

Emergency and Assistance Calling for Staff in Need Plus Patient Call & Two Way Voice Communication

The **Pinpoint 5000 Advanced Staff Personal Alarm System** offers the most flexible protection available with **three** levels of call and voice communication.

The **Pinpoint 5000 Advanced System** provides protection for staff at risk from violence at work as well as the ability to call for assistance in non-emergency situations. It has been developed for the widest range of applications where staff or others require instantaneous response. It has powerful communications and reporting capabilities, is extremely simple to use, reassuringly reliable and exceptionally effective.



The **Pinpoint 5000 Advanced System** employs Pinpoint's tried and trusted infrared technology and uses **Personal Infrared Transmitters (PITs)** worn by staff to activate calls for **assistance** and **emergency**. It also provides a flexible **Patient Call** solution with a wide range of **Patient Call Push Button Units** and mobile **Infrared Patient Call Transmitters**.

'Talkback' is an option with the **5000 Advanced System** adding **Two-way Voice Communication** to its other advanced facilities, whilst the **5000 Advanced System Supervisor** monitors the whole system reporting faults entirely automatically.

<p>Emergency and Assistance Calling: Personal Infrared Transmitter Advanced Infrared Receiver Over Door Lights LCD Alphanumeric Display</p>	<p>Patient Call Talkback Voice Communication Paging and Communications Management Information System Monitoring The System</p>
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Personal Infrared Transmitter

Of cylindrical design, the Transmitter is 90mm long and 28mm in diameter. Worn on the belt clipped to the clothing, it is activated in an emergency by pulling the Transmitter from its retaining pin, instantly spreading upwards coded infrared signals towards the Infrared Receiver Unit. Because of its power, there is absolutely no need to point the Transmitter at the Receiver Unit. Produced in polycarbonate and ABS plastics for strength and lightness, the Transmitter is powered by a 6 Volt alkaline or lithium battery, which is easily user-replaceable.



There is a range of Transmitters available providing a wide range of choices for the capabilities of the system installed. **Model 316** is the standard Transmitter for use with twin-code systems. It has Pinpoint's standard high-quality membrane button on the base with its excellent resistance to accidental operation and first-class tactile 'feedback' which, when pushed, provides the assistance level of call. There is battery-checking circuitry to warn when the battery needs to be replaced. This is carried out by unscrewing the grooved top of the Transmitter, sliding out the electronics and substituting a new battery for the old. Batteries are available from Pinpoint in standard or long-life varieties. For single-code, emergency-only systems, the **Model 316.7** has a unique 'reassurance' button which enables the wearer to check the status of the Transmitter and Room Receiver Unit at the same time without setting off the alarm. To attach the Transmitter to the clothing there is choice of a belt loop, a clip, or a metal 'dog lead' style hook.

WHAT? NO BATTERY! The new battery-free **Model 312** twin code Perpetual PIT is now available. No more batteries to buy or dispose of, this new PIT is "charged" each shift in around 10 seconds by the **Model 311** Energizer. The Perpetual PIT is particularly suited to disciplined environments that have a shift pattern of working. Available in green with a rubber base, recessed button and tinted top.

Advanced Infrared Receiver Unit (595)

The Advanced Infrared Receiver Unit (ARU) fits a standard double-gang back-box and has a tinted rectangular infrared-transparent fascia made of polycarbonate for strength. The all-over, infrared window has a spark-eroded finish, maximizing the area available for the passage of the infrared. Internally, it has special amplifying and filtering circuitry to enable it to recognize instantly the incoming infrared code from the Transmitter and distinguish it from extraneous infrared light from other sources, such as fluorescent light fittings. There is a flashing green LED in the corner of the fascia to provide reassurance. It has three rates of flash: 1. 'Ready', 2. 'Emergency Alarm' and 3. 'Tested' or 'Assistance Call Received'. 'Ready' can be deselected if required.



The Advanced Receiver Unit is programmed in situ with its own unique address, in the range 001-799 using the **Model 597** Hand Held Programmer or it can be set-up to share the address of another unit to which it is connected. When activated, the Advanced Receiver Unit transfers its address to Display Units and Pagers via the data bus to which it is connected. The ARU will support Single or Dual Over Door Lights and other devices such as Panic and Patient Call Buttons, Door Contacts and CCTV. It can also be programmed with a second address so that the connected devices will, when activated, cause a different message to be displayed.



Individual alarmed Receiver Units may be reset locally using the **Model 316.7** Transmitter or **Model 328/9** Receiver Unit Tester or the whole system may be reset using a System Reset Key Switch, any number of which may be located where required.

For external reception in a courtyard, garden or recreation area, the **Model 532** External Receiver Unit is housed in a waterproof (IP65) box. It is designed with even more sensitive infrared reception components than internal receivers, giving it the greater range required outdoors for the most effective operation of the Personal Infrared Transmitter.

Over Door Lights

In order to assist staff when responding to a call on the Pinpoint System, we offer a range of Single and Dual Over Door Lights, which can be positioned where appropriate. Specially designed by Pinpoint to provide a very bright light in a package that will not be a risk to clients, the Over Door Light can be attached to any Advanced Receiver Unit or can be positioned entirely separately on the data bus to allow for 'follow-my-leader' configurations.



The 5000 Advanced LCD Alphanumeric Display Units

There are two types - **Large** and **Standard**. The Large incorporates a 4 line x 20 character back-lit LCD display and, when alarmed, will show on the first and second lines up to 32 characters defining the precise location where an incident has taken place. The type of call, whether **EMERGENCY, ASSISTANCE** or **PATIENT CALL**, is indicated on the third line and on the fourth the transmitter that has been used will be optionally identified.



The 3-digit address number of the alarmed Receiver Unit is displayed at the beginning of the first line. The number of the Zone (8 available) in which the Receiver Unit is installed is displayed at the beginning of the second line, and on the third line, when more than one Receiver Unit is alarmed, there is an indication of the number of alarmed units and which message within that group is currently being displayed, e.g. "2/4".

There are two different Models: **Model 534** comes with an integral 'insistent tone' sounder whereas **Model 535** has no integral sounder but supports **Model 365** 'adjustable tone' sounders that can be positioned in areas specified by the customer. Both types of sounder can be muted using a **Model 349.1** Mute Switch or **Model 349.3** Day/Night Switch. The tone of the sounders varies to indicate the different level of calls.

The Large Advanced Display Unit is supplied fitted to an appropriate flush or surface mounted back-box. Initially pre-programmed to individual requirements, there is a communications port enabling individual Message Tables to be amended and updated in situ by the Pinpoint Priority Service Engineer.

The Standard Display Unit fits into a deep, double-gang back box. When a Receiver Unit is alarmed, the Display Unit displays the Receiver Unit's address number, up to 32 characters of descriptive text and the type of call (*E* for Emergency and -A- for Assistance). The alarm tone also varies between types of call. Available in two different models, **Model 636** comes with an integral 'insistent tone' sounder. **Model 637** has no integral sounder but supports Model 365 'adjustable tone' sounders which can be positioned in areas specified by the customer.



Patient Call Infrared Transmitter

The 5000 Advanced System provides the opportunity to give trusted clients their own Personal Infrared Transmitter to call for assistance, thus eliminating the need to provide wall-mounted push button units. **Model 516** is of standard Pinpoint cylindrical design and can only be operated by pushing the button on the base (there is no 'emergency' pull); and **Model 519** is a 'Pocket' Transmitter. Because the **5000 Advanced System** is optionally able to identify the Transmitter that has been activated, as well as its location, then a more informed response to a client can be made.



Call Button Units

There is a range of Patient Call Button Units available, which can be configured to different requirements. The standard Unit has an orange Call button and a reassurance LED. To this can be added in any combination, a reset Key Switch, a disarm Key Switch, a ceiling Pull Cord or a 'wander lead' socket. Call Button Units are configured either as 'slaves' to an Advanced Receiver Unit or as separate addressable units. They fit a double-gang back-box and have a white fascia manufactured from ABS plastic for maximum survivability in robust environments.

An 'economy', **single-gang** Call Button Unit is also available in standard (**Model 133**) and vandal-proof (**Model 133.1**) versions. Each has a call button and a reassurance LED and is installed by connecting to an Advanced Receiver Unit.

Pinpoint's Patient Call options for the 5000 Advanced System do not constitute a Bedhead Service or a Nurse Call System as defined in HTM2015 or NHS Model Specification C49.

Talkback Voice Communication

The optional 'Talkback' facility adds flexible and effective two-way communication to all the other facilities available with Pinpoint's **5000 Advanced System**. During a call for assistance, anyone in the vicinity of a Talkback Display Unit can listen and communicate with the Receiver Unit in the area where assistance is required. Talkback operates automatically with hands-free communication at the incident location. With a Pinpoint Talkstation, however, communication can be instigated at all other times. This unique product provides simple intercom and public address functions, allows room monitoring and individual paging and makes communication with any preferred room, zone or area possible.



The Infrared Receiver Unit with Talkback (495) is a standard Receiver Unit with additional Talkback components, and a perforated area in the fascia allowing two-way, hands-free communication. When the Receiver Unit is activated, the Talkback feature automatically enables a speech path between the Receiver Unit and the Talkback Advanced Display Unit, allowing two-way communication between the incident location and the Display Unit, thus providing reassurance and a valuable witness to any incident.

The Talkback Advanced Display Unit (434/5) provides two-way, half-duplex voice communication between itself and an activated Talkback Receiver Unit, controlled by two buttons on the fascia.

The Talkstation (459) is a desk-mounted central communication unit measuring 150x220x52mm, which provides staff-initiated, two-way intercom facilities, and can monitor and communicate with areas where Talkback Receiver Units are installed. The Talkstation can operate independently or in conjunction with a call for assistance initiated by activating the Pinpoint System. An output socket is provided to enable recording.



Paging and Communications

A wide range of communication options is available with the 5000 Advanced System, enabling information to be passed to or acted on by other systems. By installing the **Model 391.1 (RS232) Advanced Communications Interface** as part of the System, precise information can be transferred to other devices with RS232 capability, particularly Paging Systems, Building Management Systems and CCTV Controllers.

Pinpoint supplies and installs site-wide paging systems from **Astra** and **Scope** and is able to integrate with the systems of most other leading paging manufacturers.

Model 357.6 Advanced Display Pagers carried by staff enable them to receive the same location information as appears on the Advanced Display Unit, but directly and discreetly thus reducing response times and preventing disturbance to clients and other staff. A protective rubber "boot" is available to add robustness.



The **Model 350 Relay Communications Interface** can be installed to connect to external devices which do not have RS232 capability, such as Mimic Panel, CCTV Matrix, Fire Alarm and Intruder Alarm Panels. The specific address of an alarmed Advanced Receiver Unit will open or close a specific relay connected directly to a specific input of the external device. Relay outputs are provided in multiples of 16. The **Model 353.4 Call-on System Relay** provides two relay outputs for a specific address or a range of addresses. The Model 353.5 has a single relay output with a delay timer, which can be set in increments of 30 seconds up to a maximum of five minutes. Both these devices can be used for connection to Redcare, for example, to give notice for external response.

Management Information

Records should be kept of any incidents which may occur. The **Pinpoint 5000 System** will carry out this task automatically by either listing them directly onto paper using a printer, or communicating them to a Personal Computer running Pinpoint's **INCILOG** Software.



Comprehensive management information is provided by the **Model 352.1 Incident Logging System** which consists of a **Model 391.1 Communications Interface** connected to a Personal Computer running Pinpoint's **INCILOG** Software. The raw data from the Pinpoint System - incident location, incident type, date and time - can be enhanced via the computer keyboard by adding such information as client name, client group, staff member name, incident outcome, follow-up action, etc. Various query reports may be produced to provide important management information.

System Monitoring

It is vital that staff have complete confidence that their Pinpoint System is functioning at all times. This is why there is a flashing, green LED on the fascia of the Advanced Receiver Unit to give staff a simple visual reassurance at all times. This is why, too, the Personal Infrared Transmitter monitors the state of its battery and emits a 'beep' when battery strength falls below a safe level. Also available to provide additional visual or audible confirmation are the **Model 329 Receiver Unit Tester** and **Model 317.5 Twin-Code Transmitter Test Station**.



For completely automatic monitoring of the **5000 Advanced System**, Pinpoint has developed the **Model 526 Advanced System Supervisor**. This is an optional surface-mounted unit, housed in a grey metal box measuring 220mm W 290mm H 80mm D approximately, and wired directly onto the data bus at any convenient location. The System Supervisor routinely interrogates each Advanced Receiver Unit in turn and reports any possible faults directly to a selected Display Unit and/or via a communications port to a local or wide area paging system or to a PC. With a modem attached and appropriate software installed, faults can be reported directly to Pinpoint Priority Service for action. A printer may be optionally attached.

The System

The **Pinpoint 5000 Advanced Staff Personal Alarm System** is installed on a 'ring' using special Pinpoint screened cable (with a halogen-free, low-smoke-and-fume sheath) and standard MK or similar electrical back-boxes. The ring cabling architecture uses less cable and is quicker to install than a 'star' layout and is thus less expensive. All data rings are connected together in one or more **Model 346 Data Ring Junction Boxes**. These are surface-mounted, grey, metal boxes measuring 220mm W x 290mm H x 80mm D. The 12v power for the System is supplied from one or more battery-backed Power Supply Units rated at 5 amps (**Model 345.3**). The surface-mounted, white, metal enclosure for the Power Supply Unit measures approximately 350mm W x 330mm H x 80mm D.

For smaller systems a combined Power Supply and Data Ring Junction Box is available. This **Model 642.1** is a single unit consisting, internally, of a 2.5 amp Power Supply (requiring a 240v mains supply), connections for three data rings, a power-down relay arrangement, back-up battery and a buzzer to give warnings of mains power failure. Externally, there is a System Reset Button, an LED indicator and a System Isolation Switch. It comes in a grey metal box measuring 220mm W x 290mm H x 80mm D approx.

The intelligence of the **5000 Advanced System** is distributed to each and every Unit connected to the data ring where its own onboard microprocessor controls its own functions.

This system architecture is inherently much more reliable than one which concentrates its intelligence in a 'central controller' as it is not vulnerable to the catastrophic, total failure of its central processor, leaving staff unprotected and unaware of their situation.



