



# Central Control Unit NC-780



**Description:** The NC-780 is the control center of the Nurse Call system, providing microprocessor control of all calling and communication functions of the system. The NC-780 provides system functions for one master station, one duty station, and 50 patient and/or common area call stations. System can be expanded to 80 stations with additional trunk card (NC-730) installed in NC-780. Microprocessor based, the NC-780 controls different signaling levels from a bedside call cord, bathroom call, or cord-out status from a patient station. Warning tones for disconnected stations or off-hook condition at the master station are also processed at the CCU. The compact, wall mount design allows it to be mounted in an equipment room or cabinet, taking up little space. All system wiring is terminated in the Central Control Unit with "screw-less terminals". Wires are simply inserted into each crimp connector for fast and easy installation.

**Mounting:** NC-780 shall be mounted on UL listed 3-gang box or inside UL listed electrical enclosure. The size of the electrical enclosure shall be more than 23-3/4" x 19-3/4" x 4", with a secured door and a suitable non-combustible mounting surface inside the enclosure.

**Engineering Specifications:** Central Control Unit shall be Cornell model NC-780, equipped with power switch and concealed status LED indicators, constructed of high-impact, fire-retardant ABS plastic. System capacity shall be 50 call stations, with expansion capacity to 80 stations with model NC-730 additional trunk card, installed inside NC-780. All system functions shall be controlled from NC-780, including call signaling, communication, duty station, and zone light control. The NC-780 shall detect if any patient station becomes disconnected from the system or if the handset is left off-hook for more than 90 seconds, and shall send a warning tone to the master and duty station. All system wiring shall be terminated inside NC-780 with screw-less wire connectors. Each trunkage line from Central Control Unit shall contain up to 10 call stations, wired in a daisy-chained fashion. System shall have a maximum of eight (8) trunkage lines. Master station, duty station, 4-zone indicator light, and power supplies shall be wired directly to NC-780. Physical size of the Central Control Unit shall not exceed 18-1/8" x 13-3/8" x 3-7/8". NC-780 shall be mounted on UL listed 3-gang box or inside UL listed electrical enclosure. The size of the electrical enclosure shall be more than 23-3/4" x 19-3/4" x 4", with a secured door and a suitable non-combustible mounting surface inside the enclosure. Equipment shall be UL 1069 listed, and system components shall be provided by a manufacturer having ISO 9001 certification for quality standards.

## Technical Information:

- Power source: 24V DC, use two (2) P-5242
- Current Consumption: Max. 4A
- Capacity: 50 stations. For 80 station capacity, add NC-730 Additional Trunk Card.
- Talk channel: 1 private channel
- Wiring: All wire is twisted, shielded, low capacitance (12 pF/Ft). 5 twisted pair to Master Station. 3 twisted pairs to Duty Station. 3 twisted pairs (plus 1 wire for zone light) trunkage line to patient stations. 5 conductors to Zone Light.
- Wiring Distance: **22AWG** 65' to Master Station, 65' to Duty Station, 165' to farthest patient station (ea. trunk) 330' Max. wire distance per trunk line, including wire length t-tapped to each patient station from trunk line. **18AWG** 165' to Zone Light, 16' to Power Supply
- Material: High impact ABS fire-retardant plastic
- Dimensions (H x W x D): 18-1/8" x 13-3/8" x 3-7/8"
- Certification: UL 1069 Listed, C-UL Canadian Standard C22.2