



# RAX300 & RAX600

Modular Rack Mount System

 **OPERATION MANUAL**



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## SAFETY PRECAUTIONS

Please read all instructions before attempting to unpack, install or operate this equipment and before connecting the power supply.

Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through any openings or empty slots in the unit, as you may damage parts inside the unit.
- Do not attach the power supply cabling to building surfaces.
- Use only the supplied power supply unit (PSU). Do not use the PSU if it is damaged.
- Do not allow anything to rest on the power cabling or allow any weight to be placed upon it or any person walk on it.
- To protect the unit from overheating, do not block any vents or openings in the unit housing that provide ventilation and allow for sufficient space for air to circulate around the unit.

## REVISION HISTORY

| VERSION NO. | DATE       | SUMMARY OF CHANGE |
|-------------|------------|-------------------|
| v1.00       | 19/03/2018 | First release     |
|             |            |                   |

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## 1. INTRODUCTION

These flexible rack-mounting systems offer the ability to efficiently house up to 15 professional AV products and are available as either a 3U or 6U rack chassis. These storage units are suitable for customers who require the efficient integration and mounting of multiple units into a relatively small rack space along with optional cooling fans and intelligent power control. Each rack chassis is a standard 19 inches wide. The system allows for the optional inclusion of up to 2 power supply units, multiple cooling fan units, and empty trays for mounting non-standard equipment.

## 2. APPLICATIONS

- /// Efficient storage of multiple low-profile audio/video units

## 3. PACKAGE CONTENTS

- /// 1×Rack Chassis (6U or 3U)
- /// 1×Operation Manual

## 4. SYSTEM REQUIREMENTS

- /// 6U rack chassis requires a minimum of 266.7mm (10.5in) contiguous free space in the rack for mounting.
- /// 3U rack chassis requires a minimum of 133.35mm (5.25in) contiguous free space in the rack for mounting.

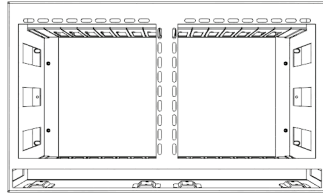
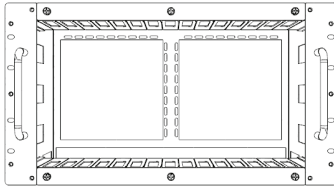
## 5. FEATURES

- /// Rack chassis with 19 inch width designed for installation into standard rack cabinets (6U or 3U height)
- /// A maximum of 15 individual units may be installed in a single chassis
- /// Optional accessories include: Power supply unit, Cooling fan unit, and empty trays for mounting non-standard equipment
- /// Optional cooling fan units can be temperature controlled to automatically turn the fan on or off as needed
- /// Each optional power supply unit provides remote power control and power state monitoring for up to 8 devices plus up to 2 fans

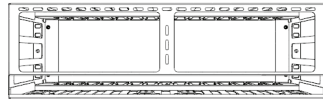
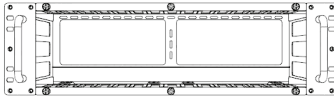
## 6. OPERATION CONTROLS AND FUNCTIONS

### 6.1 Front and Rear Panels

#### 6U Version

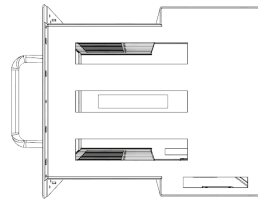
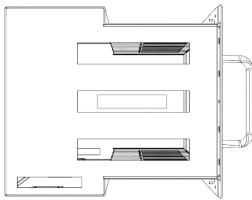


#### 3U Version

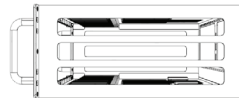


### 6.2 Left and Right Panels

#### 6U Version

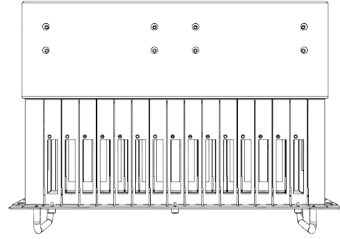
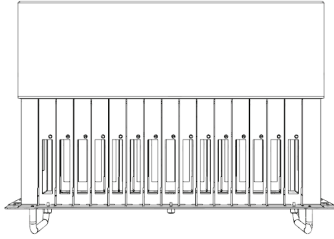


#### 3U Version

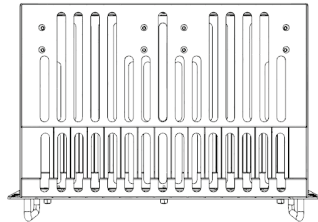
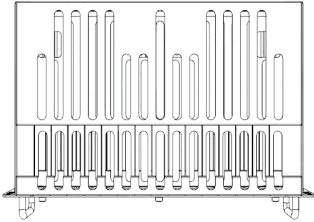


### 6.3 Top and Bottom Panels

#### 6U Version



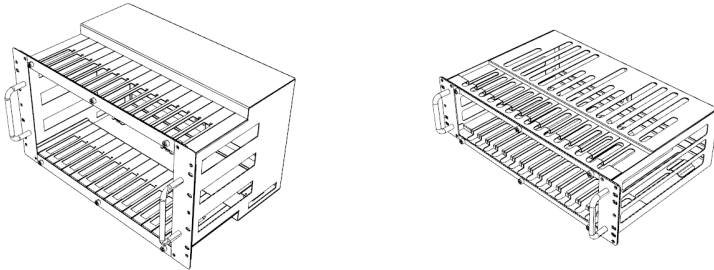
#### 3U Version





## 6.4 Installation Instructions

Each rack chassis is shipped fully assembled. Installation of compatible units, fan trays, and empty trays requires the removal of the 2 front locking panels. Installation of power supply units can be performed without any disassembly, however access to the bottom of the rack chassis is required in order to secure them in place.



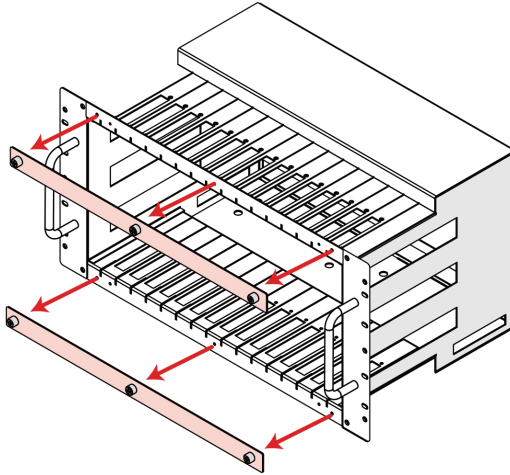
*Note: Though the 6U and 3U chassis are different in size, the installation instructions are identical for both. In the following section, only images of the 6U chassis will be used.*

## 6.4.1 Full-Length Unit/Tray Installation

### STEP 1

Unscrew the 3 thumbscrews holding the top locking panel in place, and remove it. Unscrew the 3 thumbscrews holding the bottom locking panel in place, and remove it.

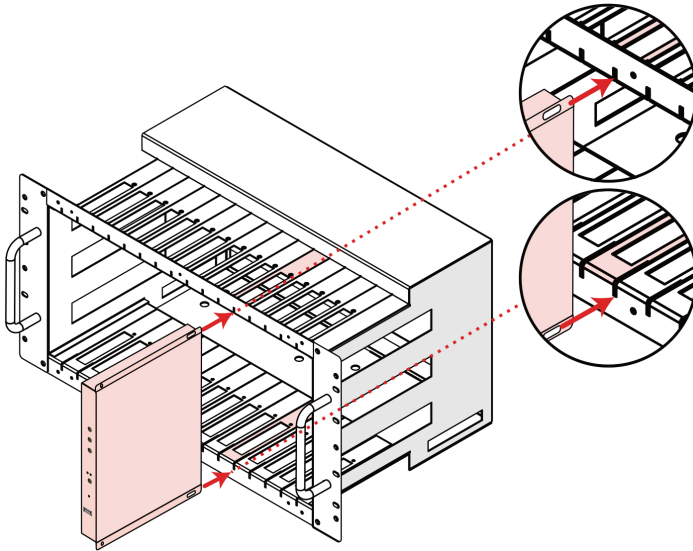
*Note: The thumbscrews are physically connected to the locking panels by a spring mechanism and will not come all the way out.*



### STEP 2

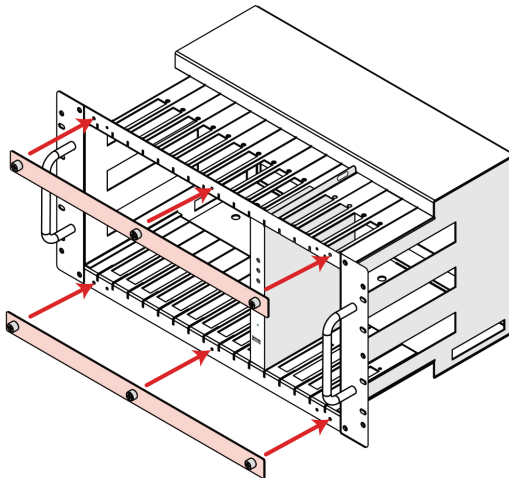
Align and then carefully slide a compatible audio/video unit, Fan Tray or populated Mounting Tray into the top/bottom grooves of a free slot. Repeat this step until all units have been installed.

*Note: If fewer than 15 units are being mounted, and no Fan Trays are being used, it is strongly suggested to leave empty space, or place empty Mounting Trays between units that get particularly warm to improve heat dissipation.*



### STEP 3

Reattach the top and bottom locking panels by screwing in the 3 thumbscrews on each until they are tight and secure.



## 6.4.2 Half-Length Unit/Tray Installation

### STEP 1

Unscrew the 3 thumbscrews holding the top locking panel in place, and remove it. Unscrew the 3 thumbscrews holding the bottom locking panel in place, and remove it.

*Note: The thumbscrews are physically connected to the locking panels by a spring mechanism and will not come all the way out.*

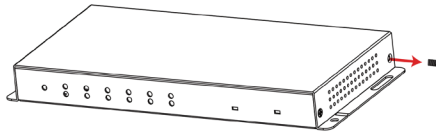
### STEP 2

Align and then carefully slide the half-length audio/video unit into the top/bottom grooves of a free slot.

*Note: Half-length units are designed with a notch to prevent them from sliding all the way to the back of the rack chassis, however some older units may not have this feature. In those cases, please follow Steps 2A, 2B & 2C instead.*

### STEP 2A (Optional)

On the unit to be installed, unscrew the right-rear screw on the unit.



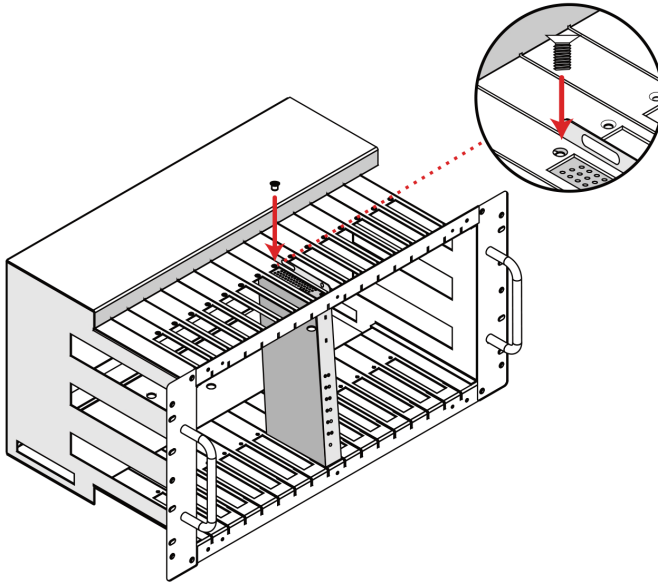
### STEP 2B (Optional)

Align and then carefully slide the half-length audio/video unit into the top/bottom grooves of a free slot, making sure to stop once front of the unit is even with the front of the rack chassis. The empty screw hole on the unit (from STEP 2A) should align with the screw hole on the top of the rack chassis.

### STEP 2C (Optional)

Using the previously removed screw and the aligned screw holes on the top of the rack chassis, attach the chassis to the unit to hold it in place.

*Note: If the screw is not long enough to secure the unit, please contact your authorised vendor to obtain a longer screw.*

**STEP 3**

Reattach the top and bottom locking panels by screwing in the 3 thumbscrews on each until they are tight and secure.

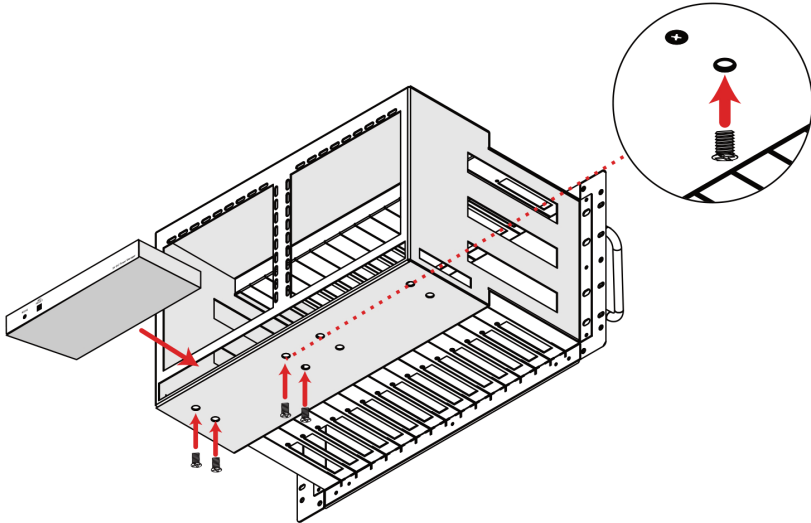
### 6.4.3 Power Supply Unit Installation

#### STEP 1

From the back of the rack chassis, place the Power Supply Unit on top of one set of raised mounting brackets. Make sure that the holes in the mounting brackets align with all 4 of the screw holes on the bottom of the Power Supply Unit.

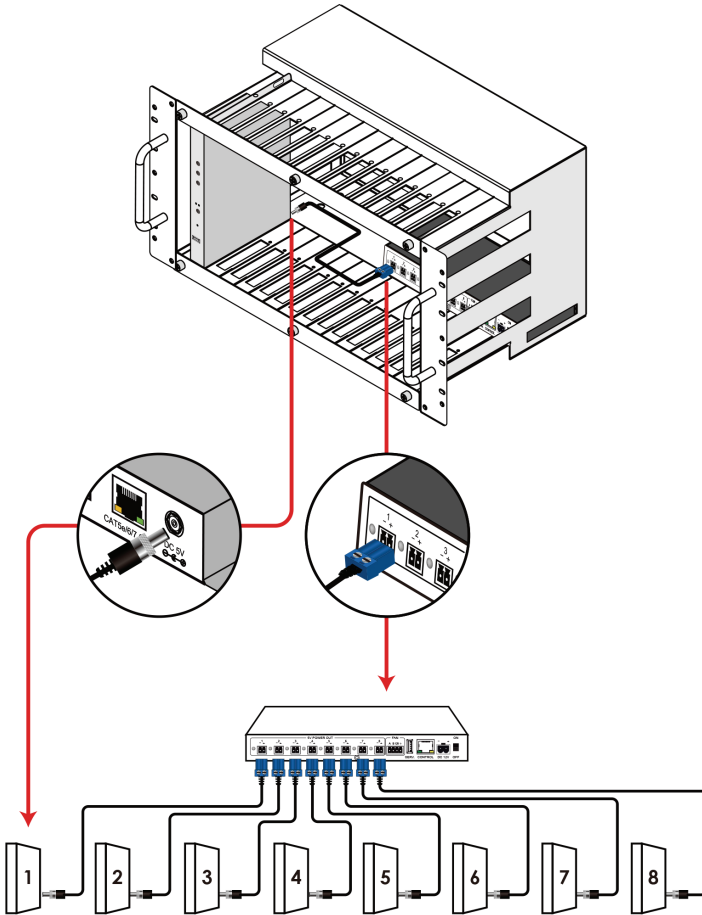
#### STEP 2

From the bottom of the rack chassis, attach the Power Supply Unit to the rack chassis using the 4 screws supplied with the unit.



**STEP 3**

Attach all required power connections between the Power Supply Unit and any installed units, or Fan Trays, as appropriate.



## **7. RACK ACCESSORIES**

### **7.1 Rack Tray**

#### **INTRODUCTION**

These utility trays provide a flexible way to mount non-rackmount or non-standard equipment and accessories within the 3U/6U Rack Chassis. Each shelf contains vent holes designed to allow the free circulation of air around any attached gear and can help lower the overall temperature within the Rack Chassis. The front and back of the standard tray is open to allow for the easy connection of cables and to monitor the device(s).

The Cooling Fan System is a specialised version of the 3U/6U tray design with 3 side covers and a place to mount the cooling fan to provide additional cooling to your installation.

#### **FEATURES**

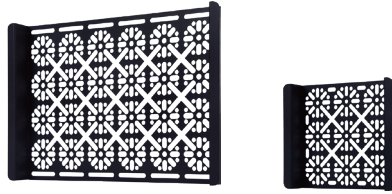
- Mounting holes are arranged in a flexible pattern allowing for easy installation using screws

- Vented shelf design improves airflow in the Rack Chassis

- Save space by placing non-rackmount equipment into your rack



## SPECIFICATIONS



| 6U Mounting Tray  |  |
|-------------------|--|
| <b>Dimensions</b> | 231.5mm×25mm×158mm (W×H×D) [Case Only]<br>231.5mm×25mm×158mm (W×H×D) [All Inclusive] |
| <b>Weight</b>     | 236g   |

| 3U Mounting Tray  |  |
|-------------------|--|
| <b>Dimensions</b> | 108mm×25mm×110mm (W×H×D) [Case Only]<br>108mm×25mm×110mm (W×H×D) [All Inclusive] |
| <b>Weight</b>     | 118g   |



| 6U Cooling Fan System |  |
|-----------------------|--|
| <b>Dimensions</b>     | 231.5mm×25mm×158mm (W×H×D) [Case Only]<br>231.5mm×25mm×158mm (W×H×D) [All Inclusive] |
| <b>Weight</b>         | 339g   |

| 6U Cooling Fan System |  |
|-----------------------|--|
| <b>Dimensions</b>     | 108mm×25mm×110mm (W×H×D) [Case Only]<br>108mm×25mm×110mm (W×H×D) [All Inclusive] |
| <b>Weight</b>         | 209g   |

## 7.2 Single Power Supply

### INTRODUCTION

This unit is a 48V DC power splitter which can distribute up to 3.12 amps of 48 volt power to up to eight connected devices via 2-pin terminal block connections (135 watts total across all 8 outputs). An integrated, battery backed-up, clock allows for detailed power scheduling based on a repeating daily/weekly schedule, or single events.

Up to 2 fans may be connected and their speed can be either automatically controlled based on a detected temperature, or set to a single static speed. Detailed status information about the power input, each power output, current fan speed, and system temperature is provided to give a comprehensive system overview. Ideal for professional applications, this unit provides direct per-port power control via WebGUI, Telnet or RS-232.

### FEATURES

- Power management system providing voltage-controlled current (48V) on each output

- Integrated, battery backed-up, clock allows for detailed power scheduling based on a repeating daily/weekly schedule, or single events

- Integrated WebGUI for control and power analysis

- PC software application can collect data of voltage/current variation over time, through RS-232 protocol, and create a history table and chart

- Supports 8 power output ports with professional 2-pin 3.5mm terminal block connectors

## SPECIFICATIONS



| <b>8-Port 48V DC Power Manager</b> |  |
|------------------------------------|--|
| <b>Output Ports</b>                | 8×48V DC Power [2-pin Terminal Block]<br>2×12V DC Power [5-pin Terminal Block]       |
| <b>Control Port</b>                | 1×RS-232 [3.5mm]<br>1×IP Control [RJ45]  |
| <b>Power Supply</b>                | 48V/3.12A  |
| <b>Dimensions</b>                  | 211.5mm×25mm×108mm (W×H×D) [Case Only]<br>211.5mm×25mm×110mm (W×H×D) [All Inclusive] |
| <b>Weight</b>                      | 284g   |

## INTRODUCTION

This unit is a 5V DC power splitter which can distribute up to 3 amps of 5 volt power to up to eight connected devices via 2-pin terminal block connections (120 watts total across all 8 outputs). Ideal for professional applications, this unit provides direct per-port power control via WebGUI, Telnet or RS-232. An integrated, battery backed-up, clock allows for detailed power scheduling based on a repeating daily/weekly schedule, or single events.

Up to 2 fans may be connected and their speed can be either automatically controlled based on a detected temperature, or set to a single static speed. Detailed status information about the power input, each power output, current fan speed, and system temperature is provided to give a comprehensive system overview.

## FEATURES

- Power management system providing voltage-controlled current (5V) on each output

- Battery backed up clock for scheduling power events

- Integrated WebGUI for control and power analysis

- Unit's overall maximum power consumption is only 140 watts

- Supports 8 power output ports with professional 2-pin 3.5mm terminal block connectors

## SPECIFICATIONS



| <b>8-Port 5V DC Power Manager</b> |  |
|-----------------------------------|--|
| <b>Output Ports</b>               | 8×5V DC Power [2-pin Terminal Block]<br>2×12V DC Power [5-pin Terminal Block]        |
| <b>Control Port</b>               | 1×RS-232 [3.5mm]<br>1×IP Control [RJ45]  |
| <b>Power Supply</b>               | 12V/12.5A  |
| <b>Dimensions</b>                 | 211.5mm×25mm×108mm (W×H×D) [Case Only]<br>211.5mm×25mm×110mm (W×H×D) [All Inclusive] |
| <b>Weight</b>                     | 372g   |

## 8. SPECIFICATIONS

### 8.1 6U Rack Technical Specifications

|                          |  |
|--------------------------|--|
| <b>Dimensions</b>        | 483mm×264mm×300mm (W×H×D)<br>[Case Only]<br>483mm×264mm×349mm (W×H×D)<br>[All Inclusive] |
| <b>Weight</b>            | 6,200g   |
| <b>Chassis Material</b>  | Metal  |
| <b>Silkscreen Colour</b> | Black  |

### 8.2 3U Rack Technical Specifications

|                          |  |
|--------------------------|--|
| <b>Dimensions</b>        | 483mm×132mm×300mm (W×H×D)<br>[Case Only]<br>483mm×132mm×339mm (W×H×D)<br>[All Inclusive] |
| <b>Weight</b>            | 4,000g   |
| <b>Chassis Material</b>  | Metal  |
| <b>Silkscreen Colour</b> | Black  |





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