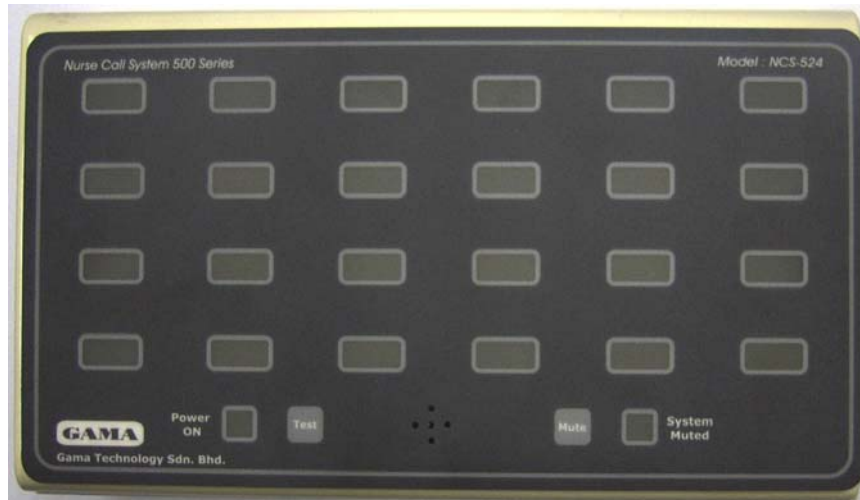


Main Station

NCS-524

Gama 500 Series Nurse Call System



GAMA 500 Series Nurse Call Systems is design with the latest technology to provide the end-user the most reliable system. This series of nurse call system is fully configurable to suit any medical institutes. And this series also have few additional add-on option's to expand the usage of this system. (*please refer to Add-On Modules for future information*).

Multiple Configurations'

The **GAMA 500 Series** Nurse Call Systems can be configured in two basic mode of operation, the "Single Mode" and "Zone Mode". The difference of these modes shall be explained later.

Power Source

The **GAMA 500 Series** Nurse Call Systems have a built in "Medical Approved Power Supply Card", this is a VERY important factor because a non-medical approved power source can cause harmful interference to other medical equipment's.

TEST Function

The user can press the "TEST" button to verify the system operation. Upon pressing this button all the bed (or zone) indication LED will light-up and the audio alarm will sound. The user can then verify the operation of the system.

MUTE Function

A "MUTE" button is provided to disable the audio alarm temporarily while the nurse attending the patient. This mute function will automatically disable if new alarm condition happened or it has been more than 5 min (*can be changed upon end-user request*) since the last mute pressed.

System Muted Indication

If the audio alarm is muted, this indicator will light-up. This indicator will automatically turn OFF after 5 min, if the alarm condition is still present. And this muting function will turn OFF if new alarm condition accorded while the system is muted.

Customized Legends

The legend for each indicator can be customized. This can be done at any time before or after delivery. With this option the user can rest assure the change in the logistic will not cost too much on the system.

Protections

The **GAMA 500 Series** Nurse Call Systems have the following built-in protection system to ensure the system work at optimum level.

1. COW BAR Circuit – This circuit will continually monitor the supply line for each bed unit if the consumption of the bed unit exceed the preset value, "SYSTEM ALARM" indicator will light-up.
- 2.
2. Cable Monitoring – This system will continually monitor the interconnection cable's and if any off this cable snapped, the system will indicate related bed or zone and the system alarm will turn ON. (*model depended*).
3. Power Monitoring – The system will monitor the main supply line, in the event of power failure, the "SYSTEM ALARM" light will ON, at the same time the "POWER ON" light will turn OFF. (*model depended*).

Single Mode

This is ONE of the commonly used mode, each bed has it's own indication. When a patient calls for nurse's assistance the related indicator will light-up. Audio alarm is provided to future alert the nurse.

Since each patient has it's own indication the duty nurse can identify the patient and prepare his/her self before attending the patient.

Zone Mode

This mode is very useful if the medical institutes have very large number of bed's. With this configuration, we can divide the large area into zone and assign to ONE indicator.

Once a zone is triggered the nurse moves to the related zone and searches for the bed head which indicating alarm (by looking at the on-board LED) and attend the related patient.

Add-On Modules

The following are the add-on modules, which the user can purchase separately to increase the scope of this system.

1. Printer Module - The system will print the date & time a patient called for assistance and the time the nurse attended the patient. This future will be very use full to monitor the nurse efficiency and patient feedback's.
2. Dialer Module - With this module the system will automatically dial to a preset number (max. 5 number) after the alarm has been trigged for some time (which the user can set).
3. Transfer Module - With this module the system will transfer all the alarm condition to another "Remote Station". This is very useful if the management personal wanted to monitor the nurse activity and efficiency.
4. Battery Back-Up - This is a Battery Back System for the entire nurse call, this system have built-in change module.

Technical Specifications

Power Source

Operation Voltage	: 90 – 264 VAC, 47 Hz to 440 Hz
Approvals	: UL / CUL / TUV / CB / CE
Safety Standard	: UL 2601 , EN 60601 , IEC 601-1
EMC Standard	: EN 55011 , EN 61000-4-2, 3, 4, 5, 6, 8, 11 EN 61000-3-2, 3, EN 60601-1-2
Types Of Protection's	: i) Over Voltage ii) Voltage Surge iii) Under Voltage iv) Lightning Surge
Warranty Period	: TWO Years

Main Controller

Central Processor Type	: 8-Bit Microprocessor working at 8Mhz
Back-up System	: Non-Violate Memory (<i><u>NO BATTERY REQUIRED</u></i>)
Maximum BED Location	: 24 Bed's
Maximum ZONE Location	: 24 Zone
Legend Area	: 10mm x 20mm
P.C.B Board Type	: FR4 with ½ oz. copper

Dimension

Width	: 280 mm
Height	: 160 mm
Depth	: 60 mm
Weight	: 5.6 Kg

Bed Side Unit

Gama 500 Series Nurse Call System

NCS-501

The 501 Bed Head unit include all required component to communicate with the Nurse Station 500 Series. This bed head unit also have remote jack built in, this can be used with the 504 REMOTE UNIT, for patient with limited move ability.

This *Bed Head* unit is ideal for mounting into the patient bed head, because this unit can be canceled into the patient bed head.



Call Button

The patient can press this button for nurse assistance. Once pressed the LED above this button will light-up. Multiple press of this button will not effect the system operation. And once triggered it's has to be reset again before operation. This "CALL" button is a very important button and the GAMA 500 Series Nurse Call System uses **normally closed type** button. In any case if this button fails the system will trigger automatically.

Emergency Button

This button is used by the nurse to call for assistance in case there is a situation with the patient he/she attending.

Once this button is pressed the following will take effect.

- Main station audio alarm will be different to indicate emergency condition.
- The bed indication light at main station will flash.
- The Door Indicator will flash rapidly to indicate emergency condition.
- The Mute function will be disabled.
- The Call button will be disabled.

Only by pressing the related "RESET" button this emergency condition can be cancelled.

Reset Button

As the name implies, this button is used to reset all the alarm conditions. The nurse who is attending the patient (who pressed the "CALL" button earlier), should press this button when he/she reached the patient bed.

This button can also be used as bed unit "TEST" button. When pressed in no-alarm condition all the LED's will light-up.

Remote

This is where the hand-held remote jack is mounted. This remote jack is used as external "CALL" button for patient who has less mobility. Upon inserting the remote unit jack, the system will trigger the "CALL" button, indicating that the unit is connected. The nurse then should press the "RESET" button to reset the unit. After this the patient can press the remote "CALL" button to call for assistance.

Technical Specification's

Power Source

Not needed, provided from the **GAMA 500 Series** main station

Dimension

Length : 145 mm
Width : 85 mm
Height : 12 mm (facial only)

Mounting

Can be mounted on standard Bed Head assembly, for non-bed head assembly please use standard electrical switch mounting base.

Hand Held Unit

Gama 500 Series Nurse Call System

NCS-504

This unit is given to patient with less move ability. This hand-held unit is highly reliable. The knob is made of high impact plastic material. The cable is made of a soft and flexible cord; this will ensure that the cable does not interfere the patient movement.



Technical Specification

Power Source

Not Need, provided by **Bed Side Unit – NCS-501**

Dimension

Width : 45mm Diameter
Height : 65mm (shaped)
Depth : -
Cord Length : 2.5 meter

Mounting

No mounting is required, this cord is inserted into the **Bed Side Unit – NCS-501**

Washroom Reset Unit

Gama 500 Series Nurse Call System

NCS-502

This unit is used at the entrance of washroom's. Once the "PULL CORD" Model :505, is been pull by the patient in the washroom. The related bed/zone will trigger.

Upon arriving to the related washroom the nurse presses this button to reset the "PULL CORD".

An LED in mounted above each LED to indicate which unit has been trigged.



This button also can be used a "TEST" button. Upon pressing this button the LED above it will light-up and the related bed/zone LED at the main station will light-up too.

Technical Specification

Power Source

Not Need, provided by **GAMA 500 Series** main station.

Dimension

Width : 85 mm
Height : 85 mm
Depth : 12mm (facial only)

Mounting

Can be mounted on standard Bed Head assembly, for non-bed head assembly please use standard electrical switch mounting base.

Washroom Pull Cord Unit

Gama 500 Series Nurse Call System

NCS-505

This unit is mounted on the cycling of the washrooms. The patient can call for assistance by pulling the red colour string.

The LED on this unit will light-up if the string is pulled



Technical Specification

Power Source

Not Need, provided by **GAMA 500 Series** main station.

Dimension

Diameter : 75 mm
Height : 45 mm
String Length : 1.5 meter (*other length available upon request*)

Mounting

Mounted onto cycling using standard screw

Door Indicator Unit

Gama 500 Series Nurse Call System

NCS-506



This unit is mounted on the entrance on each room or zone. When normal calling is active this indicator will light constantly. Under emergency condition this indicator will blink according to HTM standard.

Technical Specification

Power Source

Not Need, provided by **GAMA 500 Series** main station.

Colours (Selected upon ordering)

RED	:	
YELLOW	:	
GREEN	:	
BLUE	:	

(All the above display can be configured to blink)

Dimension

Width	:	85mm
Height	:	85 mm
Depth	:	50 mm

Mounting

Mounted on standard electrical mounting base.