TL70 Loud Multi-Tone Audible Tower Light Module



Datasheet



- Electronic volume adjustment
- Select up to four discrete sounds from a single audible module (continuous, pulse, siren, chirp)
- · Sound output options selected with DIP switches

Models

//\

TL70 Segment Housing		Audible Alarm	Housing Color
SG-TL70	-	ALM - Loud Multi-Tone Audible	Blank - Black C - Gray

For example, SG-TL70-ALM (Loud multi-tone audible in a black housing).

For more information regarding TL70 Modular Tower Light Final Assemblies, refer to the following documents:

- TL70 Modular Tower Light Final Assembly Datasheet (p/n 182214)
- TL70 Wireless Modular Tower Light Datasheet (p/n 185469)
- TL70 Modular Tower Light Final Assembly for AC Datasheet (p/n 191349)

WARNING: Risk of Hearing Loss— All **effective** warning horns produce loud sounds that may cause, in certain **situations**, permanent hearing loss. The device should be installed far enough away from potential listeners to limit their exposure while still maintaining its effectiveness. Reference OSHA Code of Federal Regulations 1910.95 Noise Standard for guidelines that may be used regarding permissible noise exposure levels.

Configure the DIP Switches

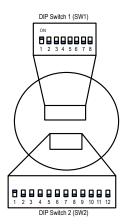


Table 1: DIP Switches for SW1

	Input Channel Select Intensity Select					y Select		
	1	2	3	4	5	6	7	8
Low intensity (default setting)								
Medium intensity	Select positions 1 through 6 for the desired input channels. ON OFF OFF ON							OFF
Medium/loud intensity								ON
Loud intensity	ON O					ON		

Input channel select—Select the input channels used to operate the audible module. Intensity select—Select the sound intensity to operate with the selected input channels.

Table 2: Function Select DIP Switches for SW2

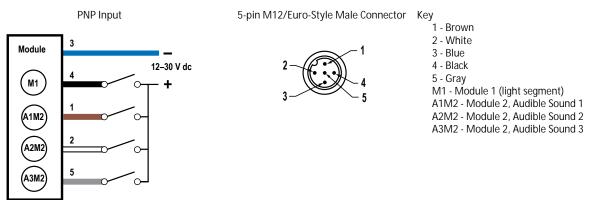
Assembly Options	Channel 1		Channel 2		Channel 3		Channel 4		Channel 5		Channel 6	
Assembly Options	1	2	3	4	5	6	7	8	9	10	11	12
Pulse 1.5 Hz	ON	OFF										
Chirp alarm	ON	ON										
Siren alarm	OFF	ON										
Continuous alarm (default setting)	OFF	OFF										



Function select—Any input channel can be configured for any of the four available sound functions. This allows for up to four discrete sounds to be operated from up to four separate input channels.

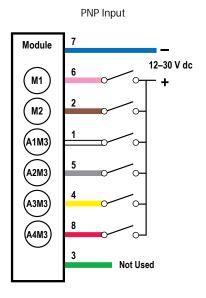
Wiring Diagram — 5-Pin Models

The following example shows a loud multi-tone audible module (M2) attached to a TL70 single-color segment (M1), using a TL70 base, and configured for three discrete sound functions (A1, A2, A3).

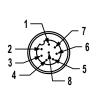


Wiring Diagram — 8-Pin Models

The following example shows a loud multi-tone audible module (M3) attached to a TL70 with two single-color segments (M1 and M2), and configured for four discrete sound functions (A1, A2, A3, and A4).



8-pin M12/Euro-style Male Connector Key 1 - White



2 - Brown 3 - Green 4 - Yellow 5 - Gray 6 - Pink 7 - Blue 8 - Red M1 - Module 1 (light segment) M2 - Module 2 (light segment) A1M3 - Module 3, Audible Sound 1 A2M3 - Module 3, Audible Sound 2 A3M3 - Module 3, Audible Sound 3 A4M3 - Module 3, Audible Sound 4

Specifications

Supply Voltage and Current

12 V dc to 30 V dc

Selected Intensity	Maximum Current (mA)			
	at 12 V dc	at 30 V dc		
Low	15	15		
Medium	40	30		
Medium/Loud	115	55		
Loud	270	110		

Supply Protection Circuitry

Protected against reverse polarity and transient voltages

Construction

Audible Segments and Covers: Polycarbonate

Vibration and Mechanical Shock

Vibration 10 Hz to 55 Hz 0.5 mm p-p amplitude per IEC 60068-2-6 Shock 15G 11 ms duration, half sine wave per IEC 60068-2-27

Operating Conditions

-40 °C to +50 °C (-40 °F to +122 °F) 95% at +50 °C maximum relative humidity (non-condensing)

Environmental Rating

IEC IP65

Certifications



Audible Alarm

Oscillation Frequency: 2.6 kHz ± 250 Hz

Selected Intensity	Maximum Intensity (typical) at 1 meter dB
Low	75
Medium	93
Medium/Loud	97
Loud	101

Audible Adjustment

Electronic Adjustment: Select the desired volume, using the intensity select DIP switches Typical Reduction in Sound Intensity (maximum to minimum): 26 dB

Required Overcurrent Protection



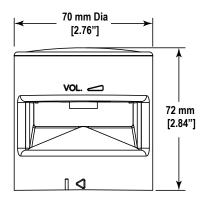
WARNING: Electrical connections must be made by qualified personnel in accordance with local and national electrical codes and regulations.

Overcurrent protection is required to be provided by end product application per the supplied table.

Supprior table. Overcurrent protection may be provided with external fusing or via Current Limiting, Class 2 Power Supply. Supply wiring leads < 24 AWG shall not be spliced. For additional product support, go to *www.bannerengineering.com*.

Supply Wiring (AWG)	Required Overcurrent Protection (Amps)
20	5.0
22	3.0
24	2.0
26	1.0
28	0.8
30	0.5

Dimensions



Banner Engineering Corp. Limited Warranty

Banner Engineering Corp. warrants its products to be free from defects in material and workmanship for one year following the date of shipment. Banner Engineering Corp. will repair or replace, free of charge, any product of its manufacture which, at the time it is returned to the factory, is found to have been defective during the warranty period. This warranty does not cover damage or liability for misuse, abuse, or the improper application or installation of the Banner product.

THIS LIMITED WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES WHETHER EXPRESS OR IMPLIED (INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE), AND WHETHER ARISING UNDER COURSE OF PERFORMANCE, COURSE OF DEALING OR TRADE USAGE.

This Warranty is exclusive and limited to repair or, at the discretion of Banner Engineering Corp., replacement. IN NO EVENT SHALL BANNER ENGINEERING CORP. BE LIABLE TO BUYER OR ANY OTHER PERSON OR ENTITY FOR ANY EXTRA COSTS, EXPENSES, LOSSES, LOSS OF PROFITS, OR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES RESULTING FROM ANY PRODUCT DEFECT OR FROM THE USE OR INABILITY TO USE THE PRODUCT, WHETHER ARISING IN CONTRACT OR WARRANTY, STATUTE, TORT, STRICT LIABILITY, NEGLIGENCE, OR OTHERWISE.

Banner Engineering Corp. reserves the right to change, modify or improve the design of the product without assuming any obligations or liabilities relating to any product previously manufactured by Banner Engineering Corp. Any misuse, abuse, or improper application or installation of this product or use of the product for personal protection applications when the product is identified as not intended for such purposes will void the product warranty. Any modifications to this product without process and reserves approach by Banner Engineering Corp will void the product warranties. All specifications published in this document are subject to change. Banner reserves the right to modify product specifications or update documentation at any time. Specifications and product information in English supersede that which is provided in any other language. For the most recent version of any documentation, refer to: www.bannerengineering.com.

