

MANUAL PART NUMBER: 400-0088-001 PRODUCT REVISION: 0

# PS5581SM

# SYSTEM POWER SUPPLY WITH 12 VDC OUTPUTS USER'S GUIDE





# **POWER SUPPLY**

### INTRODUCTION

Altinex appreciates your purchase of the **PS5581SM** Power Supply. We are sure you will find it a reliable and useful product.

Superior performance for the right price backed by solid technical and customer support is what we have to offer.

The product you are holding in your hands is designed using state-of-the-art technology and is superior to anything available on the market. You will find this and our other products reliable, long lasting, and simple to operate.

We are committed to providing our customers with solutions to the most demanding audio-visual installations at very competitive pricing.

We appreciate your selection of our products and are confident that you will join the ranks of our many satisfied customers throughout the world.

# This manual covers:

**PS5581SM** – System Power Supply with 12 VDC outputs

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# PRECAUTIONS / SAFETY WARNINGS 1

Please read this manual carefully before using your **PS5581SM**. Keep this manual handy for future reference. These safety instructions are to ensure the long life of your **PS5581SM** and to prevent fire and shock hazard. Please read them carefully and heed all warnings.

#### 1.1 GENERAL

- Unauthorized personnel shall not open the unit since there are high-voltage components inside.
- Qualified Altinex service personnel, or their authorized representatives must perform all service.

# 1.2 SAFETY GUIDELINES FOR THE RACK-MOUNTING OF THE PS5581SM

- Maximum operating ambient temperature is 35 (degrees C).
- Never restrict the air flow through the devices' fan or vents.
- When installing equipment into a rack, distribute the units evenly. Otherwise, hazardous conditions may be created by an uneven weight distribution.
- Connect the unit to a properly rated supply circuit.
- Reliable Earthing (Grounding) of Rack-Mounted Equipment should be maintained.

## 1.3 INSTALLATION

- For best results, place the PS5581SM on a flat, level surface in a dry area away from dust and moisture.
- To prevent fire or shock, do not expose this unit to rain or moisture. Do not place the PS5581SM in direct sunlight, near heaters or heat radiating appliances, or near any liquid. Exposure to direct sunlight, smoke, or steam can harm internal components.
- Handle the **PS5581SM** carefully. Dropping or jarring can damage internal components.

- Do not place heavy objects on top of the PS5581SM. If the PS5581SM is to be mounted to a table or wall, use only Altinex made mounting accessories, such as the mount mini-brackets DA1294FC or DA1293FC.
- To turn off the main power, be sure to remove the cord from the power outlet. The power outlet socket should be installed as near to the equipment as possible, and should be easily accessible.
- Do not pull the power cord or any cable that is attached to the PS5581SM.
- If the **PS5581SM** is not used for an extended period, disconnect it from the power outlet.

# 1.4 CLEANING

 Unplug the PS5581SM power cord before cleaning. Clean surfaces with a dry cloth. Never use strong detergents or solvents, such as alcohol or thinner. Do not use a wet cloth or water to clean the unit.

# 1.5 FCC / CE NOTICE

- This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
- This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant, to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may harmful interference cause to communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.



 Any changes or modifications to the unit not expressly approved by Altinex, Inc. could void the user's authority to operate the equipment.

# ABOUT YOUR POWER SUPPLY

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The **PS5581SM** is a general purpose power supply (or adapter) designed for products that operate on low voltage DC power.

It is ideal for use with the **VA6854WM** and the **VA6875WM** Wall/Furniture Mount Interfaces, providing the ability to power up to 25 units simultaneously.

It may also be used to power other ALTINEX products, such as most of the compact DA1900 series interfaces, distribution amplifiers, and switchers. Since most of these products are shipped with a wall-wart type power supply, the use of a **PS5581SM** would be an alternative solution. For example, it can be used in applications with limited space or with limited power outlets where the product is installed.

The **PS5581SM** uses a continuous 100-240V AC power input and provides 12V, 4.0 Amps (45 watts) on its output.

To simplify the installation process, the output is available on a series of five 5-pin terminal block connectors. These terminal block connectors use solder-free screw-down contacts. Each terminal block offers two grounds and three 12V 250mA outputs. All grounds are common to one another. Outputs can be paralleled to increase the available current, though they should not exceed 4.0 Amps.

The **PS5581SM** is 1U high, ½ rack wide and may be installed in a rack or under a table using optional hardware.

# **TECHNICAL SPECIFICATIONS**

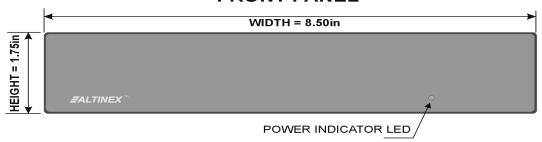
FEATURES/DESCRIPTION	PS5581SM	
Input	100-240V, 50-60Hz, 1A	
Input Connector	Universal IEC Power	
	Connector	
Line Regulation	±0.1%	
Output	12V DC, 4.0 Amp	
	capacity	
Output Connector	Five 5-pin terminal	
	block connectors	
Load Regulation	±1%	
Ripple	1% p-p	
Noise	1% p-p	
Hold up time	16m sec	
Over-current/Short Circuit	Auto-recovery	
Power Consumption	45 watts max when fully	
	loaded	
Enclosure	2	
Material	0.1" Aluminum	
Finish	Gray	
Front/Back Panel	Lexan	
Height (inches)	1.75in	
Width (inches)	8.50in	
Depth (inches)	4.93in	
Weight (pounds)	2.0lbs	
Ship Weight (pounds)	4.0lbs	
T° Operating	0°C – 40°C	
T° Maximum Operating	50°C	
T° Storage	-30°C – 75°C	
Humidity	90% non-condensing	
MTBF (calculations)	40,000 hrs	
Included		
PS5581SM	System Power Supply	
Manual	X	
Power Cord	PC5302US	



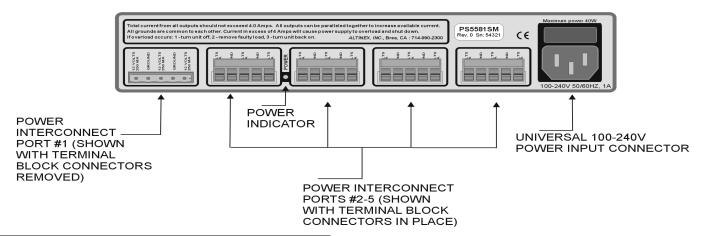
# **POWER SUPPLY**

# DESCRIPTION OF PS5581SM 4

# **FRONT PANEL**

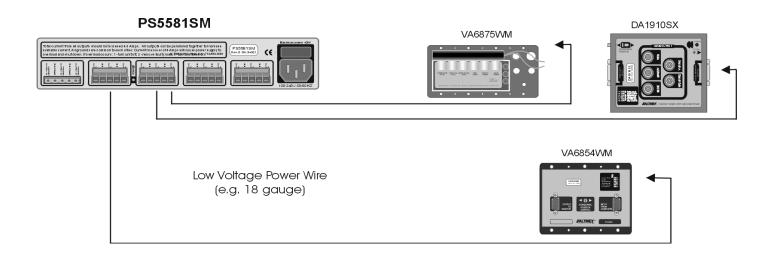


# **BACK PANEL**



# APPLICATION DIAGRAM

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# INSTALLING YOUR POWER SUPPLY

**Step 1.** Attach the **PS5581SM** to the rack with the accessories (**DA1294FC** or **DA1293FC**) which are available through ALTINEX.

Step 2. Attach the output cables to the five 5-position terminal block connectors. Make sure that you do not short any +12V pin to Ground pin. Connect +12V output that draws a maximum of 250mA per each port.

Note: Do not overload any of the outputs.

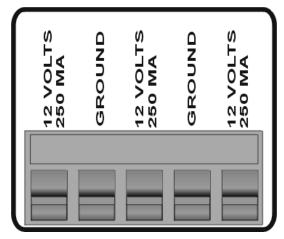


Diagram 1: 5-pin terminal block connector

- **Step 3.** Plug in the AC power cord into the power input connector.
- **Step 4.** Make sure that the power indicator light is on. This indicates that the unit is working properly.

# **CONGRATULATIONS! YOU ARE DONE.**

If you experience any problems, please call 1-800-258-4623 or 1-714-990-2300 for international calls.

# **OPERATION**

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- As long as the power is plugged in, the unit should operate successfully.
- Do not short or overload any outputs.
- Do not interrupt the AC power input, otherwise there will be an interruption in the output.
- There are no switches or controls provided so no adjustments are necessary for the operation of the PS5581SM.

# **ACCESSORIES**

Model No.	Description	
DA1294FC	Rack ears for single unit	
DA1293FC	Rack shelf for two units side-by-side	



# TROUBLESHOOTING GUIDE

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- Make sure that the power cord is attached and the correct voltage setting is shown on the fuse.
- Remove the output connectors one by one to isolate the output being sorted, or overloaded.
- If a problem arises after continuous usage at higher voltage, higher temperature, higher humidity, or at other extreme environmental conditions, please correct the problem.

# **ALTINEX POLICY**

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#### 10.1 LIMITED WARRANTY

Altinex warrants that its products and cables are free from defects in materials under normal use and service. This warranty is limited to repairing at company's factory any part or parts of the product, which upon company's examination shall disclose to be, thus defective. Products considered defective should be returned to company with transportation charges pre-paid within 2 years or (90 days for cables) from date of shipment to the purchaser. The warranty is expressly instead of all other warranties expressed or implied. Altinex neither assumes nor authorizes any other person to assume for it any other liability in connection with the sale of the products. This warranty shall not apply to any product that shall have been repaired or altered outside of company's factory in any way so as, in its judgment, to affect its stability or reliability, or that has been subject to misuse, negligence or accident.

# 10.2 RETURN POLICY

It is very important to Altinex that you receive the products that you have ordered and that this product fulfills your need. In the unlikely event, that an Altinex product needs to be returned please follow the policies below:

Altinex will accept product returns for a period of 30 days from authorized Altinex dealers. Products should be returned in an unopened package.

If a product has been opened, the restocking fees will apply. For the restocking fee amount, please contact an Altinex Sales Representative.

If the product is in your possession for more than 30 days, the restocking fees will apply.

Altinex will not accept any returns on cables or custom products.

If your product is in warranty and needs service, contact the Altinex Sales Department for an RMA (Return Material Authorization). Products returned without an RMA number may experience a delay in service.

If your product is out of warranty and needs service, contact the Altinex Sales Department for an RMA (Return Material Authorization). Products returned without an RMA number may experience a delay in service. The service charges will be quoted to you before the actual repairs are done.

#### 10.3 CONTACT INFORMATION

# **Sales Department**

Phone: 714-990-2300 Fax: 714-990-3303

# **Accounting Department**

Phone: 714-990-6088 Fax: 714-990-5778



