAPPING	27
VOIP MODULE	29
CODING	30
SPARE PARTS	39
PROJECTS	40

DEFINITIONS

3G / (short for third generation) is the third generation of wireless mobile telecommunications technology.

GSM / Global System for Mobile Communications

PSTN / Public Switched Telephone Network

VOIP / Voice Over Internet Protocol

dB(A)

Sound Level Measurement unit corrected for average human hearing response.

DTMF / Dual Tone Multiple Frequency

PABX / Private Automatic Branch Exchange

BSD / Berkley Software Distribution

BSD Socket / A Transport Layer Interface provided for applications to perform interprocess communication between separate processes on a single system or on multiply connected system.

GUI / Graphical User Interface

PIN / Personal Identification Number. Used to login to the WayPhone

RVA / Recorded Voice Announcement

Sector / A WayPhone network can be segmented into individual sectors (1-99). Each WayPhone located in a sector has its sector attribute set to the corresponding sector number. Each sector can be assigned to a particular WayPhone Manager operator to enable control of WayPhone call distribution

WayPhone / Clearsonics, vandal resistant, handsfree telephone designed to provide a Telephone service to selected pre-programmed numbers. Ability to operate in high ambient noise levels and in harsh environments. Please refer to the WayPhone Specification documentation for more information

DSP / Digital Signal Processing

VCE / Voice Clarity Enhancement

CLEARSONICS HANDS FREE COMMUNICATION

The modern help phone should not be restricted for maximum use by its surroundings and have facilities for remote operation testing and functionality changes, as well as flexibility for network connections and powering options.

The following should be considered when choosing a help phone system.

Usability

In times of an emergency a help phone must be simple to use as unrestrictive as possible. A hands-free phone only needs the user to press a button once, even if they were injured or disabled it is easier to press a button than to hold onto a handset.

The user needs feedback that the phone is connecting them. A push button with travel will let them know so they know it has been pressed. Both visual and audible feedback is important to indicate that a call has been placed. A delay in any feedback would appear as an eternity in an emergency situation.

In relation to using a handset the cord length determines the restriction to a users movement and means only one hand is free. The hands-free user has the flexibility to use both hands. This then allows the user to do other tasks such as: applying first aid, directing traffic, taking notes or even receive instructions to fix a car with their head

under the bonnet which could be even more important for remote locations. A hands-free help phone should be able to operate in the expected maximum noise environment.

More than one person should be able to receive information from a hands-free phone, it is not restricted to a one to one conversation.

During a lightning storm it is much safer to use a hands-free phone than to hold onto a handset.

Hands-free phones are not as susceptible to vandalism and therefore are more available to those in need. If a help phone is provided then it will be relied upon and expected to be in working order, not with a cord hanging down with bare wires and no handset to be found. Additionally all help phones should be tested to ensure the utmost availability where the level of testing is conclusive. This put together with detection and

automatic reporting of accidental damage or vandalism (hit by a vehicle or receiving severe blows) will maximise availability.

Consider the wheelchair dependant driver whose car is failing and can stop next to a help phone in the emergency lane. With a handset phone the driver would have to get out of the vehicle necessitating the placement of the wheelchair in the first lane of traffic.

A hands-free help phone powered by solar and connected through a cellular network will be a higher initial investment but should prove the lowest in lifecycle costs whilst providing the upmost usability and flexibility for those who will rely on it.



WAYPHONE VOIP REDUNDANCY

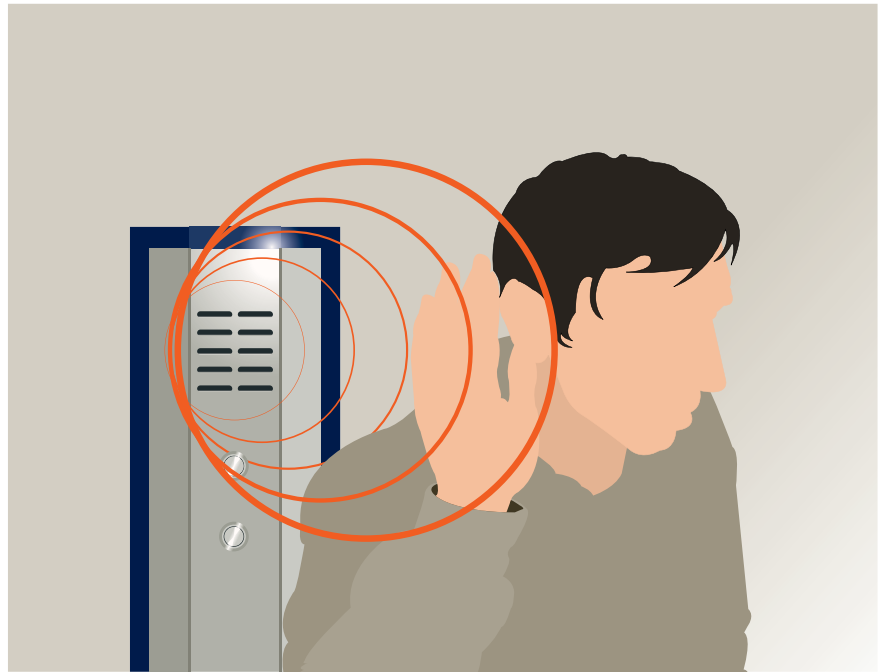
WayPhone-VoIP allows specification of a redundant proxy for use in the case of primary proxy server failure. In single proxy server systems, if the server fails, incoming calls will normally also fail as there is nothing to direct the calls to waiting operators. If the IP address of an operator console (SIP Phone) is provided as the 'redundant proxy' address. WayPhone will attempt to call this

phone if the initial attempt via the primary proxy fails. In this 'failsafe' mode, one call can be handled at a time but this is much better situation than the alternative of no calls being answered.

VoIP 'Peer-to-peer' operation can ensure calls for assistance are not missed if the primary SIP proxy server is not operational.

CLEARSONICS WAYPHONE FOR THE 'HEARING IMPAIRED'

Clearsonics hands-free communication products can be fitted with a purpose made "Hearing Loop" to allow "TeleCoil" equipped hearing aids to sense the audio from the help phone. This facility allows a hearing impaired person to stand in front of the help phone and to use the "T" setting on their hearing aid. This enables them to listen to the Operator without the extraneous noise from heavy passing traffic, which would adversely affect a conversation using the microphone "M" setting.



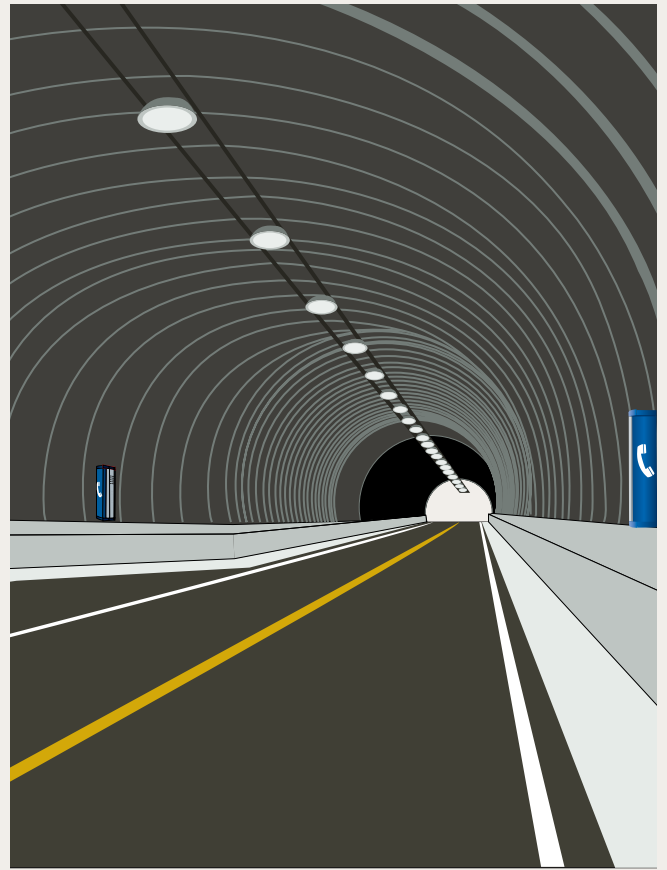
WAYPHONE & EXTERNAL ACTIVATIONS

A WayPhone button when pressed can activate relay contacts that operate product such as CCTV and Lights. If high voltage switching is required, for example a mains lighting circuit, a relay contact can be used to control an external secondary switching device.



WAYPHONE APPLICATIONS

**ROAD, TUNNEL AND BRIDGE
AUTOMATED TOLL BOOTHS
GATE ENTRY
RAILWAY STATIONS AND TRACKSIDE
UNIVERSITY CAMPUS
POLICE STATIONS
NATIONAL PARKS
BIKE TRACKS
PETROL STATIONS
BUS STOPS
CAR PARKS – HOSPITAL, PUBLIC, UNIVERSITY
MINING
AIRPORTS**



WAYPHONE PLACEMENT

WAYPHONE FREEWAY APPLICATION

A Clearsonics WayPhone should be easily accessed by the user. Placement of the WayPhone however is important as a number of areas must be taken into consideration.

WayPhones are used on roads in both city and country locations. Appropriate State Government authorities take into account the volume of traffic which is being utilised or to be utilised and also allow for the time that assistance can be rendered to a user such as a towing facility or medical emergency.

The installation spacing of a WayPhone may differ. In built up city applications WayPhones can be installed 1000 meters apart. In country applications the spacing is normally every 2km.

Multiple Freeways (Both Sides)

If a freeway has more than 2 lanes in both directions and the shoulder of the road or the emergency lane does not have appropriate space it is recommended that two WayPhones be used. This is to stop the user from attempting to cross sections of traffic where an accident may very well occur.

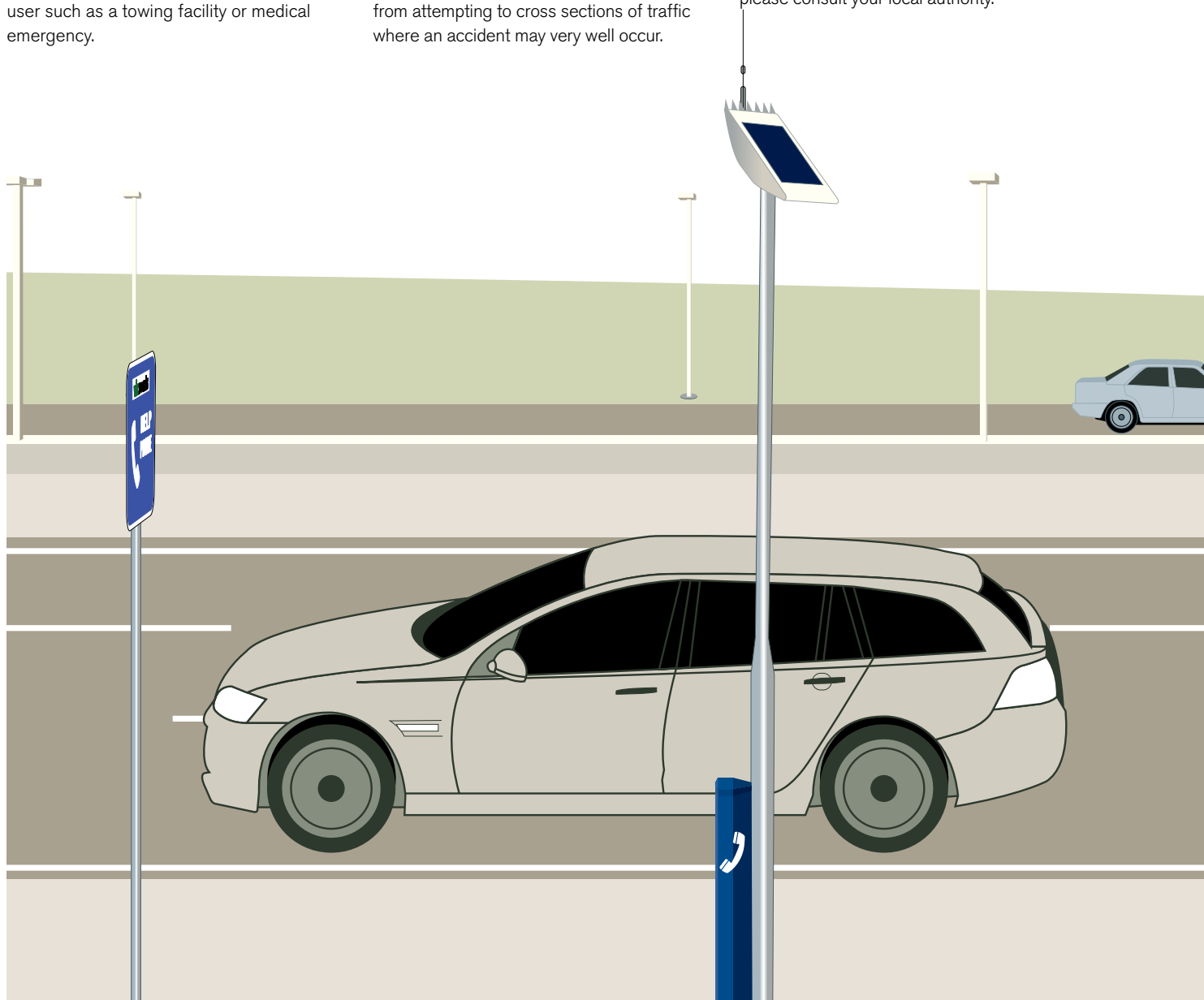
Tunnels

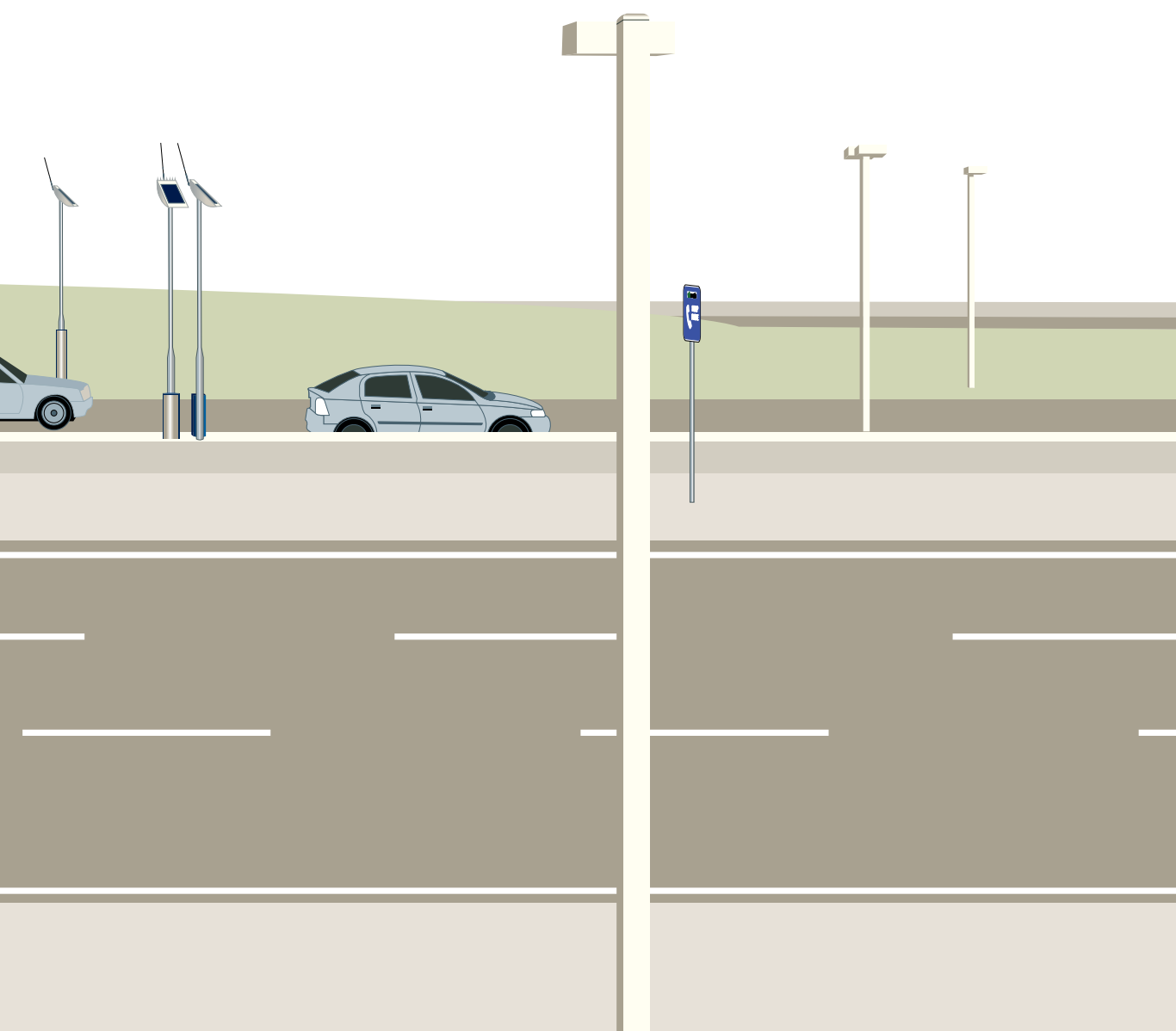
Dependant on the type of tunnel and traffic volume, it is recommended WayPhones can be installed from 100 to 200mts apart.

Other areas of concern to assist in the use of the WayPhone are appropriate lighting levels and road signage to direct and confirm position of the WayPhone.

Note:

To confirm use and placement of WayPhones please consult your local authority.





PEDESTAL WAYPHONE

FEATURES

- Mobile (3G) fixed line (PSTN) telephone or Ethernet connectivity (VoIP)
- Extensive internal diagnostics, accessible locally or remotely
- Configure remotely using tone-dialling, or optional on site via serial port
- Adaptive volume control and duplex operation
- Programmable send and receive levels
- Internal battery with charging options (solar, mains or remote power feed)
- Illuminated option
- Digitally stored announcements
- Response to remote user commands is by digitized voice
- Tilt / vandal detection with automatic dial up reporting
- Unique ID for location information
- One push button standard but can be expanded to three
- Lightning and radio frequency interference protection on PSTN / DC feed board
- Audible and visual feedback on button press with LED Buttons
- Polycarbonate label where graphics can be readily customized
- 5mm extruded aluminium housing with dual high security locks and powder coat finish
- Housing top is fitted with an endcap but not the bottom
- 1375 and 2280mm housing models

TECHNICAL SPECIFICATIONS: PEDESTAL WAYPHONE

Physical

Dimensions: 210W x 1475H x 130D (mm)
(lightbox version) 2450H
Base cover (ctr pole): 440mm diameter
Base Cover (ext pole): 470mm diameter
Weight 50kg (1375mm with centre pole)
External Solar pole: 4 metres

Environmental

Temperature range: -10 to +70 degrees C
Humidity: 95% non-condensing

Power Options

12V solar panel
Mains plug pack 15VDC 1A
Remote power feed 22V-70VDC
Internal 12V sealed lead acid battery

Network

PSTN or PABX
3G (GSM compatible)
Ethernet (VoIP)

Audio

Automatic volume control
Noise environments up to 105dBA
High clarity speaker to deliver up to 120dBA

User Interface

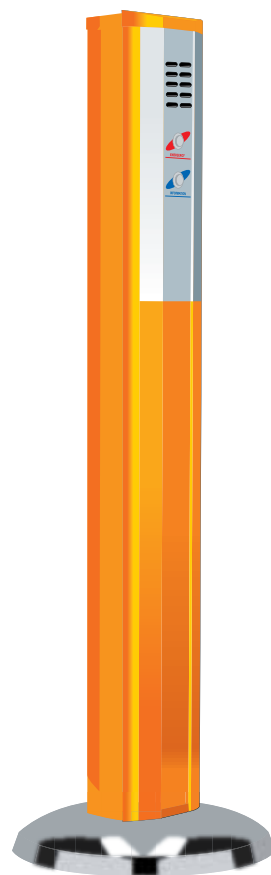
Hands-free operation
Push button(s) to call or play announcement
Illuminated push buttons (Optional)
Standard network tones



1375mm pedestal with
4m external solar pole



2280mm pedestal with
lightbox illumination and
strobe



1375mm pedestal with
centre pole

Configuration

Factory preset
Remote dial in
Management Software

Maintenance

Diagnostics via

1. Remote dial in
2. Remote PC based management system

Security

Four digit PIN protection
Automatic tilt/vandalism warning with dial
up reporting

Supporting products

WayPhone Manager for control room call
management
WayPhone Tester for automatic and remote
testing

Warranty

12 months on parts and labour from date of
delivery.

WALLMOUNT WAYPHONE

FEATURES

- Mobile (3G), fixed line (PSTN) telephone or Ethernet connectivity (VoIP)
- Extensive internal diagnostics, accessible locally or remotely
- Configure remotely using tone-dialling, or optional on site via serial port.
- Adaptive volume control and duplex operation
- Programmable send and receive levels
- Internal battery with charging options (solar, mains or remote power feed)
- Digitally stored announcements
- Response to remote user commands is by digitised voice
- Tilt/vandal detection with automatic dial up reporting
- Unique ID for location information
- One push button standard but can be expanded to three
- Lightning and radio frequency interference protection on PSTN / DC Feed board
- Audible and visual feedback on button press
- Polycarbonate label where graphics can be readily customized
- 5mm extruded aluminium housing with dual high security locks and powder coat finish
- Housing top and bottom is fitted with an endcap
- Models: 470mm (Standard), 740mm (Extended) and 1375mm (Custom)
- Mounting Methods: Wall, Pole, Barrier/ New Jersey Mount

TECHNICAL SPECIFICATIONS: WALLMOUNT WAYPHONE

Physical

Dimensions:

Standard 470mm: 210W x 530H x 130D(mm)

Extended 740mm: 210W x 800H x 130D(mm)

Custom 1375mm: 210W x 1435H x 130D(mm)

Weight 470mm: 11kg approx

Environmental

Temperature range: -10 to +70 degrees C

Humidity: 95% non-condensing

Power Options

12V solar panel

Mains plug pack 15VDC 1A

Remote power feed 22V-70VDC

Internal 12V sealed lead acid battery

Network

PSTN or PABX

3G (GSM compatible)

Ethernet (VoIP)

Audio

Automatic volume control

Noise environments up to 105dBA

High clarity speaker to deliver up to 120dBA

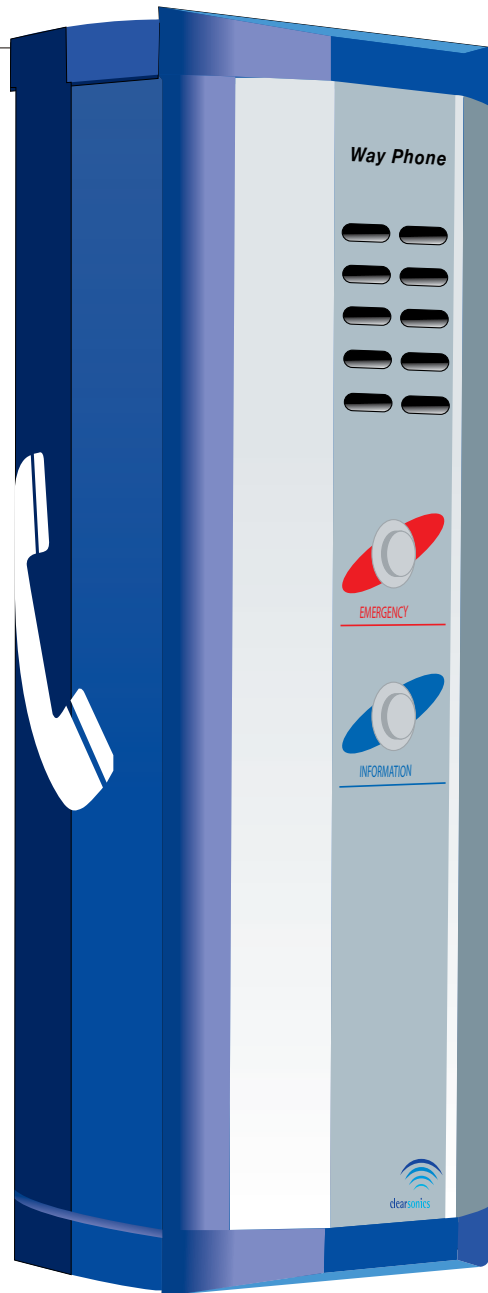
User Interface

Hands-free operation

Push button(s) to call or play announcement

Illuminated push buttons (Optional)

Standard network tones



Configuration

Factory preset
Remote dial in
Management Software

Maintenance

Diagnostics via
1. Remote dial in
2. Remote PC based management system

Security

Four digit PIN protection
Automatic tilt/vandalism warning with dial up
reporting

Supporting products

WayPhone Manager for control
room call management
WayPhone Tester for automatic
and remote testing

Warranty

12 months on parts and labour from date
of delivery.

WAYPHONE CUSTOMISED UNIVERSAL MOUNT

The Clearsonics Universal Mount WayPhone is an advanced vandal resistant, hands-free, digital SOS emergency telephone designed for high noise level and harsh environments.

An innovative mechanical design ensures environmental protection, strength and provides a variety of mounting options to suit roadside, streetscape and architectural applications.

Enclosure Height 854mm / Width 290mm / Depth 185mm

Housing size accommodates up to 12V 45AH SLA battery which may be required for VoIP Solar.



TECHNICAL SPECIFICATIONS: UNIVERSAL MOUNT

Environmental

Temperature range: -10 to +70 degrees C
Humidity: 95% non-condensing

Power Options

12V solar panel
Mains plug pack 15VDC 1A
Remote power feed 22V-70VDC
Internal 12V sealed lead acid battery

Network

PSTN or PABX
3G (GSM compatible)
Ethernet (VoIP)

Audio

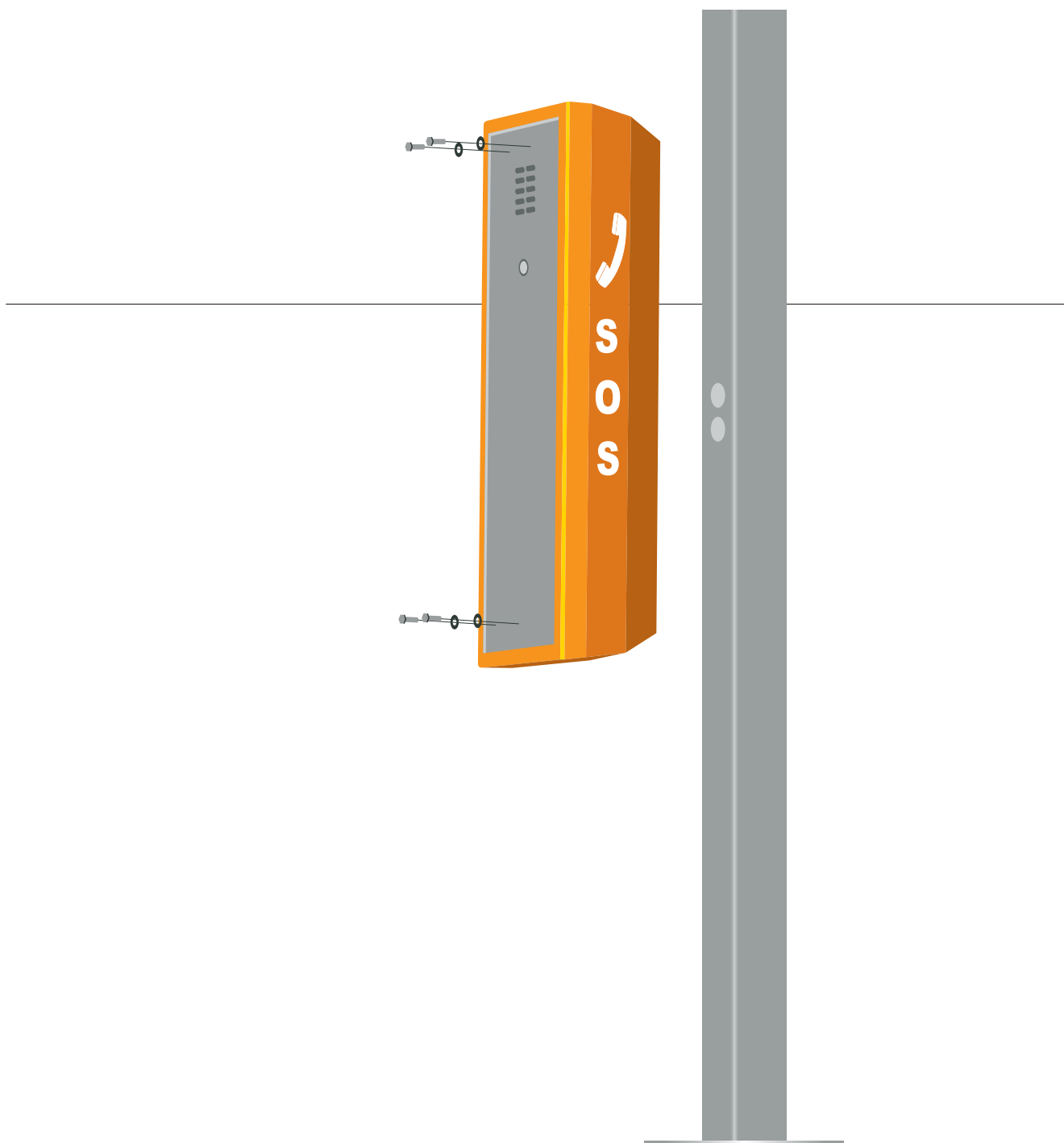
Automatic volume control
Noise environments up to 105dBA
High clarity speaker to deliver up to 120dBA

User Interface

Hands-free operation
Push button(s) to call or play announcement
Illuminated push buttons (Optional)
Standard network tones

Configuration

Factory preset
Remote dial in
Management Software



Maintenance

Diagnostics via

1. Remote dial in
2. Remote PC based management system

Security

Four digit PIN protection

Automatic tilt/vandalism warning with dial up reporting

Supporting products

WayPhone Manager for control room call management

WayPhone Tester for automatic and remote testing

Warranty

12 months on parts and labour from date of delivery.

PANEL WAYPHONE

FEATURES

- Mobile (3G), fixed line (PSTN) telephone or Ethernet connectivity (VoIP)
- Extensive internal diagnostics, accessible locally or remotely
- Configure remotely using tone-dialling, optional on site via serial port
- Adaptive volume control and duplex operation
- Programmable send and receive levels
- External battery with charging options (solar, mains or remote power feed)
- Digitally stored announcements
- Response to remote user commands is by digitised voice
- Tilt/vandal detection and automatic dial up reporting
- Unique ID for location information
- One push button standard but can be expanded to three
- Lightning and radio frequency interference protection on PSTN / DC Feed Board
- Audible and visual feedback on button press with LED buttons
- Laser etched graphics which can be readily customized
- 2.5mm stainless steel face plate

TECHNICAL SPECIFICATIONS: PANEL WAYPHONE

Physical

Dimensions:
Standard: 220W x 480H x 850D(mm)
Customised sizes available

Environmental

Temperature range: -10 to +70 degrees C
Humidity: 95% non-condensing

Power Options

12V solar panel
Mains plug pack 15VDC 1A
Remote power feed 22V-70VDC
External 12V sealed lead acid battery

Network

PSTN or PABX
3G (GSM compatible)
Ethernet (VoIP)

Audio

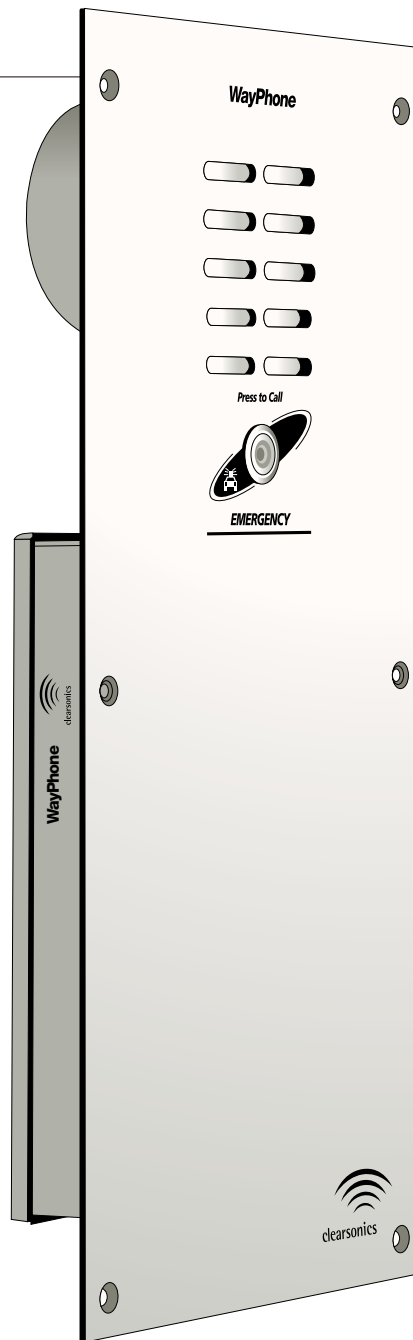
Automatic volume control
Noise environments up to 105dBA
High clarity speaker to deliver up to 120dBA

User Interface

Hands-free operation
Push button(s) to call or play announcement
Illuminated push buttons (Optional)
Standard network tones

Configuration

Factory preset
Remote dial in
Management Software



Maintenance

Diagnostics via

1. Remote dial in
2. Remote PC based management system

Security

Four digit PIN protection

Automatic tilt/vandalism warning with dial up reporting

Supporting products

WayPhone Manager for control room call management

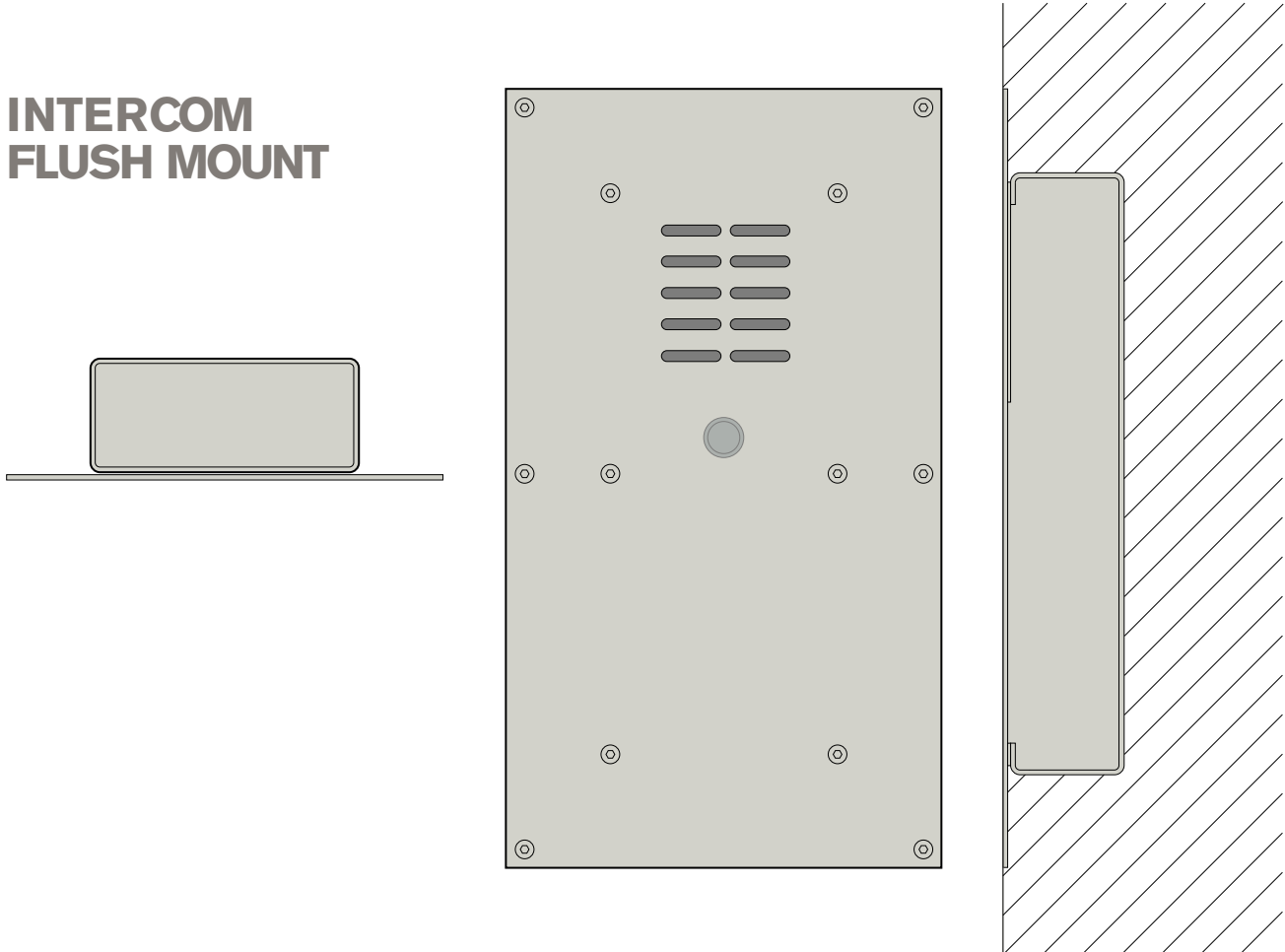
WayPhone Tester for automatic and remote testing

Warranty

12 months on parts and labour from date of delivery.

CLEARSONICS INTERCOM

INTERCOM FLUSH MOUNT



The Clearsonics IP Intercom allows hands free Voice communications over wired IP networks (VoIP). With appropriate software, the Intercom may also be used as an IP based public address system. Line level monitoring/recording outputs are available for both local and remote audio signals. The local voice signals (mic input) can also be transmitted to a "Recording Server" located on a separate IP address. Voice calls can be autonomously terminated after programmable 'no data' or 'in call' periods have been exceeded.

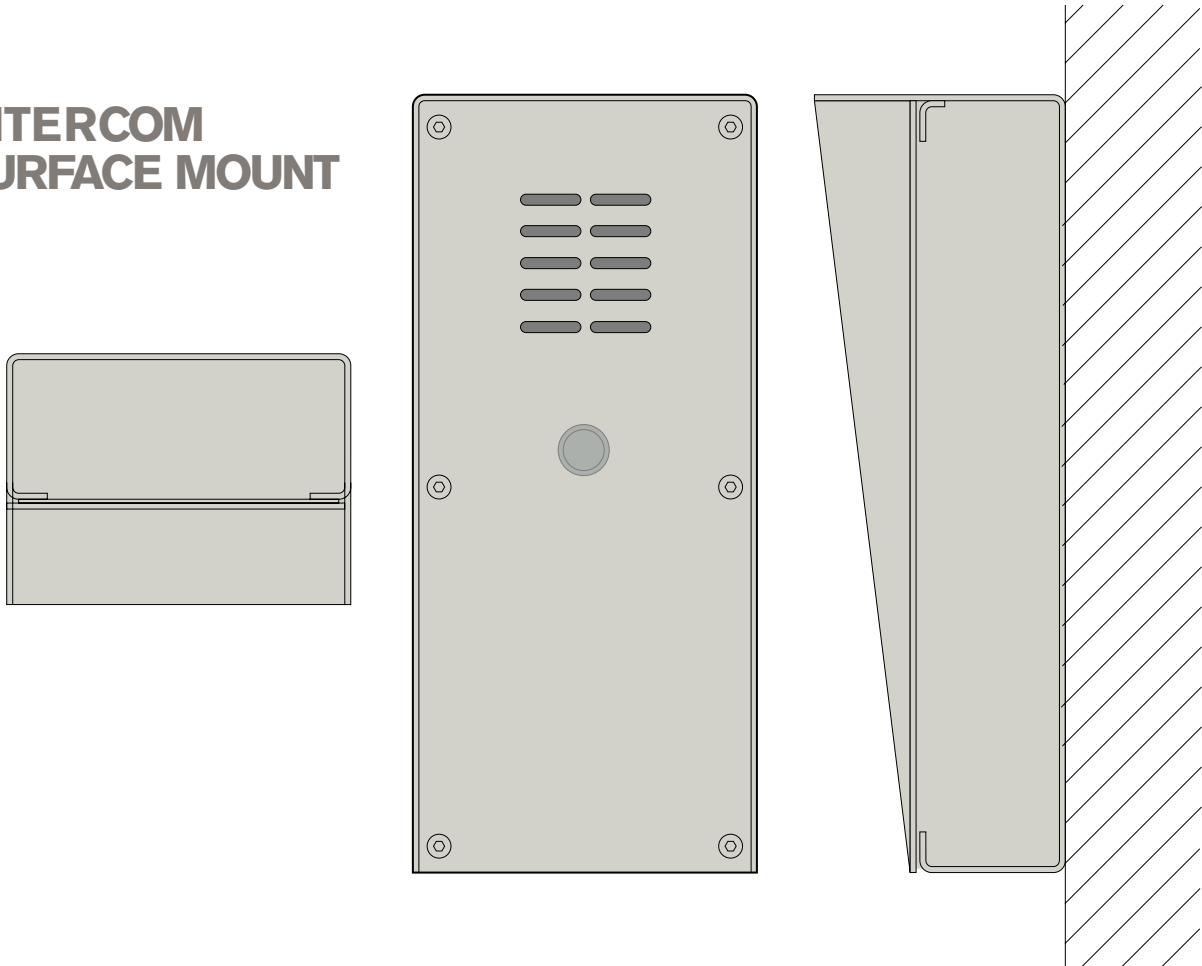
One or two 'call' buttons can be provided allowing calls to be established with up to two remote locations; a switchboard and gatehouse for example. The SIP number dialed when a button is pressed (and other operational parameters) may be re-programmed from any computer connected to the same IP network.

Two open collector LED drive outputs are available to provide device state information (LINK DOWN, IDLE, IN CALL, ON HOLD/QUEUED). These may drive an optional bi-colour indicator on the Intercom housing or be used to control external LED indicators.

Interrogation of connected equipment.

A 4 Watt, 12V to 24V DC power supply is required for operation. If additional devices are to be powered from this supply, it should be scaled appropriately. Clearsonics can provide a high quality 25W/15V switching supply that will operate reliably to +70 degrees.

INTERCOM SURFACE MOUNT



TECHNICAL SPECIFICATIONS: CLEARSONICS INTERCOM

Operating temperature: 0°C to 70°C

Humidity: 5 to 95% non-condensing

Power Requirements: 12V - 24V DC 1A

Power Consumption

Idle current 65mA

Typical current while call in progress 80mA

Maximum current while call in progress

150mA

Dimensions

Surface 326 x 144 x 105mm

Flush 418 x 234 x 65mm

Supported protocols

G.711 mu-law + A-Law

Session Initiation Protocol (SIP) RFC 3261

Real-Time Transport Protocol (RTP) RFC 3550

Session Description Protocol (SDP) RFC 2327

Trivial File Transfer protocol (TFTP) RFC 1350

User Datagram Protocol (UDP) RFC 0768

Physical connections

Local area network (LAN) connector

Audio specifications

G.711 (mu-law + A-Law)

Audio in 1.0V

Audio out 1.0V

VCE™ MODULE

VCE OEM telephone module is designed to provide clear, hands-free voice communications in high acoustic noise environments. The module utilises digital voice enhancement and advanced Digital Signal Processing (DSP) techniques to provide clear intelligible communications where ambient noise levels can reach 105dBA, as would be experienced in a motorway tunnel. Typical applications are emergency or safety communications where the module is incorporated into telephone systems where calls are set up between high ambient noise environments and a call centre. Designed to be easily integrated into most communication systems using software configurable options and internal diagnostics. On-board facilities are provided to interface and control other devices via configurable digital I/O lines, serial port and switchable power.

FEATURES

- Mobile (3G), fixedline (PSTN) telephone or Ethernet (VoIP) options
- Up to 3 call buttons each with programmable auto dialling numbers of up to 20 digits
- Extensive internal diagnostics, accessible locally or remotely
- Configure remotely using tone-dialling, or optional on site via data communication port
- Adaptive volume control and duplex operation
- Programmable send and receive levels
- External battery with charging options (solar, mains or remote power feed)
- Sleep mode to minimise power consumption
- Digitally stored announcements
- Response to remote user commands is by digitised voice
- Real time clock
- Tilt/vandal detection and automatic reporting
- Unique ID for location information
- Multiple audio I/O
- Lightning and radio frequency interference protection on PSTN / DC Feed board

TECHNICAL SPECIFICATIONS: VCE™ MODULE

Physical

Box Dimensions: 122W x 257L x 67D (mm)
Mounting flange: 122W x 281L (mm)
Mounting holes centres: 71W x 266L (mm),
6mm diameter for M4 stud

Environmental

Temperature range: -10 to +70 degrees C
Humidity: 95% non-condensing

Power Options

12V Solar Panel, Mains plug pack 15VDC 1A
Remote power feed 22V-70VDC External
12V sealed lead acid battery

Network

PSTN or PABX
3G, (GSM compatibility)
Ethernet (VoIP)

External Interfaces

Speaker/microphone audio, up to 3 Call
Button inputs, optional Single or Multiple Dry
Contact Relay Output, Serial config/debug
port.

Audio

Automatic volume control
Noise environments up to 105dBA
High level audio output, for speaker Low
level audio output via codec



Configuration

Factory preset
Remote dial in
Management Software

Maintenance

Diagnostics via
1. Remote dial in
2. Remote PC based management system

Security

Four digit PIN protection
Automatic tilt/vandalism warning with dial up
reporting

Supporting products

Matched high clarity speaker assembly
with integrated microphone
WayPhone Manager for control room
call management
WayPhone Tester for
automatic and remote testing
WayPhone

Warranty

12 months on parts and labour from date of
delivery.

WAYPHONE TESTER

The WayPhone Tester is an easy to use and inexpensive solution for maintaining a network of WayPhones providing automatic and manual testing facilities plus managing WayPhone configuration records. Facilities for phone diagnostics, event logging and database configuration changes are provided under mouse/ keyboard control in a user-friendly Windows environment.

FEATURES

- Automatic and manual WayPhone testing with audible alarm
- Database logging of alarm/system events with viewing, filtering and printing facilities
- Facilities to modify WayPhone configuration records
- On-screen control to customize system settings

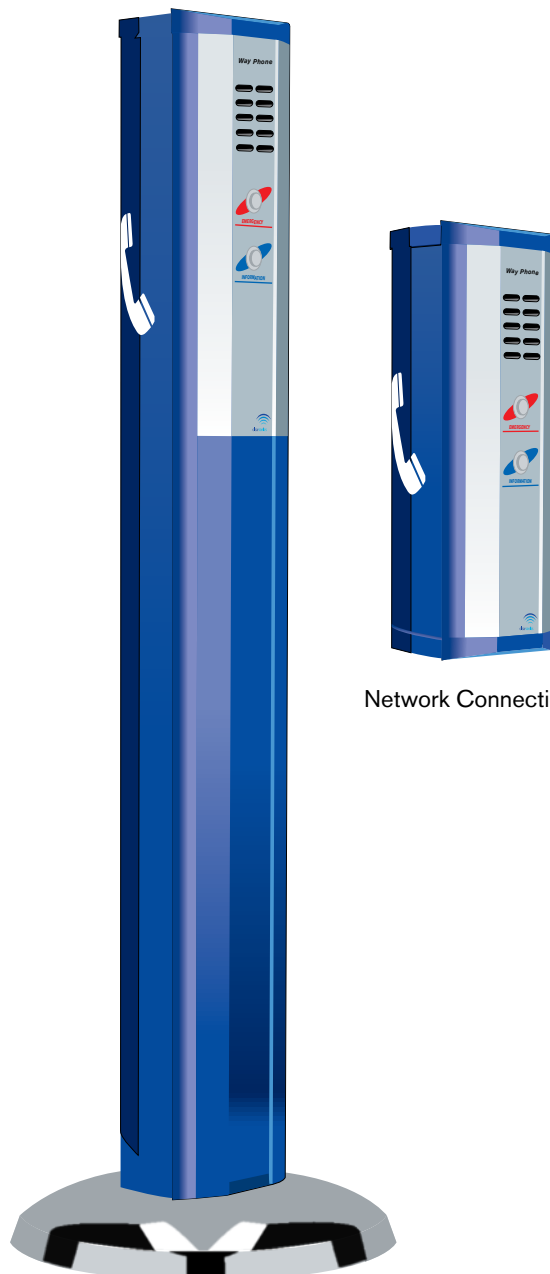
ALARM MANAGEMENT

- On the detection of a WayPhone fault condition, visual and audible alarms will be generated.
- All faults are stored in the database and there is an on-screen facility to silence the audible alarm.
- Alarms are automatically cleared when the system detects a fault condition has been removed.

TECHNICAL SPECIFICATIONS: WAYPHONE TESTER

**WayPhone Tester requires the following minimum
Hardware/ Software configuration:**

1.5 GHz Processor
1 GB RAM (2GB or more recommended)
100 GB hard drive
1024 x 768 screen size
Keyboard and Mouse
Clearsonics specified DTMF capable modem
Microsoft Windows 7/10 Professional, Windows Server 2012/2019





Modem



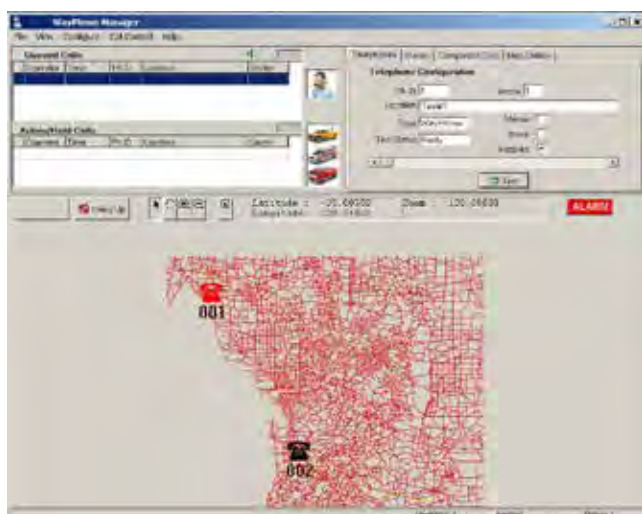
WayPhone Tester



Local Console

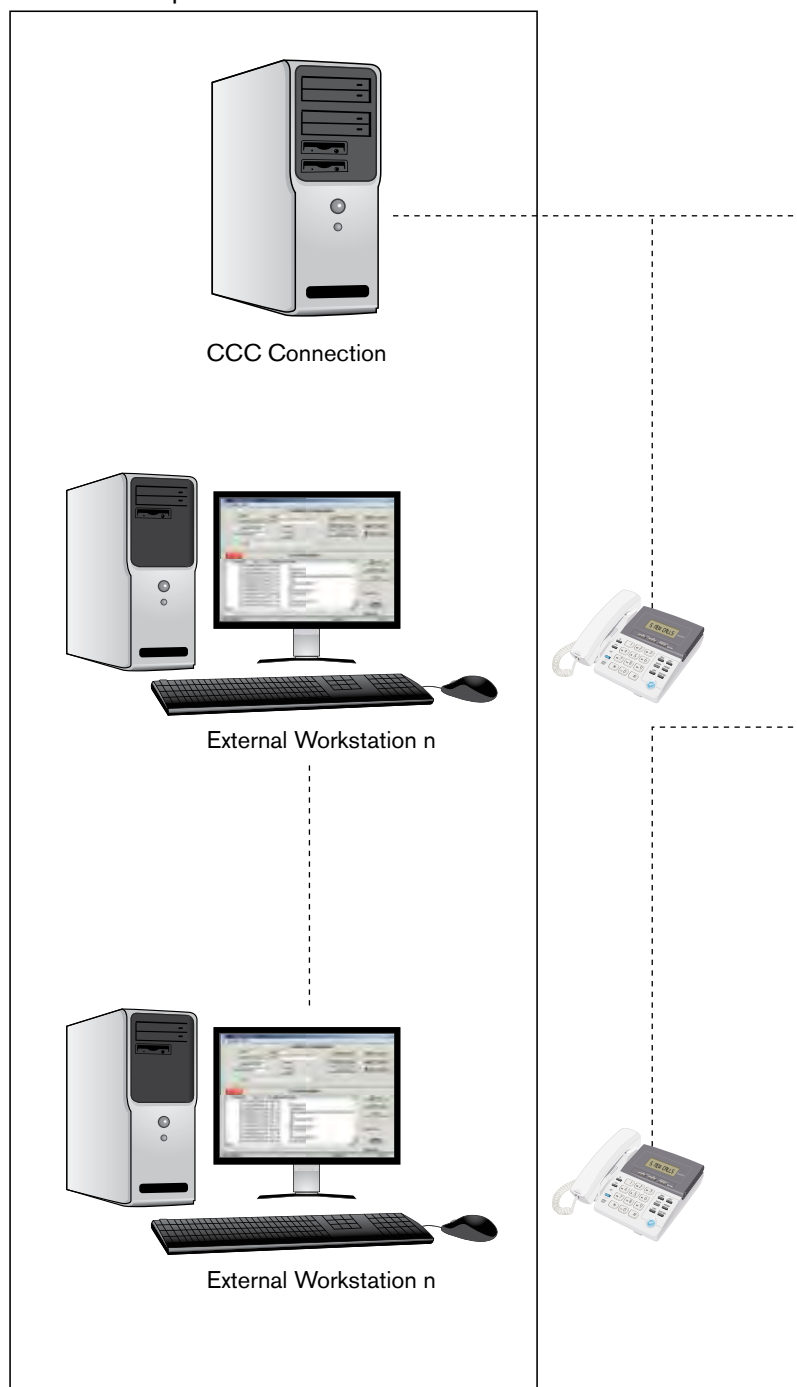
WAYPHONE MANAGER

The WayPhone Manager is a call centre solution for managing a network of WayPhones based on innovative Voice over Internet Protocol (VoIP) technology. Facilities for call control, PA, conversation recording, telephone testing, fault reporting, event logging, configuration management and system diagnostics are all provided under mouse/keyboard control. The VoIP WayPhone Manager is essentially a virtual PBX, significantly lowering hardware complexity and costs, plus is more readily integrated into a central computer system. The WayPhone Manager has the flexibility to operate with multiple operators and multiple control rooms. WayPhones can be connected to the Manager via Ethernet/fibre, fixed line or via the public telephone network including Cellular.



Above image: WayPhone Manager GUI

External Computer

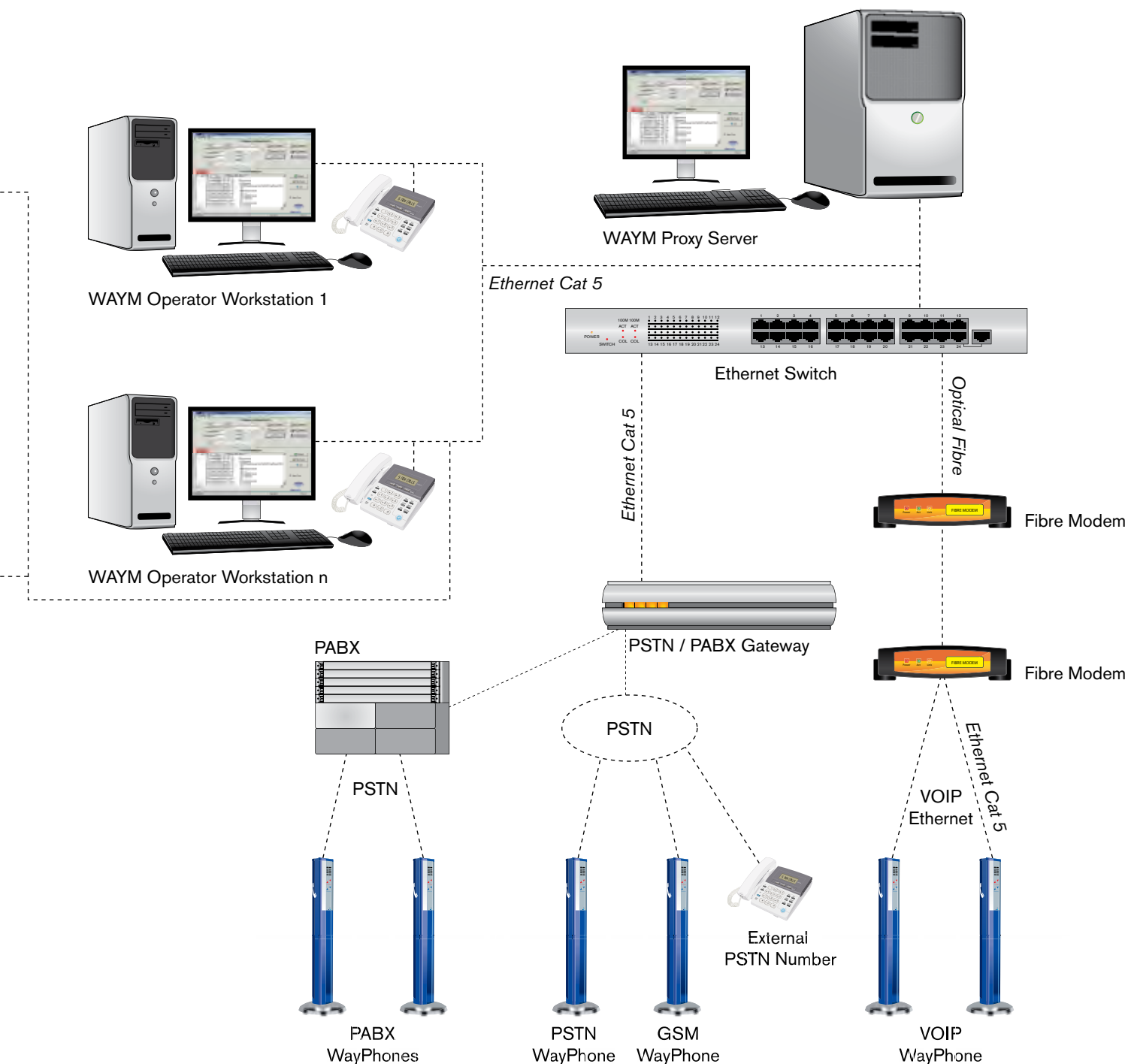


Call control

- Multiple calls held on the queue which can be accessed by all operators
- Calls when answered are placed in the active window for that operator
- WayPhone calls can be placed on hold or transferred to outside party or other operator
- External calls can be transferred to any WayPhone
- Comments can be added to any call record for reporting purposes
- Recorded announcements are provided to the WayPhone user when in the queue or on hold

Conversation recording

- All WayPhone calls are digitally recorded in "wav" file format and stored on the Server
- Calls can be replayed on an Operator Workstation using Microsoft Windows Media Player or other Third Party software
- Voice recordings can be optionally archived to a removable storage media for storage/backup



Public Address

- Pre-recorded or live PA announcements to single, multiple or all connected WayPhones

Call / Event logging

- Database logging of call and alarm/system events with viewing, filtering, export and printing facilities

WayPhone configuration/testing

- Addition, deletion or variations to database records and WayPhone settings
- Automatic testing of all WayPhones or manual testing of individual WayPhones plus audible and visual alarms

Integration

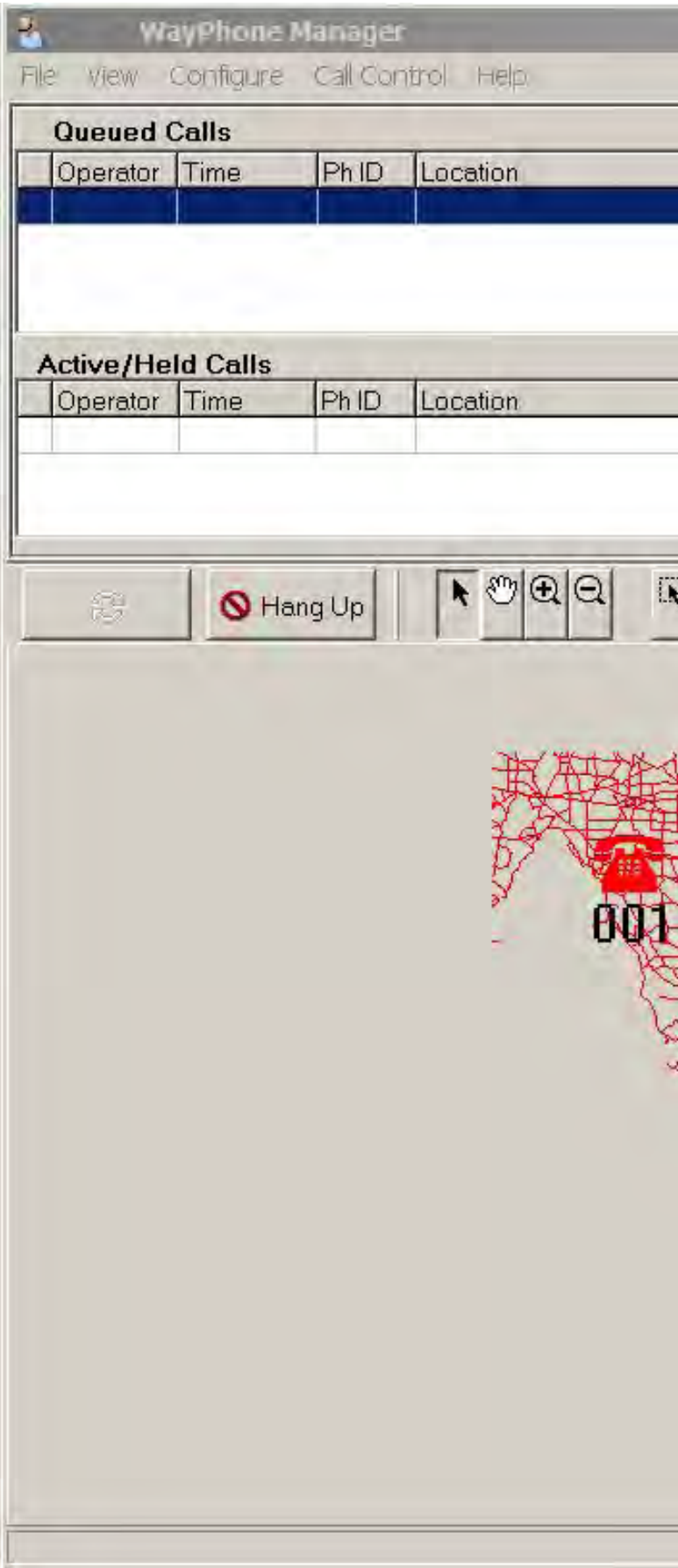
- The WayPhone Manager can operate on stand alone workstations, as a client window on multiple system workstations or integrated with other systems using a text base message protocol over via BSD Sockets

WayPhone Manager requires the following minimum Hardware/ Software configuration:

- 1.5 GHz Processor
- 2GB RAM or more
- 200GB hard drive
- 1024 x 768 screen size
- Keyboard and mouse
- Microsoft Windows 7/10 Professional, Windows Server 2012/2019

MAPPING

The WayPhone Manager Graphical User Interface includes an optional Map facility to display a graphical map covering the areas where phones are installed. The map is able to be panned and zoomed in or out to show appropriate level of detail. Emergency telephones are represented via icons on the map. The emergency telephone map icons change colour and flash depending on the current call and test status of each phone. Using pop-up menus accessed from the map icons many emergency telephone call and maintenance functions are made quickly and conveniently available.





VOIP MODULE

Model

VoIP PBA 1162

Operating temperature

0°C to 70°C

Humidity

5 to 95% non-condensing

Power Requirements

12V - 24V DC 1A

Power Consumption:

Idle current 65mA

Typical current while call in progress 80mA

Maximum current while call in progress 150mA

Dimensions

140mm by 85mm

Supported protocols

G.711 (mu-law + A-Law)

Session Initiation Protocol (SIP) RFC 3261

Real-Time Transport Protocol (RTP) RFC 3550

Session Description Protocol (SDP) RFC 2327

Trivial File Transfer protocol (TFTP) RFC 1350

User Datagram Protocol (UDP) RFC 0768

Physical connections

Power (2 way plug in screw in connector)

Local area network (LAN) connector

Button (8 way molex connector)

Programming (5 by 2 way connector)

LED (3 way molex connector)

Microphone (2 way molex connector)

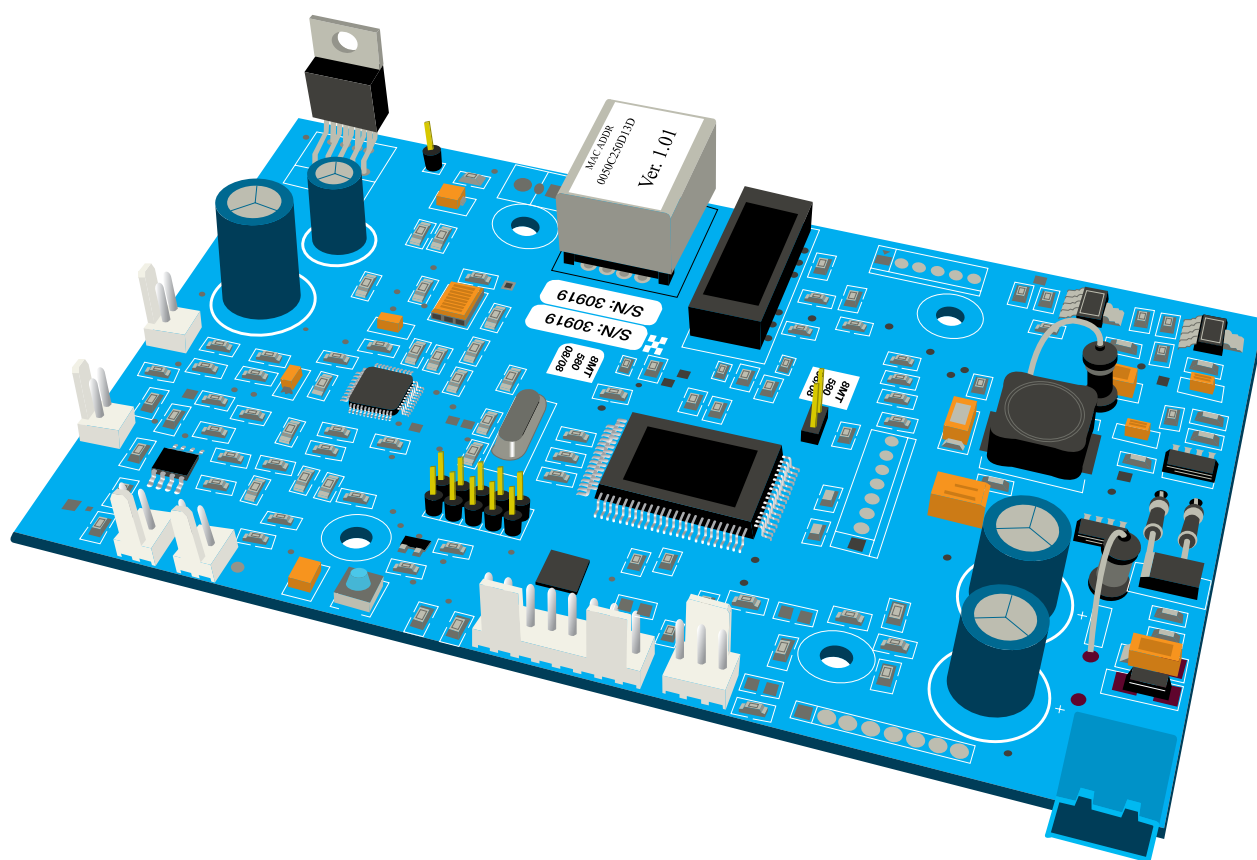
Speaker (2 way molex connector)

Audio specifications

G711 mu-law + A-Law

Audio in 1.0V

Audio out 1.0V

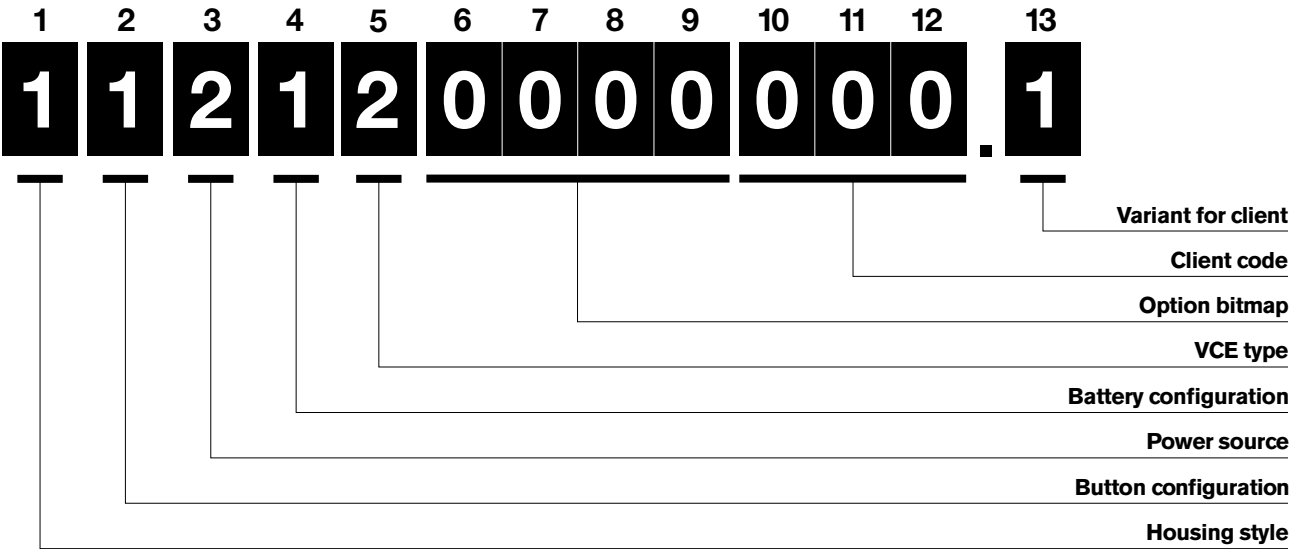


WAYPHONE CODING

Clearsonics product coding for use in manufacture takes the form of a 13 digit numeric code. There is also a longer and more human readable alphanumeric code. The function of this coding is to allow creation of unique codes for every different product supplied to our clients. The codes defined here will adequately describe the majority of builds, but there are many subtle variations to the code to suit a particular need. This will be derived in our Clearsonics Bill of Materials for the product.

Note. The product Coding Table shall change continuously as new product + variations become available. Please consult your local Clearsonics Sales office.

WAYPHONE CODING



The example above results in Alphanumeric code: PD-1B-MB-12V12-3G-CS.1

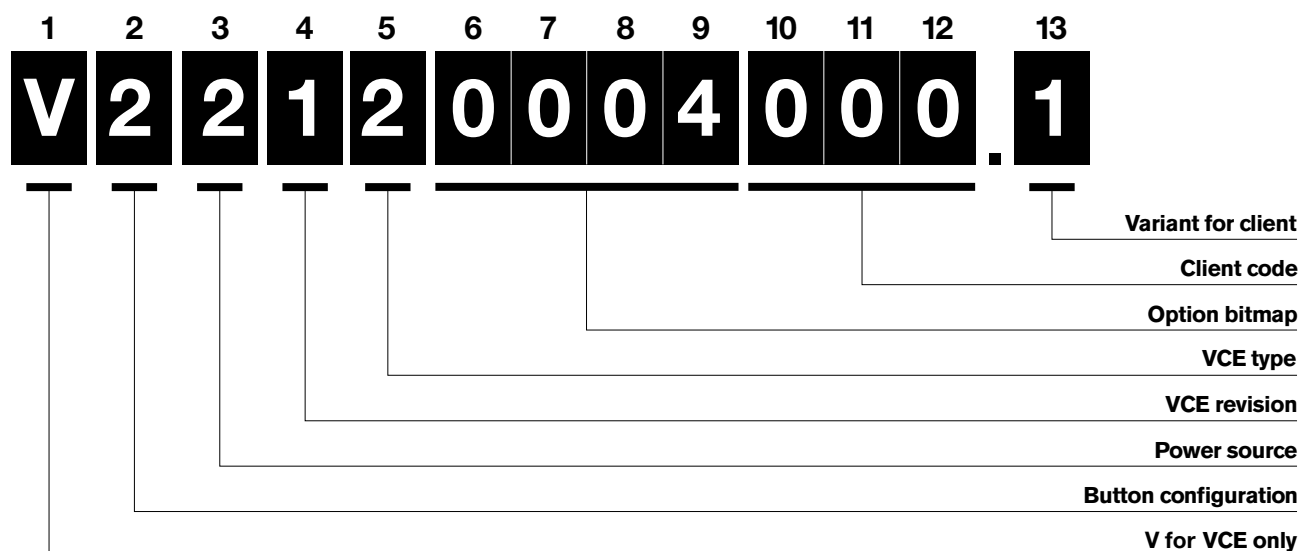
WAYPHONE CODING

DIGIT	N	A	DESCRIPTION	COMMENT
1	HOUSING STYLE			
	0	PA	Panel	
	1	PD	Pedestal (1375mm)	
	2	WM	Wallmount (470mm)	
	3	UM	Universal Mount	
	4 5	WME	Wallmount Extended (740mm)	
	8	PAC	Panel Custom (non-standard size)	Or aspect (ie horizontal)
	9	PDC	Pedestal Custom (non-standard size)	For extended/short etc
	A	WMC	Wallmount Custom (non-standard size)	Any other size other than 470 or 740mm
	F	-	Reserved for Fascia codes	
2	BUTTON CONFIGURATION			
	0	0B	No Buttons (PA only)	
	1	1B	Single Button Standard	
	2	2B	Dual Button Standard	
	3	1BI	Single Button Illuminated	
	4	2BI	Dual Button Illuminated	
	5	1BP	Single Button Illuminated Piezo	
	6	2BP	Dual Button Illuminated Piezo	
	7	1BF	Single Button Flush	
	8	2BF	Dual Button Flush	
	E	HS	Hookswitch	
	F	BC	Custom (Refer BOM)	
3	POWER SOURCE			
	0	-	Client looks after power or not relevant	Use standard Batt & DC Feed cable
	1	M	Local Power Source	Mains Plug Pack etc.
	2	MB	Local Power & Battery	
	3	RPF	Old RPF Module & Battery (obsolete)	Can't run from RPF alone
	4	R	Remote DC	(22<VDC<70)
	5	RB	Remote DC & Battery	
	6	S	Solar & Battery	Client supplies power system
	7	S10	10W Solar & Battery	
	8	S20	20W Solar & Battery	
	9	S40	40W Solar & Battery	Recommend external charger
	A	S50	50W Solar & Battery	Recommend external charger
	F	PC	Custom (refer BOM)	

WAYPHONE CODING

DIGIT	N	A	DESCRIPTION	COMMENT
4	BATTERY OPTION			
	0	-	No Battery or N/A	
	1	12V12	2 x 6V/12Ah	
	2	12V2	1 x 12V/2.3Ah	
	3	12V7	1 x 12V/7Ah	
	4	12V45	1 x 12V/45Ah	Use external charger
	F	C	Custom (refer BOM)	
5	VCE COMMUNICATIONS INTERFACE TYPE			
	0	-	No VCE or N/A	
	1	GSM	GSM Communications	
	2	3G	3G Communications	
	3	PSTN	PSTN/POTS Communications	
	5	VOIP	VoIP Communications	
	F	VC	Custom comms	
6-9	WAYPHONE OPTION BITMAP - CODED AS 4 DIGIT HEX NUMBER			
	b0	IR	IrDA (Obsolete)	Char 9 Add 1
	b1	M	Master	Char 9 Add 2
	b2	RS	Single Relay Board	Char 9 Add 4
	b3	RM	Multi Relay Board	Char 9 Add 8
	b4	S	Strobe	Char 8 Add 1
	b5	L	Light Box	Char 8 Add 2
	b6	E	E-Core	Char 8 Add 4
	b7	I	I-Core	Char 8 Add 8
	b8			Char 7 Add 1
	b9			Char 7 Add 2
	b10			Char 7 Add 4
	b11			Char 7 Add 8
	b12			Char 6 Add 1
	b13			Char 6 Add 2
	b14	XC	external battery Charge	Char 6 Add 4
	b15			Char 6 Add 8 (10=A, 11=B etc)

VCE CODING



The example above results in Alphanumeric code: VCE-2B-MB-WP1.R-3G-RS-CS.1

Strobes, Light Boxes, E-Cores & I-Cores do not effect the VCE hardware so are not included as VCE options.

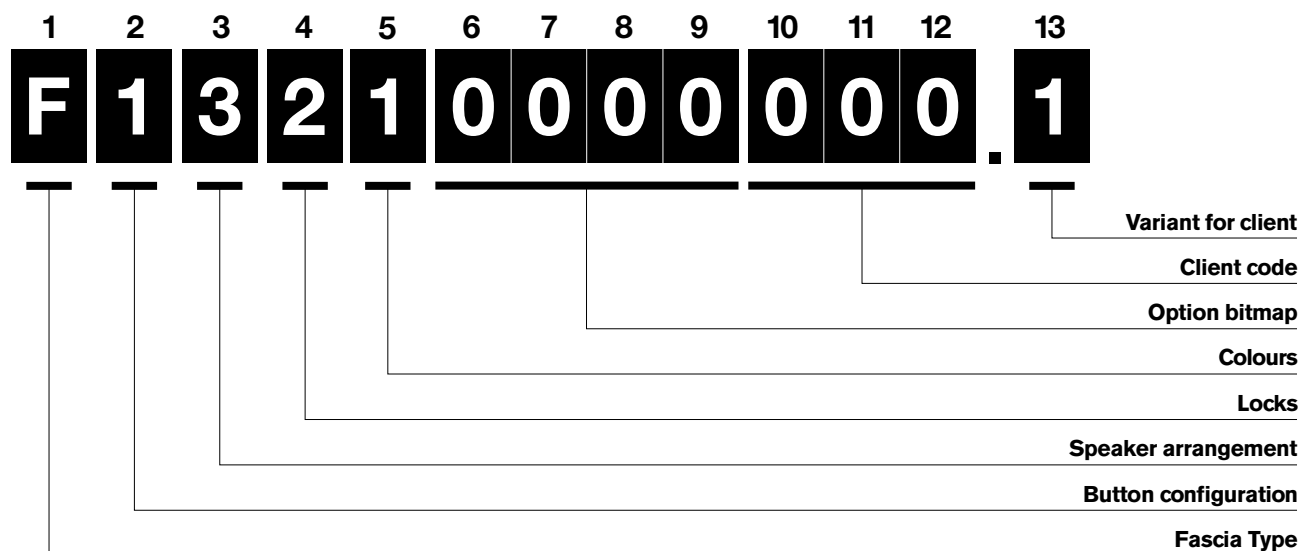
DIGIT	N	A	DESCRIPTION	COMMENT
2	BUTTON CONFIGURATION			
	0	oB	No Buttons (PA only)	
	1	1B	Single Button Standard	
	2	2B	Dual Button Standard	
	3	1BI	Single Button Illuminated	
	4	2BI	Dual Button Illuminated	
	5	1BP	Single Button Illuminated Piezo	
	6	2BP	Dual Button Illuminated Piezo	
	E	HS	Hookswitch	
	F	BC	Custom (Refer BOM)	
3	POWER SOURCE			
	0	-	Client looks after power or not relevant	Use standard Batt & DC Feed cable
	1			
	2	MB	Local Power (Solar or Mains) and Battery	
	3	RPF	Old RPF Module & Battery	Can't run from RPF alone
	4	R	Remote DC	Requires DC-P module
	5	RB	Remote DC & Battery	As above
	F	PC	Custom (refer BOM)	

VCE CODING

DIGIT	N	A	DESCRIPTION	COMMENT
4	VCE REVISION			
	0	-	Obsolete (L or P)	
	1	WP1.R	Current	
5	VCE COMMUNICATIONS INTERFACE TYPE			
	0	-	No VCE or N/A	
	1	GSM	GSM Communications	
	2	3G	3G Communications	
	3	PSTN	PSTN/POTS Communicationss	
	5	VOIP	VoIP Communications	
	F	VC	Custom Comms	
6-9	WAYPHONE OPTION BITMAP (CHECK BOXES) – CODED AS 4 DIGIT HEX NUMBER			
	b0	IR	(Obsolete)	Char 9 Add 1
	b1	M	Master	Char 9 Add 2
	b2	RS	Single Relay Board	Char 9 Add 4
	b3	RM	Multi Relay Board	Char 9 Add 8
	b4	W	Waterproof Connectors	Char 8 Add 1
	b5			Char 8 Add 2
	b6			Char 8 Add 4
	b7			Char 8 Add 8
	b8			Char 7 Add 1
	b9			Char 7 Add 2
	b10			Char 7 Add 4
	b11			Char 7 Add 8
	b12			Char 6 Add 1
	b13	O	OVP Module	Char 6 Add 2
	b14	XC	External Charger	Char 6 Add 4
	b15			Char 6 Add 8 (10=A, 11=B etc)

If an external charger is specified, the internal VCE power connections may be effected.

FASCIA CODING



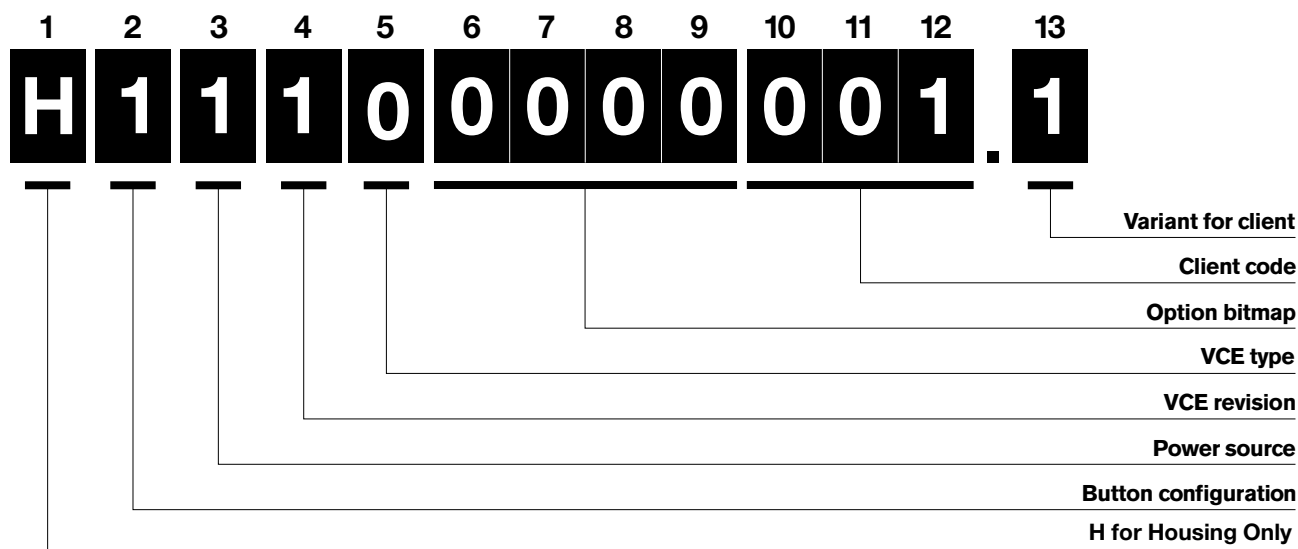
The example above results in Alphanumeric code: FAS-1B-STM-BI-SI.B-CS.1 (our standard single button fascia)

DIGIT	N	A	DESCRIPTION	COMMENT
1	FASCIA TYPE			
	F	FAS	Extruded Fascia	
	F	PAF	Panel Fascia	
2	BUTTON CONFIGURATION			
	0	0B	No Buttons (PA only)	
	1	1B	Single Button Standard	
	2	2B	Dual Button Standard	
	3	1BI	Single Button Illuminated	
	4	2BI	Dual Button Illuminated	
	5	1BP	Single Button Illuminated Piezo	
	6	2BP	Dual Button Illuminated Piezo	
	7	1BF	Single Button Flush	
	8	2BF	Dual Button Flush	
	E	HS	Hookswitch	
	F	BC	Custom (Refer BOM)	
3	SPEAKER TYPE & POSITION			
	0	-	Reserved	
	1	STMIR	Speaker Top (Mic & IrDA obsolete)	
	2	SBMIR	Speaker Bottom (Mic & IrDA obsolete)	
	3	STM	Speaker Top (Mic only)	
	4	STB	Speaker Bottom (Mic only)	
	5	ST	Speaker Top	
	6	SB	Speaker Bottom	
	F	SC	Custom (refer BOM)	

FASCIA CODING

DIGIT	N	A	DESCRIPTION	COMMENT
4	LOCK TYPE			
	0	-	Reserved	
	1	AB	Abloy	
	2	BI	BiLock	
	8	KR	Bryce KEY-REX	
	9	SC	Other security screw	
	F	LC	Custom (refer BOM)	
5	COLOUR			
	0	-	Raw	
	1	SI.B	Bright Silver	
	2	OR.B	Bistro Orange	
	3	OR.M	Mitsubishi Orange	
	4	OR.S	Signal Orange	
	5	YE.S	Safety Yellow	
	6	RD.R	Flame Red	
	7	BL.S	Space Blue	
	8	OR.D	Dulux Orange X15	
	F	C	Custom (see BOM)	
6-9	WAYPHONE OPTION BITMAP - CODED AS 4 DIGIT HEX NUMBER			
	b0	A	Anti-Graffiti	Char 9 Add 1
	b1	P	Polished (Stainless)	Char 9 Add 2
	b2	B	Brushed (Stainless)	Char 9 Add 4
	b3			Char 9 Add 8
	b4			Char 8 Add 1
	b5	L	Light Box	Char 8 Add 2
	b6			Char 8 Add 4
	b7			Char 8 Add 8
	b8			Char 7 Add 1
	b9			Char 7 Add 2
	b10			Char 7 Add 4
	b11			Char 7 Add 8
	b12			Char 6 Add 1
	b13			Char 6 Add 2
	b14			Char 6 Add 4
	b15			Char 6 Add 8 (10=A, 11=B etc)

HOUSING CODING



The example above results in Alphanumeric code: : HSG-PD-PC-B2S-BLS-CS.1

DIGIT	N	A	DESCRIPTION	COMMENT
2	HOUSING STYLE			
	0	PA	Panel	
	1	PD	Pedestal (1375mm)	
	2	WM	Wallmount (470mm)	
	3	UM	Universal Mount	
	5	WME	Wallmount Extended (740mm)	
	8	PAC	Panel Custom (non-standard size)	
	9	PDC	Pedestal Custom (non-standard size)	For extended/short etc
	A	WMC	Wallmount Custom (non-standard size)	For any size other than 470mm or 740mm
	F	-	Reserved for Fascia codes	
3	MOUNTING			
	0	-	n/a	Use 0
	1	PC	Pole Centre	Standard length
	2	PL	Pole Centre Long	
	3	PR	Pole Rear	For Solar poles etc
	4	W	Wall Mount	
	5	B	Barrier Mount	New Jersey

HOUSING CODING

DIGIT	N	A	DESCRIPTION	COMMENT
4	BATTERY BRACKET CONFIGURATION			
	0	-	No Battery or N/A	
	1	B2S	2 x Standard Brackets	For 2 x 6V 12AH
	2	B1D	1 x Deep Bracket	For 12V 7AH
	3	B1S	1 x Standard Bracket	
	4	B1T	1 x Thin Vertical Bracket	For 12V2Ah
	5	B2D	2 x Deep Bracket	
	6	B1M	1 x Medium Vertical Bracket	For 12V2.3Ah
	F	C	Custom (refer BOM)	
5	COLOUR			
	0	-	Raw	
	1	SLB	Bright Silver	
	2	ORB	Bistro Orange	
	3	ORM	Mitsubishi Orange	
	4	ORS	Signal Orange	
	5	YES	Safety Yellow	
	6	RD.R	Flame Red	
	7	BL.S	Space Blue	
	8	ORD	Dulux Orange X15	
	F	C	Custom (see BOM)	
6-9	WAYPHONE HOUSING OPTION BITMAP – CODED AS 4 DIGIT HEX NUMBER			
	b0	A	Anti-graffiti Coating	Char 9 Add 1
	b1			Char 9 Add 2
	b2			Char 9 Add 4
	b3			Char 9 Add 8
	b4	S	Strobe	Char 8 Add 1
	b5	L	Light Box	Char 8 Add 2
	b6	E	E-Core	Char 8 Add 4
	b7	I	I-Core	Char 8 Add 8
	b8			Char 7 Add 1
	b9			Char 7 Add 2
	b10			Char 7 Add 4
	b11			Char 7 Add 8
	b12	GP	Graphic: Phone (Symbol)	Char 6 Add 1
	b13	GS	Graphic: SOS	Char 6 Add 2
	b14	GE	Graphic: Emergency	Char 6 Add 4
	b15	GC	Graphic: Custom	Char 6 Add 8 (10=A, 11=B etc)

PART NUMBER		DESCRIPTION	TECHNICAL DETAILS
CS0947		Speaker/Microphone Assembly with 1m cable	4 ohm speaker, electret microphone, male DB9 connector with 1m cable, CS1394B cable connected across speaker.
CS0831		Button Prominent Cable Assembly	Front panel diameter 28mm, Cutout 25.8mm, IP66, terminated with CS1342 cable.
CS1458		Button Flush Cable Assembly	Front panel diameter 28mm, Cutout 25.8mm, IP66, terminated with CS1342 cable.
CS1704		Button Small Flush Cable Assembly	Front panel diameter 21.5mm, Cutout 19.2mm, IP66, terminated with CS1342 cable.
PP5600		Button Green Illuminated	Front panel diameter 21.5mm, Cutout 19.2mm, I P66, 2.8mm Tab connectors.
PB0105		BATTERY 12V 2AH SLA	150 x 20 x 89mm
PB0106		BATTERY 12V 45AH SLA DEEP CYCLE	197 x 165 x 170mm
PB0107		BATTERY 6V 12AH SLA F1 Terminals	151 x 51 x 98mm
PB0109		BATTERY 12V 7AH SLA F1 Terminals	151 x 65 x 98mm

PROJECTS



1 Australia / 2 UK / 3 Ireland / 4 Denmark / 5 UK /

PROJECTS



6



7



8



9



10



11

6 Greece / 7 Ireland / 8 New Zealand / 9 Brazil / 10 Chile / 11 Wales

PROJECTS



12-13 Australia / 14 India /
15 Australia



A Traffic Technologies
Products Group Company



NSW OFFICE
QTC TRAFFIC SOLUTIONS

12-14 Leeds Street
Rhodes, NSW 2138 Australia
Phone +61 (0)2 9896 5702
Email australiasales@clearsonics.com
www.clearsonics.com

VIC OFFICE
TRAFFIC TECHNOLOGIES LTD

31 Brisbane Street
Eltham, VIC 3095 Australia
Phone +61 (0)3 9430 0222
Fax +61 (0)3 9430 0299
Email info@trafficltd.com.au
www.trafficltd.com.au