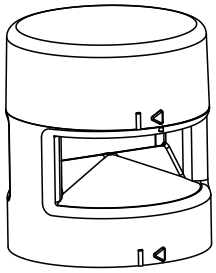
TL70 Programmable Audible Tower Light Module

Datasheet



- Install an MP3 or WAV file, up to 4MB in size
- Sequential playback of multiple files
- Flash memory can be re-programmed multiple times
- Compatible with Windows® [1], Linux® [2], or Mac® [3] operating systems
- Easy drag and drop file transfer
- Wide frequency response: 100 Hz - 20 kHz

Models

TL70 Segment Housing		Audible Alarm	Housing Color
SG-TL70	–	AP - Programmable Audible	Blank - Black C - Gray

For example, SG-TL70-AP (Programmable audible in black housing).

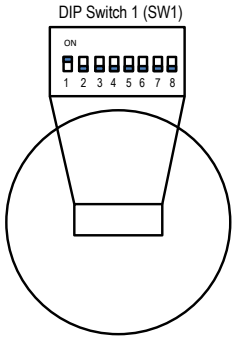
For more information regarding TL70 Modular Tower Light Final Assemblies, refer to the following documents:

- TL70 Modular Tower Light Final Assembly Datasheet (p/n 182214)
- TL70 Wireless Modular Tower Light Datasheet (p/n 185469)
- TL70 Universal AC Voltage Modular Tower Light 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.

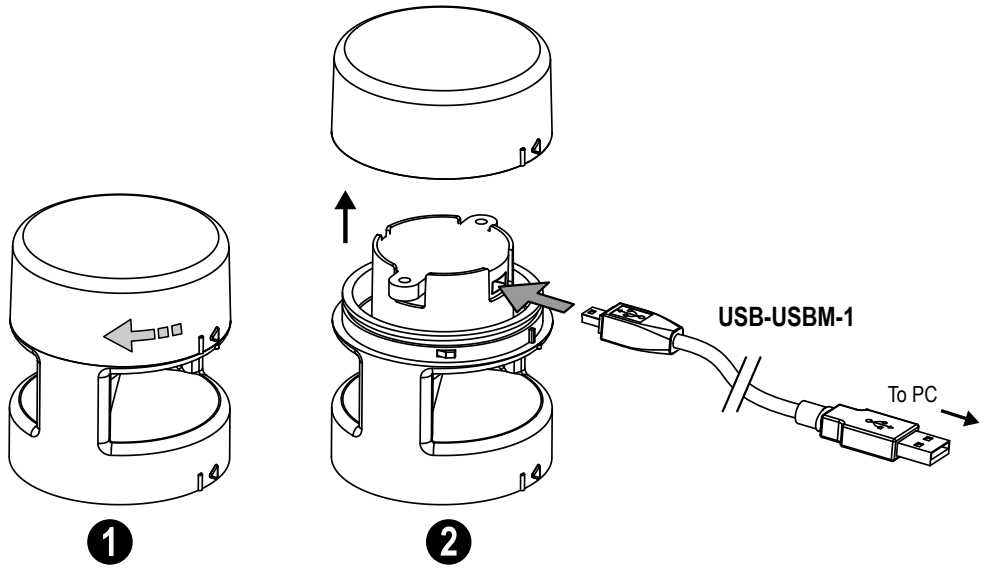
Configure the DIP Switches



Input channel select–Use switch positions 1 through 6 on SW1, to select the channel that would be used to operate the audible module. Switch positions 7 and 8 are not used.

[1] Microsoft and Windows are registered trademarks of Microsoft Corporation in the United States and/or other countries.
[2] Linux is a registered trademark of the Linux Foundation in the United States and/or other countries.
[3] Mac is a registered trademark of Apple Inc. in the United States and/or other countries.

Programming the Audible Tower Module



Loading Files into the SG-TL70-AP

The SG-TL7-AP has 4MB of on-board flash memory and can playback any WAV or MP3 audio file that is 4MB or smaller. If the file is too large, a program such as Audacity can be used to compress or shorten the file to decrease the size.

Multiple files can be loaded onto the SG-TL70-AP. Files playback according to the file name in alpha-numeric order.

Note: Add a number to the beginning of the file name to create the order in which the files run. Files play consecutively without any pause.

To program the module:

1. Remove the module top cover by rotating counterclockwise.
2. Connect the programming cable (USB-USBM-1) from the PC's USB connection to the USB mini-connection of the audible module.

   The SG-TL70-AP is recognized by the PC as a USB flash drive. The default drivers for a USB drive are assigned to the device, as well as a unique disk drive letter assignment (such as D:).
3. Drag-and-drop the audio files that are saved on the PC to the USB drive location.
4. Assign numbers to each file to designate their playback order, otherwise files playback in alpha-numeric order.
5. Remove the cable from the audio module.
6. Re-install the top cover by aligning the protruding alignment marks and turning clockwise.
7. The audible module is now ready for use with a compatible TL70 DC Base or Universal Voltage AC Base.

When the selected Input Channel is activated, the audible module begins playing the files in sequential order.

Specifications

Supply Voltage and Current
B-TL70 (DC Base):12 V DC to 30 V DC
Maximum current:
290 mA at 12 V DC
125 mA at 30 V DC
B-TL70-Z (Universal AC Voltage Base): 100 V AC to 240 V AC; 50/60 Hz
Maximum current:
85 mA at 120 V AC and 60 Hz
60 mA at 230 V AC and 50 Hz

Supply Protection Circuitry
Protected against transient voltages

Environmental Rating
IP50

Operating Conditions
-20 °C to +50 °C (-4 °F to + 122 °F)
95% at +50 °C maximum relative humidity (non-condensing)

Application Note
Volume Adjustment: The volume of an MP3 or WAV file can be modified to change the sound intensity over a limited range. Although Banner does not promote or publicize any particular audio software, it has been found that Audacity can easily be used to modify existing audio files. Audacity is a free open source audio software, available for download, at the following web address: http://www.audacityteam.org/.
File Size: MP3 files require less memory than WAV files. Converting files to MP3 allows additional files to be stored for playback on the device. Audacity can be used to convert WAV files to MP3 files.

Construction
Audible segments and covers: polycarbonate

Operating Systems
Windows (any version)
Linux
Mac

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

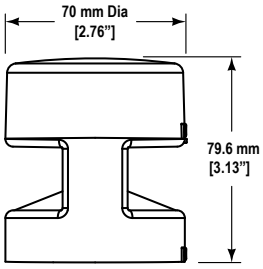
Alarm
Maximum intensity (typical) at 2.5 kHz:
95 dB at 1 meter
Frequency range: 100 Hz to 20 kHz. Continuous tones of 2 kHz and above, may sound distorted due to sampling rate
Sampling rate: 48 kHz
Flash memory: Multiple files (up to 4MB) can be stored in sequential order for playback. Module is able to be re-programmed with new files for playback.
Repeating continuous playback; Restarts if power is removed, then reapplied.
Pre-installed file: 2.5 kHz steady tone
For programming use cable USB-USBM-1 or comparable USB to USB mini cable

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



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