



# PSA-3212S

ORDERCODE 50613



**SHOWELECTRONICS FOR PROFESSIONALS**

## **Congratulations!**

You have bought a great, innovative product from Showtec.

The Showtec PSA-3212S brings excitement to any venue. Whether you want simple plug-&-play action or a sophisticated DMX show, this product provides the effect you need.

You can rely on Showtec, for more excellent lighting products.

We design and manufacture professional light equipment for the entertainment industry.

New products are being launched regularly. We work hard to keep you, our customer, satisfied.

For more information: [iwant@showtec.info](mailto:iwant@showtec.info)

You can get some of the best quality, best priced products on the market from Showtec.

So next time, turn to Showtec for more great lighting equipment.

Always get the best -- with Showtec !

Thank you!



**Showtec PSA-3212S™ Product Guide**

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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:

- 1 Showtec PSA-3212S
- This user manual

## **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:**

- 1) Your name
- 2) Your address
- 3) Your phone number
- 4) 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.

# WARNING

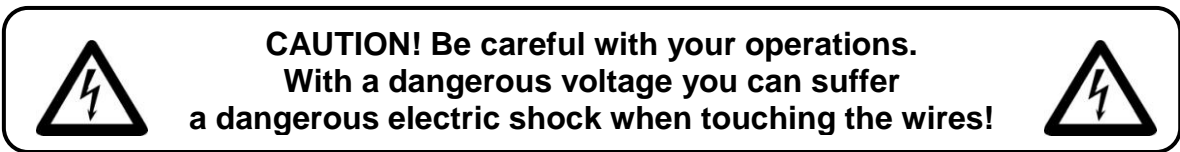


**FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY  
BEFORE YOUR INITIAL START-UP!**

## SAFETY INSTRUCTIONS

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

- be qualified
- follow the instructions of this manual



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.
- Do not insert objects into air vents.
- 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.
- Only use device indoor, avoid contact with water or other liquids.
- Avoid flames and do not put close to flammable liquids or gases.
- 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.
- If 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.
- Repairs, servicing and electric connection must be carried out only by Showtec.
- For replacement use fuses of same type and rating only.
- This device falls under protection class I. Therefore it is essential to connect the yellow/green conductor to earth.
- 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.

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, lamp explosion, crash etc.


You endanger your own safety and the safety of others!

*Improper installation can cause serious damage to people and property !*


### Connection with the Three Phase Power Network

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

3-phase wiring

International	EU (including UK) From April 2004	North America	Pin
L1	Brown	Brown	Phase 1
L2	Black	Orange	Phase 2
L3	Grey	Yellow	Phase 3
N	Blue	White	Neutral
	Green/Yellow	Green	Protective Earth

mains wiring

International	EU (including UK) From April 2004	North America	Pin
L	Brown	Black	Phase
N	Blue	White	Neutral
	Green/Yellow	Green	Protective Earth

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

# Description of the device

## Features

The Showtec PSA-3212-S distributes 3 x 32A to 12 groups (3 x 4), with 12 circuit breakers (16A). At the front-panel are 3 Volt- and 3 Ampere-meters, which shows voltage, and current, at the backpanel 12 Schuko-connectors (3 groups of 4 connectors), at which each group can load max. 32 Amps. Furthermore there is a residual current circuit breaker and an extra Schuko-connector on the frontpanel. The heavy-duty powder-coated metal-case is 19" x 4U and equipped with 1 meter cable and a CEE 3 x 32A connector (3- phase, Neutral and PE).

## Overview

### Frontpanel



Fig. 1

#### 1) F-1 frontpanel socket

Phase L-1 F-1 has an additional Schuko on the frontpanel. Make sure the total load per phase does not exceed 32A.

#### 2) Residual Current Circuit Breaker (RCCB)

3x 32A Residual Current Circuit Breaker. This will disconnect the device from the mains if a difference between Phase ("hot" or "live") and neutral is detected.

#### 3) Phase L-1 circuit breakers F-1 to F-4

Each phase has 4 Schuko outputs. Each output has it's own (16A) circuit breaker. Only phase L-1 F-1 has an additional Schuko on the frontpanel.

Make sure the total load per Circuit breaker does not exceed 16A and the total load per phase does not exceed 32A.

#### 4) Phase L-2 circuit breakers F-5 to F-8

Each phase has 4 Schuko outputs. Each output has it's own (16A) circuit breaker.

Make sure the total load per Circuit breaker does not exceed 16A and the total load per phase does not exceed 32A.

#### 5) Phase L-3 circuit breakers F-9 to F-12

Each phase has 4 Schuko outputs. Each output has it's own (16A) circuit breaker.

Make sure the total load per Circuit breaker does not exceed 16A and the total load per phase does not exceed 32A.

#### 6) L1-L2-L3 Voltmeter

Shows the voltage of each phase

#### 7) L1-L2-L3 Amperemeter

Shows the current draw of each phase

## Backpanel

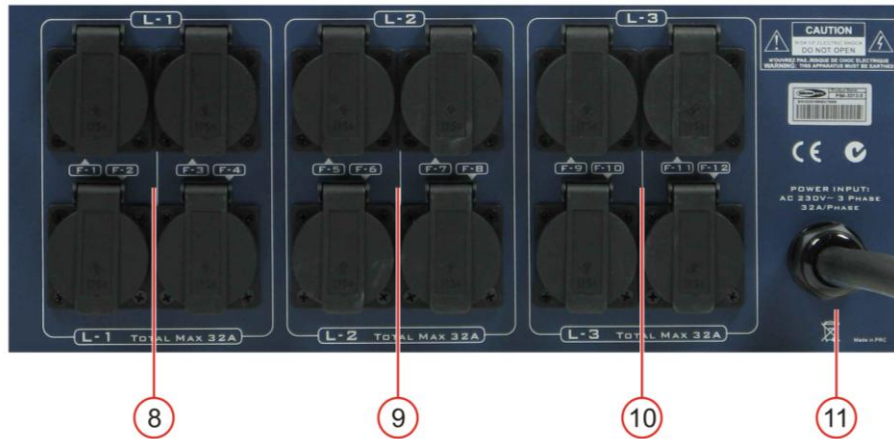


Fig. 2

### 8) Phase L-1 Schuko sockets F-1 to F-4

Each phase has 4 Schuko outputs. Each Schuko output has its own circuit breaker (16A) on the frontpanel.

Make sure the total load per Circuit breaker does not exceed 16A and the total load per phase does not exceed 32A.

### 9) Phase L-2 Schuko sockets F-5 to F-8

Each phase has 4 Schuko outputs. Each Schuko output has its own circuit breaker (16A) on the frontpanel.

Make sure the total load per Circuit breaker does not exceed 16A and the total load per phase does not exceed 32A.

### 10) Phase L-3 Schuko sockets F-9 to F-12

Each phase has 4 Schuko outputs. Each Schuko output has its own circuit breaker (16A) on the frontpanel.

Make sure the total load per Circuit breaker does not exceed 16A and the total load per phase does not exceed 32A.

### 11) Power Input

Connect to the three phase mains. Be sure the total load connected to the PSA-3212S does not exceed 32A per phase. Use the built in Ampere meters to check.



## Installation

Remove all packing materials from the PSA-3212S. Check that all foam and plastic padding is removed. Screw the equipment into a 19" 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

- **When mounting the PSA-3212S in a rack, make sure air flow is not obstructed.**
- **Always check the mains voltage before connecting the unit.**

## Maintenance

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

A qualified technician should check following points:

1. Disconnect the mains power supply, and then wipe the cover with a damp cloth. Do not immerse in liquid.
2. The cooling-fans should be cleaned with a soft brush.
3. Clean internal components with a light brush and vacuum cleaner.
4. Check and tighten all screws. Especially the screw terminals.
5. The electric power supply cables must not show any damages or material fatigue.
6. Check and clean all connectors.

## Troubleshooting

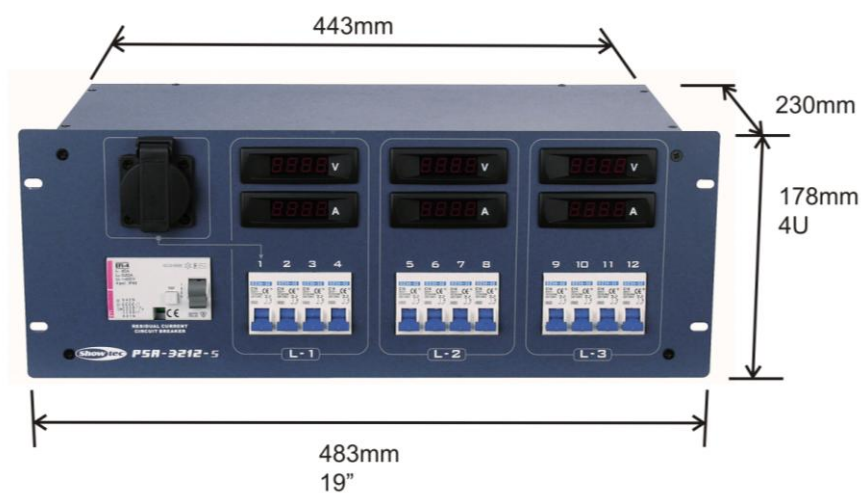
Showtec PSA-3212S

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 following steps.

1. If the device does not operate properly, unplug the device.
2. Check power from the wall, all cables, the fuse, the settings (return to default), etc.
3. If all of the above appears to be O.K., plug the unit in again.
4. If nothing happens after 30 seconds, unplug the device.
5. Return the device to your Showtec dealer.

## Product Specification

Model: Showtec PSA-3212S  
Power Input: CEE 5-pin male: 3-phase, neutral, PE  
(AC 400V 50/60Hz 3-phase input max. 32A per phase)  
Power Output: 13x Schuko: Phase, neutral, PE  
(AC 230V 50/60Hz max. 32 A per phase)  
Safety device: 16A circuit breaker per Schuko output (except F-1 which has 2 Schuko outputs)  
3x 32A Residual Current Device (RCD)  
Dimensions: 19" x 4U x 230mm (LxWxH)  
Weight: 9,8kg



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



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