

## MODELS T0516BGM & 510BGM

### T0516BGM BACKGROUND MUSIC HUB 510BGM BACKGROUND MUSIC MODULE

The Model T0516BGM is a hub into which one can connect up to sixteen 510BGM background music modules. Together they make a system for collecting and conditioning various background music sources, such as themed music in a restaurant or shop, or audio for the channel playing on TV monitors in an area. Each 510BGM module may be up to 5000 feet away from the T0516BGM hub. These devices connect via standard Cat-5 cabling over which the module receives its power and the balanced line level audio is returned to the hub. The audio from all the modules is collected into multi-pin plug-in lugless compression-type screw terminal blocks for easy wiring to an audio distribution or power amplifier frame such as the IED T9160 Integrated Power Amplifier Mainframe.

The T0516BGM hub is designed to mount in a 19-inch equipment rack/cabinet, taking up only 1 rack unit (RU) of space or 1.75" of vertical space. The BGM hub has removable rack mounting ears, which may alternately be placed near the bottom of the mainframe for ease in mounting this unit on a wall, such as in a telephone closet, or on the back for rear rail mounting reinforcement. The BGM hub takes an input from a 48 Volt power pack and converts this to the +15 and -15 Volt power needed by the BGM modules.

The IED 510BGM module is designed to go into a single-gang electrical box. The module has both a modular-8 (RJ-45) connector and a standard punchdown block to allow for either type of wiring connection. The BGM module has stereo RCA jacks to take an audio input ranging from -10 to +14 dBu. The module has 18 dB of preamplification to allow for boosting lower level signals up to professional line levels. The module has a volume control that can attenuate the signal as desired. With placement of the modules in tenant spaces using BGM, the volume control gives each background music user control over the BGM level in their area without requiring access to the main equipment room. The BGM module mixes and converts the unbalanced stereo inputs into a balanced line level output to feed into the sound system via the BGM hub.

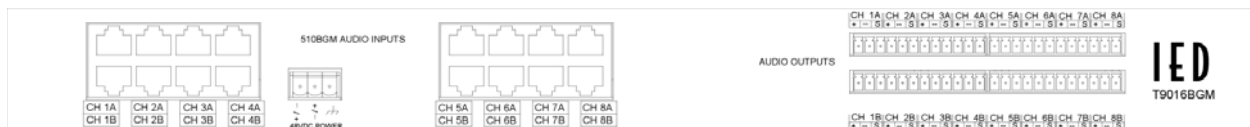


Figure 1 - IED T0516BGM Background Music Hub  
Rear View



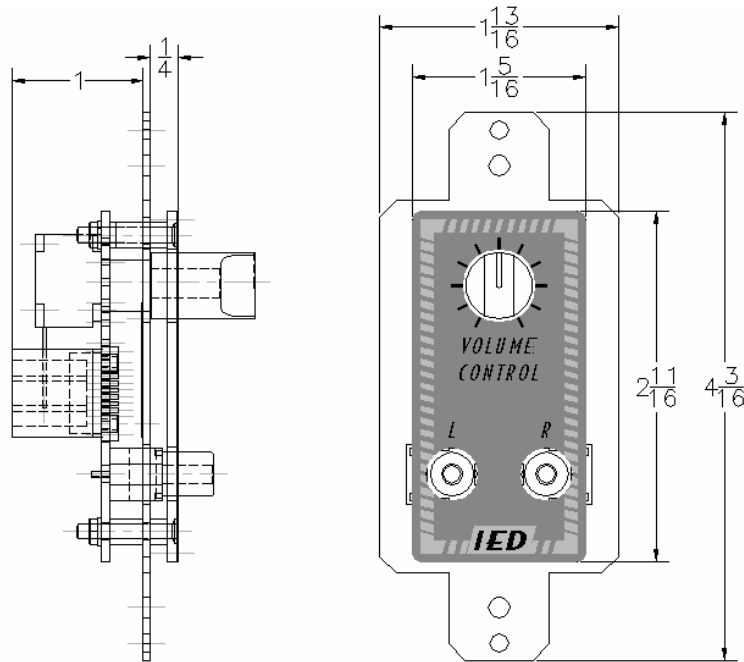


Figure 2 - 510BGM Background Music Module  
 Dimensions in inches



Figure 3 - 510BGM Background Music Module with Plate

*Innovative Electronic Designs, Inc. • 9701 Taylorsville Road • Louisville, Kentucky 40299 • USA  
 Phone: (502) 267-7436 • Fax: (502) 267-9070 • Internet: <http://www.iedaudio.com>*

## SPECIFICATIONS

### T0516BGM CONNECTORS

- |                             |  |
|-----------------------------|--|
| 1. To BGM Modules . . . . . | 16 modular-8 (RJ-45)<br>Power out and audio in         |
| 2. Audio Out . . . . .      | Plug-in lugless compression-type screw terminal blocks |
| 3. 48V Power In . . . . .   | Plug-in lugless compression-type screw terminal block  |

### 510BGM CONNECTORS

- |                                    |                   |
|------------------------------------|-------------------|
| 1. To BGM Hub (option 1) . . . . . | modular-8 (RJ-45) |
| 2. To BGM Hub (option 2) . . . . . | punchdown block   |

### POWER REQUIREMENTS

- |  |     |
|--|-----|
| 1. 48 V (with 16 BGM Modules attached) . . . . . | 4 W |
|--|-----|

### T0516BGM MECHANICAL

- |  |                 |
|--|-----------------|
| 1. Size, overall (with ears)   |                 |
| Width . . . . .  | (48.3 cm) 19"   |
| Height . . . . .   | (4.4 cm) 1.75"  |
| Depth . . . . .  | (43.2 cm) 17"   |
| 2. Mounting Depth (rack depth) . . . . . (43.2 cm) 17"                         |                 |
| For proper routing of connections allow additional 1" (2.5 cm) clearance, min. |                 |
| 3. Weight . . . . .  | (3.18 Kg) 5 lbs |
| 4. Cooling . . . . .   | none required   |
| 5. Mounting Ear Location Options . . . . . 3                                   |                 |
| Front, rear, bottom  |                 |

### 510BGM MECHANICAL

- |  |                       |
|--|-----------------------|
| 1. Size, overall   |                       |
| Width . . . . .  | (4.6 cm) 1.8"         |
| Height . . . . .   | (10.64 cm) 4.2"       |
| Depth . . . . .  | (2.54 cm) 1" Into box |
| If using RJ-45 connector, allow addition depth in box wiring |                       |
| 2. Mounting  |                       |
| Single-gang electrical box with standard Decora style plate  |                       |
| Plate supplied by contractor                                 |                       |

### ENVIRONMENT SPECIFICATIONS, BOTH

- |  |                                    |
|--|------------------------------------|
| 1. Operating Temperature Range . . . . .                               | (0 °C - +50 °C) +32 °F - +122 °F   |
| Applicable for typical voice paging and background music applications. |                                    |
| 2. Storage Temperature Range . . . . .                                 | (-40 °C - +70 °C) -40 °F - +158 °F |



This page left blank intentionally.

*Innovative Electronic Designs, Inc. • 9701 Taylorsville Road • Louisville, Kentucky 40299 • USA  
Phone: (502) 267-7436 • Fax: (502) 267-9070 • Internet: <http://www.iedaudio.com>*