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DOCUMENT REVISION HISTORY

REV	DEPT.	BY	DATE	DESCRIPTION
-	ENGINEERING			INITIAL RELEASE
	Q.A.			
	PRODUCTION			
	CUSTOMER			
	ORIGINATOR	Lawrence Chu	12/12/97	
	ENGINEERING			
	Q.A.			
	PRODUCTION			
	CUSTOMER			
	ORIGINATOR			
	ENGINEERING			
	Q.A.			
	PRODUCTION			
	CUSTOMER			
	ORIGINATOR			
	ENGINEERING			
	Q.A.			
	PRODUCTION			
	CUSTOMER			
	ORIGINATOR			

PART NUMBER **SL-1963-x**

PART NAME **Interphone Interface Module**

DOCUMENT NUMBER **SPEC SL-1963**

Interphone Interface Module — SL-1963-x

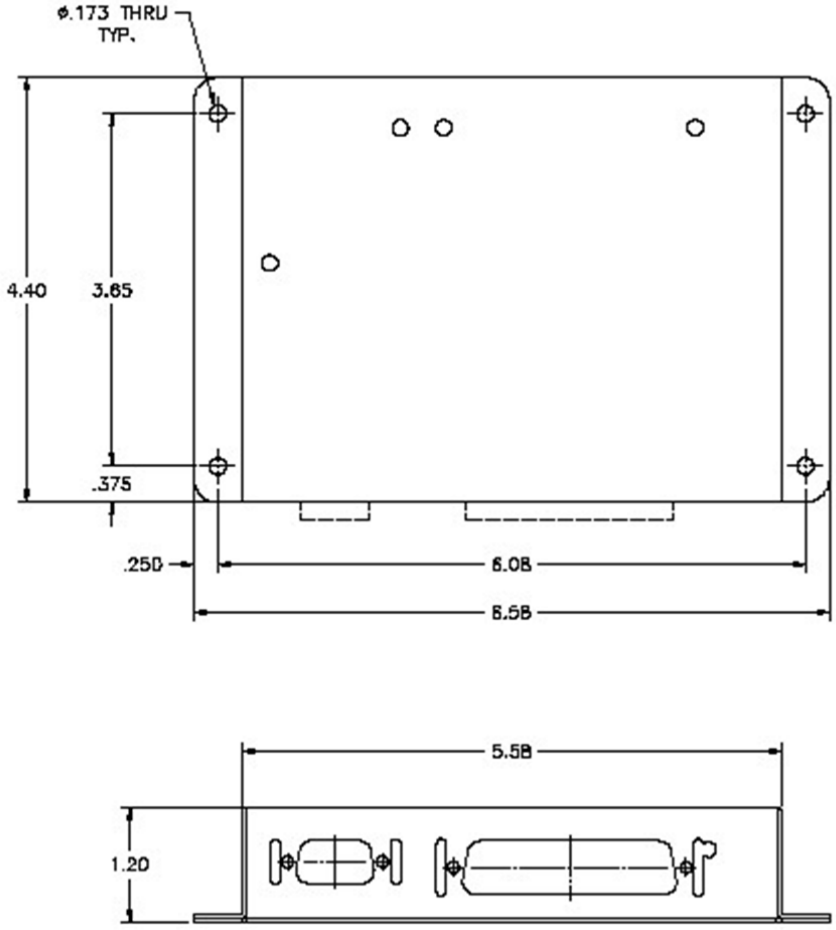
SPECIFICATIONS GENERAL:

Operating Voltage:	+17VDC to +32VDC
Operating Current:	0.2 A Typical 0.8 A Max.
Operating Temperature:	-10 to +55 ^{o}C
Connectors:	D-Sub Series with #4-40 Jack Screws (standard) with Positronic's V3 Vibration Locking System ("P" suffix)
System Interface:	SmartLink-II™
Device Group:	Special Group (40 – 4F hex)
Device I.D. Setting:	0 – F hex (0 –15 Decimal)
Max. Units per Link:	16 (limit of 16 devices per Group)
Max. Links per System:	16
Case:	SL-102
Dimensions:	4.2" L x 6.9" W x 1.2" H
Weight:	14 OZ

FEATURES & FUNCTIONS:

- SmartLink™ System Interface
- Redundancy design for highest reliability
- Intercom and PA handset interface with built-in Earphone Amplifier
- Dual Galley application
- Nonvolatile Memory of volume status and control
- Downloadable Power-up Status of all contacts via SmartLink-III™ Bus

OUTLINE DIMEMSIONS:



SMARTLINK-II SYSTEM CONNECTOR AND PIN OUT:

J1 High Density D-Sub, 15 Pin Plug
SmartLink-II™ System Connector

PIN	FUNCTION	PIN	FUNCTION	PIN	FUNCTION
1	FRAME GROUND	6	DEVICE I.D. [1 HEX]	11	DEVICE I.D. [8 HEX]
2	POWER INPUT +28 VDC	7	DEVICE I.D. [2 HEX]	12	RESERVED
3	POWER RETURN (GND)	8	DEVICE I.D. RETURN (GND)	13	RESERVED
4	SL2 – HI	9	SL2-SHLD (GND)	14	RESERVED
5	SL2 – LO	10	DEVICE I.D. [4 HEX]	15	RESERVED

Notes:

1. FRAME GROUND: Chassis Ground connection using 20AWG hookup wire minimum.
2. POWER INPUT AND POWER RETURN: Power Pins.
3. SL2 – HI/LO/SHLD: SmartLink-II™ bus connection, using 22AWG (minimum) Shielded Twisted Pair cable with single ended shield terminated to SHLD pin.
4. DEVICE I.D & RETURNS: Each module requires a unique identification setting within it's group. Add jumper connection(s) from desired ID pin(s) to GND to set the device address.

DEVICE I.D. NOTES:

1. All devices connected to SmartLink-II™ Bus must have unique Device I.D. address settings (8 bit Hex I.D., 256 possible I.D.) to allow the system to function correctly.
2. Most of the Devices have been grouped, with the upper 4 bits of the Device I.D. address predefined, only requiring the lower 4 bits to be set within the group.
3. Maximum Devices connected to the Single Loop SmartLink-II™ Bus with predefined group addresses are:
   - Panel Group: 7 bit I.D. [+128 (80 hex)] for 110 Panels total.
     Device I.D. Hex address range is 81 to EF.
   - Video Group: 4 bit I.D. [+112 (70 hex)] for 16 Distribution Cards total.
     Device I.D. Hex address range is 70 to 7F.
   - Audio Group: 4 bit I.D. [+96 (60 hex)] for 16 Distribution Cards total.
     Device I.D. Hex address range is 60 to 6F.
   - Special Group: 4 bit I.D. [+64 (40 hex)] for 16 Units total.
     Device I.D. Hex address range is 40 to 4F.
   - Lighting Group: 4 bit I.D. [+48 (30 hex)] for 16 Units total.
     Device I.D. Hex address range is 30 to 3F.
   - Relay Group: 4 bit I.D. [+32 (20 hex)] for 16 Units total.
     Device I.D. Hex address range is 20 to 2F.
   - System Group: 4 bit I.D. [+16 (10 hex)] for 16 Units total.
     Device I.D. Hex address range is 10 to 1F.
   - Reserved Address: 00 – 0F hex, 50 – 5F hex, F0 – FF hex.

INPUT / OUTPUT CONNECTOR AND PIN OUT:

J2 D-Sub 50 Pin Plug Input / Output Connector

PIN	FUNCTION	PIN	FUNCTION	PIN	FUNCTION
1	INT REQUEST RELAY COM (RLY#1 COM)	18	INT REQUEST RELAY N.C. (RLY#1 N.C.)	34	INT REQUEST INPUT LO-TRIG
2	INT REQUEST RELAY N.O. (RLY#1 N.O.)	19	LED DRV, INT REQUEST	35	LED DRV, INT REQUEST
3	INT ENABLE RELAY COM (RLY#2 COM)	20	LED DRV, CKPT CALL	36	INT REQ. CHIME DISABLE INPUT HI-TRIG
4	INT ENABLE RELAY N.O. (RLY#2 N.O.)	21	KEY, CALL RESET	37	INT REQUEST INPUT HI-TRIG
5	PA ENABLE RELAY COM (RLY#3 COM)	22	LED DRV, CKPT CALL	38	INT REQ. CHIME DISABLE CMD INPUT LO-TRIG
6	HS ON-HOOK INPUT -	23	HS OFF-HOOK IN-	39	LED DRV COMMON (+5V)
7	PA ENABLE RELAY N.O. (RLY#3 N.O.)	24	LED DRV, PA	40	LED DRV COMMON (+5V)
8	CHIME DRIVE RELAY COM (RLY#4 COM)	25	HS DISCRETE RETURN (GND)	41	LED DRV COMMON (+5V)
9	LED DRV, INT OFF-HOOK	26	HS MIC LINE RETURN (GND)	42	+28VDC POWER INPUT
10	CHIME DRIVE RELAY N.O. (RLY#4 N.O.)	27	HS EARPHONE LINE OUT- (GND)	43	INT AUDIO INPUT- (GND)
11	INT AUDIO IN+	28	LED, PA OFF-HOOK	44	GROUND, POWER RETURN
12	HS EARPHONE LINE OUT+	29	LED, INT	45	HS MIC OUT- [PA] SELECTED (GND)
13	HS KEY-LINE IN	30	HS EARPHONE AMP OUT- (GND)	46	HS MIC OUT- [INT] SELECTED (GND)
14	HS KEY-LINE OUT [INT] SELECTED	31	KEY, CKPT CALL	47	KEY, VOLUME UP
15	HS KEY-LINE OUT [PA] SELECTED	32	KEY, PA	48	KEY, INT SELECT
16	HS MIC IN	33	HS MIC OUT [PA] SELECTED	49	KEY, VOLUME DN
17	HS MIC OUT [INT] SELECTED			50	HS EARPHONE AMP OUT+

Notes:

1. LED DRV / LED DRV COMMON: Switch To Ground with 300 mA current sink capability on all LED-Drv lines. Current limit resistor must be used on all LED lamps wired across LED-Drv and LED-Drv -Common.
2. KEY, FUNCTION: Momentary to Ground to activate.
3. CKPT CALL: Alternate switching function, may be Set or Clear via external KEY and/or SmartLink-II™ Bus. Chime-Drive-Relay closed for 1 second momentary when Call function is Set.
4. INT REQUEST INPUT HI/LO TRIGGER: Apply >+5VDC on HI-Trig or Grounded LO-Trig will activates the INT Request function and makes Chime-Drive-Relay closed for 1 second.
5. INT REQ. CHIME DISABLE INPUT HI/LO TRIGGER: Apply >+5VDC on HI-Trig or Grounded LO-Trig will disable the Chime-Drive-Relay to be activates at INT Request function.
6. HS EARPHONE LINE OUT / AMP OUT: Hand Set Earphone may be connected to Line Out or AMP out as needed. Audio signal of Line Out is direct pass through and AMP Out is amplified with Volume controlled.
7. FIRMWARE CONTROLS: Function's definitions may be altering via Firmware.