ISM LONG RANGE Wireless
Nurse Call Systems

Smart-Caller BlueLine-ILU
Wireless-Call System

A Long Range Wireless System for Retirement Villages & Similar Applications

FEATURES & BENEFITS

AUSTRALIAN DESIGN AND MANUFACTURE
Using ISM (Industrial, Scientific & Medical) wireless technology and components

LONG RANGE COMMUNICATION
Up to 2Km, ideal for multiple building sites and Retirement Villages

MINIMAL USE OF BATTERIES
Used only as necessary for portable devices or accessories. The ILU-HUB/Call-Point is plug-pack powered with long-life rechargeable battery back-up.

MULTI-TASKING PRIME CALL-POINT
Being the ILU’s communication ‘Hub’ it allows up to 6 uniquely identifiable wireless + hard-wired trigger inputs

SITE-WIDE PENDANT LOCATION
System calculates approximate location of Alerted Roaming Pendants

INBUILT ROOM MONITORING FACILITIES
Can accommodate ILU call-points, pendants, smoke detectors, inactivity & intrusion sensors etc.

HIGH SENSITIVITY PLUS MULTI-FREQUENCY OPERATION
To avoid interference and optimize site coverage

SUPERVISED TWO-WAY COMMUNICATION
All call traffic acknowledged by confirmation response from System Head-End

‘HEARTBEAT’ INTEGRITY
System infrastructure fully supervised to ensure continuity of performance

ADD-ON OR OVERLAY EXISTING SYSTEMS
Ideal for enhancing existing hard-wired and ageing ‘Legacy’ systems

INFECTION CONTROLLED CALL-BUTTONS
Including call lock-out cleaning facilities

CALL, CANCEL & ASSIST VIA 2 BUTTONS
All Call-Points (including ISM pendants) also provide Call, Cancel and Staff Assist

WIDE CHOICE OF HEAD-END CONNECTION
System Repeaters and Nodes can connect to the head-end via Fibre, IP-LAN, RS232, RS485 or via Wireless repeater on same or other channel

11-YR MTBF RELIABILITY CERTIFICATION
System Server has 100,000 hour ‘Mean Time Between Failure’ Certification—or select computerless solution
SYSTEM APPLICATIONS
Designed and manufactured in Australia BlueLine-ILU is a special configuration of the well accepted BlueLine-ISM long range wireless emergency call system.

The benefits of the ISM (Industrial, Scientific & Medical) wireless protocols include protected frequency spectrums along with permitted higher transmit power levels.

This system is designed to suit large sites having multiple buildings typically including Community Living, ‘Building Construction Sites’, large Retail Complexes plus ‘Schools and Universities’ etc.

The following descriptions and illustrations have however been specifically configured to describe this system’s ideal suitability for Retirement Village applications of which many such sites are seeking alternatives to the traditional telephone line PERS (Personal Emergency Response Systems) connections.

A typical large scale system deploys a number of ISM Repeater/Nodes located at suitable locations throughout the site. These receive and process incoming calls from ILUs (Independent Living Units) or other locations. They are also capable of allowing persons wearing a miniature personal transmitter to ‘call for help’ whilst around the grounds whereby the system (within larger sites) is also capable of identifying the approximate location of that person requiring assistance.

HOW IT WORKS
The system is based on each ILU, Domestic Home, School Room or Work Location being equipped with a communications ‘Hub’ device which also functions as a highly featured wireless call-point.

Known as the ILU-HUB it is fully enclosed and waterproof and is therefore also suitable for many specific external applications ‘around the grounds’ (such as school play grounds).

In addition to having its own call and cancel buttons it can also deliver high priority Staff Assist calls by the attending Staff pressing both buttons simultaneously.

This communications hub can also accommodate two hard-wired inputs plus up to four separate ‘short-haul’ UHF wireless accessories each having its unique identification at the system head-end for display, logging and reporting purposes.

These add-on devices can typically include wireless pendants and call-points perhaps in the bathroom or bedroom. Other possibilities include a duress call-point, wireless equipped Smoke detectors plus intrusion and inac-
tivity sensors to name a few.

As with the total series of BlueLine-ISM call-points the ILU-HUB also has the same high degree of anti-
bacterial/antifungal infection control.

In order to ensure maintenance free long term 24/7 operation the unit is fitted with a plug-pack for continuous mains power connection and includes an internal rechargeable long life NiMH back-up battery. Further levels of protec-
tion include the ability to send daily test calls to the head-end which in turn will generate a trouble report should a programmed test call not be received.

SYSTEM HEAD-END DESIGN
The head-end may be computerless or computer based, the latter comprising a high quality solid state Server having no moving parts and a certified ‘Mean Time Between Failure’ of 100,000 hours (11 years). The nurse call software includes comprehensive logging and reporting capabilities with elapsed time call response reporting for each pre-determined location. It also includes total ‘System Audit’ to ensure the ability to maintain continuity of communication throughout the site.

Other items include the Head-End ISM Wireless Input Controller plus battery backed power supply and various other items or software modules required to deliver text to DECT or Wi-Fi Smart Phones, Pagers, Screens, Annunciators and other connected sub systems including fire panel monitoring etc as may be required.
**EXTERNAL STROBE LIGHT OPTION**

In order to provide an additional level of safety and security each ILU-HUB device is also capable of controlling an external Strobe or other forms of local external alerting. This is primarily intended to assist Staff or perhaps an Ambulance Driver to easily locate the required premises. Alternatively it can act as a warning to a returning Resident should the ILU-HUB have also been configured to act as an intrusion sensor whereby an intrusion condition has been detected.

The connection between the ILU-HUB device and the external Strobe may be hard-wired or controlled via wireless contact from that ILU’s controlling ILU-HUB.

**PORTABLE COMMUNICATION SOLUTIONS**

Clients choose the portable display devices that best suit their overall needs and a BlueLine-ILU system offers the necessary interfaces to suit most DECT, Wi-Fi, 3G, and traditional VHF and UHF POCASG alphanumeric pocket paging systems.

The tendency to deploy the site’s Wi-Fi infrastructure to provide text and voice communication is rapidly gaining acceptance. Accordingly BlueLine’s economically priced, robust and waterproof Android Smart-Phones can form an integral part of the overall nurse call system whilst also allowing site-wide Wi-Fi access and/or wide area access (via SIM card insertion) as required.

Using the latest technology Server middleware program communicating with the Wi-Fi network the display traffic can be delivered to both fixed and portable display devices as required.

The smart-phone’s special Android icons use the Australian Standard AS3811 colors and associated audio tones thereby immediately identifying the priority level of each incoming call.

**ANNUNCIATOR DISPLAY OPTIONS**

As with all BlueLine systems a choice of 16 or 8 character full color LED Annunciator displays may be included within the overall system. They feature 50mm characters whilst also providing audible tones with tone and display cadence in accordance with Australian Standard AS3811.

**SMART-HOUSE MONITORING POSSABILITIES**

There is no practical limit to the level of monitoring that can be achieved via the BlueLine-ILU system. If necessary it is possible to monitor large numbers of devices and sensors via two or more ILU-HUB devices as may well be necessary within the facility's Community Centre, Resident’s workshops or recreational locations.