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 could cause, in certain situations, permanent hearing loss. Install the device 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 about permissible noise exposure levels.

Configure the DIP Switches

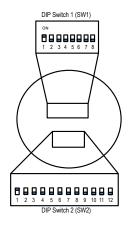


Table 1: DIP Switches for SW1

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

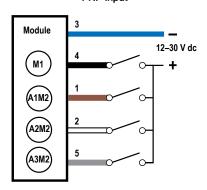
Function select - Any input channel can be configured for any of the four available sound functions. This allows for up to four discrete sounds to be operated from up to four separate input channels.



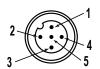
Wiring Diagram — 5-Pin Models

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).

PNP Input



5-pin M12 Male Connector



Key

- 1 Brown
- 2 White
- 3 Blue
- 4 Black
- 5 Gray

M1 - Module 1 (light segment) A1M2 - Module 2, Audible Sound 1

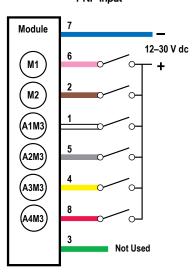
A2M2 - Module 2, Audible Sound 2

A3M2 - Module 2, Audible Sound 3

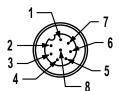
Wiring Diagram — 8-Pin Models

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).

PNP Input



8-pin M12 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

Audible Alarm
Oscillation Frequency: 2.6 kHz ± 250 Hz

Selected Intensity	Maximum Intensity (typical) at 1 meter dB
Low	83
Medium	101
Medium/Loud	106
Loud	109

Audible Adjustment

Electronic Adjustment: Select the desired volume, using the intensity select DIP

Typical Reduction in Sound Intensity (maximum to minimum): 26 dB

Construction

Audible Segments and Covers: Polycarbonate

Vibration and Mechanical Shock

Vibration: 10 Hz to 55 Hz, 0.5 mm peak-to-peak 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

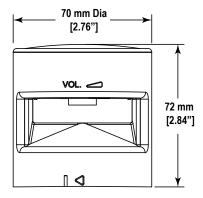
Certifications



Banner Engineering Europe Park Lane, Culliganlaan 2F bus 3, 1831 Diegem, BELGIUM

Turck Banner LTD Blenheim House, Blenheim Court, Wickford, Essex SS11 8YT, Great Britain

Dimensions



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.

Supplied 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

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