**bps** ®

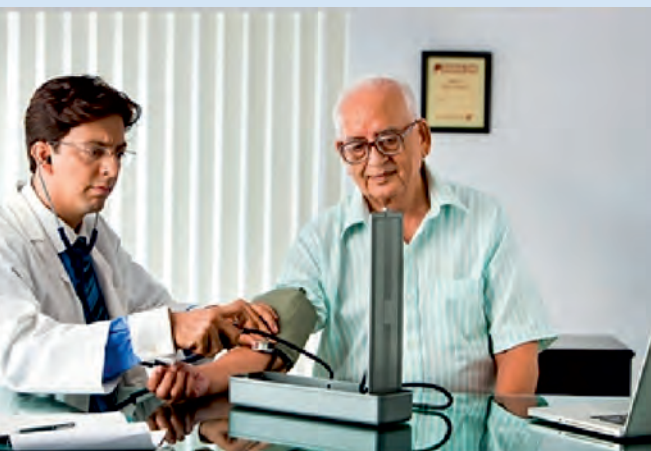# Micro-controller based Nurse Call Monitoring System Series 640 & 640 CB With Code Blue Facility

It helps you to monitor and fix-up responsibility.

With Built in timer for non-attendance alarm.

## Why Nurse Call System ?

Healthcare industry is facing challenge now how to cope with ever-increasing patient numbers verses rising operational costs and tight budgets?

Governments are changing the regulatory framework of the healthcare industry, leading to a growth in consumer-driven healthcare where patients are viewed as customers.

Hospitals need to do more with less. They need to increase both efficiency and productivity. Human resources have to be utilized in a way that optimally balances costs to the provider and benefits to the patient. Hospitals need to improve their service to patient for safety and quality of care for greater satisfaction. This can only achieved by improvement of information flows at the right time and securely to reduces waiting and treatment times.

## INTRODUCTION

Nurses Call Monitoring System series 640 register all calls received in sequence and display the same at Nurse Station.

The first call pending is displayed with Big 2" 7 segment display. 4 other calls are displayed in the sequence of receipt. If more then 5 calls are pending, the same can be scrolled down. Any call attended is automatically erased and display is replaced with the next call pending.

If any call is pending beyond set time, the number starts blinking. it also activates a buzzer to draw attention of the nursing staff. If call remains pending even beyond 2nd limit, rate of blinking is intensified to bring notice of problem.

## SYSTEM HIGHLIGHTS

- **Serial display of calls received**
  -1st call displayed with 2" Height LED display, Next 4 calls in sequence on side column, Further pending calls- on Scrolling 3 Digit 7 segment displays.

- **Built in Non Attendance Timer**
  - Pending calls flash
  - Long pending calls flash at higher rates

- **Modular Bed Side console**
  - Easy installation in std. Modular cabinet

- **Status Indicators**
  - Ready, Call & Wait LED indication on board, with Call & Reset switch

- **Low Voltage Operation**
  - The system works on 12 V. DC hence patient is not put to danger even due to accidental snatching of wires.

- **Reset at patient bed**
  - re-set button installed near the patient.

- **Compact and flexible**
  - The system requires very low space and is flexible to accommodates up to 64 beds.

- **Code Blue Facilities**
  **Series 640CB series**
  Incorporates Code Blue Facility
  - Code blue alert can be activated from bed side if the attending nursing staff feels problem which need additional help.
  - On received of code blue signal at nurse station from any bed, code blue indication will be activated & bed no. will be highlighted.

## Micro-controlled Nurse Call Monitoring System

Designed by our in-house team having over 25 years experience in Nurse Call Systems. Series 640 is improved and technical advance systems of our earlier Nurse Call Systems.

# SYSTEM COMPONETS

Series 640 consists of the following sub-systems:

a)   **Bed Side Call Unit**
b)   **Patient Remote hand set**
c)   **Door indicator**
d)   **Toilet Pull Cord**
e)   **Master Controller Hub**
f)   **Nurse Station Monitor**

## Bed Side Call Unit:

is consists of Call Push Buttons for Call and Re-Set & LED indications for Ready(green), Call(Red), Wait(Yellow).
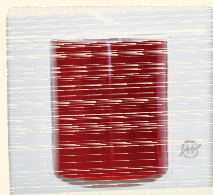
Ready LED indicates that the system is ok. If there is any problem with wiring, it will not glow. LED marked Call lights up when the call is made. Once the call is registered with the controller hub, LED marked Wait glows.

Model : BNCM-PB640A

## Patient Remote hand set:

is provided to make call form his bed. It has Push Button to call & LED indication for Ready, Call and Wait.

Model : BNCM-PB640R

## Door indicator:

Door indicator is installed out side the room to indicate call pending in the room.

Model : BNCM-DU640-1

## Toilet Pull Cord:

is to be installed side of toilet to make any emergency call. It has cord attached to push button and LED indications for Ready, Call & Wait.

Model : BNCM-TPC1

## Master Controller Hub:

Hub is central unit installed near Nurse Monitor Console. It is consisting of one Micro-processor central Controller card, one connector card for up to 16 beds SMPS. Wires from all beds are terminated on connector PCB.
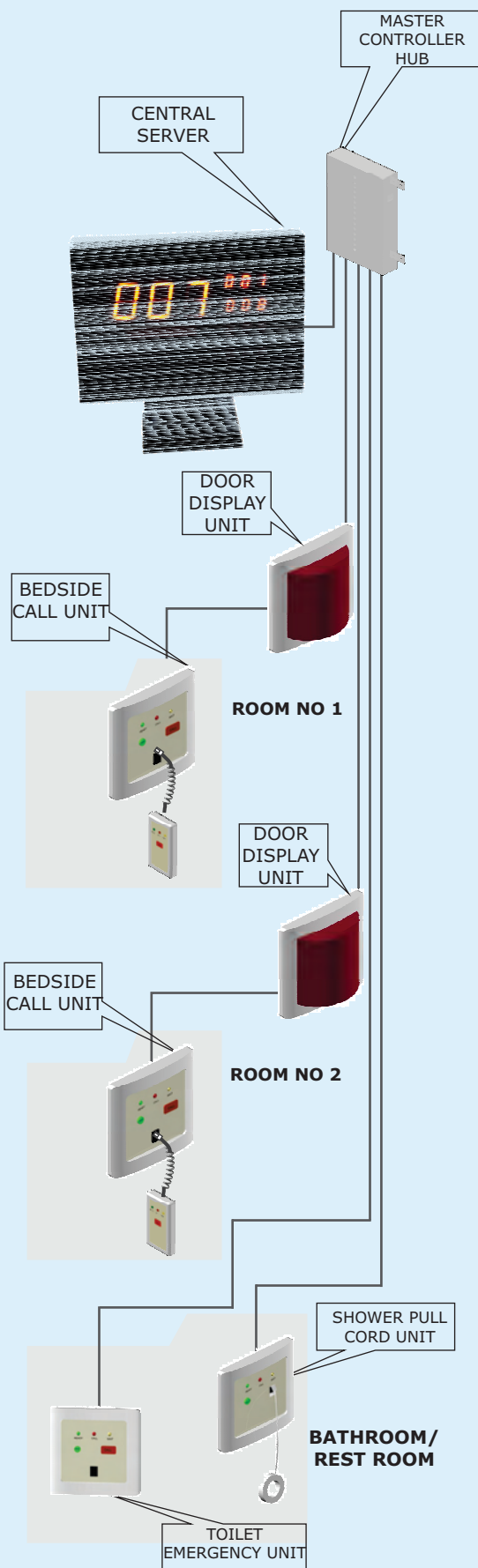
## Nurse station monitor:

is to be installed at the Nurse center. Call received from any bed will be displayed by the respective bed number by 3 digit 7 segment LED display. The first call pending is displayed with Big 2" 7 segment display. Other 4 calls are displayed in the sequence of receipt. If more then 5 calls are pending, the same can be scrolled down.
Any call attended is automatically erased and display is replaced with the

Model : BNCM-NCH640A

# WIRING DIAGRAM



MASTER CONTROLLER HUB

CENTRAL SERVER

DOOR DISPLAY UNIT

BEDSIDE CALL UNIT

**ROOM NO 1**

DOOR DISPLAY UNIT

BEDSIDE CALL UNIT

**ROOM NO 2**

SHOWER PULL CORD UNIT

**BATHROOM/ REST ROOM**

TOILET EMERGENCY UNIT

# Ordering information Nurses Call Monitoring System Series 640.

| | Item | Description | Quantity required | Model No. | Compitable 640 | 640 CB |
|---|---|---|---|---|---|---|
| **BED SIDE** | Call station Board | With push switches for call and Re-set buttons & LEDs for Ready, Call and Wait, Connector for console connection and connector for Patient remote hand set suitable for 3 module Conceal Box | each bed | BNCM-PB640A | 1 | 0 |
| | | With push switches for call, Re-set & **Code Blue buttons** & LEDs for Ready, Call, Wait & **Code Blue,** Connector for console connection and connector for Patient remote hand set with **4 module** Conceal Box | | BNCM-PB640CB | 0 | 1 |
| | Remote Handset | With flexible cord of 2 meters, Telephone type Jack connector, switch for call and indication for Ready, Call & Wait | each bed | BNCM-PB640R | 1 | 1 |
| | Door Indicator | with Red LEDs, Red Acrylic cover | Optional | BNCM-DU640-1 | 1 | 0 |
| | | Door display unit with green, yellow, and red LED indicators | Optional | BNCM-DUCB-3 | 0 | 1 |
| | Toilet Pull Cord | Toilet Pull Cord with indicator standard Rope length | Each toilet | BNCM-TP640C1 | 1 | 1 |
| **NURSE STATON** | Master Controller Hub | With Micro-processor Controller card, **1** connector card & SMPS | 16 Points | BNCM-MCH640A | 1 | 0 |
| | | | 8 Points | BNCM-MCH640CBA | 0 | 1 |
| | | With Micro-processor Controller card, **2** connector card & SMPS | 32 Points | BNCM-MCH640B | 1 | 0 |
| | | | 16 Points | BNCM-MCH640CBB | 0 | 1 |
| | | With Micro-processor Controller card, **3** connector card & SMPS | 64 Points | BNCM-MCH640D | 1 | 0 |
| | | | 32 Points | BNCM-MCH640CBD | 0 | 1 |
| | Nurse Station Monitor | with one 2" height & 4 No. 3/4" height LED display suitable for wall mounting and with table stand | 64 Points | BNCM-NCH640A | 1 | 0 |
| | | with one 2" height, 4 No. 3/4" height LED display & Code Blue indications, suitable for wall mounting and with table stand | 32 Points | BNCM-NCH640CB | 0 | 1 |
| | Wires from bed to call station | 2 pair telephone wire for Sereis 640 and CAT 5 OTP cable for Series 640CB | | | | |