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**MODEL T6400**

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**2-CARD POWER AMPLIFIER MAINFRAME**

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The Model T6400 2-Card Power Amplifier Mainframe is designed to house, supply power to and cool up to two Titan series power amplifier cards. The mainframe is designed to mount in a 19-inch equipment rack/cabinet, taking up only 2 rack units (RUs) of space or 3.5" of vertical space. All cooling is back to front, so no additional vertical space is required in the rack for cooling. The mainframe 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.

There are several models of Titan Series power amplifier card that may be put into the mainframe including single channel or dual channel configurations, and loudspeaker driving options of 4 Ohm, 8 Ohm, 70 Volt distributed and 100 Volt distributed. Each amplifier card is capable of supplying 400 Watts of continuous power to its designed load type, which means there will be either 200 or 400 Watts per channel depending on the amplifier card type. So, a full frame is capable of driving 4 channels of 200 Watts or 800 Watts total.

The mainframe has connections for audio inputs and loudspeakers, as well as status monitoring outputs such as fan speed, amplifier (heatsink) temperature and amplifier status signals. The fan speed and temperature outputs are voltages whose values are proportional to speed or temperature, respectively. The mainframe also has individual input level controls for each of the possible 4 channels. The audio inputs on the back are made via plug-in lugless compression-type screw terminals. Also, the loudspeaker connections are made via larger scale terminals of the same type. The power amp cards slide in from the front and have individual power switches on the front along with power and signal presence LEDs.

Model T6400L is the part number for 120VAC power source, and Model T6400H is the part number for 240VAC power source.





Figure 1 - T6400 Front View  
With ampliifer cards



Figure 2 - T6400 Rear View

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## SPECIFICATIONS

### CAPACITIES

- |   |           |
|---|-----------|
| 1. Maximum Number of Titan series Amplifier Cards . . . . . | 2 Cards   |
| 2. Maximum Number Audio Inputs . . . . .                    | 4 Inputs  |
| 3. Maximum Number of Loudspeaker Outputs . . . . .          | 4 Outputs |

### CONNECTORS

- |  |                    |
|--|--------------------|
| 1. Balanced Audio Inputs . . . . .                                       | 4                  |
| Plug-in lugless compression-type screw terminal blocks                   |                    |
| 2. Loudspeaker Connections . . . . .                                     | 2                  |
| Plug-in lugless compression-type screw terminal blocks                   |                    |
| 3. Status Outputs . . . . .  | 3 per amp card     |
| Fan speed voltage, amplifier temperature voltage, amplifier status logic |                    |
| 4. AC Power Cord   |                    |
| T6400L for 120VAC Operation . . . . .                                    | Belden/Volex 17250 |
| T6400H for 240VAC Operation . . . . .                                    | Belden/Volex 17850 |

### CONTROLS & INDICATORS

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|---|---|
| 1. Level Controls . . . . .                                     | 4 |
| Detented potentiometers ranging from no attenuation to full off |   |
| 2. Amplifier Type LEDs . . . . .                                | 4 |

### AC POWER REQUIREMENTS

- |  |        |
|--|--------|
| 1. No power amplifier cards, quiescent power . . . . .                   | 15 W   |
| 2. 2 power amplifier cards . . . . .                                     | 95 W   |
| quiescent power  |        |
| 3. 2 power amplifier cards . . . . .                                     | 215 W  |
| Full power output, speech/voice announcement input                       |        |
| 4. 2 power amplifier cards, full power output, sine wave input . . . . . | 1023 W |

### MECHANICAL

- |   |                 |
|---|-----------------|
| 1. Size, overall  |                 |
| Width, with ears . . . . .                                      | (48.3 cm) 19"   |
| Height . . . . .  | (8.9 cm) 3.5"   |
| Depth . . . . .   | (43.2 cm) 17"   |
| 2. Mounting Depth (rack depth) . . . . .                        | (44.2 cm) 17.4" |
| For proper fan operation add a minimum of 2" (5.1 cm) clearance |                 |
| 3. Weight   |                 |
| T6400L, no amplifiers . . . . .                                 | (6.35 kg) 14 lb |
| T6400L, with 2 power amplifier cards . . . . .                  | (10 kg) 22 lb   |
| 4. Cooling . . . . .  | 2 fans          |
| One per amplifier   |                 |
| 5. Mounting Ear Location Options . . . . .                      | 3               |
| Front, rear, bottom   |                 |



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**ENVIRONMENTAL SPECIFICATIONS**

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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

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**POWER AMPLIFIER CARD OPTIONS**

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**Note:** *Not all units are in full production as of this writing. Check with IED for availability.*

1. T6472 Dual 200 Watt, 70 Volt Power Amplifier Card
2. T6482 Dual 200 Watt, 8 Ohm Power Amplifier Card
3. T6471 Single 400 Watt, 70 Volt Power Amplifier Card
4. T6481 Single 400 Watt, 8 Ohm Power Amplifier Card
5. T6441 Single 400 Watt, 4 Ohm Power Amplifier Card
6. T6411 Single 400 Watt, 100 Volt Power Amplifier Card

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**SUPPORT EQUIPMENT OPTIONS**

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Below are optional units that may be ordered to work with and extend the capabilities of this mainframe.

1. T0516BGM Background Music Hub

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