



# RP-405 Relay Pack MKII

ORDERCODE 50753



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**SHOWELECTRONICS FOR PROFESSIONALS**

## **Congratulations!**

You have bought a great, innovative product from Showtec.

The Showtec Relay Pack 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!



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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 RP-405 Relay Pack with IEC powercable 1,25m
- User manual



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



**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 have 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 insert objects into air vents.
- Do not open the device and do not modify the device.
- Do not connect this device to a dimmerpack.
- Do not switch the device on and off in short intervals, as this would reduce the system'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 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.
- 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.
- Repairs, servicing and electric connection must be carried out by a qualified technician.
- WARRANTY: Till one year after date of purchase.

## OPERATING DETERMINATIONS


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!

### Connection with the mains

Connect the device to the mains with the power-plug.

Always pay attention, that the right color cable is connected to the right place.

International	EU Cable	UK Cable	US Cable	Pin
L	BROWN	RED	YELLOW/COPPER	FASE
N	BLUE	BLACK	SILVER	NUL
	YELLOW/GREEN	GREEN	GREEN	EARTH

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



*Improper installation can cause serious damage to people and 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:**

- 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.

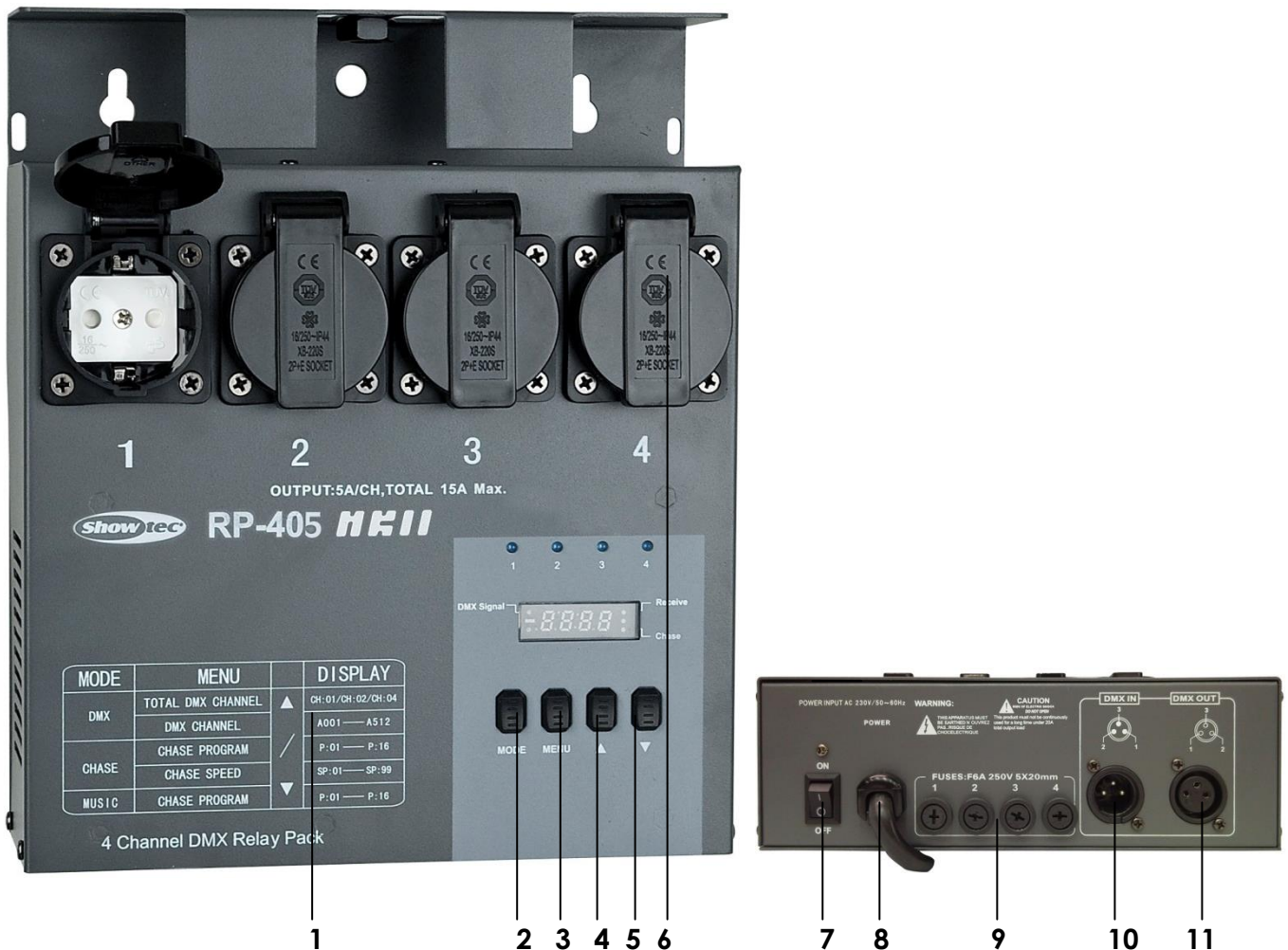
# Description of the device

## Features

The Showtec Relay Pack is a switchpack from Showtec.

- Common switchpacks are not suitable to switch low power of LEDs; The RP-405 is the perfect solution.
- Very suitable to switch your LED lighteffects.
- 4 Shuko outputs
- 4 channels of each 5 Amp and each channel is patchable.
- Controllable by DMX or sound, according to the built in patterns.
- Pattern speed adjustable between 20 seconds - 2 minutes per step
- Output: 4x 240V / 5A; Max 15A
- Max 1100 Watt per Channel
- Built-in patterns
- DMX-512, Sound Control, Master/Slave
- Patchable per channel
- 4 Channel switchpack with built-in relays
- Fuse 6.3A per channel
- Max Load  $230 \times 15 = 3450$  Watt (at 230V)

## Overview



- 1) Control Modes
- 2) Mode Button
- 3) Menu Button
- 4) UP Button
- 5) Down Button
- 6) 4x Schuko Outputs

- 7) Power ON/OFF
- 8) Powercable
- 9) Channels Fuses 6,3A 250V
- 10) DMX signal connector (IN) 3-pin
- 11) DMX signal connector (OUT) 3-pin

## Installation

Remove all packing materials from the Relay Pack. Check that all foam and plastic padding is removed. 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

Before plugging the unit in, always make sure that the power supply matches the product specification voltage. Do not attempt to operate a 120V specification product on 230V power, or vice versa.

When the unit is plugged in, it will be in the last working mode.

1. Press the "MENU" button to go to the submenu.

CH: XX	set total DMX Channels for this relay pack
CH: 01	relay pack has 1 DMX channel, controlling all 4 outputs
CH: 02	relay pack has 2 DMX channels to control outputs.
	Relay Pack is divided in 2 groups of two channels
CH: 04	relay pack has 4 DMX channels. All 4 outputs can be Controlled separately.

2. In DMX mode press "MENU" to patch per channel. Depending on how many channels you have selected 1xxx, 2xxx or 4xxx.

3. When in stand alone mode, press "MENU" to enter the submenu's :

P :01~16	press UP or DOWN to choose an auto program
SP:01~99	press UP or DOWN to control the speed of the programs
So:01~16	press UP or DOWN to choose an internal sound triggered program.

When you have chosen a program you can press **Menu** and set the desired speed or you can press **Mode** and go to the sound mode.

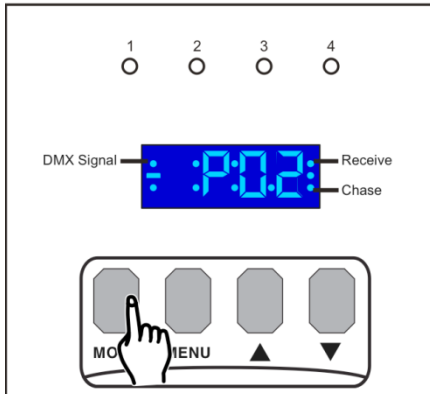
After power is switched off or there has been a power failure, the Relay Pack will return to the last setting.



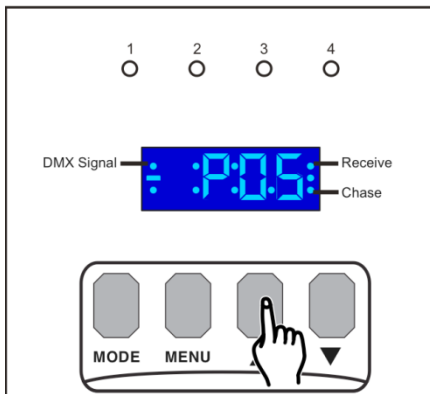
## OPERATING INSTRUCTIONS

1. Turn the power switch on.
2. Operating mode is controlled by MODE.
3. You can select the operating mode: Chase or Receive

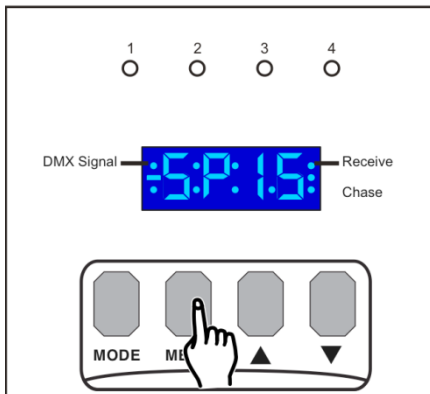
### Chase Mode



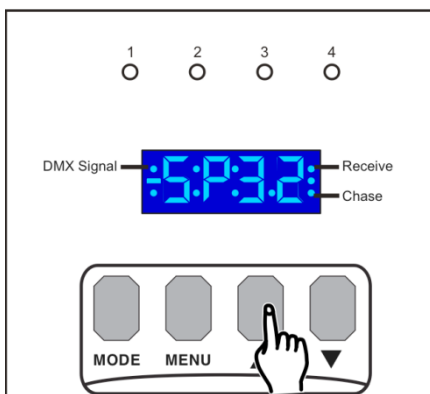
1. Press MODE to select Chase mode.  
Chase mode is indicated by "P" followed by numbers 01-16.  
"P" is Programmed Applied. If "A" appears in the LCD display you are in DMX mode, "A" stands for address.



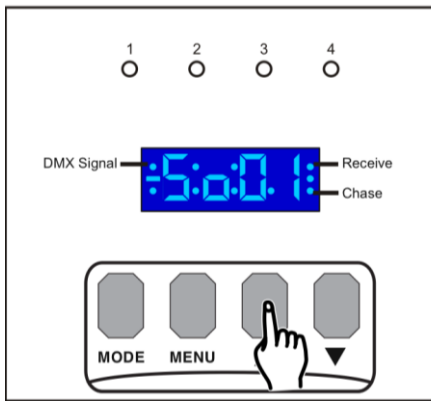
2. Set you desired chase pattern: Once you have selected the chase function use the Menu button to select your desired chase. The chase pattern is represented in the LCD display by "P" followed by two numbers. You may select any of the built in 16 programs to run at a single time.  
Tap ▲ or ▼ to your wanted chase within 01-16 built-in chases



3. While in chase mode, tap on the MENU button until the "SP" followed by two numbers is displayed in the LCD.  
Press MENU to enter Chase Speed mode.

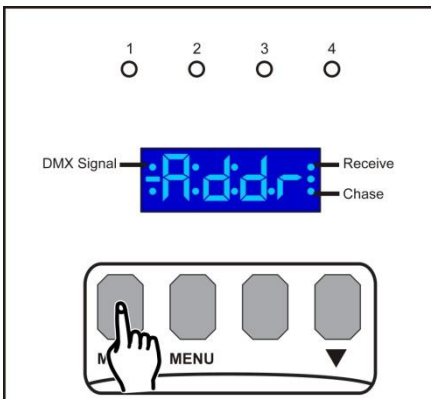


4. Tap ▲ or ▼ to your desired speed.  
A value of 99 will give you the fastest chase speed (about 1/10th of a second). A value of 01 will give you the slowest chase speed (one step every 30 sec.).

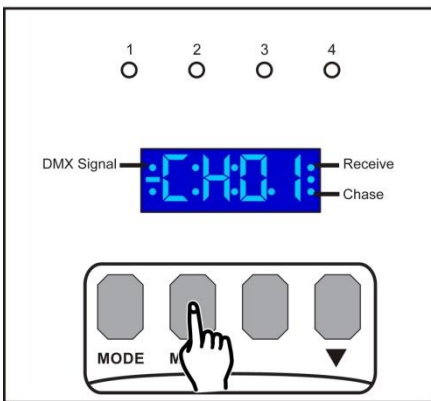


5. Tap ▲ or ▼ to select sound to light program.  
You can select 16 different sound patterns.

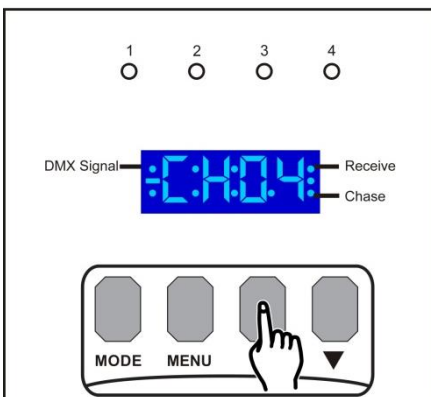
## Receive Modus



1. Press MODE to select Receive mode.

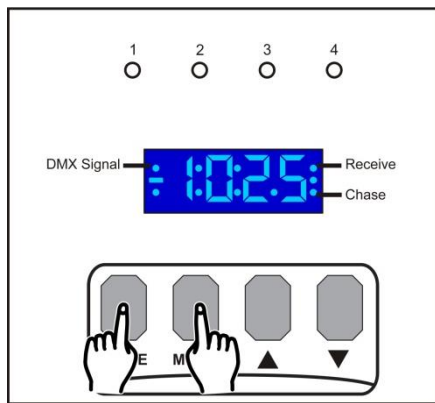


2. Press MENU to select how many channels you want to choose.  
Press once for CH:01, twice for CH:02 and three times for CH:04.



3. Tap MENU again to select the operation mode:

CH:01 → MENU → 1.xxx  
 CH:02 → MENU 1x → 1.xxx  
           MENU 2x → 3.xxx  
 CH:04 → MENU 1x → 1.xxx  
           MENU 2x → 2.xxx  
           MENU 2x → 3.xxx  
           MENU 2x → 4.xxx



4. Press MENU to set the DMX address for the desired channel. Tap ▲ or ▼ to select the desired DMX address 001-512.

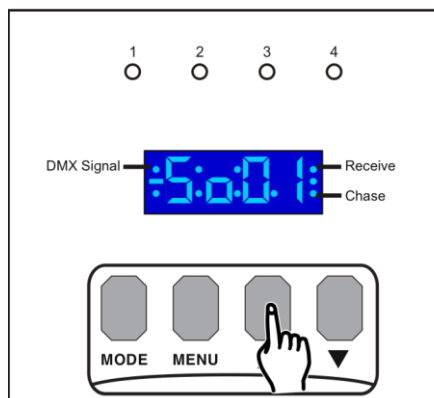
## DMX Mode

1. Plug in a DMX controller to your Relay pack via the 3-pin XLR cables.
2. Connect your lighting effect to any of the 4 power sockets on the front of the pack.
3. Decide if you are going to use your relay pack as 1, 2, or 4 channels. This function allows you to:
  - a. Control the output to all four outlets with one DMX channel.
  - b. Group outlet channels one and two and group outlets channels three and four. The first group will be controlled by one DMX channel and the second group will be controlled by another DMX channel. This gives the pack a DMX value of two.
  - c. The default setting is a four-channel DMX switcher, each channel is controlled by one DMX channel.
4. To change the channel function mode be sure you are in DMX mode. Use the MENU button to select "CH" followed by two digits. Then use the UP and DOWN arrow buttons to change the setting from 01, 02, or 04. Your relay pack is initially set as a four-channel DMX switcher.
5. You can set desired channel to switch modus.

CH: XX	set total DMX Channels for this relay pack
CH: 01	relay pack has 1 DMX channel, controlling all 4 outputs
CH: 02	relay pack has 2 DMX channels to control outputs. Relay Pack is divided in 2 groups of two channels
CH: 04	relay pack has 4 DMX channels. All 4 outputs can be Controlled separately.

## Sound Control

1. Connect your lights to the any of 4 power sockets on the pack.
2. Use the mode button to select sound mode:  
chase mode is indicated by "So" followed by the numbers 0-16.
3. Give sound signal and chase will start running.



## Maintenance

The Showtec Relay Pack requires almost no maintenance. However, you should keep the unit clean. Disconnect the mains power supply, and then wipe the cover with a damp cloth. Do not immerse in liquid. Keep connections clean. Disconnect electric power, and then wipe the audio connections with a damp cloth. Make sure connections are thoroughly dry before linking equipment or supplying electric power.

### Replacing a Fuse

Power surges, short-circuit or inappropriate electrical power supply may cause a fuse to burn out. If the fuse burns out, the product will not function whatsoever. If this happens, follow the directions below to do so.

1. Unplug the unit from electric power source.
2. Insert a screwdriver into the slot in the fuse cover. Turn the screwdriver to the left, at the same time Gently push a bit (Turn and Push). The fuse will come out.
3. Remove the used fuse. If brown or unclear, it is burned out.
4. Insert the replacement fuse into the holder where the old fuse was. Reinsert the fuse cover. Be sure to use a fuse of the same type and specification. See the product specification label for details.

## Troubleshooting

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. If the Relay Pack does not operate properly, refer servicing to a technician. If the fuse is burned out, replace the broken fuse with a new one, with the same specifications.

Response: Suspect two potential problem areas: the power supply or the fuse.

1. Power supply. Check that the unit is plugged into an appropriate power supply.
2. The fuse. Check if the fuses are ok.

## Product Specification

Model: Showtec Relay Pack

Voltage: AC 230V-50Hz (CE)

4 Shuko outputs

4 channels of each 5 Amp and each channel is patchable.

Controllable by DMX or sound, according to the built in patterns.

Pattern speed adjustable between 20 seconds - 2 minutes per step

Output: 4x 240V / 5A; Max 15A

Built-in patterns

DMX-512, Sound Control, Master/Slave

Patchable per channel

4 Channel switchpack with built-in relays

Max 1100 Watt per Channel (6.3A per channel max)

Max Load 220x15=3300 Watt (at 230V)

DMX OUT: 3-pin XLR Female

DMX IN: 3-pin XLR Male

No Midi Option

Channel Fuse: 6,3A

Dimensions: 260x220x70mm (LxWxH)

Weight: 2.4 kg



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



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