

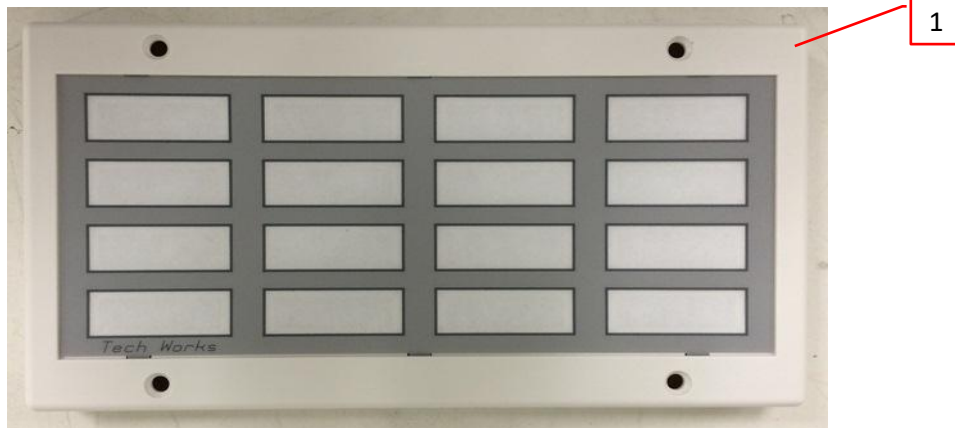
1.0 Reference and Address			
Report Number	104419081NYM-001	Original Issued: 26-Mar-2021	Revised: 3-Jul-2025
Standard(s)	Hospital Signaling and Nurse Call Equipment [UL 1069:2024 Ed.8]		
Entirely Replaces Report Number	102154083NYM-001		
Applicant	Tech Works, Inc.	Manufacturer	<b>Tech Works, Inc</b>
Address	7340 Eastgate Rd. #130 Henderson, NV 89011	Address	7340 Eastgate Rd. #130 Henderson, NV 89011
Country	USA	Country	USA
Contact	Mark A. Dundas	Contact	Mark A. Dundas Erica Mead
Phone	(702) 846-1080	Phone	(702) 846-1080
FAX	NA	FAX	NA
Email	mdundas@tech4people.com	Email	mdundas@tech4people.com erica@tech4people.com

<b>2.0 Product Description</b>	
Product	Nurse Call System NC Series
Brand name	Tech Works
Description	The Nurse Call System is a cord-connected system that can be configured using CAT 5 cabling or repurposed wire from a vintage installation using the 16-station control module. The system consists of Nurse Call Annunciator, Push Button Call Cord, Nurse Call Control Module, Nurse Call Dome Light and Controller, Nurse Call Emergency Pull Station, Wet Location Pull Station, Patient Bed Station with 1 call jack, Patient Bed Station with 2 call jacks, Nurse Call Staff Assist HELP Station, Nurse Call Staff Duty Station, Nurse Call Staff Presence Station, Nurse Call Code Blue plus Assist Station, Nurse Call Code Blue Station, Cancel Only Station, Vandal Proof-Code Blue Station, Vandal Proof-Cancel Only Station, Vandal Proof-Staff Assist Station, Vandal Proof-Staff Assist Station-with Remote Cancel, Vandal Proof-Patient Bed Station, Vandal Proof-Button with Light, Vandal Proof-Key Switch, Power Supply.
Models	NC-AN-16C-T, NC-AN-32C-T, PBC-7, PBC-2-12, NC-CM-16, NC-DL-12-WC, NC-DL-12-BC, NC-DL-12-RC, NC-DL-12-RSCT, NC-DL-12-BSCT, NC-DL-12-WSCT, NC-DL-22-RW, NC-DL-22C-BR, NC-DL-22C-BW, NC-EPS, NC-PBS-1, NC-SAS, NC-SDS, NC-SPS, NC-CBAS, NC-CBS, PS-2437A, NC-PCBS-1, NC-EPS-WP, NC-CS, NC-PBS-2, NC-VP-CBS, NC-VP-CS, NC-VP-SAS, NC-VP-SAS-RC, NC-VP-PBS, VPBL-1, VPKS-1, PS-2437B.
Model Similarity	See illustrations 3, 4.

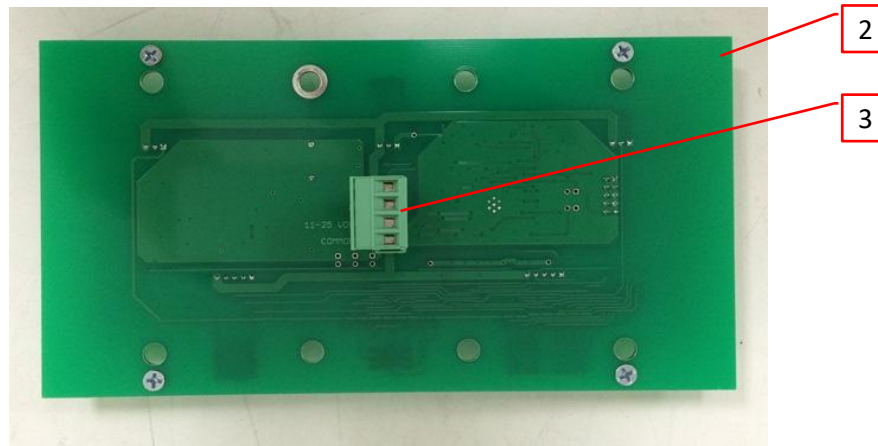
<b>2.0 Product Description</b>				
Ratings	<b>Model Number</b>	<b>Voltage</b>	<b>Current</b>	<b>Frequency</b>
	NC-AN-16C-T	11-25VDC	264mA	-
	NC-AN-32C-T	24VDC	264mA	-
	PBC-7	24VDC	0.1A	-
	PBC-2-12	24VDC	0.1A	-
	NC-CM-16	24VDC	2.15A	-
	NC-DL-12-WC	24VDC	80mA	-
	NC-DL-12-BC	24VDC	80mA	-
	NC-DL-12-RC	24VDC	80mA	-
	NC-DL-12-RSCT	24VDC	80mA	-
	NC-DL-12-BSCT	24VDC	80mA	-
	NC-DL-12-WSCT	24VDC	80mA	-
	NC-DL-22-RW	24VDC	80mA	-
	NC-DL-22C-BR	24VDC	80mA	-
	NC-DL-22C-BW	24VDC	80mA	-
	NC-EPS	15VDC	8mA	-
	NC-EPS-WP	15VDC	8mA	-
	NC-PBS-1	15VDC	8mA	-
	NC-PBS-2	15VDC	8mA	-
	NC-SAS	15VDC	8mA	-
	NC-SDS	15VDC	35mA	-
	NC-SPS	15VDC	8mA	-
	PS-2437A	Input:100-240VAC Output: 24VDC	Input: 1.2A Output: 3.75A	50-60 Hz
	NC-CBAS	15VDC	8mA	-
	NC-CBS	15VDC	8mA	-
	NC-PCBS-1	15VDC	8mA	-
	NC-CS	15VDC	8mA	-
	NC-VP-CBS	-	-	-
	NC-VP-CS	15VDC	14mA	-
	NC-VP-SAS	15VDC	14mA	-
NC-VP-SAS-RC	15VDC	14mA	-	
NC-VP-PBS	15VDC	14mA	-	
VPBL-1	11-24VDC	14mA	-	
VPKS-1	-	-	-	
Other Ratings	PBC-7 & PBC-2-12 rated for use in Oxygen-Enriched Environment			

### 3.0 Product Photographs

**Photo 1** - External view of Nurse Call Annunciator 16 point tone/visual Model NC-AN-16C-T

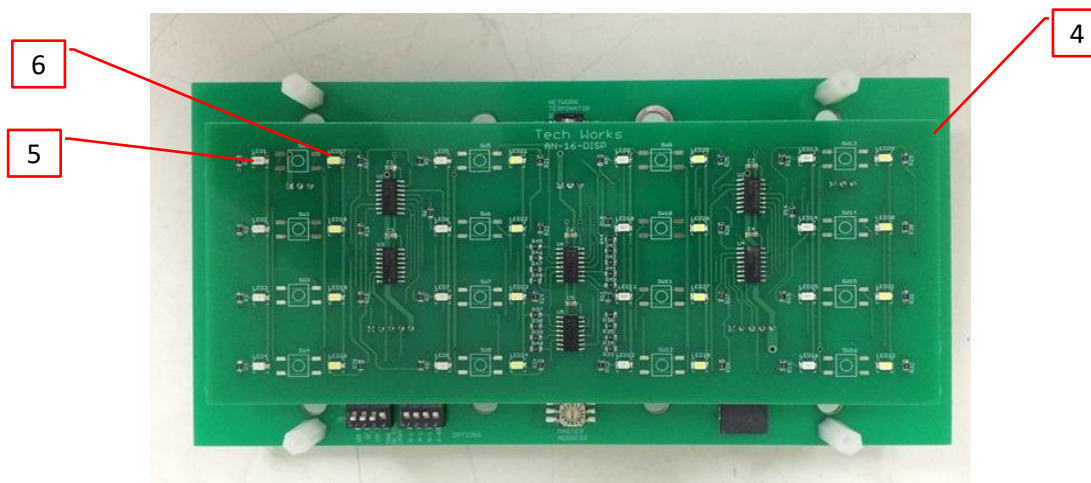


**Photo 2** - Internal view of Model NC-AN-16C-T - PCB - Side 1

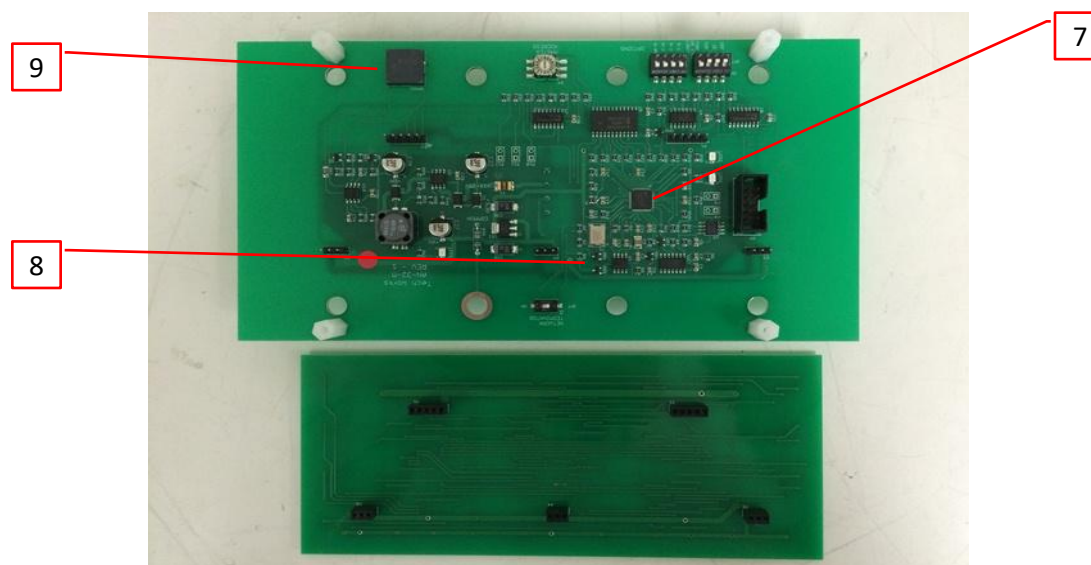


### 3.0 Product Photographs

**Photo 3** - Internal view of Model NC-AN-16C-T - PCB - Side 2



**Photo 4** - Internal view of Model NC-AN-16C-T - PCB - In-Between

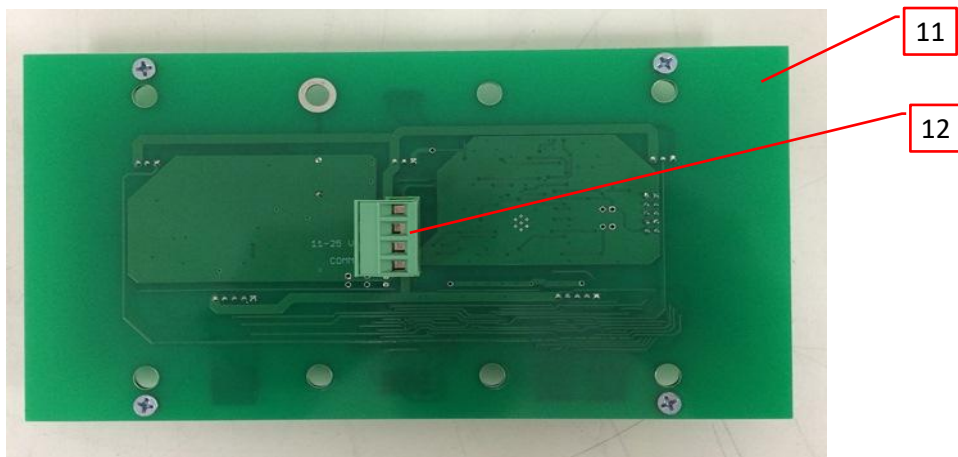


**3.0 Product Photographs**

**Photo 5** - External view of Nurse Call Annunciator 32 point tone/visual Model NC-AN-32C-T



**Photo 6** - Internal view of Model NC-AN-32C-T - PCB - Side 1

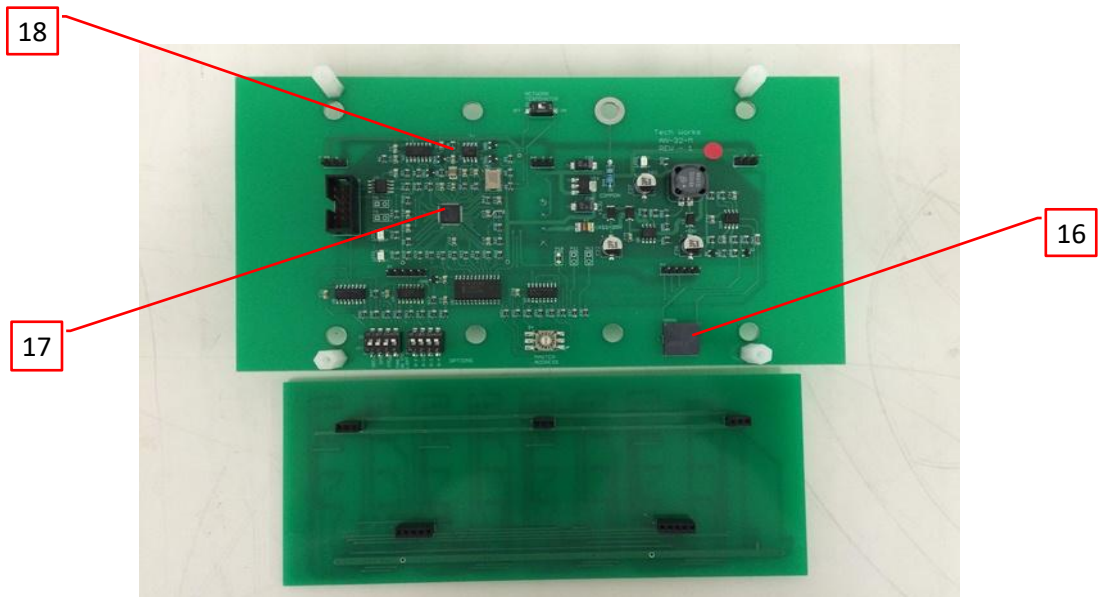


**3.0 Product Photographs**

**Photo 7 - Internal view of Model NC-AN-32C-T - PCB - Side 2**



**Photo 8 - Internal view of Model NC-AN-32C-T - PCB - In-Between**



**3.0 Product Photographs**

**Photo 9** - Push Button Call Cord Model PBC-7 (Used in conjunction with Emergency Push Button Station Model NC-PBS-1)



**Photo 10** - Push Button Call Cord Model PBC-2-12 (Used in conjunction with Emergency Push Button Station Model NC-PBS-1)



**3.0 Product Photographs**

**Photo 11** - External view of Nurse Call Control Module Model NC-CM-16 - Front

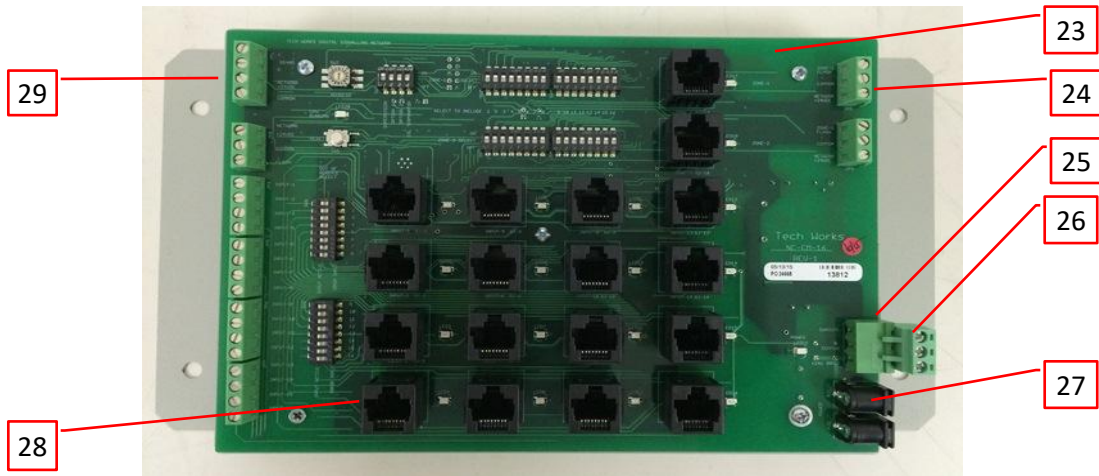


**Photo 12** - External view of Nurse Call Control Module Model NC-CM-16 - Bottom

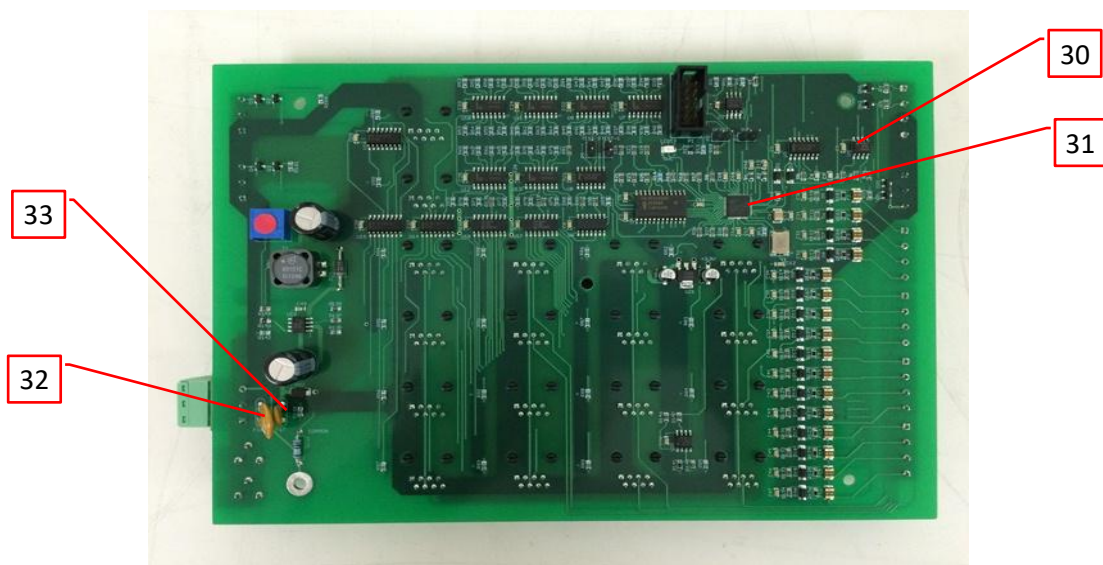


**3.0 Product Photographs**

**Photo 13 - Internal view of Nurse Call Control Module Model NC-CM-16 - PCB - Side 1**



**Photo 14 - Internal view of Nurse Call Control Module Model NC-CM-16 - PCB - Side 2**

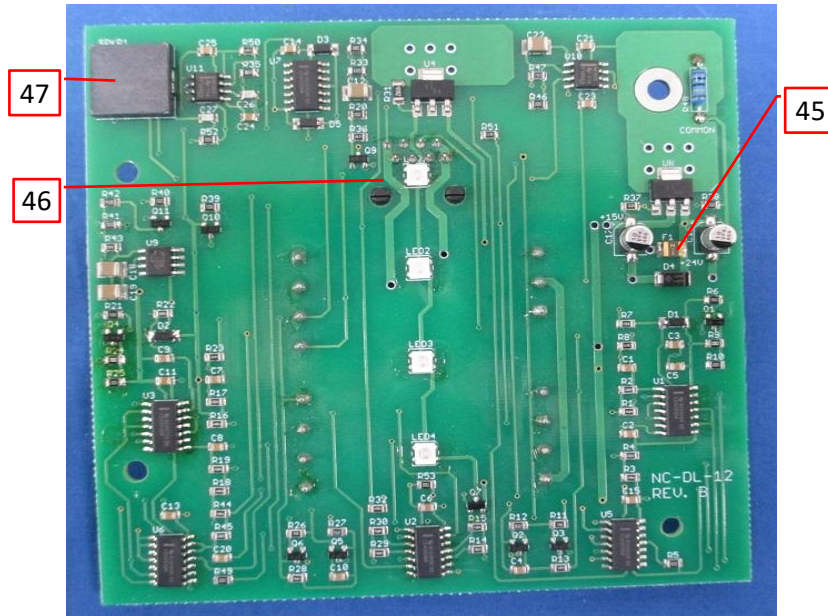




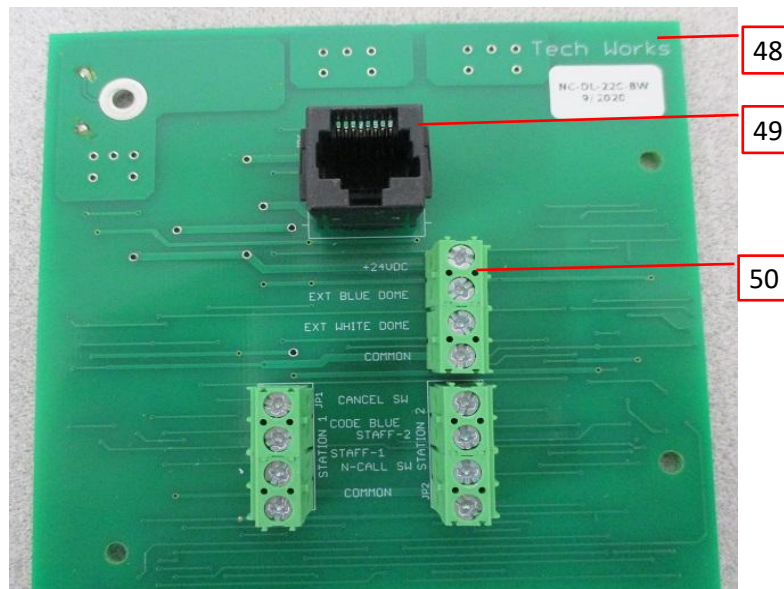


**3.0 Product Photographs**

**Photo 19** - Internal view of Nurse Call Dome Light Model NC-DL-12-RSCT - PCB - Side 2. (Also represents Models NC-DL-12-BSCT, NC-DL-12-WSCT )

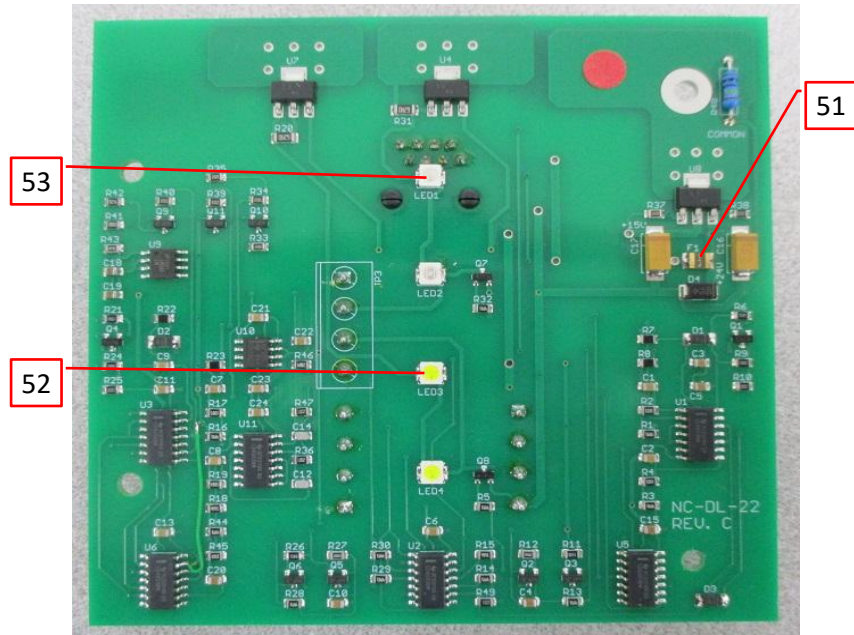


**Photo 20** - Internal view of Nurse Call Dome Light NC-DL-22-RW - PCB - Side 1 (Also represents Models NC-DL-22C-BR, NC-DL-22C-BW)

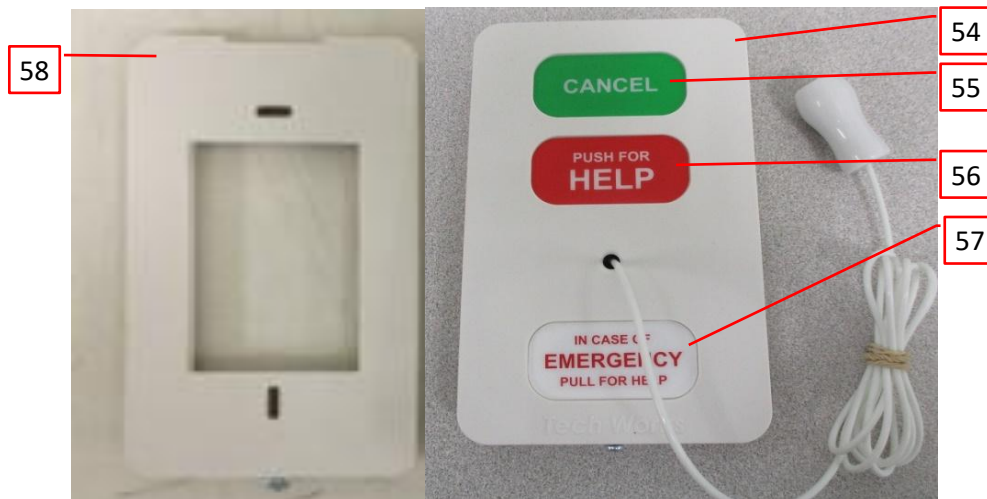


**3.0 Product Photographs**

**Photo 21** - Internal view of Nurse Call Dome Light NC-DL-22-RW - PCB - Side 2. (Also represents Models NC-DL-22C-BR, NC-DL-22C-BW)

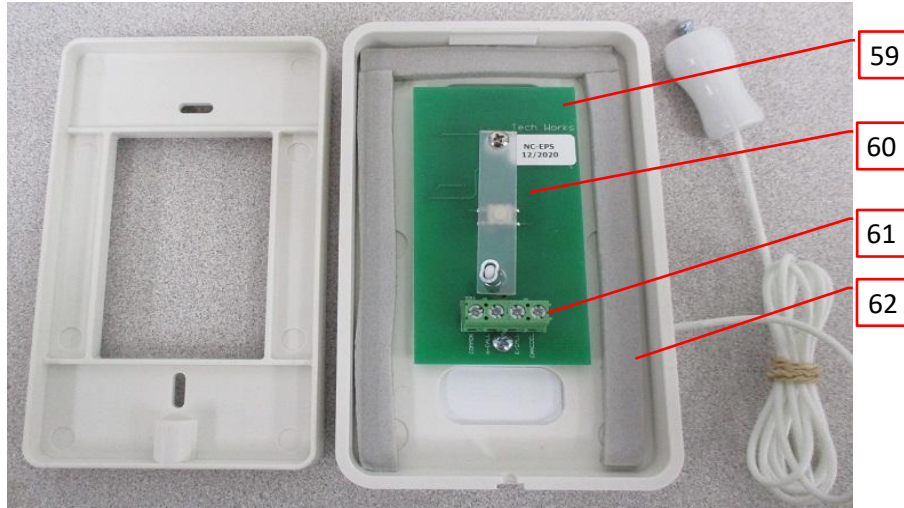


**Photo 22** - Nurse Call Emergency Pull Station Model NC-EPS-WP - Front View. (Also represents Model NC-EPS)



**3.0 Product Photographs**

**Photo 23** - Nurse Call Emergency Pull Station Model NC-EPS-WP - Back View - PCB - Side 1  
(Also represents Model NC-EPS with exception of gasket)



**Photo 24** - Nurse Call Emergency Pull Station Model NC-EPS-WP - PCB - Side 2  
(Also represents Model NC-EPS)



**3.0 Product Photographs**

**Photo 25** - Patient Bed Station Model NC-PBS-1 - Front View  
(Also represents Model NC-PCBS-1 where Push for Help Button Label is replaced with Code Button Label)

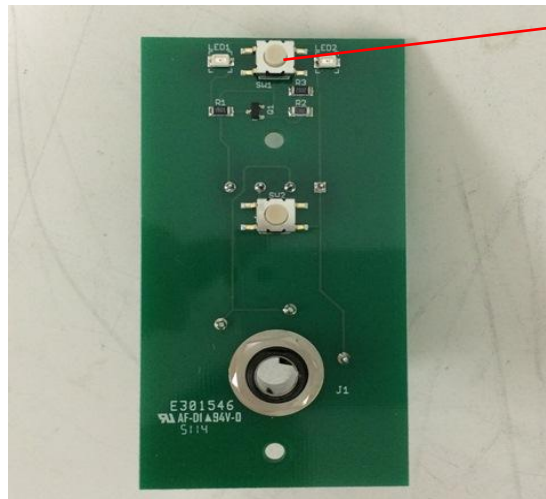


**Photo 26** - Patient Bed Station Model NC-PBS-1 - Back View - PCB - Side 1  
(Also represents Model NC-PCBS-1)



**3.0 Product Photographs**

**Photo 27** - Patient Bed Station Model NC-PBS-1 - PCB - Side 2  
(Also represents Model NC-PCBS-1)



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**Photo 28** - Nurse Call Staff Assist HELP Station Model NC-SAS - Front View



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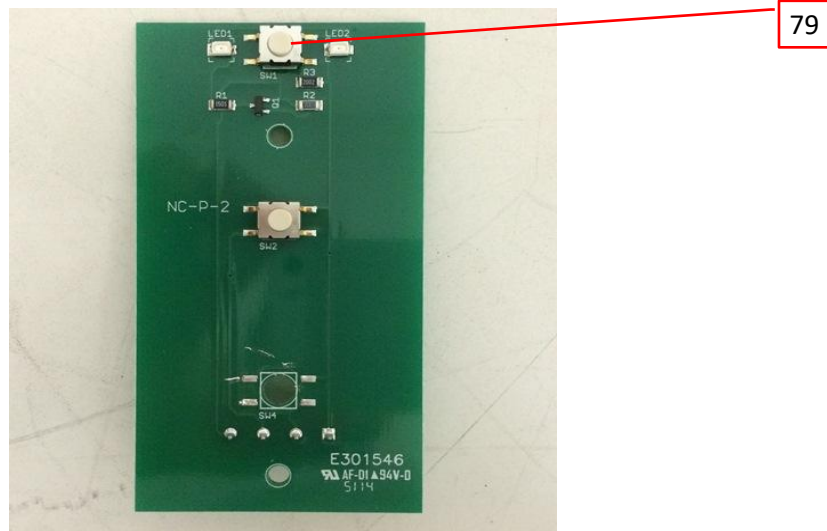
75

**3.0 Product Photographs**

**Photo 29** - Nurse Call Staff Assist HELP Station Model NC-SAS - Front View - PCB - Side 1

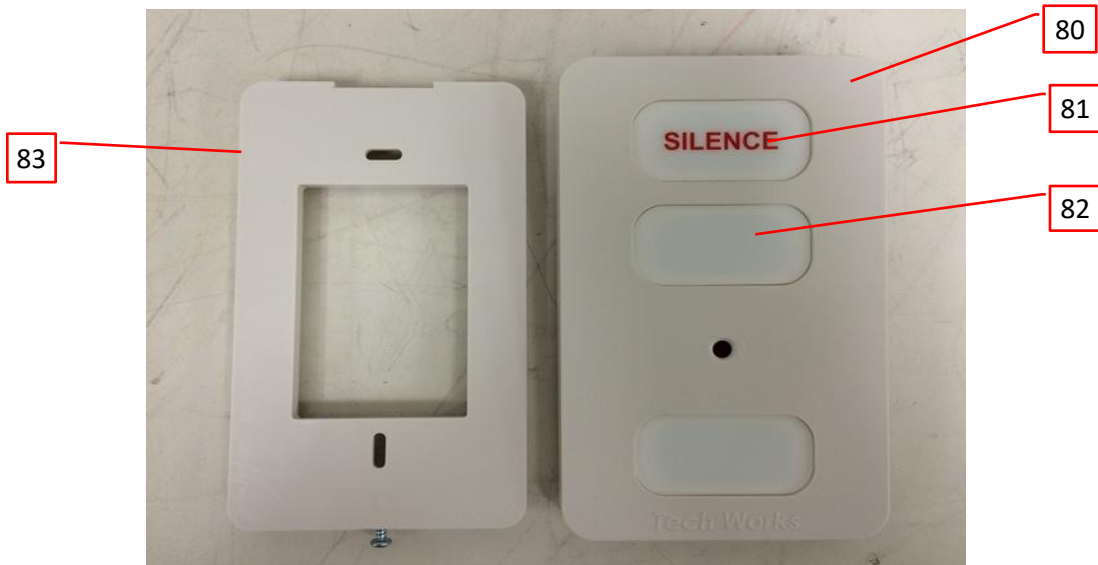


**Photo 30** - Nurse Call Staff Assist HELP Station Model NC-SAS - PCB - Side 2

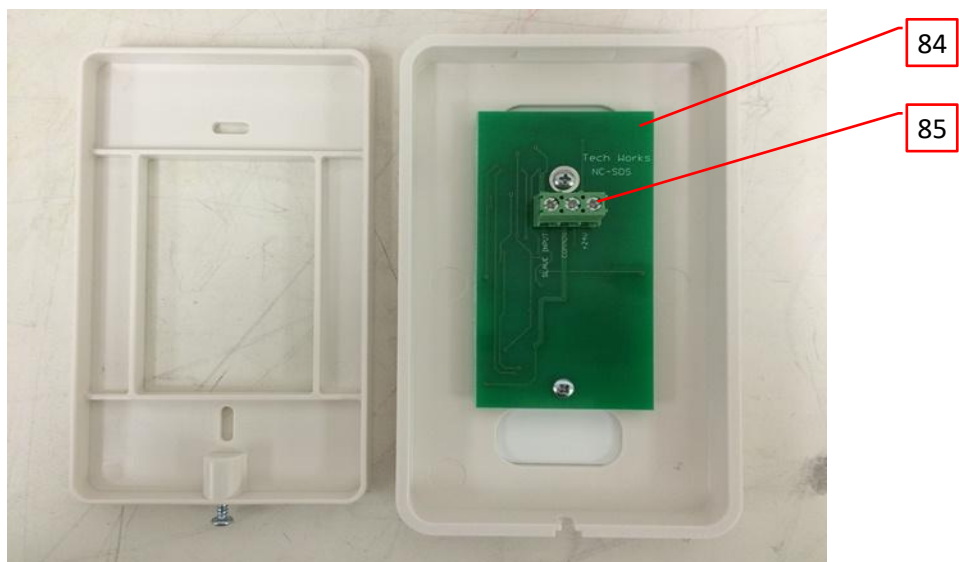


**3.0 Product Photographs**

**Photo 31 - Nurse Call Staff Duty Station Model NC-SDS - Front View**

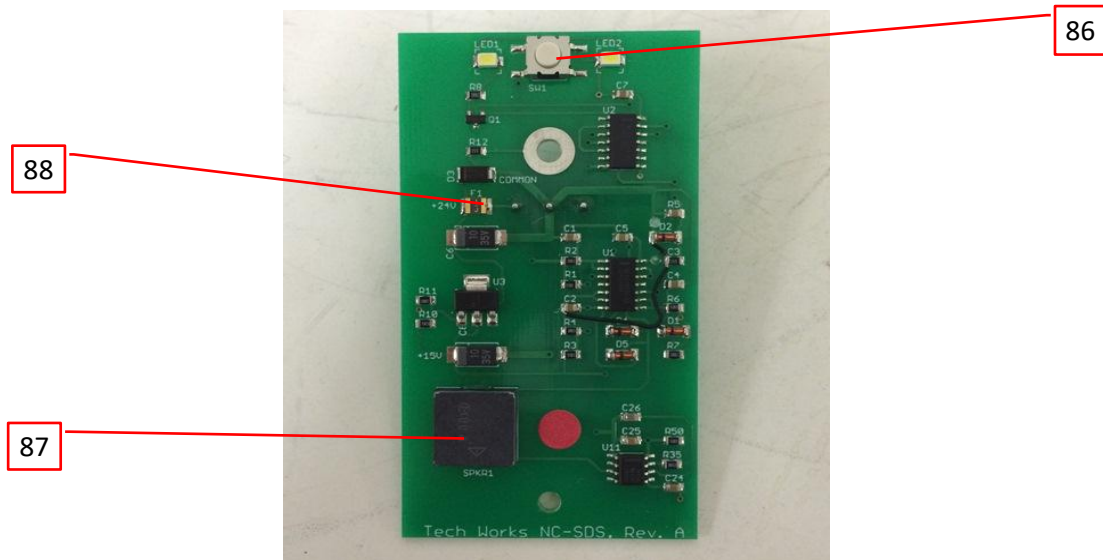


**Photo 32 - Nurse Call Staff Duty Station Model NC-SDS - Back View - PCB - Side 1**



**3.0 Product Photographs**

**Photo 33 - Nurse Call Staff Duty Station Model NC-SDS - PCB - Side 2**

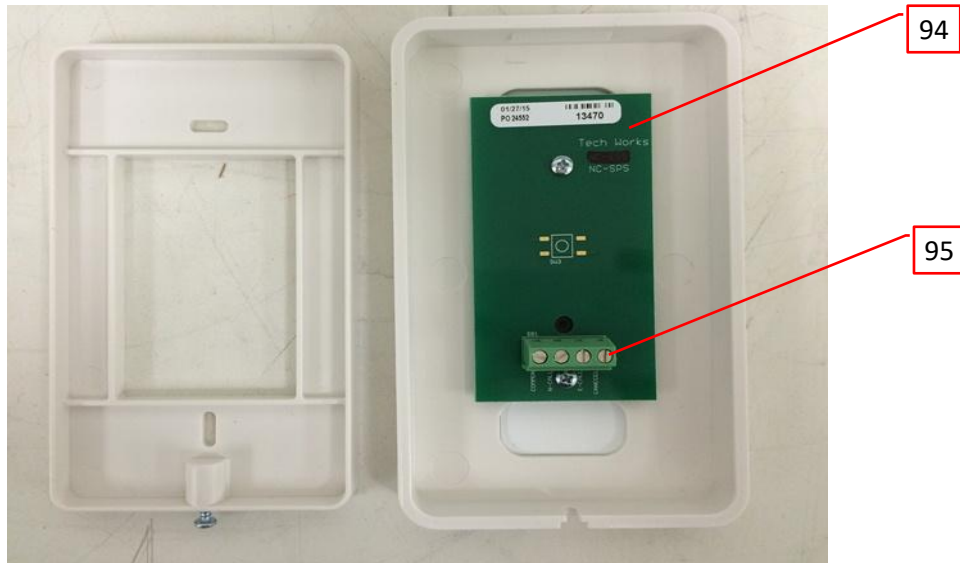


**Photo 34 - Nurse Call Staff Presence Station Model NC-SPS - Front View**

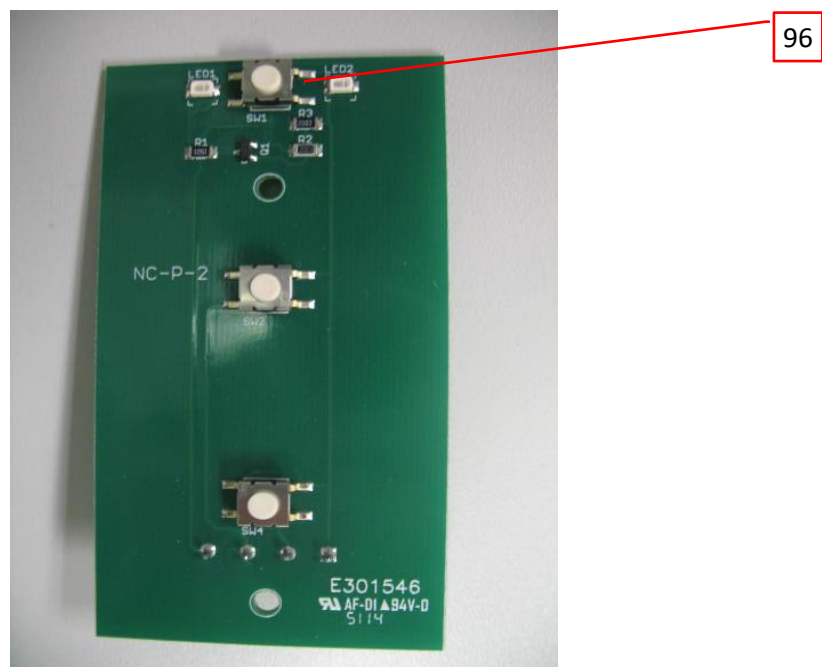


**3.0 Product Photographs**

**Photo 35** - Nurse Call Staff Presence Station Model NC-SPS - Back View - PCB - Side 1



**Photo 36** - Nurse Call Staff Presence Station Model NC-SPS - PCB - Side 2



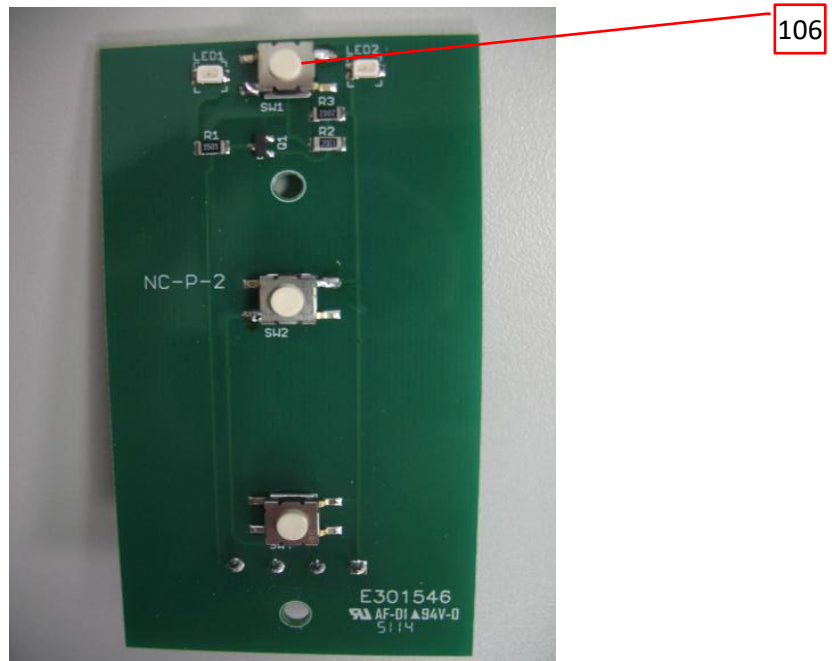


**3.0 Product Photographs**

**Photo 39** - Nurse Call Code Blue plus Assist Station NC-CBAS - Back View - PCB - Side 1



**Photo 40** - Nurse Call Code Blue plus Assist Station NC-CBAS - PCB - Side 2

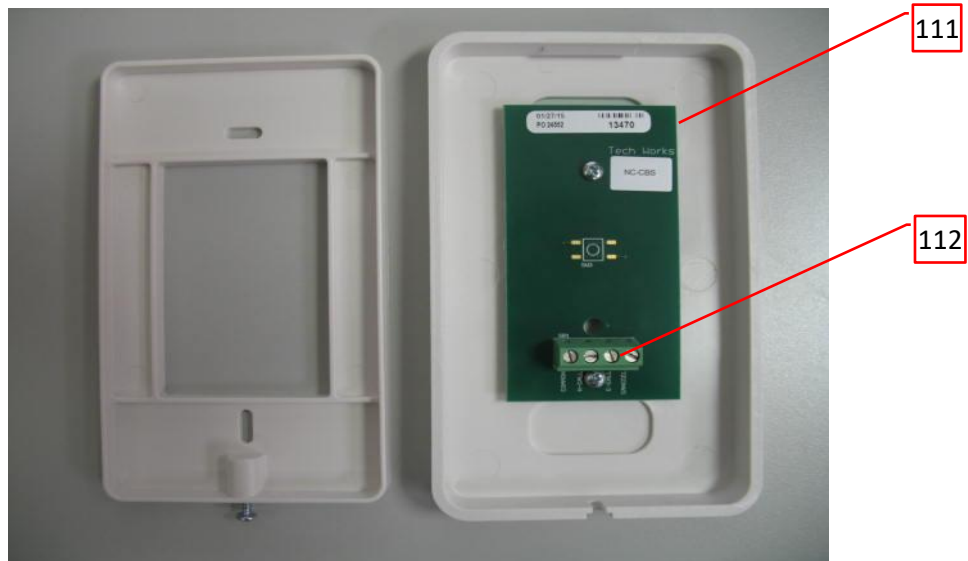


**3.0 Product Photographs**

**Photo 41** - Nurse Call Code Blue Station NC-CBS - Front View

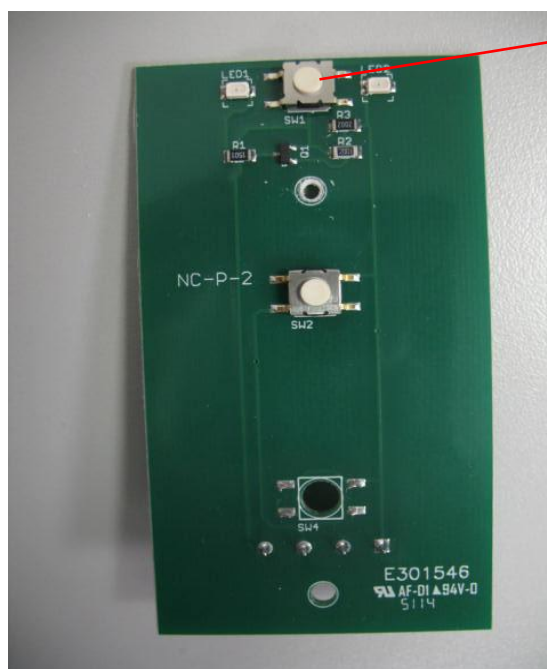


**Photo 42** - Nurse Call Code Blue Station NC-CBS - Back View - PCB - Side 1



**3.0 Product Photographs**

**Photo 43** - Nurse Call Code Blue Station NC-CBS - PCB - Side 2



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**Photo 44** - Cancel Only Station Model NC-CS - Front View



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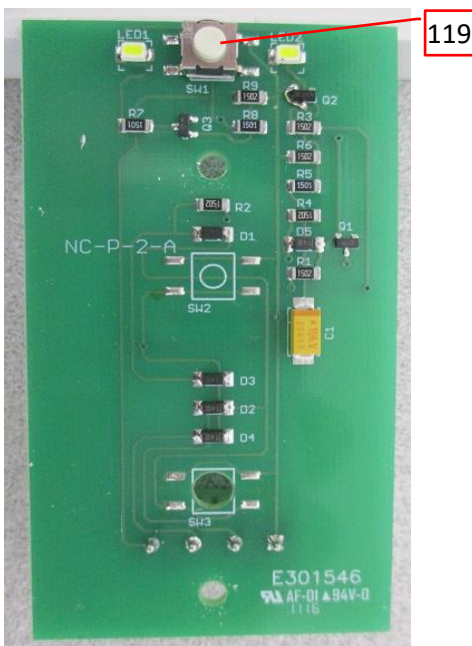
115

**3.0 Product Photographs**

**Photo 45** - Cancel Only Station Model NC-CS - PCB side 1

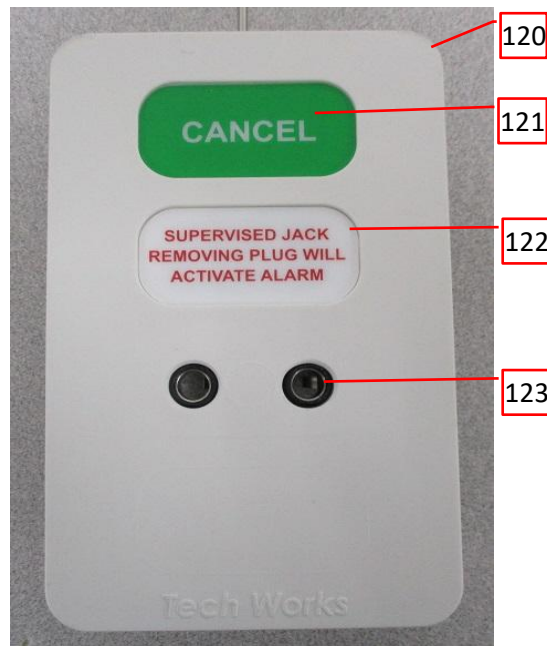


**Photo 46** - Cancel Only Station Model NC-CS - PCB side 2



**3.0 Product Photographs**

**Photo 47** - Patient Bed Station Model NC-PBS-2 - with 2 call jacks - Front View

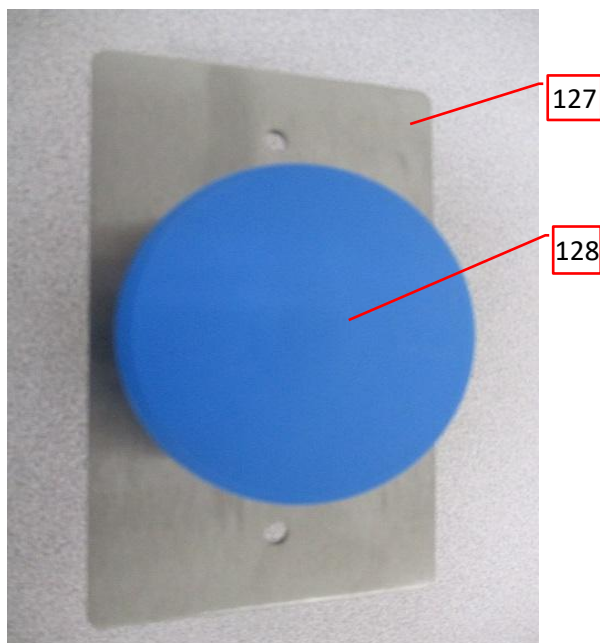


**Photo 48** - Patient Bed Station Model NC-PBS-2 - with 2 call jacks - PCB

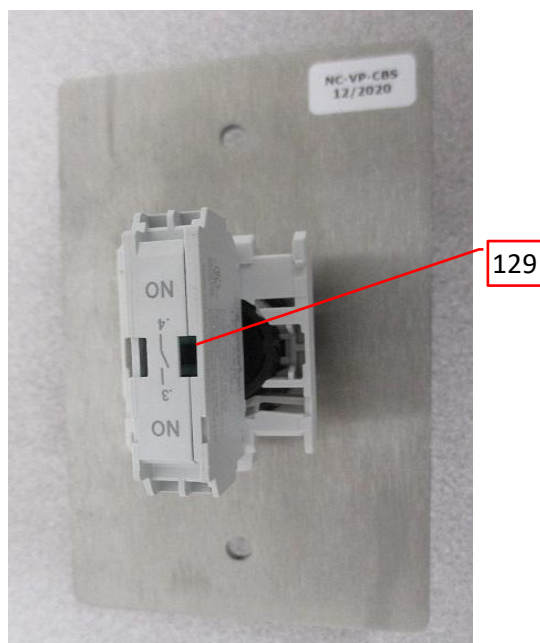


**3.0 Product Photographs**

**Photo 49** - Vandal Proof-Code Blue Station Model NC-VP-CBS - Front View

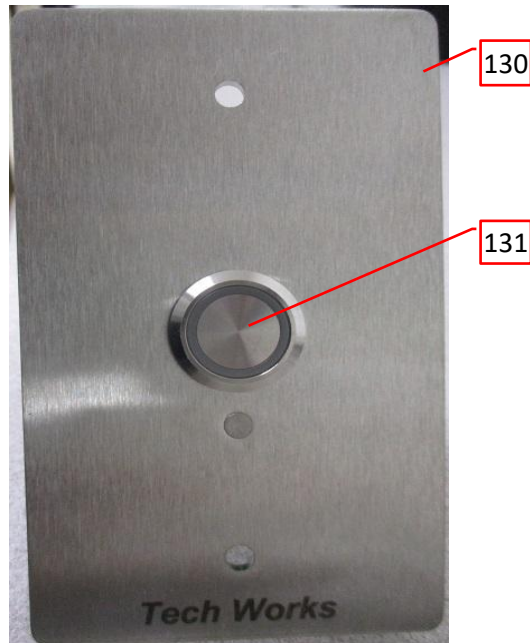


**Photo 50** - Vandal Proof-Code Blue Station Model NC-VP-CBS - Back View

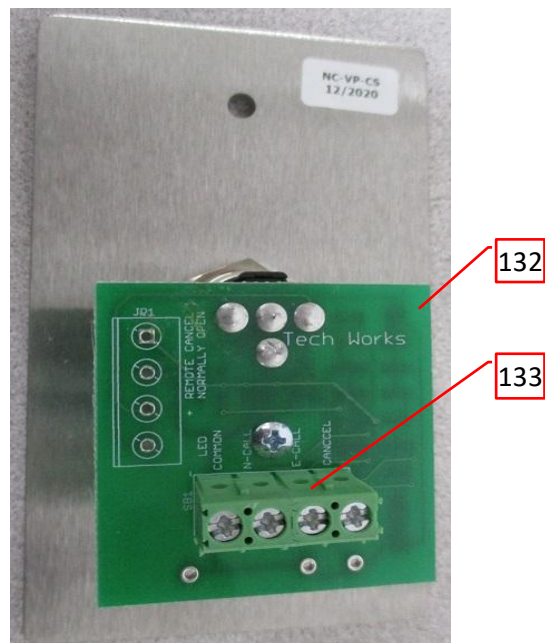


**3.0 Product Photographs**

**Photo 51** - Vandal Proof-Cancel Only Station Model NC-VP-CS - Front View



**Photo 52** - Vandal Proof-Cancel Only Station Model NC-VP-CS - PCB

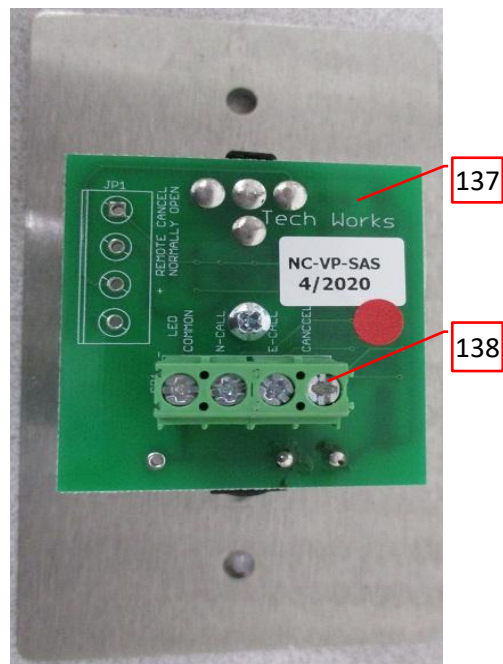


**3.0 Product Photographs**

**Photo 53** - Vandal Proof-Staff Assist Station Model NC-VP-SAS - Front View



**Photo 54** - Vandal Proof-Staff Assist Station Model NC-VP-SAS - PCB

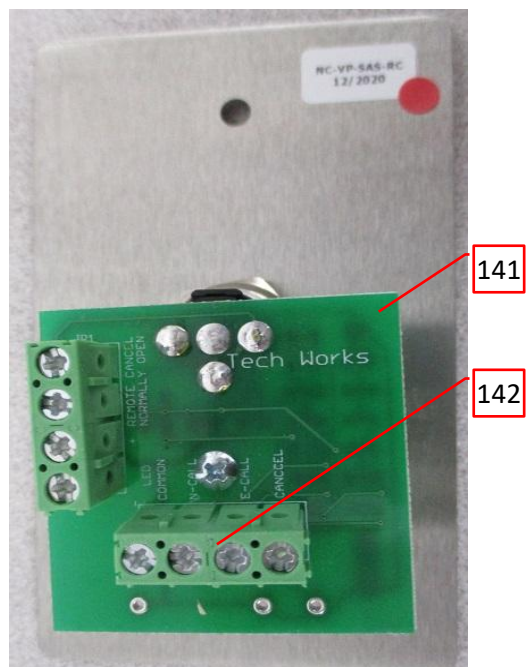


**3.0 Product Photographs**

**Photo 55** - Vandal Proof-Staff Assist Station-with Remote Cancel Model NC-VP-SAS-RC - Front View



**Photo 56** - Vandal Proof-Staff Assist Station-with Remote Cancel Model NC-VP-SAS-RC - PCB



**3.0 Product Photographs**

**Photo 57** - Vandal Proof-Button with Light Model VPBL-1 - Front View



**Photo 58** - Vandal Proof-Button with Light Model VPBL-1 - Back View



**3.0 Product Photographs**

**Photo 59** - Vandal Proof-Key Switch Model VPKS-1 - Front View



**Photo 60** - Vandal Proof-Key Switch Model VPKS-1 - Back View



4.0 Critical Components						
Photo #	Item no. <sup>1</sup>	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity <sup>3</sup>
1	1	Nurse Call Master Bezel	Chi Mei Corporation	PA-747	Ploylac 8.25" L x 4.5" H x 0.75" D Minimum Thickness: 1 mm Flammability Rating: UL 94-HB	UR
2	2	Printed Wiring Board	Various	AN-32-M	Flammability Rating: UL 94-V0 Max. Operating temperature: 130°C	UR
2	3	Pluggable Terminal Block	Phoenix Contact	V443H	320V, 12A	UR, CSA
				5441184	320V, 12A	UR, CSA
			Various	Various	320V, 12A	cURus
3	4	Printed Wiring Board	Various	AN-16-DISP	Flammability Rating: UL 94-V0 Max. Operating temperature: 130°C	UR
3	5	Light Emitting Diode (LED1-LED16)	Lite-On Optoelectronics	LTW-M670ZVS-M5	Color: Red DC Forward Current Max.: 30mA Operating Temperature Range: -40°C to +85°C.	NR
3	6	Light Emitting Diode (LED17-LED32)	Kingbright	AA3021VWD1S	Color: White DC Forward Current Max.: 30mA Operating Temperature Range: -40°C to +85°C.	NR
4	7	Microcontroller (U6)	Echelon	14305R-5000	Supply Voltage: 3.3VDC Max Current Draw: 52mA Operating Temperature: -40°C to +85°C Firmware Version: AN-32-M_Release__11-29-2021_1917h.hex	NR
4	8	RS485/RS422 Transceiver (U1)	Maxim	S08	6VDC, 100mA.	NR
			Texas Instruments	SN65HVD1780 DR	Supply Voltage: -0.5V - 7V Maximum Receiver Output Current: 24mA Minimum Operating Temperature: -40C to 105C	
4	9	Buzzer (SPKR1)	Murata	PKLCS1212E20 A0-R1	Operating Voltage Range: 25Vp-p Maximum Sound Pressure Level: 70dB Minimum Operating Temperature Range: -40°C to +85°C	NR
5	10	Nurse Call Master Bezel	Chi Mei Corporation	PA-747	Ploylac 8.25" L x 4.5" H x 0.75" D Minimum Thickness: 1 mm Flammability Rating: UL 94-HB	UR
6	11	Printed Wiring Board	Various	AN-32-M	Flammability Rating: UL 94-V0 Max. Operating temperature: 130°C	UR
6	12	Pluggable Terminal Block	Phoenix Contact	1755532	320V, 12A	UR, CSA
				5441184	320V, 12A	UR, CSA
			Various	Various	320V, 12A	cURus

4.0 Critical Components						
Photo #	Item no. <sup>1</sup>	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity <sup>3</sup>
7	13	Printed Wiring Board	Various	AN-32-DISP	Flammability Rating: UL 94-V0 Max. Operating temperature: 130°C	UR
7	14	Switch (SW1)	C&K	611-KT11P3SM34-LFS	Momentary, SPST, N.O. 1.0 VA max. @ 32VAC or DC Operating Temperature Range: -40°C to +90°C	NR
7	15	Light Emitting Diode (LED1-LED33)	Kingbright	AA3021VWD1S	DC Forward Current Max.: 30mA Operating Temperature Range: -40°C to +85°C	NR
8	16	Buzzer (SPKR1)	Murata	PKLCS1212E20 A0-R1	Operating Voltage Range: 25Vp-p Maximum Sound Pressure Level: 70dB Minimum Operating Temperature Range: -40°C to +85°C	NR
8	17	Microcontroller (U6)	Echelon	14305R-5000	Supply Voltage: 3.3VDC Max Current Draw: 52mA Operating Temperature: -40°C to +85°C Firmware Version: AN-32-M_Release__11-29-2021_1917h.hex	NR
8	18	RS485/RS422 Transceiver (U1)	Maxim	S08	6VDC, 100mA	NR
			Texas Instruments	SN65HVD1780 DR	Supply Voltage: -0.5V - 7V Maximum Receiver Output Current: 24mA Minimum Operating Temperature: -40C to 105C	
9	19	Call Cord	Crest Electronics, Inc.	9900W-7	24VDC, 0.1A Rated for use in Oxygen-Enriched Environment (Tech Works Model PBC-7)	cETLus Recognized
10	20	Call Cord	Crest Electronics, Inc.	9900DW-12	24VDC, 0.1A Rated for use in Oxygen-Enriched Environment (Tech Works Model PBC-2-12)	cETLus Recognized
11	21	Enclosure	GP Manufacturing	NC-CM-16-TOP	Material: Cold Rolled Steel Finish: Powder Coat Painted Tiger-Drylac-89_71540 10.875"L X 5.875H X 3.0D 20 GUAGE (.035") CRS	NR
12	22	Enclosure	GP Manufacturing	NC-CM-16-BOT	Material: Cold Rolled Steel Finish: Powder Coat Painted Tiger-Drylac-89_71540 10.875" L x 5.875" H x 3.0" D 20 GUAGE (.035") CRS	NR

4.0 Critical Components						
Photo #	Item no. <sup>1</sup>	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity <sup>3</sup>
13	23	Printed Wiring Board	Various	NC-CM-16-R1	Flammability Rating: UL 94-V0 Max. Operating temperature: 130°C	UR
			Various	NC-CM-16-A-1	Minimum Thickness 0.062 mm . Flammability rating: 94V-0 ; Approved to UL 796, Operating temperature: 130°C	UR
13	24	Terminal Block (JP2, JP3, JP8)	Phoenix Contact	1935174	400V, 17.5A	UR, CSA
13	25	Header	Phoenix Contact	1757255	320V, 12A	UR, CSA
13	26	Pluggable Terminal Block	Phoenix Contact	5448242	320V, 12A	UR, CSA
13	27	Power Jack (PJ1, PJ2)	Same Sky	PJ-102AH	24V, 5.0A	NR
13	28	RJ-45 Jack (RJ1-RJ18)	TE Connectivity	5520260-4	1.5A	NR
13	29	Terminal Block (JP1, JP4, JP5, JP6, JP7)	Phoenix Contact	1935187	400V, 17.5A	UR, CSA
14	30	RS485/RS422 Transceiver (U1)	Maxim	S08	6VDC, 100mA	NR
			Texas Instruments	SN65HVD1780 DR	Supply Voltage: -0.5V - 7V Maximum Receiver Output Current: 24mA Minimum Operating Temperature: -40C to 105C	
14	31	Microcontroller (U5)	Echelon	14305R-5000	Supply Voltage: 3.3VDC Max Current Draw: 52mA Operating Temperature: -40°C to +85°C Firmware Version: NCCM16_Release__04-19-2024_1648h.hex	NR
14	32	Resettable Fuse (F18)	Bourns	MFR185-LF	Max. voltage: 30VDC Hold current: 1.85A Trip current: 3.7A	cURus
14	33	Resettable Fuse (F17)	Bourns	MFR030-LF	Max. voltage: 60VDC Hold current: 0.3A Trip current: 0.6A	cURus
15	34	Nurse Call Dome Light Plastic Bezel	Chi Mei Corporation	PA-747	Ploylac 5.25" L x 5.00" H x 0.75" D Minimum Thickness: 1 mm Flammability Rating: UL 94-HB	UR
15	35	Nurse Call Wall Plate 2-gang	Chi Mei Corporation	PA-747	Ploylac 4.98" L x 4.49" H x 0.375" D Minimum Thickness: 1 mm Flammability Rating: UL 94-HB	UR
16	36	Printed Wiring Board	Various	NC-DL-12 Rev. B	Flammability Rating: UL 94-V0 Max. Operating temperature: 130°C	UR

4.0 Critical Components						
Photo #	Item no. <sup>1</sup>	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity <sup>3</sup>
16	37	RJ-45 Jack (RJ6)	TE Connectivity	5520260-4	1.5A	NR
16	38	Terminal Block (JP1, JP2)	Phoenix Contact	1935187	400V, 17.5A.	UR, CSA
17	39	Resettable Fuse (F1)	Bourns	MF-USMF010-2	Max. voltage: 30VDC Hold current: 0.1A Trip current: 0.3A.	UR, CSA
17	40	Light Emitting Diode (LED1-LED4)	Kingbright	AA3535SEL1Z1S	Color: Red DC Forward Current Max.: 150mA Operating Temperature Range: -40°C to +85°C. (Model NC-DL-12-RC)	NR
				AA3535QB25Z1S	Color: Blue DC Forward Current Max.: 150mA Operating Temperature Range: -40°C to +85°C. (Model NC-DL-12-BC)	
				AA3535QR4A25Z4SC1AMT	Color: White DC Forward Current Max.: 150mA Operating Temperature Range: -40°C to +85°C. (Model NC-DL-12-WC)	
			Various	Various	Color: Red, Blue, White DC Forward Current Max.: 150mA Operating Temperature Range: -40°C to +85°C.	NR
18	41	Printed Wiring Board	Various	NC-DL-12 Rev. B	Flammability Rating: UL 94-V0 Max. Operating temperature: 130°C	UR
18	42	Terminal Block (JP1, JP2, JP4)	Phoenix Contact	1935187	400V, 17.5A	UR, CSA
18	43	Terminal Block	Phoenix Contact	1935174	400V, 17.5A	UR, CSA
18	44	RJ-45 Jack (RJ6)	TE Connectivity	5520260-4	1.5A	NR
19	45	Resettable Fuse	Bourns	MF-USMF010-2	Max. voltage: 30VDC Hold current: 0.1A Trip current: 0.3A	UR, CSA

4.0 Critical Components						
Photo #	Item no. <sup>1</sup>	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity <sup>3</sup>
19	46	Light Emitting Diode (LED1-LED4)	Kingbright	AA3535SEL1Z1S	Color: Red DC Forward Current Max.: 150mA Operating Temperature Range: -40°C to +85°C. (Model NC-DL-12-RSCT)	NR
				AA3535QB25Z1S	Color: Blue DC Forward Current Max.: 150mA Operating Temperature Range: -40°C to +85°C. (Model NC-DL-12-BSCT)	
				AA3535QR4A25Z4SC1AMT	Color: White DC Forward Current Max.: 150mA Operating Temperature Range: -40°C to +85°C. (Model NC-DL-12-WSCT)	
			Various	Various	Color: Red, Blue, White DC Forward Current Max.: 150mA Operating Temperature Range: -40°C to +85°C.	NR
19	47	Buzzer (SPKR1)	Murata	PKLCS1212E20A0-R1	Operating Voltage Range: 25Vp-p Maximum Sound Pressure Level: 70dB Minimum Operating Temperature Range: -40°C to +85°C.	NR
20	48	Printed Wiring Board	Various	NC-DL-22 Rev. C	Flammability Rating: UL 94-V0 Max. Operating temperature: 130°C	UR
20	49	RJ-45 Jack (RJ6)	TE Connectivity	5520260-4	1.5A	NR
20	50	Terminal Block (JP1, JP2, JP4)	Phoenix Contact	1935187	400V, 17.5A.	UR, CSA
21	51	Resettable Fuse (F1)	Bourns	MF-USMF010-2	Max. voltage: 30VDC Hold current: 0.1A Trip current: 0.3A	UR, CSA
21	52	Light Emitting Diode (LED3, LED4)	Kingbright	AA3535QR4A25Z4SC1AMT	Color: White DC Forward Current Max.: 150mA Operating Temperature Range: -40°C to +85°C. (Models NC-DL-22-RW, NC-DL-22-BW)	NR
				AA3535QB25Z1S	Color: Blue DC Forward Current Max.: 150mA Operating Temperature Range: -40°C to +85°C. (Model NC-DL-22-RB)	

4.0 Critical Components						
Photo #	Item no. <sup>1</sup>	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity <sup>3</sup>
21	53	Light Emitting Diode	Kingbright	AA3535SEL1Z1 S	Color: Red DC Forward Current Max.: 150mA Operating Temperature Range: -40°C to +85°C (Models NC-DL-22-RW, NC-DL-22-RB)	NR
				AA3535QB25Z1 S	Color: Blue DC Forward Current Max.: 150mA Operating Temperature Range: -40°C to +85°C. (Model NC-DL-22-BW)	
22	54	Nurse Call Station Bezel 1-gang	Chi Mei Corporation	PA-747	Ploylac 5.25" L X 5.00" H X 0.532" D Minimum Thickness: 1 mm Flammability Rating: UL 94-HB	UR
22	55	Nurse Call Station Face Button Label	Sabic Innovative Plastics	GS133	Lexan Film Flammability Rating: UL 94VTM-0 "CANCEL" in white letters with green background.	UR
22	56	Nurse Call Station Face Button Label	Sabic Innovative Plastics	GS133	Lexan Film Flammability Rating: UL 94VTM-0 "PUSH FOR HELP" in white letters with red background.	UR
22	57	Nurse Call Station Face Button Label	Sabic Innovative Plastics	GS133	Lexan Film Flammability Rating: UL 94VTM-0 "IN CASE OF EMERGENCY PULL FOR HELP" in red letters with white background.	UR
22	58	Nurse Call Wall Plate 1-gang	Chi Mei Corporation	PA-747	Ploylac 4.98" L x 4.5" H x 0.375" D Minimum Thickness: 1 mm Flammability Rating: UL 94-HB	UR
23	59	Printed Wiring Board	Various	NC-P-2-R1	Flammability Rating: UL 94-V0 Max. Operating temperature: 130°C	UR
23	60	NC String Actuator	Industrial Plastic Supply	NC-ACTUATOR	Polypropelene 0.062	NR
23	61	Terminal Block (SB1)	Phoenix Contact	1935187	400V, 17.5A	UR, CSA
23	62	Gasket	Frostking	V443H	Vinyl Foam Weather Seal Color: Grey Width: 3/8" Thickness: 3/16"	NR

4.0 Critical Components						
Photo #	Item no. <sup>1</sup>	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity <sup>3</sup>
24	63	Tactile Switch (SW1-SW3)	C&K	KT11P3SM34L FS	Contact Arrangement: SPST, N.O. Contact Rating: 1.0VA max., 32V AC or DC max. Operating Temperature Range: -40°C to +90°C.	NR
25	64	Nurse Call Wall Plate 1-gang	Chi Mei Corporation	PA-747	Ploylac 4.98" x 4.5" H x 0.375" D Minimum Thickness: 1 mm Flammability Rating: UL 94-HB	UR
25	65	Nurse Call Station Face Button Label	Sabic Innovative Plastics	GS133	Lexan Film Flammability Rating: UL 94VTM-0 "SUPERVISED JACK REMOVING PLUG WILL ACTIVATE ALARM" in red letters with white background.	UR
25	66	Nurse Call Station Face Button Label	Sabic Innovative Plastics	GS133	Lexan Film Flammability Rating: UL 94VTM-0 "PUSH FOR HELP" in white letters with red background.	UR
25	67	Nurse Call Station Face Button Label	Sabic Innovative Plastics	GS133	Lexan Film Flammability Rating: UL 94VTM-0 "CANCEL" in white letters with green background.	UR
25	68	Nurse Call Station Bezel Big Hole	Chi Mei Corporation	PA-747	Ploylac 5.25" L x 5.00" H x 0.532" D Minimum Thickness: 1 mm Flammability Rating: UL 94-HB	UR
26	69	Printed Wiring Board	Various	NC-PBS	Flammability Rating: UL 94-V0 Max. Operating temperature: 130°C	UR
26	70	Terminal Block (SB1)	Phoenix Contact	1935187	400V, 17.5A	UR, CSA
26	71	Phone Jack (J1)	Switchcraft	N112AX	Operating Temperature Range: -20°C to +65°C	NR
27	72	Tactile Switch (SW1, SW2)	C&K	KT11P3SM34L FS	Contact Arrangement: SPST, N.O. Contact Rating: 1.0VA max., 32V AC or DC max. Operating Temperature Range: -40°C to +90°C	NR
28	73	Nurse Call Station Bezel 2 button	Chi Mei Corporation	PA-747	Ploylac 5.25" L x 5.00" H x 0.532" D Minimum Thickness: 1 mm Flammability Rating: UL 94-HB	UR

4.0 Critical Components						
Photo #	Item no. <sup>1</sup>	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity <sup>3</sup>
28	74	Nurse Call Station Face Button Label	Sabic Innovative Plastics	GS133	Lexan Film Flammability Rating: UL 94VTM-0 "CANCEL" in white letters with green background.	UR
28	75	Nurse Call Station Face Button Label	Sabic Innovative Plastics	GS133	Lexan Film Flammability Rating: UL 94VTM-0 "PUSH FOR HELP" in white letters with red background.	UR
28	76	Nurse Call Wall Plate 1-gang	Chi Mei Corporation	PA-747	Ploylac 4.98" L x 4.5" H x 0.375" D Minimum Thickness: 1 mm Flammability Rating: UL 94-HB	UR
29	77	Printed Wiring Board	Various	NC-P-2-R1	Flammability Rating: UL 94-V0 Max. Operating temperature: 130°C	UR
29	78	Terminal Block (SB1)	Phoenix Contact	1935187	400V, 17.5A	UR, CSA
30	79	Tactile Switch (SW1, SW2)	C&K	KT11P3SM34L FS	Contact Arrangement: SPST, N.O. Contact Rating: 1.0VA max., 32V AC or DC max. Operating Temperature Range: -40°C to +90°C	NR
31	80	Nurse Call Station Bezel	Chi Mei Corporation	PA-747	Ploylac 5.25" L x 5.00" H x 0.532" D Minimum Thickness: 1 mm Flammability Rating: UL 94-HB	UR
31	81	Silence White Button	Sabic Innovative Plastics	GS133	Lexan Film Flammability Rating: UL 94VTM-0 "SILENCE" in red letters with white background.	UR
31	82	Jack White Buttons	Sabic Innovative Plastics	GS133	Lexan Film Flammability Rating: UL 94VTM-0 No letters with white background.	UR
31	83	Nurse Call Wall Plate 1-gang	Chi Mei Corporation	PA-747	Ploylac 4.98" L x 4.5" H x 0.375" D Minimum Thickness: 1 mm Flammability Rating: UL 94-HB	UR
32	84	Printed Wiring Board	Various	NC-SDS-A	Flammability Rating: UL 94-V0 Max. Operating temperature: 130°C	UR
32	85	Terminal Block (JP1)	Phoenix Contact	1935174	400V, 17.5A.	UR, CSA
			Various	Various		cURus

4.0 Critical Components						
Photo #	Item no. <sup>1</sup>	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity <sup>3</sup>
33	86	Tactile Switch (SW1)	C&K	KT11P3SM34L FS	Contact Arrangement: SPST, N.O. Contact Rating: 1.0VA max., 32V AC or DC max. Operating Temperature Range: -40°C to +90°C.	NR
33	87	Buzzer (SPKR1)	Murata	PKLCS1212E20 A0-R1	Operating Voltage Range: 25Vp-p Maximum Sound Pressure Level: 70dB Minimum Operating Temperature Range: -40°C to +85°C	NR
33	88	Resettable Fuse (F1)	Bourns	MF-USMF010-2	Max. voltage: 30VDC Hold current: 0.1A Trip current: 0.3A	UR, CSA
34	89	Nurse Call Station Bezel 3 Button	Chi Mei Corporation	PA-747	Ploylac 5.25" L x 5.00" H x 0.532" D Minimum Thickness: 1 mm Flammability Rating: UL 94-HB	UR
34	90	Nurse Call Station Face Button Label	Sabic Innovative Plastics	GS133	Lexan Film Flammability Rating: UL 94VTM-0 "CANCEL" in white letters with green background.	UR
34	91	Nurse Call Station Face Button Label	Sabic Innovative Plastics	GS133	Lexan Film Flammability Rating: UL 94VTM-0 "PUSH FOR HELP" in white letters with red background.	UR
34	92	Nurse Call Station Face Button Label	Sabic Innovative Plastics	GS133	Lexan Film Flammability Rating: UL 94VTM-0 "STAFF" in red letters with white background.	UR
34	93	Nurse Call Wall Plate 1-gang	Chi Mei Corporation	PA-747	Ploylac 4.98" L x 4.5" H x 0.375" D Minimum Thickness: 1 mm Flammability Rating: UL 94-HB	UR
35	94	Printed Wiring Board	Various	NC-P-2-R1	Flammability Rating: UL 94-V0 Max. Operating temperature: 130°C	UR
35	95	Terminal Block	Phoenix Contact	1935187	400V, 17.5A	UR, CSA
36	96	Tactile Switch (SW1, SW2, SW4)	C&K	KT11P3SM34L FS	Contact Arrangement: SPST, N.O. Contact Rating: 1.0VA max., 32V AC or DC max. Operating Temperature Range: -40°C to +90°C.	NR

4.0 Critical Components						
Photo #	Item no. <sup>1</sup>	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity <sup>3</sup>
37	97	Desktop Power Supply	Sceptre Power	PS-2437APL05	Input: 100-240vac, 50-60Hz Output: 24VDC, 3.75A (Tech Works Model PS-2437A)	cULus
			Mean Well	GST90A24-P1M	Input: 100-240VAC, 50/60Hz, 1.3A Output: 24VDC, 3.75A (Tech Works Model PS-2437B)	cULus
37	98	Power Supply Bracket	GP Manufacturing	PWR SUPL-BRACKET	Material: Cold Rolled Steel Finish: Powder Coat Painted Tiger-Drylac-89 71540	NR
38	99	Nurse Call Station Bezel 3 Button	Chi Mei Corporation	PA-747	Ploylac 5.25" L x 5.00" H x 0.532" D Minimum Thickness: 1 mm Flammability Rating: UL 94-HB	UR
38	100	Nurse Call Station Face Button Label	Sabic Innovative Plastics	GS133	Lexan Film Flammability Rating: UL 94VTM-0 "CANCEL" in white letters with green background.	UR
38	101	Nurse Call Station Face Button Label	Sabic Innovative Plastics	GS133	Lexan Film Flammability Rating: UL 94VTM-0 "PUSH FOR HELP" in white letters with red background.	UR
38	102	Nurse Call Station Face Button Label	Sabic Innovative Plastics	GS133	Lexan Film Flammability Rating: UL 94VTM-0 "CODE" in white letters with blue background.	UR
38	103	Nurse Call Wall Plate 1-gang	Chi Mei Corporation	PA-747	Ploylac 4.98" L x 4.5" H x 0.375" D Minimum Thickness: 1 mm Flammability Rating: UL 94-HB	UR
39	104	Printed Wiring Board	Various	NC-P-2-R1	Flammability Rating: UL 94-V0 Max. Operating temperature: 130°C	UR
39	105	Terminal Block	Phoenix Contact	1935187	400V, 17.5A.	UR, CSA
40	106	Tactile Switch (SW1, SW2, SW4)	C&K	KT11P3SM34L FS	Contact Arrangement: SPST, N.O. Contact Rating: 1.0VA max., 32V AC or DC max. Operating Temperature Range: -40°C to +90°C.	NR
41	107	Nurse Call Station Bezel 3 Button	Chi Mei Corporation	PA-747	Ploylac 5.25" L x 5.00" H x 0.532" D Minimum Thickness: 1 mm Flammability Rating: UL 94-HB	UR

4.0 Critical Components						
Photo #	Item no. <sup>1</sup>	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity <sup>3</sup>
41	108	Nurse Call Station Face Button Label	Sabic Innovative Plastics	GS133	Lexan Film Flammability Rating: UL 94VTM-0 "CANCEL" in white letters with green background.	UR
41	109	Nurse Call Station Face Button Label	Sabic Innovative Plastics	GS133	Lexan Film Flammability Rating: UL 94VTM-0 "CODE" in white letters with blue background.	UR
41	110	Nurse Call Wall Plate 1-gang	Chi Mei Corporation	PA-747	Ploylac 4.98" L x 4.5" H x 0.375" D Minimum Thickness: 1 mm Flammability Rating: UL 94-HB	UR
42	111	Printed Wiring Board	Various	NC-P-2-R1	Flammability Rating: UL 94-V0 Max. Operating temperature: 130°C	UR
42	112	Terminal Block	Phoenix Contact	1935187	400V, 17.5A	UR, CSA
43	113	Tactile Switch (SW1, SW2)	C&K	KT11P3SM34L FS	Contact Arrangement: SPST, N.O. Contact Rating: 1.0VA max., 32V AC or DC max. Operating Temperature Range: -40°C to +90°C	NR
44	114	Nurse Call Station Bezel 3 Button	Chi Mei Corporation	PA-747	Ploylac 5.25" L x 5.00" H x 0.532" D Minimum Thickness: 1 mm Flammability Rating: UL 94-HB	UR
44	115	Nurse Call Station Face Button Label	Sabic Innovative Plastics	GS133	Lexan Film Flammability Rating: UL 94VTM-0 "CANCEL" in white letters with green background.	UR
45	116	Printed Wiring Board	Various	NC-P-2-A	Flammability Rating: UL 94-V0 Max. Operating temperature: 130°C	UR
45	117	Terminal Block	Phoenix Contact	1935187	400V, 17.5A.	UR, CSA
45	118	Nurse Call Wall Plate 1-gang	Chi Mei Corporation	PA-747	Ploylac 4.98" L X 4.5" H X 0.375" D Minimum Thickness: 1 mm Flammability Rating: UL 94-HB	UR
46	119	Tactile Switch	C&K	KT11P3SM34L FS	Contact Arrangement: SPST, N.O. Contact Rating: 1.0VA max., 32V AC or DC max. Operating Temperature Range: -40°C to +90°C.	NR
47	120	Nurse Call Station Bezel 3 Button	Chi Mei Corporation	PA-747	Ploylac 5.25" L x 5.00" H x 0.532" D Minimum Thickness: 1 mm Flammability Rating: UL 94-HB	UR

4.0 Critical Components						
Photo #	Item no. <sup>1</sup>	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity <sup>3</sup>
47	121	Nurse Call Station Face Button Label	Sabic Innovative Plastics	GS133	Lexan Film Flammability Rating: UL 94VTM-0 "CANCEL" in white letters with green background.	UR
47	122	Nurse Call Station Face Button Label	Sabic Innovative Plastics	GS133	Lexan Film Flammability Rating: UL 94VTM-0 "SUPERVISED JACK REMOVING PLUG WILL ACTIVATE ALARM" in red letters with white background.	UR
47, 48	123	Phone Jack	Switchcraft	N112AX	Operating Temperature Range: -20°C to +65°C	NR
48	124	Printed Wiring Board	Various	NC-PBS-2	Flammability Rating: UL 94-V0 Max. Operating temperature: 130°C	UR
48	125	Terminal Block	Phoenix Contact	1935187	400V, 17.5A.	UR, CSA
48	126	Nurse Call Wall Plate 1-gang	Chi Mei Corporation	PA-747	Ploylac 4.98" L x 4.5" H x 0.375" D Minimum Thickness: 1 mm Flammability Rating: UL 94-HB	UR
49	127	Face Plate	G.P. Manufacturing	VPB-1	1-Gang, Stainless Steel with button hole	NR
49	128	Code Blue Button	Lovato Electric	LPCB6166	Blue, Mushroom Head Push Button Actuator, Spring Return	NR
50	129	Contact Element	Lovato Electric SPA	LPXCS10	N.O. Spring Clamp Termination Contact Ratings: 24VDC, 3A	cULus
51	130	Face Plate	G.P. Manufacturing	VPB-1	1-Gang, Stainless Steel with 1 button hole	NR
51	131	Cancel Button	EAO	82-5151.1134	24VDC lighted green stainless steel button	cURus
52	132	Printed Wiring Board	Various	NC-VPS	Flammability Rating: UL 94-V0 Max. Operating temperature: 130°C	UR
52	133	Terminal Block	Phoenix Contact	1935187	400V, 17.5A	UR, CSA
53	134	Face Plate	G.P. Manufacturing	VPB-2	1-Gang, Stainless Steel with 2 button holes	NR
53	135	Cancel Button	EAO	82-5151.1134	24VDC lighted green stainless steel button	cURus
53	136	Call Button	EAO	82-5151.1000	Stainless steel button	cURus
54	137	Printed Wiring Board	Various	NC-VPS	Flammability Rating: UL 94-V0 Max. Operating temperature: 130°C	UR
54	138	Terminal Block	Phoenix Contact	1935187	400V, 17.5A	UR, CSA
55	139	Face Plate	G.P. Manufacturing	VPB-1	1-Gang, Stainless Steel with 1 button hole	NR
55	140	Cancel Button	EAO	82-5151.1134	24VDC lighted green stainless steel button	cURus
56	141	Printed Wiring Board	Various	NC-VPS	Flammability Rating: UL 94-V0 Max. Operating temperature: 130°C	UR
56	142	Terminal Block	Phoenix Contact	1935187	400V, 17.5A	UR, CSA

<b>4.0 Critical Components</b>						
Photo #	Item no. <sup>1</sup>	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity <sup>3</sup>
57	143	Face Plate	G.P. Manufacturing	VPB-1	1-Gang, Stainless Steel with 1 button hole	NR
57, 58	144	Cancel Button	EAO	82-5151.1134	24VDC lighted green stainless steel button	cURus
59	145	Face Plate	G.P. Manufacturing	VPKS-1	1-Gang, Stainless Steel with 1 button hole	NR
59, 60	146	Keylock Switch	C&K	Y108122A203N Q	Single-Pole, Keypull Pos. 1 Contact Rating: 28VDC, 4A Operating Temperature: -30°C to +85°C	cURus
<p>NOTES:</p> <p>1) Not all item numbers are indicated (called out) in the photos, as their location is obvious.</p> <p>2) "Various" means any type, from any manufacturer that complies with the "Technical data and securement means" and meets the "Mark(s) of conformity" can be used.</p> <p>3) Indicates specific marks to be verified, which assures the agreed level of surveillance for the component. "NR" - indicates Unlisted and only visual examination is necessary. "See 5.0" indicates Unlisted components or assemblies to be evaluated periodically refer to section 5.0 for details.</p>						

## **5.0 Critical Unlisted CEC Components**

No Unlisted CEC components are used in this report.

**6.0 Critical Features**

Recognized Component - A component part, which has been previously evaluated by an accredited certification body with restrictions and must be evaluated as part of the basic product considering the restrictions as specified by the Conditions of Acceptability.

Listed Component - A component part, which has been previously Listed or Certified by an accredited Certification Organization with no restrictions and is used in the intended application within its ratings.

Unlisted Component - A part that has not been previously evaluated to the appropriate designated component standard. It may also be a Listed or Recognized component that is being used outside of its evaluated Listing or component recognition.

Critical Features/Components - An essential part, material, subassembly, system, software, or accessory of a product that has a direct bearing on the product's conformance to applicable requirements of the product standard.

Construction Details - For specific construction details, reference should be made to the photographs and descriptions. All dimensions are approximate unless specified as exact or within a tolerance. In addition to the specific construction details described in this Report, the following general requirements also apply.

1. Mechanical Assembly - Components such as switches, fuseholders, connectors, wiring terminals and display lamps are mounted and prevented from shifting or rotating by the use of lockwashers, starwashers, or other mounting format that prevents turning of the component.
2. Corrosion Protection - All ferrous metal parts are protected against corrosion by painting, plating or the equivalent.
3. Accessibility of Live Parts - No accessibility of uninsulated live parts in primary circuits since it is contained within the UL/CSA 60950-1 listed desktop power supply.
4. Grounding - This product is not provided with a means of grounding as it is contained within the UL/CSA 60950-1 listed desktop power supply.
5. Internal Wiring - Internal wiring is routed away from sharp or moving parts. Internal wiring leads terminating in soldered connections are made mechanically secure prior to soldering. Recognized Component separable (quick disconnect) connectors of the positive detent type, closed loop connectors, or other types specifically described in the text of this report are also acceptable as internal wiring terminals. At points where internal wiring passes through metal walls or partitions, the wiring insulation is protected against abrasion or damage by plastic bushings or grommets. All wiring is minimum 22-AWG with a minimum rating of 150V, 60°C.
6. Markings - The product is marked on a labeling system. See illustration 1.
7. Installation, Operating and Safety Instructions - Instructions for installation and use of this product are provided by the manufacturer. Refer to illustrations 2.

**7.0 Illustrations**

**Illustration 1 - Markings**

The product is marked on a labeling system as follows:

1. Applicant's name or brand name. (on the unit)
2. Model number and date code. (on the unit)
3. For products directly powered from high voltage, electrical rating in volts, amperes or watts and frequency. (on the unit for Model PS-2437A)
4. Correct mounting position if a unit is intended to be mounted in a definite position. (in the manual for Models NC-AN-16C-T, NC-AN-32C-T, NC-CM-16, NC-DL-12-WC, NC-DL-12-BC, NC-DL-12-RC, NC-DL-12-RSCT, NC-DL-12-BSCT, NC-DL-12-WSCT, NC-DL-22-RW, NC-DL-22C-BR, NC-DL-22C-BW, NC-EPS, NC-PBS-1, NC-SAS, NC-SDS, NC-SPS, NC-CBAS, NC-CBS, NC-PCBS-1, NC-EPS-WP, NC-CS, NC-PBS-2, NC-VP-CBS, NC-VP-CS, NC-VP-SAS, NC-VP-SAS-RC, NC-VP-PBS, VPBL-1, VPKS-1.)
5. Identification of lights, switches, meters and similar parts regarding their function. (adjacent to the component)
6. Reference to an installation wiring diagram by drawing number and issue date. (on the unit)
7. For a custom enclosure or faceplate, the manufacturer's name, model number, and date of manufacture. (on the custom enclosure or faceplate)
8. For a device, such as a switch, intended for emergency service, the word "EMERGENCY" and "EMERGENCIA" an equivalent wording describing an emergency condition, such as "PULL FOR HELP" and "PIDE AYUDA" or a representative symbol that describes the switch intended function. If a symbol is used, the instructions shall describe the symbol and meaning of the symbol. The marking shall be permanent, in a distinctive color, and on the front of the device. Other type units shall be marked regarding their function. (on the unit for Models NC-EPS-WP, NC-EPS, NC-PBS-1, NC-PCBS-1, NC-SAS, NC-SPS, NC-CBAS)
9. Call cord only that has been investigated and found suitable for use in oxygen- enriched atmospheres, is permitted to have the following marked on the device: "Note - May Be Used by Patients Undergoing Oxygen Therapy - Hang On Hook (In Holder) When Not In Use." and " Nota - Pueden ser utilizados por pacientes sometidos a terapia de oxígeno - Colgar en gancho (en el soporte) cuando no está en uso" (on the unit for Models PBC-7, PBC-2-12)
10. For emergency service devices (Pull Cord Stations), the word "EMERGENCY" and "EMERGENCIA" (on the unit for Models NC-EPS-WP, NC-EPS)

**Illustration 2 - Manuals (shall be made available upon inspection)**

Document No.	Issue Date	Title/Description	Comments to Field Representative
11/18/24 NC Series System Planning and Installation Manual	11/18/2024	NC Series Nurse Call Communication System Planning and Installation Manual	Verify document No. & Issue Date

## 7.0 Illustrations

### Illustration 3 - Model Similarity

- NC-AN-16C-T is the Nurse Call Annunciator 16 point tone/visual. It is a 16-light intelligent annunciator panel and it is the digital communication device using intelligent control modules for call point monitoring.
- NC-AN-32C-T is the Nurse Call Annunciator 32 point tone/visual. It is a 32-light intelligent annunciator panel and it is the digital communication device using intelligent control modules for call point monitoring. It contains a silence button.
- PBC-7 is a Push Button Call Cord with a 7-foot cord and right angle 1/4-inch phone plug. Designed to provide remote push button operation from the NC-PBS-1 Emergency Push Button Station.
- PBC-2-12 is a Push Button Call Cord with a 2 buttons each on a 12 foot cord with a common right angle 1/4 inch phone plug. Designed to provide remote push button operation from the NC-PBS-1 Emergency Push Button Station.
- NC-CM-16 is the Nurse Call Control Module. It is the modular central equipment that monitors and powers up to 16 patient room call points. It converts the status of call points to RS485 Network Communication and it is addressable on the Tech Works Network using a rotary switch to select one of 16 addresses. The NC-CM-16 is designed to monitor the NC-DL-12 Dome Lights. Two wiring options are included on each NC-CM-16 Control Module. Wire can either be run as a Buss Loop with an individual home run wire for signaling or as multiple home runs of CAT5.
- NC-DL-12-RC (1 Color, 2 Input - Red) is a Nurse Call Dome Light and Controller all in one unit. It supports Normal Calls and Emergency Calls. NC-CM-16 Control Module supplies Power and Flash synchronization to the Dome Light. NC-DL-12-BC is the same as the NC-DL-12-RC except the color of the LED is blue. NC-DL-12-WC is the same as the NC-DL-12-RC except the color of the LED is white.
- NC-DL-12-RSCT has the same features as the NC-DL-12-RC. The NC-DL-12-RSCT also has a built-in Flash module for stand-alone operation and a Tone unit to make a beeping sound when the station is active. As a stand-alone unit it can be a Master and does not require a Control Module. All you need is a power supply. In Slave mode it can be a Zone Light. Dome Light-1 Color, Red, 2 Input, with Tone sounder unit NC-DL-12-RSCT is exactly the same as the NC-DL-12-BSCT and the NC-DL-12-WSCT except the "B" stands for Blue LED's and the "W" stands for White LED's.
- NC-DL-22-RW is a Nurse Call Dome Light and Controller all in one unit. It supports Normal Calls and Emergency Calls. NC-CM-16 Control Module supplies Power and Flash synchronization to the Dome Light. Dome Light-2 Color, Red/White, 2 Input NC-DL-22-RW is exactly the same as the NC-DL-22C-BW and the NC-DL-22C-BR except the "B" stands for Blue LED's and the "W" stands for White LED's.
- NC-EPS is a Nurse Call Emergency Pull Station. A braided nylon pull cord provides the patient with call-for-help access when they may not be able to reach the station. A "Push for HELP" button activates the Emergency Call. The Staff is provided with a "CANCEL" button to reset the station.
- NC-PBS-1 is a Patient Bed Station. A 1/4-inch phone jack provides a supervised connection for Call Cord PBC-7 or Call Cord PBC-2-12. The Call Cord provides the patient with call-for-help access when they may not be able to reach the station. A "Push for HELP" button activates the Emergency Call. The Staff is provided with a distinctive "CANCEL" button to reset the station.
- NC-SAS is a Nurse Call Staff Assist HELP Station. A "Push for HELP" button activates the Emergency Call. The Staff is provided with a "CANCEL" button to reset the station.
- NC-SDS is a Nurse Call Staff Duty Station. An integral tone unit generates a beeping sound to alert staff that the system is active. This unit is used in remote areas like work rooms and other areas where staff needs to monitor the active Nurse Call System. Staff is provided with a distinctive "SILENCE" button to turn off the tone while the station is still active.

## 7.0 Illustrations

### Illustration 4 - Model Similarity - continued

<ul style="list-style-type: none"><li>• NC-SPS is a Nurse Call Staff Presence Station. A "STAFF" button generates a light signal to notify staff that someone is in a room. A "Push for HELP" button activates the Emergency Call. The Staff is provided with a "CANCEL" button to reset the station.</li></ul>
<ul style="list-style-type: none"><li>• PS-2437A is a 3.75A, 24V DC power supply.</li></ul>
<ul style="list-style-type: none"><li>• NC-CBAS is a Nurse Call Code Blue plus Assist Station. It is a Code Blue Station with a Staff Assist Help Button. A "CODE" button generates a light signal to notify staff that Emergency Help is needed in a room. A "Push for HELP" button activates the Emergency Call. Staff is provided with a distinctive "CANCEL" button to reset the station.</li></ul>
<ul style="list-style-type: none"><li>• NC-CBS is a Nurse Call Code Blue Station. A "CODE" button generates a light signal to notify staff that "Code" Help is needed in a room. The Staff is provided with a "CANCEL" button to reset the station.</li></ul>
<ul style="list-style-type: none"><li>• Patient Bed Station with Code Blue, Single Bed NC-PCBS-1 is a variation of the NC-PBS-1 with the "Help" button label changed to "Code" Blue.</li></ul>
<p>The Wet location Pull Station NC-EPS-WP is the exact same product as the NC-EPS with foam rubber gasket added to the back plate.</p>
<ul style="list-style-type: none"><li>• The Cancel Only Station NC-CS is the exact same product as the NC-SAS with the "Help" button removed. It is used as a secondary call "Cancel" button.</li></ul>
<ul style="list-style-type: none"><li>• Patient Bed Station NC-PBS-2 is the same station as the NC-PBS-1 with a second jack added for a second call cord.</li></ul>
<ul style="list-style-type: none"><li>• Vandal Proof-Code Blue Station NC-VP-CBS is a large mushroom switch on a stainless steel plate that is used to activate a Code Blue Call. The unit is used in conjunction with the NC-CS.</li></ul>
<ul style="list-style-type: none"><li>• Vandal Proof-Cancel Only Station NC-VP-CS is a lighted metal button on a stainless steel plate and is used in mental health and detention applications to cancel a call without being at the calling station. It is located outside the room with visibility to the calling station in the room.</li></ul>
<ul style="list-style-type: none"><li>• Vandal Proof-Staff Assist Station NC-VP-SAS is a lighted push button and a non-lighted push button both on a single gang stainless steel plate. It functions exactly like the NC-SAS. It is used in mental health and detention applications.</li></ul>
<ul style="list-style-type: none"><li>• Vandal Proof-Staff Assist Station-with Remote Cancel NC-VP-SAS-RC is a lighted push button on a single gang stainless steel plate. The unit functions exactly like the NC-SAS. The unit is capable of being canceled remotely by a simple contact closure using the VPBL-1 or VPKS-1. It is used in mental health and detention applications.</li></ul>
<ul style="list-style-type: none"><li>• Vandal Proof-Patient Bed Station NC-VP-PBS is a lighted push button and a 1/4 phone jack both on a single gang stainless steel plate. The unit functions exactly like the NC-PBS-1. It is used in mental health and detention applications.</li></ul>
<ul style="list-style-type: none"><li>• Vandal Proof-Button with Light VPBL-1 is a lighted push button on a single gang stainless steel plate. The unit does not include any circuitry and is intended as a contact closure only for remote cancel of the NC-VP-SAS-RC. It is used in mental health and detention applications.</li></ul>
<ul style="list-style-type: none"><li>• Vandal Proof-Key Switch VPKS-1 is a key switch on a single gang stainless steel plate. The unit does not include any circuitry and is intended as a contact closure only for remote cancel of the NC-VP-SAS-RC. It is used in mental health and detention applications.</li></ul>

8.0 Test Summary			
Evaluation Period	12/21/2020 - 3/26/2021		Project No. G102154083
Sample Rec. Date	8-Jan-2021	Condition Production	Sample ID. NYM2101081006-001 to NYM2101081006-042
Test Location	41 Plymouth St., Fairfield NJ 07004		
Test Procedure	Testing Lab		
Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.			
Due to the previous testing performed under Intertek Report 102154083NYM-001 only the following testing was performed:			
Test Description	ANSI/UL 1069	CSA C22.2 No. 205	
Normal Operation Test	17	-	
Electrical Supervision Test	18	-	
Voltage and Current Measurements – Input Circuit	19.1	6.2	
Jarring Test	21	-	
Variable Ambient Temperature Test	25	-	
Humidity Test	26	6.6	
Static Discharge Test	31	-	
Water Spray Test	38	-	
Impact Test	39	6.16	

Evaluation Period	05/10/2021 to 05/21/2021		Project No. G104675659
Sample Rec. Date	01/8/2021; 05/10/2021	Condition Production	Sample ID. NYM2110056575-001~002; NYM2101081006-001~042
Test Location	41 Plymouth St., Fairfield NJ 07004		
Test Procedure	Testing Lab		
Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.			
The following tests were performed:			
Test Description	ANSI/UL 1069	CSA C22.2 No. 205	
Variable Ambient Temperature Test	25	-	
Humidity Test	26	-	
Leakage Current Test	28	6.6	
Transient Test - Supply line transients – high-voltage units	29.2	6.20.1	
Transient Test - Internally induced transients	29.3	-	

Evaluation Period	05/02/2022 - 05/13/2022		Project No. G105002144
Sample Rec. Date	18-Apr-2022	Condition Production	Sample ID. NYM2204181104-001 to 007
Test Location	41 Plymouth St., Fairfield NJ 07004		
Test Procedure	Testing Lab		
Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.			
The following tests were performed:			
Test Description	ANSI/UL 1069	CSA C22.2 No. 205	
Normal Operation Test	17	-	
Jarring test	21	-	
Variable Ambient Temperature Test	25	-	
Humidity Test	26	-	

**8.0 Test Summary**

Evaluation Period	11/21/2023	Project No.	G105486073SVN
Due to previous testing performed and reported above no additional testing was necessary for Hospital Signaling and Nurse Call Equipment [UL 1069:2007 Ed.7+R:21Feb2022].Signal Equipment [CSA C22.2#205:2017 Ed.3].			

Evaluation Period	09/05/2024 - 09/10/2024		Project No.	G105946179	
Sample Rec. Date	NA	Condition	Production	Sample ID.	NA
Test Location	545 E. Algonquin Road, Arlington Heights, IL 60005 USA				
Test Procedure	Testing Lab				
Due to previous testing performed and reported above no additional testing was necessary for Hospital Signaling and Nurse Call Equipment [UL 1069:2007 Ed.7+R:21Sep2022].					

Evaluation Period	6/27/2025 - 7/3/2025		Project No.	G106234096	
Sample Rec. Date	NA	Condition	Production	Sample ID.	NA
Test Location	545 E. Algonquin Road, Arlington Heights, IL 60005 USA				
Test Procedure	Testing Lab				
Due to previous testing performed and reported above no additional testing was necessary Hospital Signaling and Nurse Call Equipment [UL 1069:2024 Ed.8].					
Test Description	UL 1069:2024 Ed.8	-	-		
Functional Safety Test Description	-	-	-		
Note: The above noted standard was reviewed and no functional safety requirements were identified.	FS Engineer: Dylan Karach	-	-		

**8.1 Signatures**

A representative sample of the product covered by this report has been evaluated and found to comply with the applicable requirements of the standards indicated in Section 1.0.

Completed by:	Abigail Favela	Reviewed by:	R.Cole
Title:	Engineer	Title:	Reviewer
Signature:	<i>Abigail Favela</i>	Signature:	<i>Robert M. Cole</i>

**9.0 Correlation Page For Multiple Listings**

The following products, which are identical to those identified in this report except for model number and Listee name, are authorized to bear the ETL label under provisions of the Intertek Multiple Listing Program.

<b>BASIC LISTEE</b>	Tech Works, Inc.
Address	7340 Eastgate Rd. #130 Henderson, NV 89011
Country	USA
Product	Nurse Call System NC Series

<b>MULTIPLE LISTEE 1</b>	None
Address	
Country	
Brand Name	

<b>ASSOCIATED MANUFACTURER</b>	
Address	
Country	

<b>MULTIPLE LISTEE 1 MODELS</b>	<b>BASIC LISTEE MODELS</b>

<b>MULTIPLE LISTEE 2</b>	None
Address	
Country	
Brand Name	

<b>ASSOCIATED MANUFACTURER</b>	
Address	
Country	

<b>MULTIPLE LISTEE 2 MODELS</b>	<b>BASIC LISTEE MODELS</b>

<b>MULTIPLE LISTEE 3</b>	None
Address	
Country	
Brand Name	

<b>ASSOCIATED MANUFACTURER</b>	
Address	
Country	

<b>MULTIPLE LISTEE 3 MODELS</b>	<b>BASIC LISTEE MODELS</b>

## 10.0 General Information

The Applicant and Manufacturer have agreed to produce, test and label ETL Listed products in accordance with the requirements of this Report. The Manufacturer has also agreed to notify Intertek and to request authorization prior to using alternate parts, components or materials.

### COMPONENTS

Components used shall be those itemized in this Intertek report covering the product, including any amendments and/or revisions.

### LISTING MARK

The ETL Listing mark applied to the products shall either be separable in form, such as labels purchased from Intertek, or on a product nameplate or other media only as specifically authorized by Intertek. Use of the mark is subject to the control of Intertek.

The mark must include the following four items:

- 1) applicable country identifiers "US" and/or "C" or "US", "C" and "EU"
- 2) the word "Listed" or "Classified" or "Recognized Component" (whichever is appropriate)
- 3) a control number issued by Intertek
- 4) a product descriptor that identifies the standards used for certification. Example:

**For US standards**, the words, "Conforms to" shall appear with the standard number along with the word, "Standard" or "Std." Example: "Conforms to ANSI/UL Std. XX."

**For Canadian standards**, the words "Certified to CAN/CSA Standard CXX No. XX." shall be used, or abbreviated, "Cert. to CAN/CSA Std. CXX No. XX."

Can be used together when both standards are used.

**If all standards on the ATM have the same standard title**, the shared title or its abbreviation may be used in place of the examples above. Example: "Medical Electrical Equipment" or "MEE"; "Information Technology Equipment" or "ITE"; "Audio/Video Information And Communication Technology Equipment" or "AV ICTE".

### **Note: A facsimile must be submitted to Intertek, Attn: Follow-up Services for approval prior to use.**

The facsimile need not have a control number. A control number will be issued **after signed Certification Agreements** have been received by the Follow-up Services office, approval of the facsimile of your proposed Listing Mark, satisfactory completion of the Listing Report, and scheduling of a factory assessment in your facility.

### MANUFACTURING AND PRODUCTION TESTS

Manufacturing and Production Tests shall be performed as required in this Report.

### FOLLOW-UP SERVICE

Periodic unannounced audits of the manufacturing facility (and any locations authorized to apply the mark) shall be scheduled by Intertek. An audit report shall be issued after each visit. Special attention will be given to the following:

1. Conformance of the manufactured product to the descriptions in this Report.
2. Conformance of the use of the ETL mark with the requirements of this Report and the Certification Agreement.
3. Manufacturing changes.
4. Performance of specified Manufacturing and Production Tests.

In the event that the Intertek representative identifies non-conformance(s) to any provision of this Report, the Applicant shall take one or more of the following actions:

1. Correct the non-conformance.
2. Remove the ETL Mark from non-conforming product.
3. Contact the issuing product safety evaluation center for instructions.

### **10.1 Evaluation of Unlisted Components**

Because Unlisted Components are uncontrolled, and they do not fall under a third party follow up program, Intertek may require these components to be tested and/or evaluated at least once annually, more often for certain components, as part of the independent certification process. The Unlisted Components in Section 5.0 require testing and/or evaluation as indicated.

**The Applicant will be notified, in writing, via the applicable contact methods, as defined in Section 1.0, when these components must be selected and sent to Component Evaluation Center (CEC) for re-evaluation.**

**Due to particular testing requirements, some components may be requested to be shipped to specific labs. Thus, specific shipment destination(s) for each sample will be provided in the written notification.**

Managing CEC Location:  
Intertek Testing Services NA Inc.  
ETL Component Evaluation Center  
1717 Arlingate Ln.  
Columbus, Ohio 43228 USA  
Attn: CEC Safety

Sample Disposition: Due to the destructive nature of the testing, all samples will be discarded at the conclusion of testing unless, the manufacturer specifically requests the return of the samples. The request for return must accompany the initial component shipment.

**11.0 Manufacturing and Production Tests**




The manufacturer agrees to conduct the following Manufacturing and Production Tests as specified:

**Required Tests**

None

<b>12.0 Revision Summary</b>				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
21-May-2021 G104675659NYM	R. Yeole	4	97	<b>Added</b> an alternative: Mean Well p/n GST90A24-P1M
		8	-	<b>Added</b> Test Summary section for Project: G104675659
	R. Cole	8.1	-	<b>Added</b> Signatures
13-May-2022 G105002144NYM	S. Koltovskiy	1	-	<b>Changed</b> standard <b>from</b> Hospital Signaling and Nurse Call Equipment [UL 1069:2007 Ed.7+R:08Jun2018] <b>to</b> Hospital Signaling and Nurse Call Equipment [UL 1069:2007 Ed.7+R:23Apr2020].
		4	23	<b>Added</b> alternate PCB model No: NC-CM-16-A-1 for item 23.
	R. Cole	8	-	<b>Added</b> Project G105002144.
		8.1	-	<b>Added</b> signatures.
21-Nov-2023	D.Robb	1	-	Technical change to update standard UL 1069 From:Hospital Signaling and Nurse Call Equipment [UL 1069:2007 Ed.7 +R:23Apr2020] To:Hospital Signaling and Nurse Call Equipment [UL 1069:2007 Ed.7+R:21Feb2022]□ Product listed is not affected.
G105486073SVN	D.Tesfaye	8	-	Added new test block.
		8.1	-	Added new signatures.
10-Sep-2024 G105946179CHI	Y.Moula	1	-	<b>Updated</b> standard <b>from</b> "Hospital Signaling and Nurse Call Equipment [UL 1069:2007 Ed.7+R:21Feb2022]" <b>to</b> "Hospital Signaling and Nurse Call Equipment [UL 1069:2007 Ed.7+R:21Sep2022]"
	R.Cole	8	-	<b>Added</b> test summary section for project: G105946179

<b>12.0 Revision Summary</b>				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
28-Feb-2025 G106077530CHI	J. Fox R. Cole	-	-	This revision has been completed to resolve variances raised during the inspection dated 14-Oct-2024 under order number 5002971.
		1	-	<b>Removed</b> Signal Equipment [CSA C22.2#205:2017 Ed.3] from standards section.
		4	3, 12	<b>Added</b> "various various" to items 3 and 12.
		4	5	<b>Updated</b> item 5 from "Kingbright AA3021SRCT" to "Lite-On Optoelectronics LTW-M670ZVS-M5"
		4	40, 46	<b>Added</b> "various various" to items 40 and 46.
		4	7, 17	<b>Updated</b> part number and technical data from "14305R-2000 3.3VDC, 30mW Firmware Version: AN-32-M_Release__01-13-2016_1549.hex" to "Supply Voltage: 3.3VDC Max Current Draw: 52mA Operating Temperature: -40°C to +85°C Firmware Version: AN-32-M_Release__11-29-2021_1917h.hex"
		4	31	<b>Updated</b> part number and technical data from "3.3VDC, 30mW Firmware Version: NCCM16.hex" to "Supply Voltage: 3.3VDC Max Current Draw: 52mA Operating Temperature: -40°C to +85°C Firmware Version: NCCM16_Release__04-19-2024_1648h.hex"
		4	8, 18, 30	<b>Removed</b> Maxim MAX1487CSA.
		4	8, 18, 30	<b>Added</b> Texas Instruments SN65HVD1780DR.
		4	27	<b>Updated</b> manufacturer and part number from "CUI CP-102AH-ND" to "Same Sky PJ-102AH"
		4	28, 37, 44, 49	<b>Updated</b> technical data from "150VAC, 1.5A" to "1.5A"
		4	33	<b>Corrected</b> mark of conformity from "cULus" to "cURus"
		4	71, 123	<b>Updated</b> technical data from "Contact Rating: 0.25A, 48 VDC make and break, 3A carry only Operating Temperature Range: -20°C to +65°C" to "Operating Temperature Range: -20°C to +65°C"
4	85	<b>Added</b> various various to item 85.		
7	2	<b>Updated</b> manual document number and issue date from "04/06/21 NC Series System Planning and Installation Manual 4/6/2021" to "11/18/24 NC Series System Planning and Installation Manual 11/18/2024"		

<b>12.0 Revision Summary</b>				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
3-Jul-2025 G106234096CHI G106077530CHI	A. Favela 	1	-	<b>Updated</b> standrd from Hospital Signaling and Nurse Call Equipment [UL 1069:2007 Ed.7+R:21Sep2022] <b>To</b> Hospital Signaling and Nurse Call Equipment [UL 1069:2024 Ed.8]
	J. Fox 	2	-	<b>Added</b> model PS-2437B to model section.
	R. Cole 	8	-	<b>Added</b> new test section under project#: G106234096
		8.1	-	<b>Added</b> new signatures.