EMERGENCY NURSE CALL SYSTEM

Mircom’s EC-300 system fulfils the demands of modern health care or washroom alert applications. The simple operation of Mircom’s EC-300 makes it easy to use without the need for extensive training.

A basic system consists of pull cord, or push cord calling stations, a central nurse station, dome lights with possible central corridor horns and duty stations.

Emergency calls are placed from designated EC-103/115 Pull/Push Cord stations which are distinctly identified by the flashing suite dome light and central annunciator suite LED. The Central Nurse’s station will sound a fast pulsing alert tone and trigger any corridor horns that are connected.

All tones may be silenced but the alarm can only be reset from the station that initiated the call. If the nurse fails to respond to the call within a preset period, the tones will re-initiate.

Normal calls are placed from a Call Station which are distinctly identified by the slow flashing suite dome light and central annunciator LED. Similar silencing capabilities for emergency calls are provided for normal calls.

When duty stations are used, the system may be remotely silenced and monitored for alarm calls.

The EC-300 System is the most economical, multi-state call system. The system incorporates LED annunciator panels, pull/push cord stations, corridor lights, and duty stations. All these components provide the common features and functions most nurses and administrators feel are necessary.

Features

• UL 1069 Listed

• Multiple Audible/Visual Alarm States
  Three alarm conditions are available on the EC-300 system; fast, slow and steady. Each can be programmed for distinguishing calls for Emergency, Normal Patient calls or Door Alarm.

• Remote Duty Stations
  Remote Duty Stations may be added to the system to provide signal silence and remote alarm annunciation.

• Subsequent Alarm
  Using Mircom’s EC-103 Pull Cord Stations, it is possible to silence an alarm call and have subsequent alarms re-trigger the audible alarm.

• Common Alarm Contact
  Common alarm contacts are available for central peripheral alarm devices.

• Remote Signalling and Control Outputs
  Connections can be made to the central control unit to remotely annunciate alarm calls and initiate signal silence.

• Modular Design
  Easily expandible, the EC-300 system uses add-on annunciator panels. The modular construction easily facilitates custom applications.
Single State Alarm
The wiring diagram illustrates a typical single state alarm system. A call placed from an EC-100 Pull Cord Station will trigger an audible and visual alarm. Selecting the appropriate terminals on the EC-300 will provide fast or slow flashing alarm conditions. Resetting all alarm calls can only be accomplished at the point of activation. A momentary silence button is provided on the EC-300 to silence all audible devices.

Dual State Subsequent Alarm
The wiring diagram illustrates a typical dual state alarm system with subsequent alarm capability. An alarm initiated from an EC-103 pull cord station designated as a 'normal' station shall pulse a slow audible and visual signal. An EC-103 Pull Cord Station designated as an 'emergency' station shall pulse a fast audible and visual signal. Alarms silenced at the EC-300 shall be re-initiated upon receiving a subsequent call. Only the audible signals can be silenced. All visual indicators shall remain until the initiating pull cord station is reset. Further visual aids can be added to change all emergency calls to flash a red dome corridor lamp (see factory for details).
**Central Monitoring Panel**

The Central Monitoring Panel consists of an EC-300 Call Receiver module, EC-220A/240A annunciator module(s) and a 300-nF frame housing.

The EC-300 provides all the controls, audible and visual alarm signalling for the system. An audio amplifier provides all the audible tones through a built-in speaker and the exterior audio ports (S1, S2). A silence button on the EC-300 silences all incoming calls. A DIP switch can program the silence function to be latching or recall after a fixed period of time (2.5, 5 or 10 minutes). External ports are provided for remote monitoring, audible signals and common alarm annunciators. Typically only one EC-300 Call Receiver module is required per system. The EC-300 is designed to withstand transient or electrical noise.

Dimension: 121 mm (w) x 300 mm (h)  
[4.875' (w) x 12' (h)]

**EC-300 Central Annunciator Panel**

Mircom’s EC system uses solid state red LEDs for zone annunciation. Two annunciator modules are provided for a 20 (EC-220A) and a 40 (EC-240A) zone capacity. These modules can be ganged together to provide any multiple of 20 zones. A protective strip of plexiglass covers the paper directory.

Dimension: 121 mm (w) x 300 mm (h)  
[4.875' (w) x 12' (h)]

**Frames and Backboxes**

The Central Monitoring panel is made up of various modules which can be ganged together. The frames have an incremental size to accommodate the various modules. Made from brushed anodized aluminium, the 300-nF frames give a clean durable finish. All frames can be flush or surface mounted, dependant on the backbox used.

<table>
<thead>
<tr>
<th>Frame</th>
<th>Description</th>
<th>Backbox Flush</th>
<th>Wall Opening Dimensions</th>
</tr>
</thead>
</table>
| 301-1F  | Accomodates 1 module | 301-1B        | 335 mm (h) x 152 mm (w) x 108 mm (d)  
[13 3/16" (h) x 6" (w) x 4 1/4" (d)] |
| 301-2F  | Accomodates 2 module | 301-2B        | 335 mm (h) x 270 mm (w) x 108 mm (d)  
[13 3/16" (h) x 11" (w) x 4 1/4" (d)] |
| 301-3F  | Accomodates 3 module | 301-3B        | 335 mm (h) x 403 mm (w) x 108 mm (d)  
[13 3/16" (h) x 15 7/8" (w) x 4 1/4" (d)] |

**Pull Cord Stations**

Mircom Pull Cord Stations are made from durable brushed stainless steel single gang plates. Each pull cord is 1.8 m (6 feet) in length with a white pendant at the end. All stations use UL approved 125 VAC, 3A slide switches. The standard single gang electrical boxes are not supplied with the units.

**EC-100**

The EC-100 Pull Cord Station has a DPDT slide switch for basic alarm systems.

**EC-103**

The EC-103 Pull Cord Station has a red LED indicator. A TPDT slide switch on the station provides subsequent and dual alarm state operation.
EC-115 Cord Set Station
Designed to utilize various cord sets for initiating a call, the EC-115 station can accommodate a 1/4" diameter cord set. A local reset button is provided on each station and a red confirmation LED. Removal of any cord set shall also trigger a call.

EC-104 & EC-106 Corridor Dome Lights
The Corridor Lamps (EC-104, EC-106) mount to a standard single gang electrical box. Each lamp is made from a brushed stainless steel plate.

The EC-104 is a single lamp while the EC-106 is a dual lamp. A partition inside the translucent white lens separates the two lamps from top and bottom. Special coloured bulb covers can provide additional visual distinction. (eg. red, yellow, blue, etc.)

DA-100A Door Alarm Station
provides peripheral exit security for any facility. Each station can monitor normally open (N.O.) or normally closed (N.C.) contacts. Ideal for nursing homes, the DA-100A can interface with Mircom’s Emergency Call Systems.

A Central Monitoring Panel consisting of the EC-300 Call Receiver Module, EC-220A or EC-240 Annunciator Module.

Module shall provide audible and visual annunciation for a multitude of DA-100A stations. A 24 VDC output is provided on each station for local audible and/or visual indicators.

A durable design, the DA-100A is made from stainless steel and uses solid state electronics.

Features
• Keys which are difficult to duplicate
• Form C, 3 ampere relay
• Single gang, stainless steel face plate
• Yellow Status Indicator
• Red Armed Indicator
• Local audible and visual output provided (24VDC)

DA-100A Wiring Diagram

NOT TO BE USED FOR INSTALLATION PURPOSES.
## Ordering Information

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC-220A</td>
<td>20 LED Annunciator panel with a directory</td>
</tr>
<tr>
<td>EC-240A</td>
<td>40 LED Annunciator panel with a directory</td>
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<tr>
<td>EC-300</td>
<td>Central Call Receiver Panel</td>
</tr>
<tr>
<td>301-1F</td>
<td>Single Panel Frame</td>
</tr>
<tr>
<td>301-2F</td>
<td>Two Panel Frame</td>
</tr>
<tr>
<td>301-3F</td>
<td>Three Panel Frame</td>
</tr>
<tr>
<td>301-1B</td>
<td>Backbox for 301-1F</td>
</tr>
<tr>
<td>301-2B</td>
<td>Backbox for 301-2F</td>
</tr>
<tr>
<td>301-3B</td>
<td>Backbox for 301-3F</td>
</tr>
<tr>
<td>TR-074B</td>
<td>24 VAC, 75 VA Transformer</td>
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<tr>
<td>EC-105A</td>
<td>Stainless Steel Dual Gang Horn, 24V AC/DC</td>
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<tr>
<td>AS-084A</td>
<td>Remote Signal Silence Station with Audible Buzzer</td>
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<tr>
<td>EC-100</td>
<td>Single Gang Pull Cord Station</td>
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<tr>
<td>EC-103</td>
<td>Single Gang Pull Cord Station with LED</td>
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<tr>
<td>CC06-010</td>
<td>Push Cord Set, 6 feet</td>
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<tr>
<td>EC-115</td>
<td>Push Cord Station w/Confirmation LED</td>
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<tr>
<td>EC-116</td>
<td>Emergency Push Button Station</td>
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<td>EC-104</td>
<td>Corridor Dome Light</td>
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<td>EC-106</td>
<td>Dual Corridor Dome Light</td>
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<tr>
<td>EC-140</td>
<td>Corridor Light and Audible Signal Unit</td>
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<tr>
<td>DA-100A</td>
<td>Door Alarm Station</td>
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<tr>
<td>PS-3B</td>
<td>24VAC Transformer</td>
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