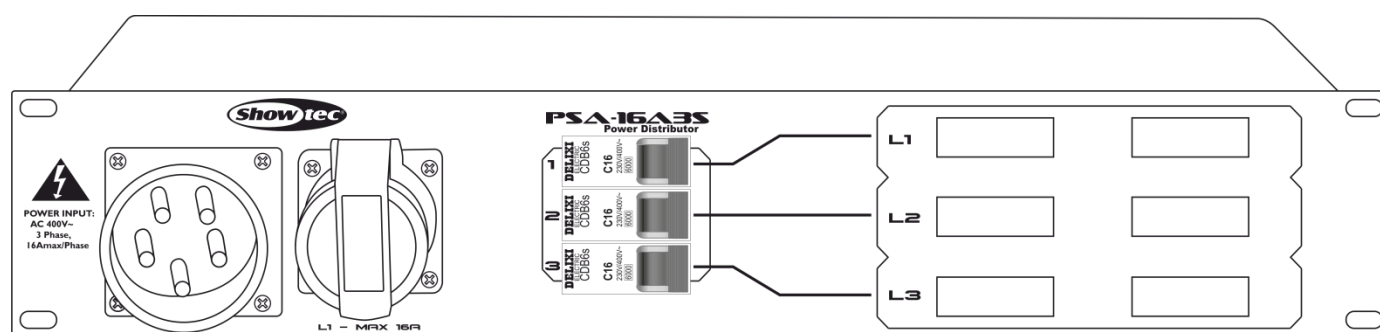




# MANUAL



ENGLISH

## PSA-16A3S

## V1

Ordercode: 50661

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## Warning



**For your own safety, please read this user manual carefully  
before your initial start-up!**

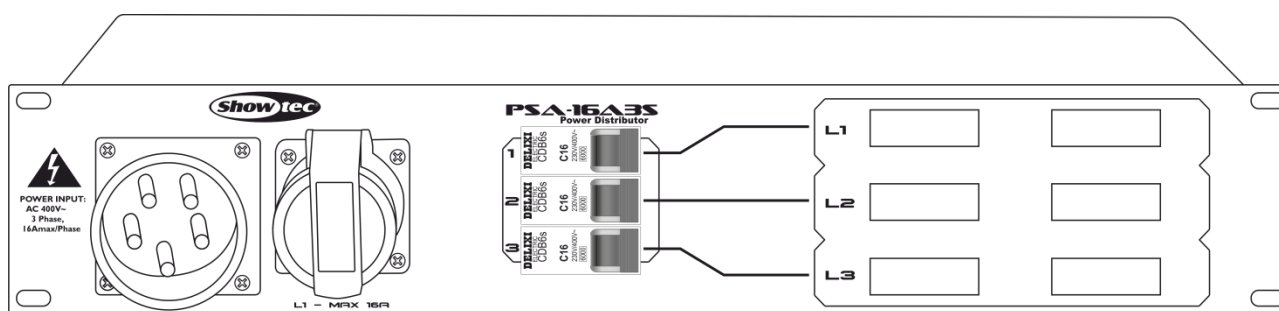


## Unpacking Instructions

Immediately upon receiving this product, carefully unpack the carton and check the contents to ensure that all parts are present, and have been received in good condition. Notify the dealer immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

### Your shipment includes:

- Showtec PSA-16A3S
- User manual



### CAUTION!

**Keep this device away from rain and moisture!  
Unplug mains lead before opening the housing!**



## Safety Instructions

Every person involved with the installation, operation and maintenance of this device has to:

- be qualified
- follow the instructions of this manual



**CAUTION! Be careful with your operations.  
With a dangerous voltage you can suffer  
a dangerous electric shock when touching the wires!**



Before your initial start-up, please make sure that there is no damage caused by transportation. Should there be any, consult your dealer and do not use the device.

To maintain perfect condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this manual.

Please consider that damages caused by manual modifications to the device are not subject to warranty.

This device contains no user-serviceable parts. Refer servicing to qualified technicians only.

**IMPORTANT!**

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the device.

- Never let the power cord come into contact with other cables! Handle the power cord and all connections with the mains with particular caution!
- Never remove warning or informative labels from the unit.
- Do not open the device and do not modify the device.
- Never use anything to cover the ground contact.
- Never leave any cables lying around.
- Never use the device during thunderstorms, unplug the device immediately.
- Do not connect this device to a dimmerpack.
- Do not switch the device on and off in short intervals, as this would reduce the device's life.
- Do not shake the device. Avoid brute force when installing or operating the device.
- Only use device indoors, avoid contact with water or other liquids.
- Only operate the fixture after having checked if the housing is firmly closed and all screws are tightly fastened.
- Only operate the device after having familiarized with its functions.
- Avoid flames and do not put close to flammable liquids or gases.
- Always keep case closed while operating.
- Always disconnect power from the mains, when device is not used or before cleaning! Only handle the power cord by the plug. Never pull out the plug by tugging the power cord.
- Make sure that the device is not exposed to extreme heat, moisture or dust.
- Make sure that the available voltage is not higher than stated on the rear panel.
- Make sure that the power cord is never crimped or damaged. Check the device and the power cord from time to time.
- The cable insert or the female part in the device must never be strained. There must always be sufficient cable to the device. Otherwise, the cable may be damaged which may lead to deadly electrical shocks.
- If the device is dropped or struck, disconnect mains power supply immediately. Have a qualified engineer inspect for safety before operating.
- If the device has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.
- If your Showtec device fails to work properly, discontinue use immediately. Pack the unit securely (preferably in the original packing material), and return it to your Showtec dealer for service.
- For adult use only. Device must be installed out of the reach of children. Never leave the unit running unattended.
- The user is responsible for correct positioning and operating of the Showtec PSA-16A3S. The manufacturer will not accept liability for damages caused by the misuse or incorrect installation of this device.
- This device falls under protection class I. Therefore it is essential to connect the yellow/green conductor to earth.
- Repairs, servicing and electric connection must be carried out by a qualified technician.
- WARRANTY: Till one year after date of purchase.


**Operating Determinations**

- This device is not designed for permanent operation. Consistent operation breaks will ensure that the device will serve you for a long time without defects.
- The maximum ambient temperature  $t_a = 35^\circ\text{C}$  must never be exceeded.
- The relative humidity must not exceed 50 % with an ambient temperature of  $35^\circ\text{C}$ .
- If this device is operated in any other way, than the one described in this manual, the product may suffer damages and the warranty becomes void.
- Any other operation may lead to dangers like short-circuit, burns, electric shock, crash etc.

*You endanger your own safety and the safety of others!*

**Connection with the Three Phase Power Network**

Connect the device to the 3-phase Power Socket with a CEE-form power-plug.  
Always make sure that the right color cable is connected to the right place.

International	EU Cable	UK Cable	US Cable	Pin
L1	BROWN	RED	BLACK	PHASE 1
L2	BLACK	YELLOW	RED	PHASE 2
L3	GREY	BLUE	BLUE	PHASE 3
N	BLUE	BLACK	WHITE	NEUTRAL
	YELLOW/GREEN	GREEN	GREEN	PROTECTIVE GROUND

*Make sure that the device is always connected properly to the earth!*

*Improper installation can cause serious injuries to people and/or damage of property !*



### **Return Procedure**



Returned merchandise must be sent prepaid and in the original packing, call tags will not be issued. Package must be clearly labeled with a Return Authorization Number (RMA number). Products returned without an RMA number will be refused. Highlite will not accept the returned goods or any responsibility. Call Highlite 0031-455667723 or mail [aftersales@highlite.nl](mailto:aftersales@highlite.nl) and request an RMA prior to shipping the fixture. Be prepared to provide the model number, serial number and a brief description of the cause for the return. Be sure to properly pack fixture, any shipping damage resulting from inadequate packaging is the customer's responsibility. Highlite reserves the right to use its own discretion to repair or replace product(s). As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

**Note: If you are given an RMA number, please include the following information on a piece of paper inside the box:**

- 01) Your name
- 02) Your address
- 03) Your phone number
- 04) A brief description of the symptoms

### **Claims**

The client has the obligation to check the delivered goods immediately upon delivery for any shortcomings and/or visible defects, or perform this check after our announcement that the goods are at their disposal. Damage incurred in shipping is the responsibility of the shipper; therefore the damage must be reported to the carrier upon receipt of merchandise.

It is the customer's responsibility to notify and submit claims with the shipper in the event that a fixture is damaged due to shipping. Transportation damage has to be reported to us within one day after receipt of the delivery.

Any return shipment has to be made post-paid at all times. Return shipments must be accompanied with a letter defining the reason for return shipment. Non-prepaid return shipments will be refused, unless otherwise agreed in writing.

Complaints against us must be made known in writing or by fax within 10 working days after receipt of the invoice. After this period complaints will not be handled anymore.

Complaints will only then be considered if the client has so far complied with all parts of the agreement, regardless of the agreement of which the obligation is resulting.

## Description of the device

### Features

The Showtec PSA-16A3S is a power distributor providing real-time voltage and amperage information during your show.

- Input: 1 x CEE male 3P+N+PE, 400V AC, 50/60Hz
- 1 x 16A Schuko output (on the front panel)
- 6 x 16A Schuko output, 2 per phase (on the rear panel)
- 3 x 1-pin 16A, C-Type circuit breaker (MCB)
- Rated current: 16A
- Tripping curve: C-type
- Poles: 1P
- Breaking capacity: 6kA
- Road suited housing and components
- Digital voltage & amperage monitoring per phase
- Housing: Powder-coated metal
- Color: Dark grey
- Dimensions: 482 x 211 x 88 mm (LxWxH)  
19 inch x 2HE (LxH)
- Weight: 4,9 kg

### Frontside

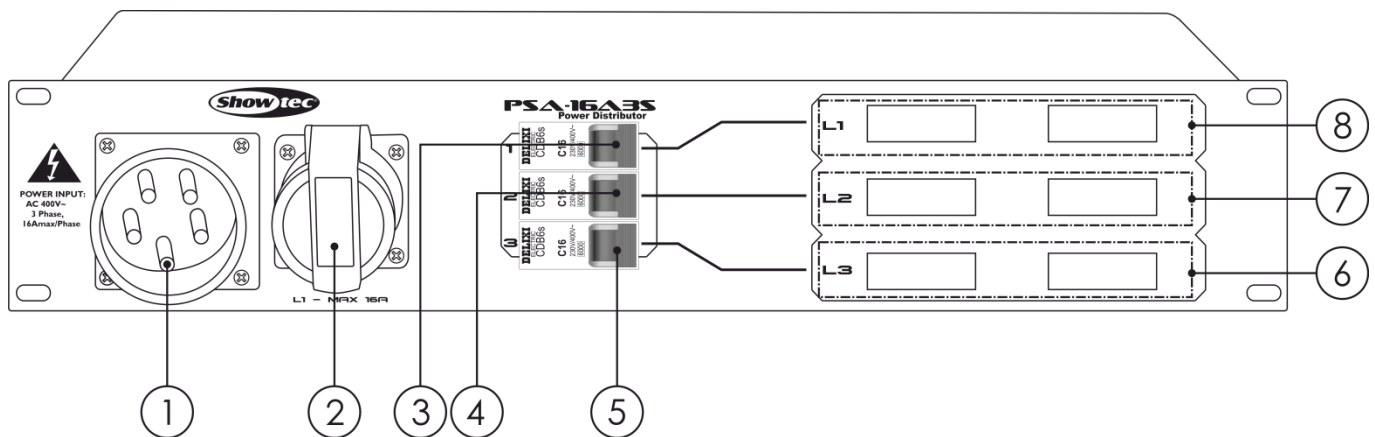


Fig.01

#### 01) CEE power input

Connect to the three phase mains. Make sure that the total load connected to the PSA-16A3S does not exceed 16A per phase. The CEE input should be connected to the power source which is equipped with its own RCCB protection.

#### 02) 16A Schuko output

Single-phase Schuko output with a maximum load of 16A per socket, connected to L1 phase. Total load for all sockets together should not exceed 16A per phase.

#### 03) L1 Main Circuit Breaker (MCB)

This circuit breaker will cut off the power supply if the load current per phase exceeds 16A.

#### 04) L2 Main Circuit Breaker (MCB)

This circuit breaker will cut off the power supply if the load current per phase exceeds 16A.

#### 05) L3 Main Circuit Breaker (MCB)

This circuit breaker will cut off the power supply if the load current per phase exceeds 16A.

#### 06) L3 voltage & amperage LED display

#### 07) L2 voltage & amperage LED display

#### 08) L1 voltage & amperage LED display

## Backside

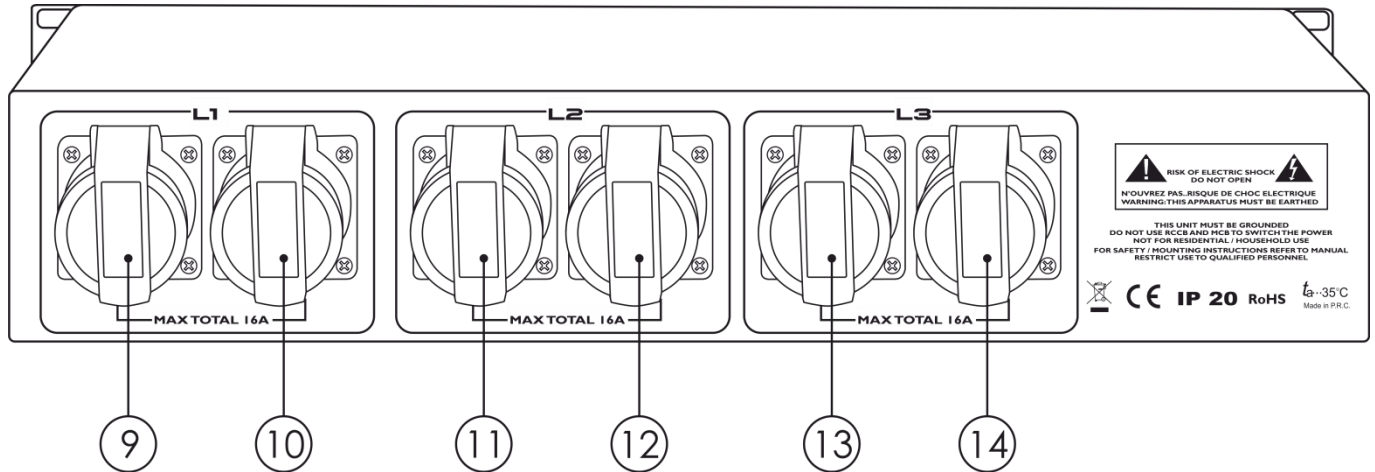


Fig. 02

### 09) Schuko L1 Output

Schuko socket. Maximum load 1x 16A per socket. Total load for all sockets **together** on L1 (2 sockets **(09+10)** on the backside and 1 socket **(02)** on the frontside) should not exceed 16A per phase.

### 10) Schuko L1 Output

Schuko socket. Maximum load 1x 16A per socket. Total load for all sockets **together** on L1 (2 sockets **(09+10)** on the backside and 1 socket **(02)** on the frontside) should not exceed 16A per phase.

### 11) Schuko L2 Output

Schuko socket. Maximum load 1x 16A per socket. Total load for both sockets on L2 **together** should not exceed 16A per phase.

### 12) Schuko L2 Output

Schuko socket. Maximum load 1x 16A per socket. Total load for both sockets on L2 **together** should not exceed 16A per phase.

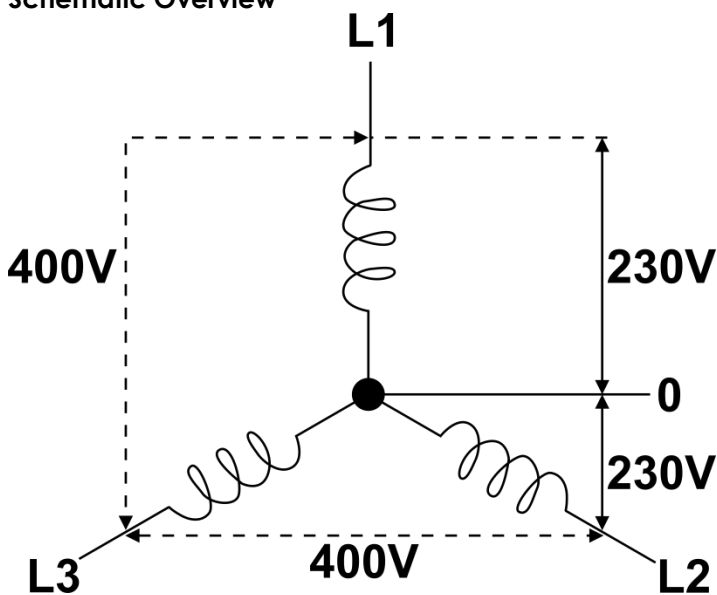
### 13) Schuko L3 Output

Schuko socket. Maximum load 1x 16A per socket. Total load for both sockets on L3 **together** should not exceed 16A per phase.

### 14) Schuko L3 Output

Schuko socket. Maximum load 1x 16A per socket. Total load for both sockets on L3 **together** should not exceed 16A per phase.

## Schematic Overview





## Installation

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Remove all packing materials from the PSA-16A3S. Check if all foam and plastic padding is removed. Screw the equipment into a 19-inch rack. Connect all cables.

**Always disconnect from electric mains power supply before cleaning or servicing.**  
**Damages caused by non-observance are not subject to warranty.**

## Set Up and Operation

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- When mounting the Showtec PSA-16A3S in a rack, make sure that air flow is not obstructed.
- Always check the mains voltage before connecting the unit.
- Do not use the main MCBs to switch power on outputs. Toggle the units only when the system is in idle state.
- Switch MCBs to ON position only once all the devices have been connected to the outputs.



**Before switching the device on, make sure that the power source is equipped with its own RCCB protection system.**



## Maintenance

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The operator has to make sure that safety-related and machine-technical installations are to be inspected by an expert after every year in the course of an acceptance test.  
The operator has to make sure that safety-related and machine-technical installations are to be inspected by a skilled person once a year.

**We strongly advise you to let a qualified technician give the unit a maintenance check twice a year.**

The following points have to be considered during the inspection:

- 01) All screws used for installing the device or parts of the device have to be tightly connected and must not be corroded.
- 02) There may not be any deformations on housings, fixations and installation spots.
- 03) The electric power supply cables must not show any damages or material fatigue.

The Showtec PSA-16A3S requires almost no maintenance. However, you should keep the unit clean.

- 01) Disconnect the mains power supply, and then wipe the cover with a damp cloth. Do not immerse in liquid. Do not use alcohol or solvents.
- 02) Please clean internal components twice a year with a light brush and vacuum cleaner.
- 03) Keep connections clean. Disconnect electric power, and then wipe the connections with a damp cloth. Make sure connections are thoroughly dry before linking equipment or supplying electric power.
- 04) Check and tighten all screws, especially the screw terminals.
- 05) The electric power supply cables must not show any damages or material fatigue.

## Troubleshooting

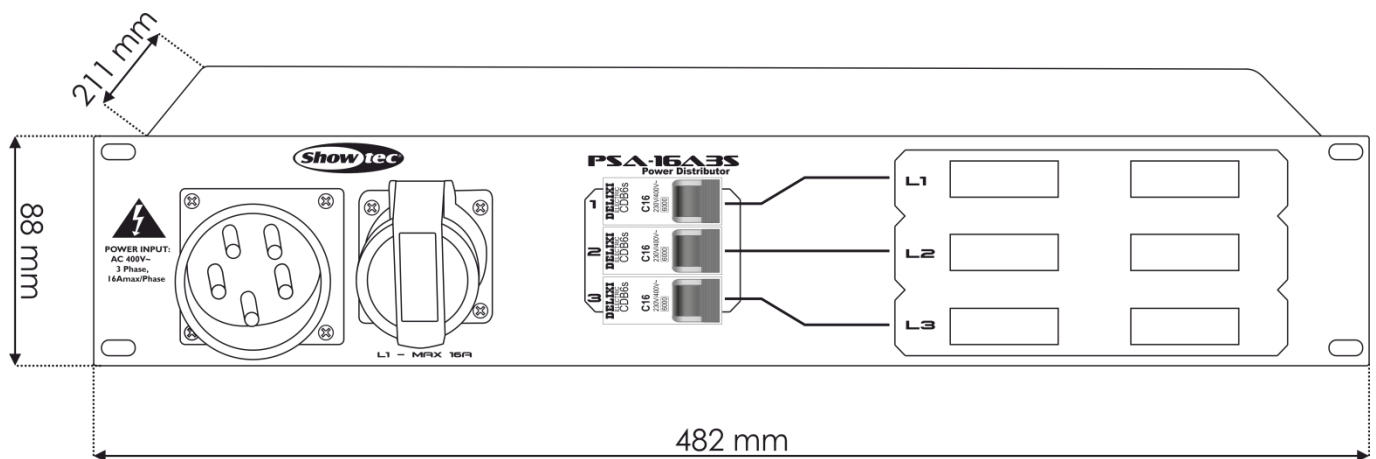
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This troubleshooting guide is meant to help solve simple problems. If a problem occurs, carry out the steps below in sequence until a solution is found. Once the unit operates properly, do not carry out the following steps.

- 01) If the device does not operate properly, unplug the device.
- 02) Check power from the wall and all cables.
- 03) Plug the unit in again.
- 04) If nothing happens after 30 seconds, unplug the device.
- 05) Return the device to your Showtec dealer.

## Product Specification

Model:	Showtec PSA-16A3S
Max. power input:	16A/Phase
Dimensions:	482 x 211 x 88 mm (LxWxH) 19 inch x 2HE (LxH)
Weight:	4,9 kg
<b>Operation</b>	
Input:	1 x CEE male 3P+N+PE, 400V AC, 50/60Hz
Front output:	1 x 16A Schuko socket
Rear output:	6 x Schuko 1P+N+PE, 230V AC, 50/60Hz
Circuit breaker:	3 x 1-pin 16A, C-Type
<b>Electro-mechanical effects</b>	
IP rating:	IP20
Housing:	Powder-coated metal
Rated current:	16A
Breaking capacity:	6kA
Color:	Dark grey
Voltage and amperage indication:	LED display
Cooling:	Convection
Max. ambient temperature $t_a$ :	-5°C - 35°C
Max. housing temperature $t_B$ :	80°C
<b>Minimum distance:</b>	
Minimum distance from flammable surfaces:	0,5 m



Design and product specifications are subject to change without prior notice.



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