



CORNELL Communications
5000 Nurse Call System
28 64 Station 1 Master Tone Visual
Bid Specification

The information provided herein is believed to be reliable. However, *CORNELL* Communications assumes no responsibility for the use of this information, and all use of such information shall be entirely at the user's own risk.

No part of this publication may be stored in a retrieval system, transmitted, or modified in any way without prior agreement and written permission from *CORNELL* Communications.

Table of Contents

| | |
|---|----------|
| 1. General..... | 3 |
| 1.1 Description..... | 3 |
| 1.2 Manufacturer..... | 3 |
| 1.3 Standard Products | 3 |
| 1.4 Service Capabilities | 3 |
| 1.5 Customer In-Service Training | 3 |
| 1.6 Technical Training Schools | 3 |
| 1.7 System Planning and Layout | 3 |
| 2. System Specifications..... | 4 |
| 2.1 Basic System Specifications | 4 |
| 2.2 System Sizing..... | 4 |
| 2.3 Call Placement/Annunciation/Display..... | 4 |
| 2.4 Call Classification..... | 4 |
| 2.5 System Interface..... | 4 |
| 2.6 System Failure | 4 |
| 2.7 Maintenance..... | 5 |
| 2.8 ANSI/UL 1069 Approved System | 5 |
| 2.9 Power Sources..... | 5 |
| 2.10 Power Distribution | 5 |
| 2.11 Station Connectors..... | 5 |
| 2.12 Annunciator Panels and Other Indicators | 5 |
| 2.13 Single and Dual Patient Stations..... | 6 |
| 2.14 Pull Cord and Other Emergency Stations | 6 |
| 2.15 Staff Locator Stations | 6 |
| 2.16 Faceplates..... | 6 |
| 2.17 Optional System Specifications | 6 |
| 3. Devices and Operation..... | 6 |
| 3.1 Control Units, HTN7616UA and HTN7617UA..... | 6 |
| 3.2 Annunciator Panel, Model HRN7614UA..... | 7 |
| 3.3 Duty Station, Model HWN7606UA | 8 |
| 3.4 Visual Patient Station, Models HWN7600UC and HWN7630UC..... | 8 |
| 3.5 Satellite Station with Phono Jack, Model HWN7624UA..... | 9 |
| 3.6 Satellite Station with Membrane Panel, Model HWN7625UC | 9 |
| 3.7 Patient Station for use with 20-pin Receptacle, Model HWN7017UC | 10 |
| 3.8 Pull Cord Emergency Station, Model HWN7605UA..... | 10 |
| 3.9 Auxiliary Stations | 11 |
| 3.10 Smart Station (Addressable), Model HWN7628UC..... | 11 |
| 3.11 Emergency/Smart Stations, Models HWN7619UC and HWN7620UC..... | 11 |
| 3.12 Corridor Dome Lights..... | 12 |
| 3.13 Patient Station Call Cords..... | 13 |

Table of Contents, continued

ADDENDUM TO CUMULA I BID SPECIFICATION

| | |
|---|------------|
| 4. - Additional Devices | A-1 |
| 4.1 Economy Visual Single Patient Station, HWN7668UA | A-1 |
| 4.2 Economy Visual Dual Patient Station, HWN7678UA | A-1 |
| 4.3 Pull Cord Emergency Stations, HWN7652UA and HWN7657AA | A-2 |
| 4.4 Remote Reset Station, HWN7691UA | A-2 |

1. GENERAL

1.1 Description

The nurse call supplier shall provide equipment, accessories and materials necessary for a complete operating nurse call system in accordance with specifications and applicable drawings.

All equipment used in configuring a nurse call installation (including field wiring cables) shall be listed and tested by an OSHA-certified Nationally Recognized Testing Laboratory (NRTL) to the current ANSI/UL 1069 Standard for Hospital Signaling and Nurse Call Equipment.

1.2 Manufacturer

This specification is based on equipment manufactured by *CORNELL* Communications of Milwaukee, WI.

1.3 Standard Products

The nurse call equipment described in this specification shall be from the standard product line of one manufacturer as designated on their published price list.

1.4 Service Capabilities

The nurse call equipment distributor shall employ skilled service personnel to provide system maintenance and to assist the customer in management of the installation.

1.5 Customer In-Service Training

An authorized technical representative shall be available to provide applicable in-service training to hospital staff members.

1.6 Technical Training Schools

The nurse call equipment manufacturer/distributor shall offer periodic technical training sessions, designed and presented by skilled technical instructors. The training sessions shall include such topics as operation, troubleshooting techniques, preventive maintenance procedures and related topics.

1.7 System Planning and Layout

The manufacturer/distributor shall make available system planning expertise to the customer as part of the nurse call installation design and preparation process. This service includes providing the necessary installation and floor layout drawings.

2. SYSTEM SPECIFICATIONS

2.1 Basic System Specifications

The microprocessor nurse call system shall provide communication between the centrally located Annunciator Panel(s), and patient, emergency and auxiliary stations located throughout the floor. The basic system shall use only those components specified in this document and shall consist of Annunciator Panel(s), Patient Stations, Duty Stations, Bath Emergency Stations, Auxiliary Stations, Dome Lights and a System Control Unit (CU) containing advanced solid state, microprocessor technology for system control and call processing. The CU shall contain programmable modules/devices suited to basic system operation. All control voltages required by the system for audible and visual annunciation shall be provided by solid state circuitry.

2.2 System Sizing

In its basic configuration (one zone), the Control Unit shall provide power and control for up to 40 addressable stations plus accessories, and up to 80 addressable stations in the expanded configuration (two zones).

It shall be possible to expand the system's patient/staff station handling capability where specified in order to meet additional unit requirements. Up to 64 addressable stations shall be accommodated. The system shall be able to accommodate up to 3 (three) Annunciator Panels.

2.3 Call Placement/Annunciation/Display

Calls from Patient, Emergency and Staff Stations shall be placed by momentary switch action and shall be latched by solid state circuits. Each Annunciator Panel shall display 32 station calls by means of LED indicators and a dual-tone sounder.

2.4 Call Classification

The system shall automatically classify and provide commensurate audible and visual annunciation of patient calls such as Routine, Emergency and Staff Assist. The highest level of call from a calling station shall take precedence over a lower level call.

The system shall be capable of indicating staff members registered into a room. Provision for an auxiliary signal detection and a unique signaling level shall be built-in for customer use.

2.5 System Interface

Annunciator Panel to Control Unit (CU): The system shall provide ports for data exchange with up to three Annunciator Panels.

Control Unit to floor stations: The system shall provide power and two serial data channels for control and monitoring of all addressable stations and auxiliary devices.

RS-232 Interface: An RS-232 port shall be provided for direct serial interface with an ANSI video terminal or laptop computer for diagnostic support or for entering custom system parameters.

2.6 System Failure

In the event of a system failure, other than a complete power loss, a back-up visual mode of call signaling shall be possible using Dome Lights located above patient rooms.

System Fault indicators (LED) shall be located at the Control Unit and the Annunciator Panels. These indicators shall illuminate in a unique fashion whenever a fault is detected by the built-in diagnostics.

2.7 Maintenance

The system shall be readily serviceable. Built-In Test Equipment shall be provided in the form of diagnostic self checks and service routines resident in microprocessor firmware. Diagnostics shall be able to determine Patient Station faults as well as faults within the Control Unit.

Additional diagnostic functions shall be accessible to service personnel to test and troubleshoot the system:

System Test button on the CU processor module to run a test routine that sequentially flashes all station outputs (Dome Lights and LED indicators).

Station status display at the Annunciator Panel or the ANSI video terminal to show the status of the data communication between the Control Unit and each active Patient Station.

System fault display at the Annunciator Panel to isolate a fault condition to a major component..

2.8 ANSI/UL 1069 Approved System

The nurse call system shall be tested and subsequently listed by an OSHA-certified Nationally Recognized Testing Laboratory (NRTL) in accordance with the ANSI/UL 1069 standard for Hospital Signaling and Nurse Call Equipment. Each major component shall bear the manufacturer's model number as well as the applicable listing label as required by the listing agency.

2.9 Power Sources

The system shall be designed to operate from a 120 or 240 VAC (+/- 10%), 50/60 Hz power source. The standard models shall be factory wired for 120 VAC, 60 Hz operation.

2.10 Power Distribution

All stations in the system will obtain their operating power from a central source via the system cabling. The system shall utilize low voltage, low current distribution and meet all requirements for Class 2 wiring.

2.11 Station Connectors

All Patient, Staff, Bath Emergency, Duty and Auxiliary Stations, and Annunciator Panels shall incorporate pre-numbered, quick-disconnect connectors for field wiring terminations, simplifying installation and maintenance.

2.12 Annunciator Panels and Other Indicators

Audible and visual indicators shall be provided at each Annunciator Panel and Duty Station, providing distinct, clear indication of calls.

The Annunciator Panel shall be a wall-mounted device. It shall be designed for ease of service and shall not require the use of special tools for assembly/disassembly. The Annunciator Panel shall include a 32-LED multi-function display section, a Tone Silence button and a Lamp Test button. Additional LEDs shall be provided to indicate Power On and System Fault conditions.

Bright, multi-colored indicators (Dome Lights) shall be provided to visually annunciate calls from patient or Emergency Stations.

2.13 Single and Dual Patient Stations

Single and Dual Patient Station shall be wall-mounted devices with built-in receptacles for the call cord device required. With the exception of the economy and satellite station, each device shall include a membrane keypad with an ASSIST and a RESET switch. Each station shall include a brushed, stainless steel faceplate. Plastic faceplates shall not be acceptable.

A call from a Single or Dual Patient Station shall be initiated by pressing a CALL switch on the call cord device. Solid-state devices on all station types shall control call latching circuits and output devices that drive Dome Light indicators.

2.14 Pull Cord and Other Emergency Stations

Pull Cord and other Emergency Stations shall be wall-mounted devices; each with a built-in membrane keypad or other means to provide a call function and a RESET switch, and an LED indicating a call has been placed. Each station shall include a brushed, stainless steel faceplate. Plastic faceplates shall not be acceptable.

2.15 Staff Locator Stations

Staff Locator Stations shall be wall-mounted devices, each with a built-in membrane keypad having a STAFF IN and a STAFF OUT switch, and an LED indicating a staff member has checked in. Each station shall include a brushed, stainless steel faceplate. Plastic faceplates shall not be acceptable.

2.16 Faceplates

All Patient Station, Duty Station, Pull Cord Emergency Station and Auxiliary Station faceplates shall be constructed of brushed stainless steel for ruggedness and an attractive appearance.

2.17 Optional System Specifications

The optional features described in subsequent paragraphs shall allow the basic nurse call system to be expanded in function and size. The basic system shall be designed to accommodate all options by either software parameter changes and/or addition of system devices. Additional functions or devices shall not alter the requirements of previous paragraphs.

3. DEVICES AND OPERATION

3.1 32-station Control Unit, model HTN7616UA

64-station Control Unit, model HTN7617UA

The System Control Unit shall be available in 32 and 64 station versions and shall be constructed on a single stainless steel panel for installation in a flush or surface wall-mounted equipment cabinet. The Control Unit panel (CU) shall contain the power supplies and processor module which shall be the power and control elements of the Nurse Call System. The 32 station version shall be equipped with one 12- and one 24-volt power supply, and the 64 station version shall have one 12- and two 24-volt units to accommodate the additional Dome Lights required in a larger system.

The linear-regulated power supplies shall be single-output, open-frame units, which shall operate from a 120 or 240 VAC (by setting internal jumpers), 50-60 Hz power source. They shall be factory wired for 120 VAC.

The Processor Module, the microprocessor-based control center for the Nurse Call System, shall be a single printed circuit board assembly mounted on the Control Unit panel. It shall contain an advanced Intel microcontroller and the solid state memory devices (EPROM, RAM, and EEPROM) needed to store and run

the system program. The system program and the configuration parameters shall be stored in non-volatile memory which shall retain all programmed data even if power is removed. In addition, the processor module shall contain power and signal conditioning circuits and the termination points for all the corridor and annunciator cables in the system.

TECHNICAL INFORMATION

| | |
|-------------------------|---|
| AC power input: | 120/240 VAC, 50/60 Hz |
| DC power output: | +12V (1 Amp nominal) from 12 VDC power supply +24V-1 (3.6 Amps max.) from 24 VDC p/s no. 1 +24V-2 (3.6 Amps max.) from 24 VDC p/s no. 2 |
| Field wiring terminals: | Screw-clamp terminals on pluggable connectors Barrier terminal strips with screw terminals |
| Operating temperature: | 0-50 degrees C (32-122 degrees F) |

3.2 Annunciator Panel, Model HRN7614UA

The Annunciator Panel, Model HRN7614UA, shall be a 4-gang, wall-mounted device with 34 LED indicators and a dual tone sounder which “announces” patient and staff calls placed in the system. The Annunciator Panel unit shall consist of two “stacked” pc board assemblies, both mounted to a steel chassis plate, complete with hardware for installation into a standard 4-gang electrical backbox.

The POWER LED and the SYS FLT (system fault) LED shall have dedicated functions, but the other 32 LEDs shall be multi-function indicators. In normal operation, one of the 32 LEDs shall illuminate, and the tone shall sound to indicate that a call has been placed by a patient or staff member.

The LAMP TEST button shall be pressed to initiate a brief test which sequentially flashes the annunciator LED indicators to check their integrity. In addition, the LAMP TEST button shall be used to activate other test modes, used for diagnostic purposes.

The function of the TONE SILENCE button in normal operation shall be to silence the sounder tone when one or more calls are being annunciated. Also, during the LAMP TEST sequence, pressing the TONE SILENCE button shall cause the display to step to one of four different test modes: Station Status, System Status, Version Number display and back to Lamp Test.

A screwdriver adjustment control shall be on the front pc board assembly, accessible by removing the faceplate, and used to set the tone volume.

The annunciator panel shall operate as follows:

POWER LED

The POWER LED is illuminated (green) whenever there is power to the annunciator panel. If a panel is not powered, but the system is otherwise operational, it is likely that the SYS FLT LED will be illuminated at other panels and at the processor module.

SYSTEM FAULT LED

The SYS FLT LED (yellow) indicates four conditions as shown below:

| | |
|---|--|
| SYS FLT LED winks once every 10 seconds | System is running normally. |
| SYS FLT LED stays off | The panel or the entire system may have failed. |
| SYS FLT LED flashes | The entire system or an individual component of the system has failed. |

CALL ANNUNCIATION

In the normal mode of operation, the 32 red LEDs and the dual tone sounder indicate the presence and source of calls in the system. Usually, one Patient Station is programmed to each LED position. Optionally, more than one station may be programmed to any one LED position; for example, all of the beds in a room. When more than one station is programmed to one position, the highest priority call mapped to the LED is displayed. The LED flashing rate and sounder tone indicates the priority level.

TONE SILENCE

When any new call is placed, the tone will begin to sound. Press the TONE SILENCE button to silence the sounder while a call is active. Press it again to re-activate the sounder. When a new call is placed, the sounder will announce the highest priority call on the panel, not necessarily the new call.

LAMP TEST

Pressing the LAMP TEST button starts a test which sequentially activates all the annunciator LEDs and outputs a low-high-low tone before returning to the normal standby mode.

The LAMP TEST button is also used to initiate one of the status display modes used for diagnostics.

3.3 Duty Station, Model HWN7606UA

Faceplate, Model HFN7611UA

The Duty Station, model HWN7606UA, shall be a two-gang wall-mounted device. It shall have three LED indicators which announce the various call levels within the system, as well as a unique audible announcement for each call level.

Duty Station operation shall be as follows:

A staff member will be able to observe the current call conditions within the programmed area by observing the pulsing rate of the 3 LEDs and the sounder on the unit.

3.4 Visual Patient Station, Single-Gang, Models HWN7600UC and HWN7630UC

Single-Gang Faceplate, Model HFN7601UA

The visual-only Patient Stations, models HWN7600UC and HWN7630UC, shall be single-gang wall-mounted devices for use in a nurse call system as described in this specification. Each station shall have a phono jack type receptacle for a single, dual or split function call cord device, a membrane keypad with an ASSIST call button and a RESET button for canceling ROUTINE or ASSIST calls, and an LED indicator which announces ROUTINE, ASSIST and cord pullout calls.

Operation of the visual Patient Station shall be as follows:

A patient may press the push-button switch on the call cord device to place a ROUTINE call. The station LED glows green and the appropriate output devices (Dome Light, Duty Station, etc.) annunciate the call. A staff member may call for additional help by pressing the ASSIST button on the station, which lights the station LED red, and activates a higher level of annunciation at the corridor stations and Annunciator Panel. If the call cord device is pulled out of its receptacle, an ASSIST level call is placed. The membrane RESET button is pressed to cancel any call placed from the Patient Station. The RESET button will NOT reset a call initiated by a call cord device pull out. The device must be re-inserted and then the RESET button pressed to cancel the call.

3.5 Satellite Station with Phono Jack, Model HWN7624UA

The Satellite Station with phono jack (HWN7624UA) shall be a simple, low cost, wall-mountable, bedside call device, for use in conjunction with an addressable, Visual Patient Station (HWN7630UC), in a multi-bed room.

Each Satellite Station shall consist of a 3-conductor phono jack, mounted on a single-gang, stainless steel faceplate, which shall accept one of three types of call cord devices (HWN7608UA, HWN7609UA or HWN7610UA).

Operation of the Satellite Station shall be as follows:

Pressing the call cord push-button switch shall register a ROUTINE level call in the system, which shall activate the Dome Light, Duty Station and Annunciator position associated with the addressable Patient Station in the same room. Pressing the membrane RESET switch on the addressable station shall cancel the ROUTINE call.

A cord pullout function shall also be provided, placing an ASSIST level emergency call. Canceling this call may be accomplished by re-inserting the call cord and pressing the RESET button on the addressable station.

**3.6 Satellite Station with Membrane Panel, Model HWN7625UC
Faceplate, Single Gang, Stainless, Model HFN7601UA**

The Satellite Station with membrane panel (HWN7625UC) shall be a low cost, single-gang, wall-mountable, bedside call device, for use in conjunction with an addressable, Visual Patient Station (HWN7630UC), in a multi-bed room.

Each Satellite Station shall be a full-function bedside station which includes a call cord jack, a tri-color LED indicator and a membrane panel with ASSIST and RESET switches. The station shall be installed with one of three types of call cord devices (HWN7608UA, HWN7609UA or HWN7610UA).

Operation of the Satellite Station shall be as follows:

A patient will press the push-button switch on the call cord device to place a ROUTINE level call for assistance. The station LED shall glow green and the appropriate output devices (Dome Light, Duty Station and/or annunciator panel) associated with the addressable Patient Station in the room shall annunciate the call.

A staff member will call for additional help by pressing the membrane ASSIST switch on the station, which shall light the station LED red and activate a higher level of annunciation at the corridor stations. Also, if the call cord device is pulled out of its receptacle, both ROUTINE and ASSIST level calls shall be placed, lighting the station LED amber.

The membrane RESET switch may be pressed to cancel a ROUTINE or ASSIST call placed from the satellite station. Resetting a pull-out call shall require re-inserting the call cord in the receptacle before pressing the RESET switch.

3.7 Patient Station for use with 20-pin Receptacle, Model HWN7017UC

The Visual Patient Station (HWN7017UC) shall be an addressable device for use with one or two wall-mounted 20-pin receptacles and one or more auxiliary stations (such as HWN7602UA, HWN7604UA or HWN7605UA). It shall be mounted in a two or three gang back box.

The 20-pin receptacle (not included) shall accept a call device (such as the model HSN6527UB), providing a nurse call button and TV controls. The receptacle/faceplate assembly shall be supplied in a single version (model SPHFN7016UA) or a dual version (SPHFN9006UA), and both shall include one cutout for mounting the Patient Station.

The Patient Station shall also have a phono jack type receptacle, and a membrane keypad for placing ASSIST calls and to RESET ROUTINE and ASSIST level calls.

Operation of the visual Patient Station shall be as follows:

A patient may press the push-button switch on the call cord device to place a ROUTINE call for assistance. The station LED glows green and the appropriate output devices (Dome Light, Duty Station, etc.) annunciate the call. A staff member may call for additional help by pressing the ASSIST button on the station, which lights the station LED red, and activates a higher level of annunciation at the corridor stations and Annunciator Panel. If the call cord device is pulled out of its receptacle, an ASSIST level call is placed. The membrane RESET button is pressed to cancel any call placed from the Patient Station. The RESET button will NOT reset a call initiated by a call cord device pull out. The device must be re-inserted and then the RESET button pressed to cancel the call.

3.8 Pull Cord Emergency Station, Model HWN7605UA

Faceplate, Single-Gang, Model HFN7601UA

The Pull Cord Emergency Station, HWN7605UA, shall be a single-gang wall-mounted device for use in the Nurse Call System as described in this specification. This station shall be used in conjunction with a Patient Station or smart station to provide the necessary logic for addressing and call annunciation. The Pull Cord Station will generate a unique call in the system. The station is capable of lighting a unique Dome Light. A single-gang faceplate, HFN7601UA is required with each Pull Cord Station.

Operation of the Pull Cord Station shall be as follows:

The Emergency Pull Cord Station has a 72" nylon cord with a luminous pendant which, when pulled, will place a unique call on the system. An LED is visible on the front membrane keypad. This LED will flash giving a visual indication that a call has been placed.

To cancel the call, press the RESET switch on the Emergency Pull Cord Station.

3.9 Auxiliary Stations:

Push-Button Emergency Station, Model HWN7602UA

Staff Locator Station, Model HWN7603UA

Code Blue Station, Model HWN7604UA

Faceplate, Single-Gang, Model HFN7601UA

The Auxiliary Stations (models HWN7602UA, HWN7603UA, HWN7604UA) shall be single-gang wall-mounted devices for use in a visual or audio-visual nurse call system. These stations shall be used in conjunction with a Patient Station or smart station providing the necessary logic for addressing and call annunciation. The Push-button Emergency and Code Blue Stations shall generate unique calls in the system, whereas the Staff Locator Station shall provide a way to locate staff members within the facility. Each station shall be capable of lighting a unique Dome Light. Each of the auxiliary stations require a single-gang faceplate, HFN7601UA.

Operation of the Auxiliary Stations shall be as follows:

The Emergency Push-button and Code Blue Stations each have two membrane switches providing a CALL and RESET function. The Staff Locator Station also has two membrane switches, one for registering a staff member's presence (STAFF IN), the other for canceling (STAFF OUT).

Pressing the PRESS FOR HELP or the CODE BLUE switch will start flashing the LED located on the station providing immediate feedback to the user that a call has been placed. When the STAFF IN switch is pressed, the LED in the station will light continuously. Each of these stations is capable of supporting a Dome Light for unique annunciation through the associated Patient Station.

To cancel the call from the station, press the RESET switch on the Emergency Push-button and Code Blue Stations. To register a staff member out of a room, press STAFF OUT.

3.10 Smart Station (Addressable), Model HWN7628UC

The Smart Station (HWN7628UC) shall be a low cost, single-gang, addressable call device to be used in conjunction with one or more wall-mounted, auxiliary stations (such as HWN7602UA, HWN7604UA or HWN7605UA) when a bedside Patient Station is not required. Each Smart Station shall be installed in an unexposed location, such as a junction box or Dome Light backbox, and shall occupy one of the Patient Station hex addresses on the 32-station polling channel.

Its primary purpose shall be to encode input data from the auxiliary stations in one room, communicate with the Control Unit, and decode response data to control the output ports, which shall normally drive the Dome Lights associated with this room.

3.11 Push-button Emergency/Smart Station, Model HWN7619UC

Code Blue/Smart Station, Model HWN7620UC

Faceplate, Single-Gang, Model HFN7601UA

The Push-button Emergency/Smart Station (HWN7619UC) shall combine a Push Button Emergency Station with an addressable Smart Station (HWN7628UC) in one low-cost, single-gang package. Likewise, the Code Blue/Smart Station (HWN7620UC) unit shall be a Code Blue and Smart Station combination device. These

two-in-one units shall provide a high-level call function for use in a room where there is no addressable Patient Station.

Either station shall also function in conjunction with up to three external wall-mounted, auxiliary stations (such as HWN7602UA, HWN7604UA or HWN7605UA) when a standard Patient Station is not used in the same room.

Each P.B./Smart Station or C.B./Smart Station shall be wall-mountable and shall occupy one of the Patient Station hex addresses on the station polling channel.

The primary purpose of the Smart Station shall be to encode input data from the auxiliary stations in one room, communicate with the Control Unit and decode response data to control the output ports, which drive the Dome Lights associated with the room.

Operation of these stations shall be as follows:

Pressing the top membrane switch on the auxiliary station (PRESS FOR HELP or CODE BLUE) shall activate the input call function which generates the appropriate annunciation at the Dome Light, Duty Station and/or annunciator panel.

Pressing the RESET switch shall cancel the function.

Each station is intended to be installed with a single-gang stainless steel faceplate, model HFN7601UA.

3.12 Corridor Dome Lights

Corridor Dome Lights shall be located where indicated on the plans. The Dome Lights shall indicate calls from rooms according to classification.

A single-circuit Dome Light (HWN6691UA) shall contain one white lamp.

A 3-circuit Dome Light (HWN6693UA) shall contain one white, one green and one red lamp.

A 5-circuit Dome Light (HWN6695UA) shall contain one white, one green, one red, one amber and one blue lamp separated by barriers.

Corridor Dome Lights shall annunciate according to the number of lamp circuits available. The following tables represent two possible configurations:

The suggested HWN6693UA Dome Light annunciation is:

| <u>Color</u> | <u>Call Indication</u> | <u>Indication Rate</u> |
|--------------|------------------------|------------------------|
| White | Routine | steady |
| White | Bath Emergency | 1 sec on/1 sec off |
| Red | Assist/Cord Pullout | ½ sec on/ ½ sec off |
| Blue | Code Blue | ½ sec on/ ½ sec off |

The suggested HWN6691UA Dome Light indications annunciation is:

| <u>Color</u> | <u>Call Indication</u> | <u>Indication Rate</u> |
|--------------|-----------------------------------|------------------------|
| White | Routine | steady |
| White | Bath Emergency | 1 sec on/1 sec off |
| White | Nurse Location | steady |
| White | Assist/Cord Pullout, Code Blue | ½ sec on/ ½ off |

A corridor Dome Light shall consist of a wedge-shaped, translucent, high temperature, polystyrene, plastic luminaire, mounted on a deluxe, all plastic base. Changing lamps shall be accomplished without the need of tools.

3.13 Patient Station Call Cords (Visual):

Single Call Cord, HAN7608UA

Dual Call Cord, HAN7609UA

Split Function Call/Monitor Cord, HAN7610UA

The patient's control device for use with the visual nurse call Patient Stations shall be a Single Call Cord (HAN7608UA), a Dual Call Cord (HAN7609UA) or a Split Function Call/Monitor Cord (HAN7610UA).

The Call Cord cable shall be terminated in a molded-on safety disconnect plug. The device and cable material shall permit cleaning with detergents and other standard hospital cleaning agents without damage to the exterior or interior.

Each Call Cord device shall include a bed-sheet clip made of a UL approved material. This device will allow the attachment of the device to the patients bed sheets to keep the control portion from falling from the bed.

Addendum to the 5000 Bid Specification

4. ADDITIONAL WALL-MOUNTED DEVICES

4.1 HWN7668UA Economy Visual Single Patient Station

The HCE model HWN7668UC economy visual Patient Station shall be a 2-gang, wall mounted device and include a brushed stainless steel faceplate. It shall have one call LED, one phono jack receptacle to service one or two beds, and a RESET button.

The phono-jack call cord receptacle shall accept any of the following call cord devices:

- Model HAN7608UA - single call cord
- Model HAN7609UA - dual call cord
- Model HAN7610UA - split function call cord

The station shall include a dip switch for selecting one of 32 unique polling addresses. It shall also include terminations for connection to auxiliary input devices, such as bath emergency, pushbutton emergency, staff locator, or code blue stations. It shall also provide output terminals for connection to Dome Light indicators. Quick-disconnect, insulation-displacement type connectors shall be provided to terminate field-installed power, control and data lines.

Operation of the visual Patient Station shall be as follows:

A patient may press the push-button switch on the call cord device to place a ROUTINE call. The station LED glows green and the appropriate output devices (Dome Light, Duty Station, etc.) annunciate the call. A staff member may call for additional help by pressing the ASSIST button on the station, which lights the station LED red, and activates a higher level of annunciation at the corridor stations and Annunciator Panel. If the call cord device is pulled out of its receptacle, an ASSIST level call is placed. The RESET button is pressed to cancel any call placed from the Patient Station. The RESET button will NOT reset a call initiated by a call cord device pull out. The device must be re-inserted and then the RESET button pressed to cancel the call.

4.2 HWN7678UA Economy Visual Dual Patient Station

The HWN7678UC economy visual dual Patient Station shall be a 3-gang, wall mounted device and include a brushed stainless steel faceplate. It shall have two phono jack receptacles for servicing two beds with individual readouts at the Annunciator Panel, two call LED's, and a RESET button.

The phono-jack call cord receptacles shall accept any of the following call cord devices:

- Model HAN7608UA - single call cord
- Model HAN7609UA - dual call cord
- Model HAN7610UA - split function call cord

The station shall include a dip switch for selecting one of 32 unique polling addresses. It shall also include terminations for connection to auxiliary input devices, such as bath emergency, pushbutton emergency, staff locator, or code blue stations. It shall also provide output terminals for connection to Dome Light indicators. Quick-disconnect, insulation-displacement type connectors shall be provided to terminate field-installed power, control and data lines.

Operation of the visual Patient Station shall be as follows:

A patient may press the push-button switch on the call cord device to place a ROUTINE call. The station LED glows green and the appropriate output devices (Dome Light, Duty Station, etc.) annunciate the call. A staff member may call for additional help by pressing the ASSIST button on the station, which lights the station LED red, and activates a higher level of annunciation at the corridor stations and Annunciator Panel. If the call cord device is pulled out of its receptacle, an ASSIST level call is placed. The RESET button is pressed to cancel any call placed from the Patient Station. The RESET button will NOT reset a call initiated by a call cord device pull out. The device must be re-inserted and then the RESET button pressed to cancel the call.

**4.3 HWN7652UA Pull Cord Emergency Station
HWN7657AA Water Resistant Pull Cord Emergency Station**

The Pull Cord Emergency Stations (HCE model HWN7652UA and model HWN7657AA) shall be single-gang, wall-mounted call devices, on brushed stainless steel faceplates. They shall be used in conjunction with an addressable station, such as a single Patient Station, dual Patient Station, smart station, etc.

The front panel of the Pull Cord Station shall include the following:

- A 72" nylon cord with luminous pendant
- A RED call LED indicator
- A RESET slide switch

A rubber gasket is included on the water resistant model (HWN7657AA) to protect the station from moisture.

A 5-position quick-disconnect, insulation-displacement type connector shall be provided to terminate field-installed power and control lines.

Operation of the Pull Cord Station shall be as follows:

The Emergency Pull Cord Station has a 72" nylon cord with a luminous pendant which when pulled will place a unique call on the system. An LED is visible on the front membrane keypad. This LED will flash giving a visual indication that a call has been placed.

To cancel the call, press the RESET switch on the Emergency Pull Cord Station.

4.4 HWN7691UA Remote Reset Station

The Remote Reset Station, HWN7691UA, shall be a single-gang, wall-mounted device, on a brushed stainless steel faceplate. It shall be used in conjunction with Patient Stations, single or dual, to cancel a Routine level call from a remote location.

It shall include one momentary pushbutton switch on the front of the plate, engraved with the words "RESET CALL."