Quantec
DEMENTIA CARE

Nurse call system & dementia care
from Channel Safety Systems
Quantec

Dementia care

Designed in conjunction with the NHS Trust and widely regarded as the leading light in the provision of high-intensity dementia care.

Quantec Dementia Care allows care providers to enhance the level of care they provide for patients suffering from dementia, Alzheimers, incontinence and other degenerative illnesses.

The system is engineer programmable to suit the exact requirements of an individual patient/bedroom, it includes all of the inputs, outputs, timers and power needed for the connection of PIR movement detectors, an enuresis sensor, bed exit mats, low voltage LED lighting, door monitoring contacts, slave infrared ceiling receivers, slave overdoor lights, a room status controller and more.

The controller comes with a number of pre-set DIP-switch selectable configurations, all geared towards giving patients the freedom and dignity they need to live their lives as normally as possible with as little intervention from carers as their condition will allow.

Features

- Can be configured to automatically switch lights on and off when movement is detected to safely guide patients to and from ensuite areas
- Provides clear and concise indication of room status data at ALL relevant Quantec displays (e.g. Bedroom 1, Bed Exit)
- All room/patient call activity is logged at the main Quantec Controller for optional output to our Quantec Surveyor data management software
- Comes with 10 pre-set patient monitoring configurations including high-intensity, medium-intensity and ensuite ushering
- Easily adapted to the changing needs and ongoing behaviour patterns of Dementia and Alzheimer sufferers
- Many of the components shown can be easily added to existing Quantec systems
- All network devices are designed and manufactured in the UK

Dementia Care Controller

Includes all of the inputs, outputs, timers and power required for the connection of PIR movement detectors, an enuresis sensor, bed exit mats, low voltage LED lighting, door monitoring contacts, slave infrared ceiling receivers, slave overdoor lights, a room status controller and more.

- Features two PIR sensing channels and two LED lighting circuits
- Sends detailed room status data (e.g. bedroom 1, enuresis call) to all Quantec displays
- All room status/call system activity data is sent to the main Quantec Controller for output to our Surveyor data management software
- One N/QT630 required per dementia bedroom (typically located in the bedroom in an engineer accessible cupboard)
- Can be programmed to suit the exact requirements and/or behaviour patterns of an individual patient/bedroom via a number of DIP-switch selectable configuration options, including:-

  - **3 x Medium Intensity/Ensuite Ushering configurations**: These options utilise a bed exit mat, PIRs and timers to automatically switch lights on and off when movement is detected and to safely guide patients in and out of ensuite areas. The length of time the patient is allowed out of bed before a call is generated varies depending on the configuration/behaviour pattern selected. Should the patient return to bed within the allocated time period, the system will return to normal and the lights will go out without the need for staff/carer intervention.

  - **3 x Medium Intensity Monitoring configurations**: These options utilise bed exit mats and timers to switch lights on as soon as the patient gets out of bed and allows them a period of 4, 6 or 8 minutes before generating a call. Should the patient return to bed within the allocated time period, the system will return to normal and the lights will go out without the need for staff/carer intervention.

  - **4 x High Intensity Monitoring configurations**: These options utilise PIRs to detect patient movement and switch lights on/generate a call the moment the patient gets out of bed.

Product Dimensions

- Height 235mm
- Width 380mm
- Depth 90mm

**PRODUCT CODE** | **DESCRIPTION**
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N/QT630 | Quantec dementia care controller complete with PSU (needs 1x12V 7Ah battery)
N/CH12/7 | 12V 7Ah battery

**SPECIFICATIONS**

- **Mains supply**: 230V A.C 50/60Hz. Max. current 350mA
- **Internal Power Supply**: 27V DC (nominal)
- **Total output current limited to Max. switching current**: 3A @ 230V A.C 25mA
- **Max. switching voltage**: 30Vd.c
- **Control and menu access buttons**: Accept(A), Scroll Up, Scroll Down, Code Entry Buttons(1, 2, 3 & 4), Escape (E)
- **LED Indicator**: Power Present (LED lit), No Power Present(LED extinguished)
- **Main Fuse**: 1 x 1 A HRC ceramic (20x5mm)
- **Battery**: 1 x 12V 7Ah battery
- **Battery Fuse**: 1 x 3.15 A F (20x5mm) this limits the current drawn from the battery
- **Weight**: 3.5kg (not including battery)

GET INTERACTIVE

Scan the code for further information and technical documents on the Quantec Dementia range

www.channelsafety.co.uk/quantec-dementia-care/
Room Status Controller

The Room Status Controller allows staff to isolate certain functions (e.g. PIRs during daytime hours), to put the room into ‘Presence’ and to reset calls using a magnetic swipe key. It can also be interfaced to a door bell unit (when the patient presses the door bell a call is activated).

Product Dimensions
- Height 87mm
- Width 87mm
- Depth 35mm

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>N/QT631M</td>
<td>Quantec room status controller</td>
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Enuresis/Bed Exit Interface Socket

The Enuresis/bed exit interface socket includes two remote jack sockets, one for a N/QT635 enuresis sensor and one for a N/QT633 bed exit mat or other ancillary calling device.

Fully isolated and medical directive compliant.

Requires a PP3 battery (not supplied)

Product Dimensions
- Height 87mm
- Width 147mm
- Depth 35mm

<table>
<thead>
<tr>
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<td>N/QT637</td>
<td>Quantec interface socket</td>
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Display Units

The Display Units indicate incoming calls to the system with the highest priority calls displayed first and a message to notify staff how many calls are waiting. The display has an on board sounder and buttons to accept, scroll and divert calls. The units are normally used in corridors, staff rooms, and nursing stations to enable staff to see the call details without having to go back to the control panel.

Product Dimensions
- Height 87mm
- Width 147mm
- Depth 35mm

<table>
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<tr>
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<tr>
<td>N/QT608C</td>
<td>Quantec display unit with controls</td>
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<tr>
<td>N/QT608CD</td>
<td>Quantec display unit with no controls</td>
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PIR Movement Sensor

The PIR Movement Sensor can be programmed at the N/QT630 to make a call when movement is detected (e.g. when a patient exits his or her bed) and to automatically switch lights on to ensure their safety. A maximum of two N/QT638s can be connected per PIR channel.

Product Dimensions
- Height 90mm
- Width 63mm
- Depth 40mm

Interface Unit

The Interface unit includes a remote jack socket that can be configured for normally open or normally closed operation.

Typically used to connect QT633 bed exit mats or other ancillary calling devices to systems that do not wish to use Quantec’s enuresis (bed wet) sensing function.

Product Dimensions
- Height 87mm
- Width 147mm
- Depth 35mm

PIR Power Interface

The N/QT645 PIR Power Interface is designed to connect to the slave input on a new-style N/QT602 or N/QT609 Master Call Point. Deriving its power from the Quantec network, it allows up to two N/QT638 PIR movement sensors to be connected to a Quantec addressable call system without the need for a separate power supply unit.

Typically located outside a bedroom (where, for example, PIRs can be used to monitor a patient getting out of bed), it includes an isolation keyswitch so that members of staff entering the room can temporarily disable the PIRs from triggering a call.

Product Dimensions
- Height 87mm
- Width 87mm
- Depth 35mm
Ultra Bright LED lamp

The Ultra bright LED lamp Can be programmed at the N/QT630 to switch on, off or dim as per the configuration/behaviour pattern selected. Timer options are also available to guide patients in and out of ensuites. Up to two N/QT639s can be connected per lighting circuit.

Please note LED housings are not included.

Product Dimensions
• Diameter 50mm
• Depth 50mm

Slave IR Ceiling Receiver

Designed to accept calls for extra assistance and/or ‘staff attack’ notifications generated by a member of staff’s N/QT412 infrared transmitter.

Typical receiving range is 10m line of sight. Max. 3 slave ceiling receivers per N/QT630

Product Dimensions
• Diameter 87mm
• Depth 35mm

Over Door Light

The N/QT606 slave over door light can be used to increase the call indication levels of the system. Positioned typically outside rooms and includes two ultra-bright LEDs in a triangular diffuser.

N/QT606A addressable over door lights include an on board sounder and can be programmed to illuminate when certain groups of call points are calling.

Product Dimensions
• Height 87mm
• Width 87mm
• Depth 60mm

PRODUCT CODE DESCRIPTION
N/QT606 Quantec slave overdoor light
N/QT606A Quantec addressable overdoor light

PRODUCT CODE DESCRIPTION
N/QT613 Quantec slave IR ceiling receiver

PRODUCT CODE DESCRIPTION
N/QT302RXRS Quantec slave IR ceiling receiver

PRODUCT CODE DESCRIPTION
N/QT639 Quantec ultra bright 3W LED lamp

PRODUCT CODE DESCRIPTION
N/QT606 Quantec slave overdoor light
N/QT606A Quantec addressable overdoor light

PRODUCT CODE DESCRIPTION
N/QT613 Quantec slave IR ceiling receiver

PRODUCT CODE DESCRIPTION
N/QT302RXRS Quantec slave IR ceiling receiver

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PRODUCT CODE DESCRIPTION
N/QT613 Quantec slave IR ceiling receiver

PRODUCT CODE DESCRIPTION
N/QT302RXRS Quantec slave IR ceiling receiver

PRODUCT CODE DESCRIPTION
N/QT639 Quantec ultra bright 3W LED lamp
The N/QT633 is a Dementia Care Bed Exit Sensor Mat for the Quantec Call System range. This unit is designed to raise an alarm when the occupant gets up from the bed.

The QT633 is designed for use with the N/QT636 & N/QT637 Interface Sockets.

Senses the pressure change when a patient exits or returns to bed. Connects to a N/QT637 Enuresis/bed exit interface socket or a N/QT636 interface unit. Typically placed horizontally between the bedsheets and mattress.

**Product Dimensions**
- Height 100mm
- Width 800mm

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**Floor Pressure Mat**

Designed to trigger a call when it detects patient foot pressure, typically located alongside a bed to advise staff of wandering patients (which can be connected to a Quantec addressable call system via a remote jack socket).

Finished in a tough, durable grey PVC with a non-slip rubber base and a high-quality design. Ideal for use in all types of care facilities and can be wiped-clean using a non-caustic sanitising solution.

The floor pressure mat is supplied with a 2m lead and a normally open right angled jack plug.

**Product Dimensions**
- Height 90mm
- Width 60mm
- Depth 5mm

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**Chair Exit Mat**

The N/QT634 is a Chair Exit Sensor Mat for use with the Quantec Dementia Care System. This sensor is designed to raise a call when the occupant gets up from his or her chair.

Senses the pressure change when a patient exits or sits back down on a chair. Connects to a N/QT637 Enuresis/bed exit interface socket or N/QT636 interface unit.

Please note that N/QT644 floor pressure mats are also available.

**Product Dimensions**
- Height 400mm
- Width 25mm

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**PRODUCT CODE** | **DESCRIPTION**
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N/QT633 | Bed exit mat (connects to a QT636/637 interface unit)
N/QT644 | Quantec floor pressure mat (connects to a QT602 call point or QT636/637 interface unit)
N/QT634 | Chair exit mat (connects to a QT636/637 interface unit)
Ensuresis Sensor

The N/QT635 is an Enuresis Sensor for use with the Quantec Call System.

The N/QT635 is designed to be used with the N/QT637 Enuresis Sensor Interface Socket.

The sensor triggers a call when moisture is detected in a patient’s bed. Typically placed between the bedsheet and mattress. Connects to a N/QT637 Enuresis/bed exit interface socket. Can be wiped clean using a non-caustic sanitiser making it suitable for multiple use.

Product Dimensions

- Height 120mm
- Width 800mm

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Dual Action Transmitter

Quantec’s rechargeable dual-action infrared/radio transmitter has a typical infrared transmitting range of 10m (line of sight) and a typical radio transmitting range of around 60m. With two infrared emitters (one on each side to maximise performance), two buttons (A & B) and a retained ‘pull clip’.

Pressing a transmitter’s buttons or activating its ‘pull clip’ will generate a standard, help required, emergency or staff attack call on a compatible infrared and/or radio receiver. The transmitter can be recharged fully in approximately 14 hours using the N/QT424/1, or the N/QT424/10, which is also available for sites with multiple transmitters.

The N/QT423 configurator complete with lead, adaptor and software (Windows 2000/XP/Vista/7) will allow an engineer to reprogram any of the aforementioned transmitters to suit the operational requirements of an individual site.

N/QT611 is a small multi-purpose programmable device that can be programmed to operate in a multitude of ways using a N/QT423 configurator. N/QT611 universal devices allow third-party switch assemblies and indicators to be interfaced to Quantec for use as call points, monitoring points or day/night switches.

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A TOTAL SOLUTIONS PROVIDER

Did you know?

Channel Technical Services; a division of Channel Safety Systems, offers a Design, Supply, Installation, Commissioning and Maintenance services for all Nurse Call & Disabled Refuge Systems.
Sample System Architecture

A Medium Intensity Patient Monitoring System with Ensuite Ushering

- **Enuresis (bed wet) Sensor**: Triggers a call when moisture is detected in the patient's bed.
- **Infrared Ceiling Receiver**: Picks up any help-required, emergency or 'staff attack' calls made by a carer's infrared transmitter.
- **Superbright LED Light**: Switches on, off or dims dependent on the status of the behaviour pattern selected.
- **PIR Movement Sensors**: Sense patient movement and instruct the controller to switch lights on, off or dim and to raise a call dependent on the status of the behaviour pattern selected.
- **Bed Exit Mat**: Senses the pressure change when the patient exits and returns to bed.
- **Enuresis/Bed Exit Interface Socket**: Allows carers to arm/isolate the system and reset any active calls. Optional door bell will trigger a call when pressed by the patient.
- **Corridor Display**: Indicates the location and type of all incoming calls (as programmed).
- **Door Contacts**: Can be set up to trigger a call when the bedroom door is opened.
- **Room Status Controller**: Indicates the location and type of all incoming calls (as programmed).