



PRODUCT PORTFOLIO

The Customer Centred Approach to
Telecare, Warden Call and Door Entry
Solutions



network communication
systems limited

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Why Choose NCS?

Network Communication Systems (NCS) is an independent manufacturer with an extensive range of telecare equipment as well as door entry, warden call and access control systems. Through these products, NCS facilitates the design, build, installation, and maintenance of these systems with a customer centred approach based on the positive outcomes received by end-users



NCS has been successfully operating in the telecare & door entry system market since 1992. Over this period NCS has developed and maintained a **strong balance of high quality products** in its portfolio and is recognised as a **trusted brand** by many local authorities, housing associations, hospitals and Clinical Commissioning Groups (CCG's) due to the formulation strong long-term relationships.

Operating out of Doncaster South Yorkshire, NCS provides **outstanding pre & post-customer care** via the work by our management and operations team. Furthermore, with an in-house workshop and dedicated customer-orientated engineers, NCS can thrive in **product maintenance, product innovation and design processes** to provide state of the art products that meet our high benchmarked standards. This also involves putting the needs of users, patients and care workers into the design process and delivery.

Overall, the main goal at NCS is to enable the offering of **professional, quality and cost-effective care for housing associations/schemes, building on foundations of high quality products, increased innovation, workmanship and convenient prices.**



*NCS strives to move away from commission based supply, and opts for providing products with a sole focus on the outcome for the: **End User, Carer, Practitioner and Family member.***



Door Entry & Warden Call Systems

Door Entry/Access Control



At NCS, we have produced a door entry/access control system that offers the user a simple and intuitive digital entry system with fob access and cloud based storage so data is tracked and logged.

The Mark III is also highly innovative; this can be said since it's the **only product on the market that has an access control AND fob access facilities built into one complete system.** Some other companies rely on two individual systems which involves more programming, more wiring, and more chances of a fault occurring.

Secondly, this system also offers the user the addition of isolation cards. These isolation cards are fitted into the systems landing decoder, and means that if for example one tenants handset produces a fault, the whole system doesn't go down. Not all other companies in this sector can offer this facility like NCS can.

These systems are also **flush mounted** and are **vandal resistant** for increased durability and reliability.

Xenon Warden Call System



The xenon warden call system is a combination of a standard warden call communication system with all the additional features that may be needed for modern day communications, such as door entry, door panels, call points and fob readers.

This simple warden call system allows for **multiple savings** to be made for the customer, as users can standardise products on dispersed alarms to achieve significant reductions in outgoings for installation & maintenance costs. This is due to the system allowing for existing dispersed alarms to be fully integrated and utilised to cut costs on new equipment.

This is especially vital in today's economic climate where there is a large emphasis placed on cost-constraints and financial pressures.

This **specialist, simple** and **reliable** system can relieve landlords and housing schemes/associations from the stresses of extensive and structured maintenance contracts that they would receive from alternative hardwired call systems.

Other Key Features & Benefits



TECHNICAL INFORMATION	
System Controller	1
Call Points	1-255
Panels	1-255
Fob Readers	1-255

Utilises Carephones from All Major Manufacturers

This can allow housing associations to upgrade their systems whilst using their **existing Carephone resources**. This can significantly reduce costs whilst offering a modern-day **future-proof** system.

Incorporates Free Calls Between Residents

This allows for residents to keep in contact with neighbours from the comfort of their homes without the risks for some of getting out and about to socialise.

This feature also allows for individuals to achieve an **increased degree of freedom**, the opportunity to be part of a community and to enhance relationships that may have not been established if free calls weren't available.

Optional Telecare Features Can Be Added

The ability to add telecare features to the system allows customers to provide all the required and desired services to the end-users and tailor their offerings to their select needs. This also reduces costs on a second system for these services.

All detectors added to the system offer sophisticated logging and tracking of all information passed through the peripherals. Onsite staff and carers can then be alerted of any changes through one fully integrated system, that adds to the simplicity of the system and stretches budgets even further by having all these additional services.

The System Prioritises & Collates Each Calls

In terms for any housing scheme/association, this can allow for the efficient allocation of human/physical resources by clearly specifying what type of call is being phoned in and can know instantly what type of action to take.

This on their behalf will improve their level of care and for the end-users, they can benefit from an **increased level of security** and peace of mind knowing that the right care is being given in an efficient and professional manner.

The Xenon system is Tested to: EN50134-4, EN55024 (EMC immunity), EN55022 (EMC radiated emissions) and EN60950-1 (general safety)

This shows the commitment to **reliable** and **high quality services**, and provides customers with comfort knowing their communication systems are all in line with accredited standards, are professional and adhere to the most up-to-date of manufacturing practises.

Harmony



Harmony is a new system developed by NCS that has gone through a rigorous and detailed 3-year research and development program involving test sites and customer feedback. This new system therefore offers countless tailored benefits for management and end-users, who were involved in the design and delivery of the finished article.

This **fully integrated telecare and security solution** was specifically made with Sheltered housing, extra care developments, retirement villages and nursing homes in mind and offers a system controller, room consoles, proximity readers and communication handsets.

This system provides a **low-cost system** that's easy to use and maintain as well as easy programming that can be tailored to the users required needs*.

Furthermore, this system offers **flexibility** and **versatility** for management/care staff, as well as providing end-users with a modern, **all-in-one system** that presents an array of features to provide them with the care they need, whilst providing a positive quality of life that they deserve in terms of **privacy, quality** and **independence**.

**The choice between Harmony and the Xenon warden call system may be impacted by factors such as the current cabling in operation and the current age of the buildings selected.*



Key Resident Features & Benefits

Large Character Display & High Contrast LCD Screen

This allows for residents to have a full clear image of Harmony's menu and can navigate with ease through its features. This screen also offers **caller ID** so residents know who's calling and can remove the stresses of unneeded/ bogus calls to their home.

Simple Three Button System

The **intuitive design** means residents aren't lost in a web of buttons and menus, which may prolong time between care being needed and care being provided.

Utilises Large "Easy-to-Press" Buttons

The **"easy-to-press" buttons** on the module are made from silicon rubber to avoid finger slips and are colour coded for varying needs. (Emergency, I'm Ok & Cancel)

The "I'm OK" and PIR motion "I'm Active" Facilities Promote Independence

This features allow for residents to have the **independence** they want and removes the stresses of unneeded daily check-ins, as well as **reduced labour costs** for housing schemes.

Medial Alarms and Other Telecare Facilities

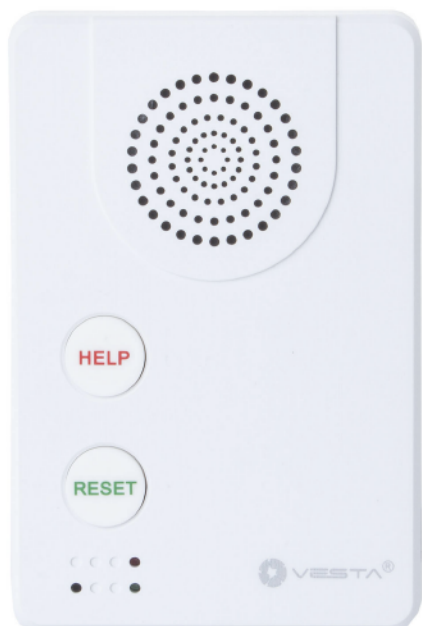
Harmony offers the use of medication reminders as part of other telecare peripherals (Pull cord, temperature sensors and many more**) that are implemented with the use of the Carephone MX 2 series.

Elderly people with **Dementia** may forget to take their medication or forget to turn on their heating in the colder months, which can lead to serious harm. This prompting system will ensure that medication and other daily activities are completed at the right time.

**For full list of telecare peripherals, see in 'Telecare Peripherals' on Page 18

Dual Functionality as an Intruder/Inactivity Alarm

Harmony can also work as an **inactivity and intruder alarm** for increased security when residents are in and out of the home.



Key Management/Care Staff Features & Benefits

All Service Providers and Events Are Tracked and Logged

This allows management and care staff to easily extract the information needed for measuring patterns in behaviour for methods of proactive care. (And for audit purposes that may be required)

Offers Category 1 Radio Receivers

Telecare needs to be **reliable** and **consistent** with its quality of service, and offering category 1 radios allows this.

With support to dual-frequency telecare receivers, this allows Harmony to be incorporated with other manufacturers telecare peripherals and can facilitate the running of these systems without the full upfront cost of a complete upgrade.

Group Zoning Feature Available

With the use of a zoning feature, carers can collectively group houses/dwellings into a single working unit to provide more efficient and cost-effective care

Call Priority Features

The call priority feature can allow for calls to be categorised and organised to allow for staff to efficiently allocate resources and capabilities for each resident.

System Test with No Down Time in Service

Room console tests can be done without the need for a voice call, meaning the line is never down. It also provides text feedback of the condition of all telecare peripherals to make sure they are all running smoothly.

TECHNICAL SPECIFICATION (PER SYSTEM)	
System Controller	1
Room Consoles	200
Wireless Telecare Sensors	2048
Handsets	8
Pagers	64
Zones	2 (Standard System)
Monitoring Centres	8
Door Panels	16
Proximity Readers	50 (16 Profiles)
Fireman’s Switch (Per Door)	16

DIMENSIONS (H X W X D)	
System Controller	500 x 510 x 120mm
Room Console (At Maximum Point)	223 x 240 x 40mm
Telecare Receiver	188 x 123 x 67mm
Door Panel	440 x 210 x 65mm
Proximity Reader	90 x 90 x 35mm



APPROVALS & STANDARDS

System Compliance	EN50134
Product Safety	EN60950
EMC	EN55022, EN6100-3-2, EN50130-4
Telecare Peripherals (Radio Tx)	EN300 220-2, EN301 489-3
Telecare Receivers (Radio Tx)	EN300 220-2 (Category 1)
Communication Protocols	TTNEW, BS8521 (Open and Standardised Protocol)
Network Compatible	21CN and NGN
Restriction of Hazardous Substances	RoHS Directive (2011/65/EU)
Waste Electrical & Electronic	WEEE Directive (2012/19/EU)
Quality (Design, Manufacture & Service)	ISO 9001:2008



Comparison Chart – Xenon & Harmony Systems

Deciding which warden call system is most suitable can be challenging, and therefore NCS has present a clear and simple comparison chart for the two systems regarding the main points that differ in each system.

	HARMONY	XENON
Radio Pendant Coverage	Coverage is available when in proximity of the room unit	Offers Full Site coverage for all radio pendants in the system
Auto-Answer Feature	Offers Auto-Answer feature	Can be Auto-Answer , however this will also mean the Door Entry System will be Auto-Answer
Room Unit Power Supply	Each room unit is powered by the Central Controller	Each room unit needs a 240V Power Socket
Flat to Flat Calling	No Flat to Flat Calling available	Flat to Flat Calling Available
Number of Speech Channels	2 Speech Channels	7 Speech Channels
Brand of Room Unit	Room units of the Harmony units designed and manufactured by NCS	Room units can be from Any Manufacturer
Wiring	10 Core Bus	1 Pairing from each flat back to the Central Controller

Digiway Plus – Door Automation

The Digiway Plus is one of our new additions to our door entry portfolio, and offers users with a **high quality, high performance** entry system with the choice of **single or double automatic swinging doors**.



Utilising New Technologies

The Digiway Plus offers **new encoding software** that allows for full recognition of the location of the door on its axis, meaning there isn't a need for a door stop and can be managed by a **master** or **slave** system.

Simple & Easy Set-up/Installation

The Digiway Plus provides a **LCD display** and integral pad for simple and quick installation via step-through instructions. This system can also be set up by the **hand-held** transmitter that comes as standard.

Many Suitable Applications

With the plethora of features, this allows the Digiway Plus to offer increased **flexibility** and **convenience** for the end-user with applications such as:

- ✓ Push & Go / Pull & Go
- ✓ Fire Alarm Input
- ✓ Night / Day Mode
- ✓ Free Open, Auto-Close
- ✓ Disabled Entry Mode
- ✓ Eletrolock Pause Timer
- ✓ PIR / Radar "Masking"
- ✓ Wind-Stop Toque Adjustment
- ✓ Obstacle Management

Complies with EN16005

Compliance with **European Standard EN16005** means that the Digiway Plus stands up to the code of practise for safety in automatic doors for pedestrian use. This can provide users with **confidence** in the product, knowing that they have a **professional** and **efficient** automatic door entry system in place

TECHNICAL SPECIFICATION

Dimensions (H x W x D)	511 x 90 x 110mm
Power	230Vac – 50Hz
Motor Power	33W
Motor Voltage	24Vdc
Battery	12Vdc, 1.3AH
Weight	5KG
IP Rating	IP22
Operating Temperature	-10 - +55°C
Mains Fail Operation	4 Hours

Why Are Telecare Systems Needed?

‘More than 90% of people say they want to live independently at home for as long as possible’



Giving Individuals the Power of Independence & Confidence

When individuals get older, they may need assisted/special care services for certain health conditions or due to injuries that have occurred during their lifetime. When this happens, many people become **isolated** and are unable to complete daily activities that once seemed straight-forward, such as going to the shops or going out and see friends/loved ones.

Telecare systems can be introduced in such cases to **stimulate the confidence in family members and to remain independent in their lifestyle** and more importantly, provide **choice** in their lives to improve their quality of life. Users will know that if they need assistance for a fall or emergency, care can be provided in a swift and effective manner.

Giving them this opportunity can also **rebuild community links** for individuals, whether that be by becoming part of their local community, or by allowing easy access to communication facilities with neighbours.

Relieve Stress from Loved Ones

Many loved ones of those who need assisted care take too much time out of their own lives to make sure that they're safe and secure.

Telecare facilities can provide a chance for those individuals to **gain freedom and peace of mind**, via increased reliability on secure and professional telecare systems to get more out of their own lives.

Efficiencies for Management & Care Staff

The use of high quality telecare systems can allow for management & care staff to **reduce their costs of labour**, due to the removal of daily carer visits/check-ins for individuals in their schemes.

This also **removes the stress** for those in their care who may be disturbed by a daily morning call if they don't need one, and may enjoy the increased degree of privacy.



‘Just because individuals become more vulnerable, it doesn't mean that they have to take a step back and remove themselves from society’



A Budget Strained Environment

Due to the current economic climate and external factors in the UK, budgets are being stretched and margins are tighter than ever. NCS can offer systems that tackle these financial pressures, providing **cost-effective systems** that have a low cost of ownership and remove the need of high cost long term maintenance contracts that others may offer.

NCS products use existing infrastructure and consistent parts over systems large and small, upgrading current telecare systems never got so easy!!

PROVIDER

- ✓ **Increased Efficiencies**
- ✓ All Information Tracked & Logged in **Real Time**
- ✓ **Reduced Costs**
(Labour, Management Systems)

END-USERS

- ✓ Products & Services **Tailored** to them
- ✓ Reducing **Isolation**
- ✓ Improving **Quality of Life**
- ✓ Stimulating **Independence**
- ✓ Increase **Confidence**
- ✓ Enhance **Social & Community Links**



Carephone MX-Series

FAMILY

- ✓ Increased **Peace of Mind**
- ✓ Alerts & Information Sent to them in **Real Time**
- ✓ **Transparency** in Care Offering
- ✓ **Gain Freedom** in Their Own Lives

CLINICIANS

- ✓ Reduced Paperwork via **Electronic Data Recording**
- ✓ Promotes **Proactive Care**
- ✓ Reduced **GP/Doctors' Appointments**

Carephones

NCS are a **proud** and **trusted** re-seller of the Carephone MX landline & mobile devices, which is part of Climax's smart care series that aims to provide end-users with medical alarms plus intrusion functions. This type of equipment is highly suitable for any individual who is of an elderly age, or needs more care and medical attention due to a serious injury or condition.

Carephones can work in tandem with the **Xenon** or **Harmony systems**, meaning that all communications and telecare is under on fully complete and tightly knit system for peace of mind for residents and management staff on a day-to-day basis.

What makes the MX series stand out from the crowd is that it's **the only product on the market that offers wireless remote speech stations and voice pendants.**

“

This is the ONLY product on the market that offers residents and housing schemes with wireless remote speech stations and voice pendants.

(This means that voices don't have to try and reach the speaker module in the hallway of a dwelling if the user needs help in their bedroom for example)

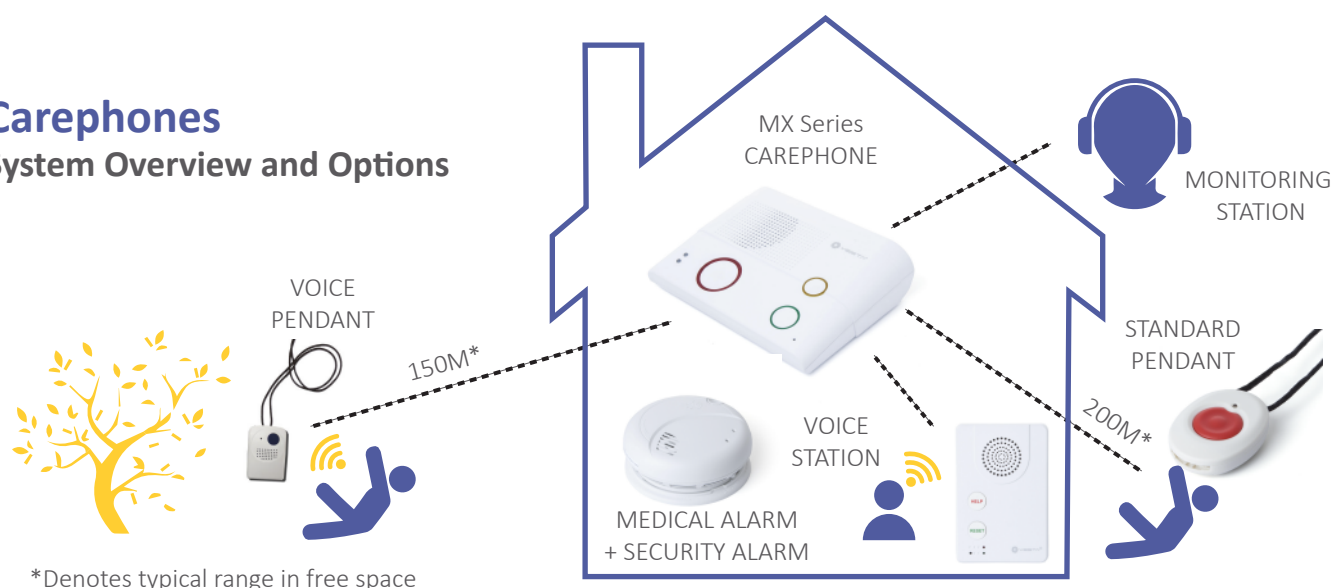
Providing this offers increased **convenience** and **ease of use** for all parties involved, and expresses NCS' commitment to **innovation** and **product differentiation**.

”

Carephone MX Series

The Carephone landline comes with a plethora of features that can benefit the end-user and management/-care staff:

Carephones System Overview and Options



Integration of up to 100 Telecare Devices

- With the ability to offer an array of telecare devices such as PIR motion sensors, heat detectors, pull cords and personal pendants (Full List, See Page 18) to the MX series, the MX series can provide the perfect solution for end-users with **varying** needs and requirements.
- These additions include a DECT module (EZ-1)*, that can allow for on-site managers to keep in two-communi- cation with end-users and a GSM terminal (EZ-2)** for an **increased reliability and security if telephone lines are down**.

(A site survey can be conducted to see whether the DECT or GSM options is the most suitable, testing signal strength, the size of the site and signal provider)

ALARM REPORTING TYPE	MX-2 (PTSN)	MX-3 (GSM/3G)
DTMF CID Reporting	PTSN	GSM/3G
Modified CID/SIA Reporting Over TCP/IP	X	GPRS
Voice Reporting (Optional)	Voice Reporting Over PTSN	Voice Reporting Over GSM/3G
SMS Alarm Reporting	X	GSM/3G

A Simple, Modern Design Whilst Still Offering Extensive Features

- The MX series offers a **simple** and **easy-to-use** three button design that allows end-users to easily navigate the many options that are on offer, such as inactivity, check in/out, away/home, non-emergency call, security buttons, intrusion alarm arm/disarm and carer/nurse arrival functions.

Providing Ease of Communication In-case of Emergency

- The Carephone landline offers an **100DB SOS alarm, world class certified RF range** and a speak erphone function that’s activated automatically if end-users have a fall and cannot reach the device.
- **Full Duplex two-way voice communication** ranges over 10 metres from the control panel, providing increased convenience for residents who need assistance
- Three **pre-set numbers** can be set into the module. These can be for carers or loved one’s so that they’re always in the loop and can be given up-to-date alerts and notifications when anything happens.



Carephone Mobile Facility

The mobile handset also allows for end-users to gain the same quality of assistance when they are out-and-about as they would from their in-home module. Most end-users need freedom from their condition, and need opportunities to go out into to the world and **socialise** and create **community links**.

This mobile device contains many of the same features as the in-home module, such as:



Two-way Communication and Automatic Emergency Response to any Alert

SOS features can also be activated when the device is turned off so care and assistance can always be provided whatever the situation.



GPS Tracking

Family members and carers can also track the Carephone handset using the online portal.



Three Pre-set Numbers

The device will call three pre-set numbers repeatedly until there is an answer, making sure that for the end-user that someone will be answering their emergency.



Additional SMS Alerts

Alarms can also be sent over SMS to loved ones or carers to further guarantee that the information has been passed on to an individual who can help them.



Carephone Emergency Response Centre (ERC)

The SOS calls will also be sent to the **24/7 Carephone Emergency Response Centre***. There they will have all relevant and important medical information stored so **specialised efficient care** is provided effectively

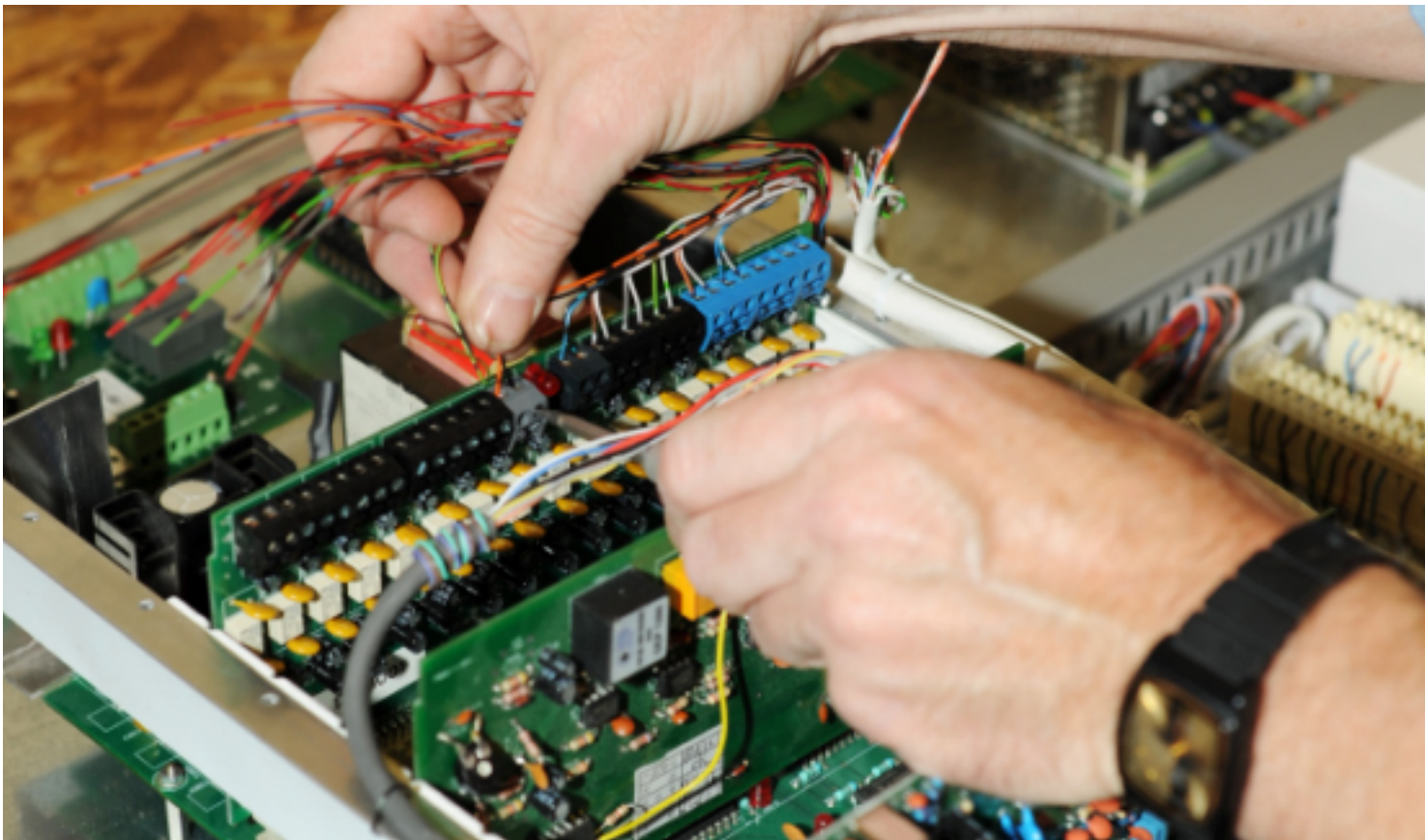
*(This feature is not part of our offering, and we advise that customers choose/set up their own telephone providers for this feature)

TECHNICAL SPECIFICATION

Dimensions (H x W x D)	57.6 x 164 x 216mm
Power	12V 1.5A Switching Power
Backup Battery	1.2V 1100Mah Ni-Cd Rechargeable Battery x 6
Battery Backup Time	Up to 41 Hours (Without EZ-1)* Up to 19.5 Hours (With EZ-1)**
Speaker	3W
Available Radio Frequencies	433AM/433FM/869.2375MHz 433 AM: Over 200 Metres (Open Space) 433 FM: Over 350 Metres (Open Space)
Radio Frequency Ranges	869.2375MHz: Over 400 Metres (Open Space)
Operating Temperature	-10°C to +45°C
Operating Humidity	Up to 90% (Non-Condensing)

APPROVALS & STANDARDS

Full System	Compliant with FCC, CE and ETL Certification Requirements
GSM Module	PTCRB Certified
Radio Frequencies	EN-300-220 (Class 1) Certified
Communication Protocols	TT New, CMS, Contact ID, Climas CPC Dialect, Franklin 4+2



Medical Alarm CTC-1032

The CTC-1032 can provide users with all the necessities of a dispersed alarm at a **fraction of the cost**, providing them with value for money and options if budgets are being stretched.



The CTC-1032 offers features such as:

Hands Free Call Answering

In case the user cannot reach the device, communication can still be transferred by the built in **two-way speaker**.

4-Way Central Monitoring Stations

Allowing for separate account numbers of up to 6 digits with individual communication protocol.

Two Way Hands-Free Voice Communication

Allowing for communication with an emergency monitoring station to keep in contact in case of an emergency.

Half & Full Duplex Speech Paths

The 'Push to Talk & Listen In' half duplex and full (Two-way) duplex features are both controlled by DTMF (Dual Tone Multi Frequency) commands.

Up to 10 Peripherals Can Be Added

With 10 peripheral devices, this is a **sufficient** amount to ensure that the user isn't at risk. These include pendants, PIR sensors, Panic buttons and Smoke, CO and Water Detectors.

Brightly Illuminated Red Emergency Button

Well displayed and clear to see, users are less likely to press the wrong buttons and can get the best out of this device.

This handy dispersed alarm also comes with a **built-in digital dialler**, remote & local programming, pre-dial alert tones and is in line with communication protocols: Contact ID, **Scancom SAF** and **Tunstall Telecom Format**

TECHNICAL INFORMATION

Dimensions (H x W x D)	178 x 120 x 32mm
Power	12V 500mA Adaptor
Battery Backup	7.2V 600mAh Ni-Mh Rechargeable Battery
Battery Back Up Time	18 Hours Minimum
Available Frequencies	433Mhz / 868.6375MHz Narrow FM / 868.35MHz
Radio Range	433MHz or 868.35MHz: Over 200 Metres (Open Space) 868.6375MHz: Over 300 Metres (Open Space)
Operating Temperature	-10°C to +45°C
Operating Humidity	Up to 90% (Non-Condensing)

Telecare Peripherals



The MX-2 & MX-3 devices offers the ability to allocate **up to 100 telecare devices** and can be tailored to individual residents so that they know the right care is being offered to them. The different peripherals NCS offer are listed below.

All telecare peripherals meet the **EN 50291 European Standards** and will be fitted by **accredited** and **professional** engineers, who will continue this high level of customer and product service through our **maintenance packages**.

(Specifications are subject to change without notice due to continuous product development and improvement)

In House Detectors & Sensors

Water WS-15 Detector

Water detectors are needed for countless reasons. A blocked sink, toilet, or tap being left on/unattended can quickly lead to flood damage with potentially dangerous consequences.

The after effects of a flood could not only result in extensive repair costs and increased insurance premiums for housing schemes, but for residents it can have long term damage to health, particularly in colder months.



TECHNICAL INFORMATION

Dimensions (H x W x D)	95 x 29.5 x 82.5mm
Power	Alkaline AAA Batteries x 4
Battery Life	6 Years (Averaging 1 Activation Per Year)
Available Frequencies	433Mhz / 868.6375MHz Narrow FM / 868.35MHz
Radio Range	433MHz or 868.35MHz: Over 200 Metres (Open Space) 868.6375MHz: Over 300 Metres (Open Space)
Operating Temperature	-10°C to +45°C
Operating Humidity	Up to 85% (Non-Condensing)

Smoke SD-8EL Detector

Smoke alarms are an essential for every home, and **linking these with other telecare sensors** as part of the MX series can provide residents and their loved ones with an improved overall sense of **security** and **safety** in accredited and professional NCS products.

Our smoke detectors can be **fully integrated into the MX series** dispersed alarm system, so onsite team members are contacted if smoke it detected.

The SD-8EL is small but large in **functionality**, offering the latest in Optical Chamber technology with long lasting battery life and 95dB sounding alarm to make sure residents are safe and avoid any fire hazard with **stability and sensitivity** worthy of **CE standards**.



TECHNICAL INFORMATION

Dimensions (H x W x D)	105 x 42mm
Power	Alkaline AA x 3
Battery Life	4 Years or Over (Averaging 1 Activation Per Day)
Available Frequencies	433Mhz / 868.6375MHz Narrow FM / 868.35MHz
Radio Range	433MHz or 868.35MHz: Over 200 Metres (Open Space) 868.6375MHz: Over 300 Metres (Open Space)
Alarm Silence Function	10mins Per Activation
Operating Temperature	-10°C to +50°C
Operating Humidity	Up to 85% (Non-Condensing)
Sensitivity Standards	EN54-7 & EN14604

Temperature Extremes and Heat Sensors

Temperature extremes/heat sensors are highly beneficial for residents who maybe suffering with **dementia**, who may leave food cooking too long or forget to turn their heating on in the winter.

These **compact, subtle and sleek designed** sensors will periodically transmit temperature readings every 30 mins and offer low battery detection whilst not compromising on top quality **stability** and **sensitivity**.



TECHNICAL INFORMATION

Dimensions (H x W x D)	103 x 31 x 21mm
Power	Lithium ½ AA Batteries x 1
Battery Life	3.5 Years
Available Frequencies	433MHz / 868.35MHz / 868.6375 MHz FM
Radio Range	433MHz or 868.35MHz: Over 200 Metres (Open Space) 868.6375MHz: Over 300 Metres (Open Space)
Operating Temperature	-10°C to +50°C
Operating Humidity	Up to 85% (Non-Condensing)

Pull Cord PCU-3 Unit

Pull cord units are used best in situations where extra attention needs to be taken to care and if the individual wishes to have a **fixed point of call** for any emergency needs, such as on a wall or ceiling.

Many pull cords for this reason are placed in bathrooms where individuals may not be wearing their pendant/personal trigger alarm. A simple pull down on the cord will alert for help via the MX series Carephone and help will arrive promptly.

TECHNICAL INFORMATION

Dimensions (H x W x D)	81.2 x 81.5 x 39.1mm
Cord Length	17.5cm
Power	CR2 3V Lithium Battery
Battery Life	5 Years
Radio Frequency	869 FM
Radio Range	Up to 400 Metres (Open Space)
Operating Temperature	-10°C to +45°C
Operating Humidity	Up to 85% (Non-Condensing)

Carbon Monoxide CO-8 & COA-8 Sensors

‘Carbon monoxide poisoning kills an estimated 30-50 people each year in the UK’ (Which. 2016) and installing detectors will help prevent the risk of this silent killer.

Carbon Monoxide (CO) is produced when a device is used that has a heating or cooking application, such as built in ovens and free standing cookers when they are running inefficiently. (due to a bad fitting, bad service or if ventilation has become blocked/prevented)

With a **self-test feature** and an **85dB alarm**, these sensors are **100% wireless** and measure CO levels as low as 30ppm, making them one of the more reliable and safest sensors available.



TECHNICAL INFORMATION

Dimensions (H x W x D)	130 x 100 x 41
Power	Alkaline AA x 3 Batteries
Battery Life	2 Years or Over (Averaging 1 Activation Per Day)
Sensor Life	5 Years
Available Frequencies	CO-7: 433MHz CO-8: 868.6375MHz COA-8: 868.35MHz
Measuring Range	0 to 999PPM
Alarm Concentration	30-999PPM
Response Time	300PPM: < 3mins 100PPM: 10-40mins 50PPM: 60-90mins 30PPM: >120mins
Alarm Sound Level	85dB @ 1 Metre
Self-Diagnostic Period	Every 30 Seconds
Operating Temperature	-10°C to +45°C
Operating Humidity	Up to 85% (Non-Condensing)
Sensitivity Standards	Meets EN50291

Door DC-15 Sensors

When aiming to minimize the risks involved in looking after individuals in assisted or shared living accommodation, being aware of their location can be crucial.

This issue is amplified when residents begin to go off-site and may lose their bearings. Door contact strips are placed on frames of doors to pinpoint an individual’s location throughout their dwelling or movement when they leave the home.

With a **new slimmer and more discreet design**, the DC-15 offers low battery detection, complies with **CE requirements** and is **tamper-proof**.



TECHNICAL INFORMATION

Dimensions (H x W x D)	107 x 32 x 22mm
Power	1/2AA 3.6V Lithium Battery
Battery Life	4 Years or over (Averaging 20 Activations Per Day)
Available Frequencies	433MHz / 868.6375MHZ / 868.35MHZ
Radio Range	433Mhz or 868.35MHZ: Over 200 Metres (Open Space) 868.6375MHZ: Over 300 Metres (Open Space)
Operating Temperature	-10°C to +45°C
Operating Humidity	Up to 85% (Non-Condensing)

PIR IR-9 Movement Sensors

Passive Infrared Sensors measure infrared (IR) light that radiates out of certain objects and are used as motion based detectors. The sensor will read an individual’s body temperature compared to the temperature of the room and will measure this in the form of infrared radiation.

The IR-9 possesses Adaptive Digital Signal Processing (ADSP) algorithms in its **compact and non-intrusive design** that enables **stability and sensitivity regardless of the external environment**

(PIR motion sensors provide inactivity monitoring when the system serves as a medial alarm and intruder monitoring when serving as an intrusion alarm)



TECHNICAL INFORMATION	
Dimensions (H x W x D)	94 x 64 x 42mm
Power	Lithium AA Battery x 1
Battery Life	2.5 Years and Over (Averaging 20 Activations Per Day)
Available Frequencies	433Mhz / 868.6375MHz Narrow FM / 868.35MHz
Radio Range	433Mhz or 868.35MHz: Over 200 Metres (Open Space) 868.6375MHz: Over 300 Metres (Open Space)
Detection Range	12 Metres (Over an 100° angle)
Operating Temperature	-10°C to +45°C
Operating Humidity	Up to 85% (Non-Condensing)
Accreditations	EN 50131 Grade 2, Class II

Personal Detectors & Communication Devices

Pendant/Wrist Transmitter

A personal pendant is one of the **easiest** and **most simple** methods of benefitting from any telecare service. The pendant acts as a personal alarm or trigger, that has a large button which can be pressed to get into contact with an onsite manager or an emergency call centre.

This pendant can be **worn around the neck, and around the wrist or belt to be more discreet** for those concerned with appearing vulnerable, reducing the **“Red Button Stigma”** that may alienate some end-users (especially for those who are younger and may need care due to injury or condition).



With **low battery detection** and **low power consumption**, these pendants also come with various colours of wrist bands/straps for that additional personal feel and style. They’re also fully waterproof up to **20 feet underwater**.

The pendant can offer a **range of 100m** from the Carephone module, making sure that the end-user will be able to communicate any issue from anywhere in the home.

TECHNICAL INFORMATION	
Dimensions (H x W x D)	45 x 35 x 10mm
Power	CR2032 Lithium Battery
Battery Life	5.5 Years (Averaging 2 Triggers Per Day)
Available Frequencies	868.6375Mhz/869Mhz
Radio Range	Over 200 Metres (Open Space)
Operating Temperature	-10°C to +45°C
Operating Humidity	Up to 85% (Non-Condensing)

Talking Pendant

For those individuals who need the ability to communicate with the personal pendant, a **talking pendant** is also available that allows for **two-way communication** for the end-user and call centre.

This for example, will enable direct communication to specify what the problem is, how they have fallen and the seriousness of the fall or emergency.

This pendant is also **waterproof** to **IP44 standards** and offers **ultra-low power consumption**.

(Note: The talking pendant will have a very limited battery life if not regularly charged up. It's therefore suggested that this pendant is to be worn for shorter periods, such as going out into the garden)



TECHNICAL INFORMATION

Dimensions (H x W x D)	61 x 42 x 20mm
Power	CR2 3V Lithium Battery
Battery Life	5 Year or Over (Averaging 3 mins Activation Per Month)
Available Frequencies	1880~1900MHz (Europe) / 1920-1930MHz (USA)
Radio Range	150 Metres (Open Space)
Operating Temperature	-10°C to +45°C
Operating Humidity	Up to 85% (Non-Condensing)



Fall Sensor

When it comes to caring for individuals who have a critical condition or of elderly age, falls and trips are highly probable and sometimes unavoidable. Fall sensors can be utilised to provide efficient emergency help when this situation occurs.

This **elegantly designed** sensor meets IP45 waterproof standards, and will be activated when someone wearing the pendant falls **more than 20 degrees and doesn't move for 8 seconds**.

These fall sensors work in a similar fashion to a pendant, and offers a large 'easy press' button which can be pressed to call for emergency help, and can help reduce an individual's fear of falling to be **more active** in their lives



TECHNICAL INFORMATION	
Dimensions (H x W x D)	58.6 x 42 x 19mm
Power	CR2477 3V Lithium Battery
Battery Life	2 Years or Over (Averaging 1 Trigger Per Day)
Radio Frequency Ranges	433Mhz: Over 130 Metres (Open Area) 868.35Mhz/869.2375MHz: Over 160 Metres (Open Area)
Radio Range	Up to 400 Metres (Open Area)
Operating Temperature	-10°C to +45°C
Operating Humidity	Up to 85% (Non-Condensing)



Call Point CP-23

Call points are an DECT device that can be used for users and management staff who want a fixed point of call around various shared & assisted living schemes so availability of emergency care is well spread over any facility.

This device is **waterproof (IP44 certified)** and provides **high voice quality** remotely from up to 3 metres away.

TECHNICAL INFORMATION	
Dimensions (H x W x D)	133 x 80 x 27.7mm
Power	1.5V AA Lithium Battery x 2
Battery Life	4 Years (Averaging 3 mins Activation Per Month)
Available Frequencies	1880~1900MHz (Europe) / 1920-1930 Mhz (USA)
Radio Range	150 Metres (Open Space)
Operating Temperature	-10°C to +50°C
Operating Humidity	Up to 90% (Non-Condensing)

Voice Satellite CTC-808RV (Remote Speaker)

A voice satellite is a device placed in a home that offers the ability for **high quality, hands free two-way communication** and can be beneficial when a situation is needed to be communicated vocally and not just by a button signal. *(See Real Life Scenarios, Page 30)*

This device can incorporate **4 CTC-808RV voice satellites** so that only one system is needed and facilitates a central monitoring station for prompt response times.

This can be mounted on the wall or placed on any table like surface for **increased availability** and can allow for housing schemes and associations to cover large areas in a more **efficient** and **direct** manner.



Combined with the MX series, this device is the **only product on the market that offers wireless remote speech and voice pendants.**

TECHNICAL INFORMATION

Dimensions (H x W x D)	115 x 172 x 36mm
Power	9V 500mA Adapter
Backup Battery	LR14/C 1.5V, 9A Alkaline Battery x 4
Battery Backup Time	6 Days
Speaker	1.5W
Available Frequencies	1880MHz~1900Mhz (Europe) / 1920@1930MHz (USA)
Maximum Range	150 Metres (Open Area)
Operating Temperature	-10°C to +45°C
Operating Humidity	Up to 85% (Non-Condensing)

Panic PB-15 Button

A panic or bogus caller button is used for when an individual in their dwelling feels unsure or at risk with someone calling at their door who is a stranger to them.

One simple press of the large button on the device sends out a **silent call** using an **extensive radio frequency (RF)** to the onsite team who will act quickly to attend to the situation.

This classy designed panic button offers a **highly cost effective solution** for housing associations and can be placed in all convenient locations on any site.



TECHNICAL INFORMATION

Dimensions (H x W x D)	74 x 45.8 x 22mm
Power	CR2 3V Lithium Battery x 1
Battery Life	5 Years
Available Frequencies	868.35MHz
Operating Temperature	-10°C to +45°C
Operating Humidity	Up to 85% (Non-Condensing)

Price List – MX Series & Telecare Peripherals

Unit Description / Part No.	RRP	5% (1-25 Units)	10% (26-50 Units)	15% (51+ Units)
Main Devices				
CTC-1032 PSTN Basic Alarm Unit + WTRF2 Wrist Transmitter	£76.00	£73.00	£69.00	£65.00
CTC-1032 Kit + WTRF2 Wrist Transmitter (No Adaptor)	£71.00	£68.00	£64.00	£61.00
CTC-1041RV Kit + WTRV Voice Satellite + WTRVS Voice Reach Pendant	£164.00	£156.00	£148.00	£140.00
CTC-1052 Kit + WTRF2 Wrist Transmitter	£170.00	£162.00	£153.00	£140.00
MX 2 PSTN + WTRF2 Wrist Transmitter	£129.00	£123.00	£117.00	£110.00
MX-2 Kit (With Output & Input)	£126.00	£120.00	£114.00	£108.00
MX-2 Light Kit + WTRF2 Wrist Transmitter (No Expansion)	£103.00	£98.00	£93.00	£88.00
MX 3 GSM + WTRF2	£174.00	£166.00	£157.00	£148.00
MX Unit Bracket	£2.00	£2.00	£2.00	£2.00
MP-2 GPS Kit	£277.00	£264.00	£250.00	£236.00
Mobile Lite Kit (3G + WTRF2*1+CT-5)	£177.00	£169.00	£160.00	£151.00
Mobile Mini GPS Classic	£156.00	£149.00	£141.00	£133.00
DECT Kit (EZ-1+808RV Voice Satellite)	£94.00	£90.00	£85.00	£80.00
DECT Kit (EZ-1+WTRVS Voice Pendant)	£71.00	£68.00	£64.00	£61.00
Panels				
CTC-1032 PTSN Digital Medical Panel (Compact)	£82.00	£78.00	£74.00	£70.00
CTC-1039 PTSN Digital Medical Panel	£86.00	£82.00	£78.00	£74.00
CTC-1041 PTSN Digital Medical Panel	£89.00	£85.00	£81.00	£76.00
CTC-1041RV PTSN Medical Alarm	£123.00	£117.00	£111.00	£105.00
CTC-1052 GSM + GPRS Digital Medical Panel	£175.00	£167.00	£158.00	£149.00
CTC-1052L GSM + GPRS Digital Medical Panel	£140.00	£133.00	£126.00	£119.00
EZ-1 DECT Module	£32.00	£31.00	£29.00	£28.00
EZ-2 GSM/3G Module	£84.00	£80.00	£76.00	£72.00
1818 IP Camera	£101.00	£96.00	£91.00	£86.00
Telecare Peripherals & Accessories				
WTRF2 Wrist Transmitter / Emergency Pendant (Neck Cords & Strap)	£20.00	£19.00	£18.00	£17.00
WTRF2 Wrist Transmitter / Emergency Pendant (Neck Cords)	£19.00	£19.00	£18.00	£17.00
WTRQ2 Wrist Transmitter / Emergency Pendant (Strap)	£19.00	£19.00	£18.00	£17.00
WTRQ2 PCB & Battery	£15.00	£15.00	£14.00	£13.00
WTRVS Voice Reach Pendant	£59.00	£57.00	£54.00	£51.00

808RV Voice Satellite	£78.00	£75.00	£71.00	£67.00
PB-8 Panic Button	£15.00	£15.00	£14.00	£13.00
Fall Sensor	£30.00	£29.00	£27.00	£26.00
IR-8 IR motion Detector	£22.00	£21.00	£20.00	£19.00
DC-15 Door Contact	£20.00	£19.00	£18.00	£17.00
SD-9 Smoke Detector	£32.00	£31.00	£29.00	£28.00
HD-9 Heat Detector	£37.00	£36.00	£34.00	£32.00
CO-8 Carbon Monoxide Detector	£56.00	£54.00	£51.00	£48.00
WS-8 Water Sensor	£24.00	£23.00	£22.00	£21.00
PCU3 Pull Cord Unit	£26.00	£25.00	£24.00	£23.00
UT-15 Universal Transmitter	£23.00	£22.00	£21.00	£20.00
CP23 Call Point	£66.00	£63.00	£60.00	£57.00
ST-1 869 M Class 1 Radio Receivers (For Nusecall System)	£27.00	£26.00	£25.00	£23.00

(We offer all MX series products with a **5% Discount as standard**, showing our commitment to provide cost-effective care whilst not compromising on quality for the user, patient, carer, and practitioner)

(Prices and quotes are subject to change. Various Devices and Panels maybe quoted by NCS for suitability to your needs. Prior to purchase of any equipment from Network Communication Systems, an invoice shall be sent regarding a final pricing schedule)

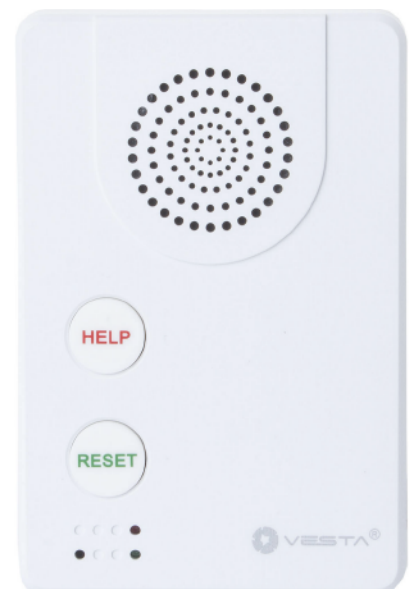
Real Life Scenarios

Scenario 1:

Mrs M is retired and lives in a bungalow in Wakefield. Her Husband, Mr M has been diagnosed with Dementia and has had to be taken into social care to fully monitor his condition. Mrs M is therefore all alone at home and has been fitted with a **MX-2 Series dispersed alarm** and telecare peripherals so she can call for assistance when she needs it. As with most dispersed alarm modules, Mrs M keeps hers placed in the hallway of her bungalow on her coffee table.

At night times, she always keeps her bedroom door closed. This is so she can keep the warmth in her bedroom while she sleeps, especially during the winter months. One night, she has fallen out of bed. She presses her personal trigger to alert the Emergency Response Centre (ERC) and they have attempted to open two-way communication via her MX-2 device placed in the hallway. Unfortunately, because of Mrs M closing the door at night, the ERC wouldn't be able to hear Mrs M through the door and vice versa.

Luckily, Mrs M had a **Voice Satellite** fitted in her bedroom as one of her telecare peripherals. The Voice Satellite functions as a wireless remote speaker, which is to be placed into various parts of any dwelling. With the Voice Satellite placed in her bedroom, Mrs M can easily communicate with the ERC and make them aware that she has fallen out of bed and will need assistance getting back in.



Without the provision of the **Voice Satellite**, Mrs M wouldn't have been able to communicate with the ERC, who would be attending an alert with no information whatsoever regarding its severity. It also means that Mrs M feels **more confident** in her telecare system, allowing her to be more active and independent in her life, knowing that when she needs help, her needs can be communicated reliably and effectively.

Mrs M is fortunate that she was fitted with a MX Series Dispersed Alarm by **Network Communication Systems**, as they're the **only UK provider to offer wireless voice satellites as part of their telecare peripherals**.



Scenario 2:

Mr T has just been released from hospital after injuring his legs in a very serious car accident. Because Mr T lives alone, he has been fitted with a **MX-3 dispersed alarm system and peripherals**, because of a poor landline service in his area, and in case he needs any assistance as he is not as mobile as he used to be, alongside some crutches. Due to his long and successful career as a soldier, Mr T is determined to stay active and wants to continue doing activities he enjoys such as working in the garden.



One day while Mr T was in his garden, he trips on a garden step and falls over, injuring his legs quite badly. He needs assistance, but also needs to communicate the severity of his injuries to the Emergency Response Centre (ERC) regarding his previous car accident.

Fortunately for Mr T, he has been given the **MX Series Voice Pendant**. This pendant offers all the same functionality as a normal personal trigger, but has the additional features of **GPS location and two-way communication**.



What this means for Mr T, is that he can clearly communicate to the ERC that he is in the garden and has hurt his leg that was damaged in his accident. This removes any ambiguity from the alert by Mr T, and means that the ERC call-out team know exactly where he is, and how severe his accident is.

Mr T is very fortunate that he has been provided a MX Series Dispersed Alarm from **Network Communication Systems**, as they are the **only provider in the UK to successfully offer voice pendants as part of their telecare peripherals**. It also allows Mr T to be confident in a service that can allow him to remain independent, but call for help when it is needed.



Telehealth Devices

Alongside offering telecare services, companies need to try and diverse themselves into **Telehealth**, which was valued at **£100 million** (TSA. 2016). These are devices that can provide end-users with monitors that can **inform**, **track** and **log** their vital health signals, such as heart rate and core body temperature.

A recent study showed that in the U.S '125,000 people die a year because they mismanage their medications' (Forbes. 2016). Telehealth devices could help prevent this due to the medial reminders and consistent tracking of vital signs. The further benefits of telehealth can mean reduced doctors' appointments, as GP's can track patient's information from devices such as a phone, tablet, or computer. This will in turn allow for practices to reduce their service lead times and save the in-house services for more serious patient issues.

Eimo by iMonSys

NCS is now proudly working with **iMonSys** (Intelligent Mobile Monitoring Systems) and are now a supplier of their new innovative and intuitive product called **Eimo**. This exceedingly smart, hi-tech, and Non-invasive Class II-A medical device allows any individual to **easily check, display and store their vital signs**. This device is suitable for LTC sufferers, domiciliary care workers, care homes, social services, social housing, charitable institutions and many more.

(Suitability varies depending on various models on offer)

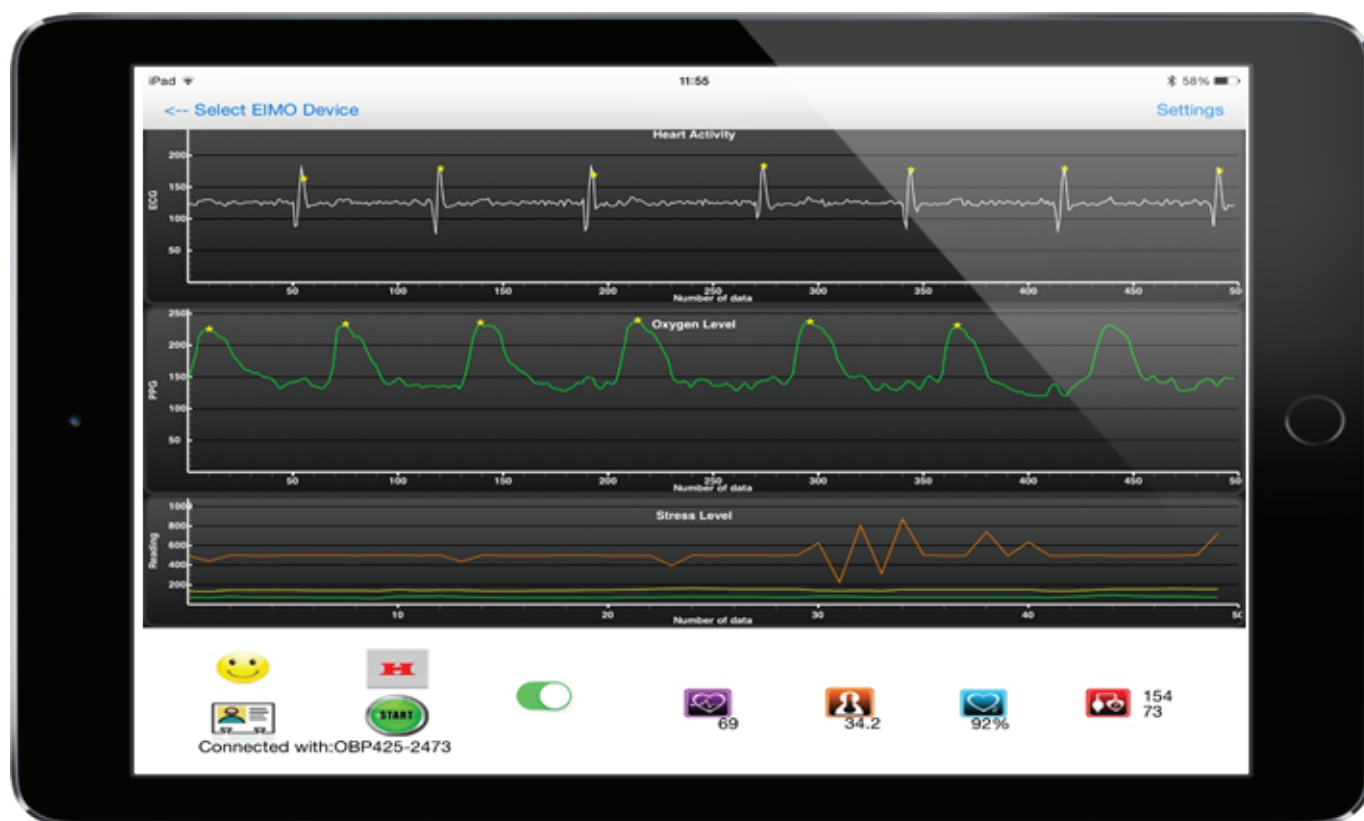
The design process was taken down to the smallest detail, and Eimo provides the monitoring of **pulse, oxygen levels, core body temperature, blood pressure and full ECG trace** all from a compact device no bigger than a standard glasses case.

The fully embedded sensors in the device records all this information and sends it **directly to a laptop or Apple/Android device** so GP's can have quick and easy access to accurate data, promoting a more **proactive approach** to treatment as conditions may be caught earlier than previously anticipated.



EARLY INTERVENTION = BETTER PATIENT CARE





See all monitored vital signs easily via the clear presentation of readings all at your fingertips!

This device is new to the market, and iMonSys are continuing their research & development into more technologies and software to identify more problems and provide more solutions for those who need them. This technology could be a pivotal move in the telehealth market, which can tend to the needs of an **aging population** in the U.K.

With calculations provided by the NICE, Eimo by iMonSys has predicted a potential saving of **£110,960,000** annually (£304,000 A Day) for the NHS when optimally used by all doctors, GPs and clinicians in the U.K.

iMonSys are an **ISO 13485** accredited company in design and development of Eimo and other portable medical devices, providing end-users with confidence that Eimo is **safe, practical, reliable** and **highly accurate**.

More Information can be accessed at <http://www.imonsys.com/> or by contacting them at Enquiries@imonsys.com

 **iMonSys**

Maintenance Packages



With our maintenance and repair services, we don't just offer our own products to you. We provide other companies' products if you feel that they are more suitable, and work with them to make sure your system(s) provide the **best quality of care and the best value for money**. What makes customers choose NCS on this basis is our level of maintenance packages and more importantly, our **Bespoke & Gold Packages**.



Bespoke

This package is an 100% individually tailored package that offers any requirement that's right for you and a response time of under 24 hours. This bespoke package promises these requirements and further shows NCS' commitment for customer satisfaction and professional quality of service.

This package provides our engineers the ability to will work with the customer in the design and delivery of the products we offer, and may be able to offer them additions to their systems that are unique to their needs. This package provides a monumental level of convenience when providing services for individuals with learning disabilities for example or those who are in a more serious condition.



Gold

The gold service encapsulates a 24/7 engineer package, with a professional and accredited engineer responding within a 24-hour period. This package ensures that all faulty or damaged equipment is fixed as part of an all-inclusive deal.



Silver

This silver package also offers the 24/7 service engineer package with 24-hour response, however this programme is an inclusive package that includes repairs on any equipment that is at fault for normal wear and tear.



Bronze

The bronze package is a basic and economical maintenance deal, where the equipment is returned to the workshop and delivered back to the client when deemed at the desired standard by our benchmark quality test processes.

For more information on any of our products or services:

Call 01302 873333

email sales@nsgroup.co.uk or visit www.nsgroup.co.uk

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