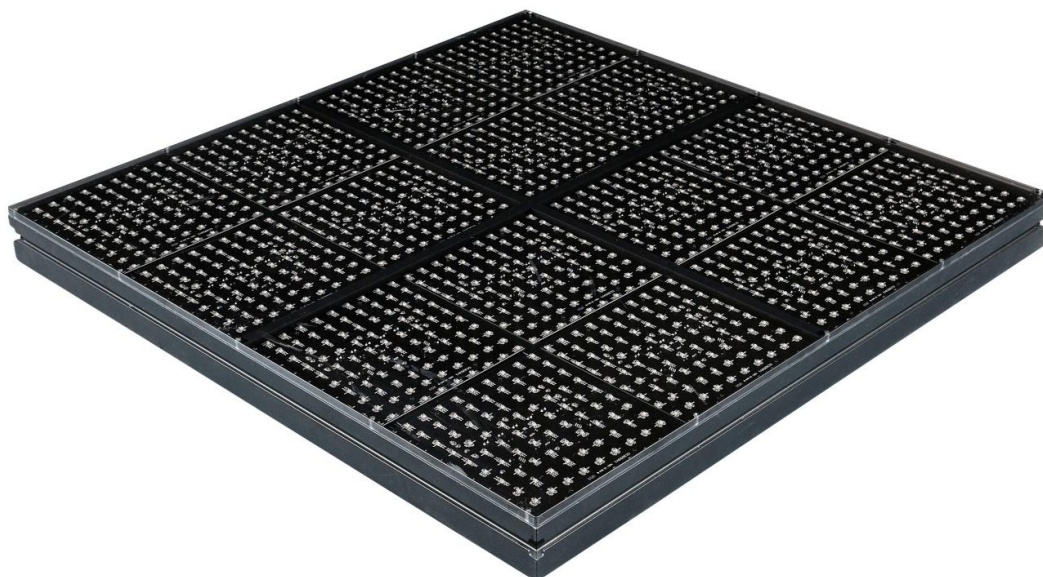




# Pixelfloor P25 Kling-Net

ORDERCODE 42280



Highlite International B.V.  
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**SHOWELECTRONICS FOR PROFESSIONALS**

## **Congratulations!**

You have bought a great, innovative product from Showtec.

The Showtec LED Pixelfloor 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

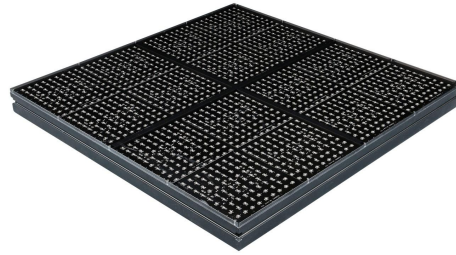
**FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY  
BEFORE YOUR INITIAL START-UP!**

## 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 LED Pixelfloor with clear cover
- 1 x AC Power Plug
- User manual



## LED Expected Lifespan

LEDs gradually decline in brightness over time. HEAT is the dominant factor that leads to the acceleration of this decline. Packaged in clusters, LEDs exhibit higher operating temperatures than in ideal or singular optimum conditions. For this reason when all color LEDs are used at their fullest intensity, life of the LEDs is significantly reduced. If improving your lifespan expectancy is of a higher priority, place care in providing for lower operational temperatures. This may include climatic-environmental and the reduction of overall projection intensity.



**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.
- Never use anything to cover the ground contact.
- Never leave any cables lying around.
- Do not insert objects into air vents.
- Do not connect this device to a dimmerpack.
- Do not open the device and do not modify the device.
- Never use the device during thunderstorms, unplug the device immediately.
- Never look directly into the light source.
- Do not switch the device on and off in short intervals, as this would reduce the system's life.
- Do not shake the device. Avoid brute force when installing or operating the device.
- Only use device indoor, avoid contact with water or other liquids.
- Avoid flames and do not put close to flammable liquids or gases.
- Always allow free air space of at least 50 cm around the unit for ventilation.
- 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.
- Make sure that the core diameter of extension cords and power cords is sufficient for the required power consumption of the device.
- 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 external cable is damaged, it has to be replaced by a qualified technician.
- If the top surface is obviously damaged, it has to be replaced. So that its functions are not impaired, due to cracks or deep scratches.
- 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 adult use only. Light effect must be installed out of the reach of children. Never leave the unit running unattended.
- For replacement use fuses of same type and rating only.
- The user is responsible for correct positioning and operating of the LED Pixelfloor. 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.
- Protect the power cord from being walked on or pinched particularly at plugs.
- Acrylic cover might be slippery when it's wet. Please keep the acrylic cover dry all the time.
- Acrylic cover and rubber adjustable feet are designed to absorb impact force. It is normal to feel dance floor bounced back when jumping on it.
- Repairs, servicing and electric connection must be carried out by a qualified technician.
- WARRANTY: Till one year after date of purchase.



**CAUTION ! EYEDAMAGES !.**  
**Avoid looking directly into the light source.**  
**(meant especially for epileptics) !**



## 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 minimum distance between light-output and the illuminated surface must be more than 0.8 meter.
- The maximum ambient temperature  $t_a = 45^\circ\text{C}$  must never be exceeded.
- The relative humidity must not exceed 50 % with an ambient temperature of  $45^\circ\text{C}$ .
- 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!

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

## Rigging

*Please follow the European and national guidelines concerning rigging, trussing and all other safety issues.*

*Do not attempt the installation yourself !*

*Always let the installation be carried out by an authorized dealer !*

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

## 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!



## **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 short-comings 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 LED Pixelfloor is designed for the more demanding user:

Klingnet is developed in collaboration with Arkaos, ensuring powerful tools and state-of-art functionalities in combination with easy set-up.

- Plug & Play with Klingnet protocol
- Quick setup due to deck brackets
- Liquid resistant CAT5 connections
- Bright colors
- The Pixelfloor P25 is a one square meter LED tile working on the Klingnet-protocol.
- Simple to integrate these dance floors in a setup with strips and battens.
- Klingnet allows you to display visuals across all fixtures in the right proportions, regardless their position.
- The Pixelfloor P25 has a 25mm pixelpitch and a wide viewing angle of 120 degrees.
- The power and data connections are liquid resistant and made for daisy chain setup.
- Coupling the floors is very easy with 2 special connection brackets which are included.
- New and revolutionary concept which makes pixel control easy and affordable.
- Pixel pitch: 25 mm
- Pixel quantity: 1 600 pixels
- Klingnet-protocol controlled
- LED Light source: RGB 5050SMD LED
- Luminance: 1000 nits
- Refresh rate: 2000 Hz
- Viewing angle: 120 degrees
- RJ45 waterproof connectors for Kling-Net in/out connection
- Connection: CAT-5
- IP-Rating: IP-40
- Housing: Lightweight aluminum extrusion casing
- Finish: Black powder coat
- Dimensions: 1000 x 1000 x 110mm
- Max Load: 750Kg/m<sup>2</sup>
- Power supply: AC 100-230V / 50-60Hz
- **No PSU/ Junctionbox needed**
- Power consumption: 350W
- Weight: 40 kg

Optional accessories: 42281 Spare bracket  
42282 Spare powercable  
42283 Pixelfloor Data Cable

### Overview

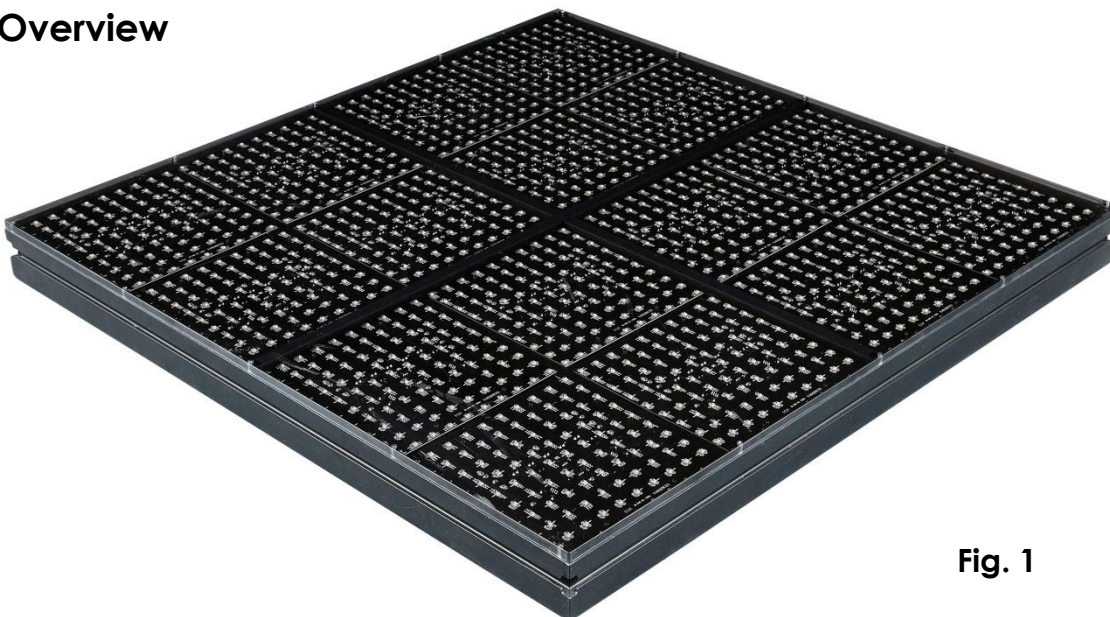


Fig. 1



## Backside



Fig. 2

- 1) Data OUT
- 2) Data IN
- 3) Power OUT
- 4) Power IN
- 5) Special Powercable



Fig. 3

## Installation

Remove all packing materials from the LED Pixelfloor. Check that all foam and plastic padding is removed. Connect all cables.

**Do not supply power before the whole system is set up and connected properly.**

**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

Follow the directions below, as they pertain to your preferred operation mode.

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.

**Damages caused by non-observance are not subject to warranty.**



Before attaching the device, make sure the installation surface can hold a minimum point load of ten times the device's weight.

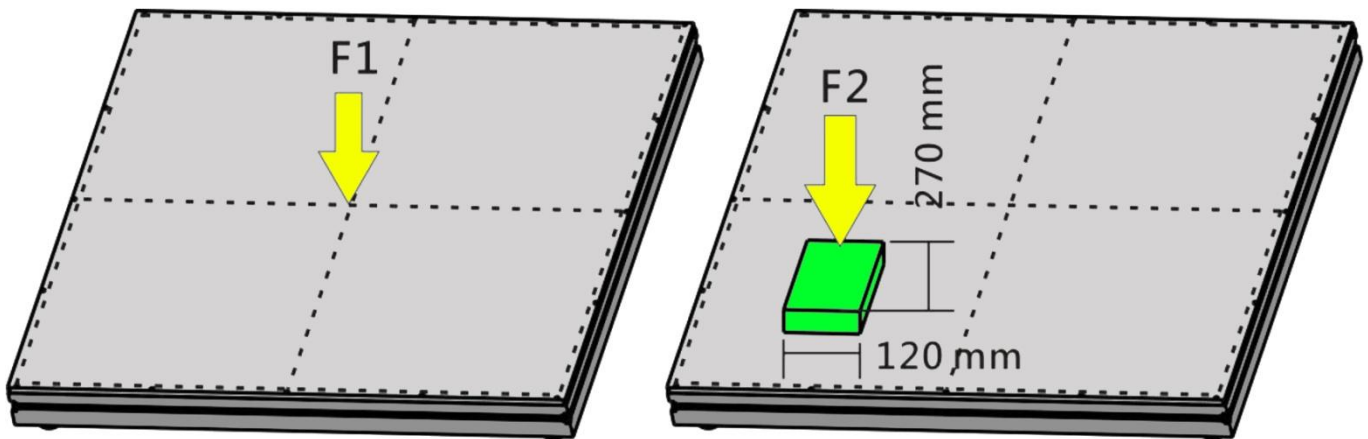


### Maximum Loads

Uniformly Distributed Load      750 Kg/m<sup>2</sup>

Point Load **F1**                      350 Kg

Point Load **F2**                      210 Kg



**Fig. 4**

The point load should be applied to a minimum area of 12 cm x 27 cm, approximately the area of the sole of a foot. The point load is placed as shown in Fig 4.



Only 1 point load per m<sup>2</sup> is allowed.



### Note

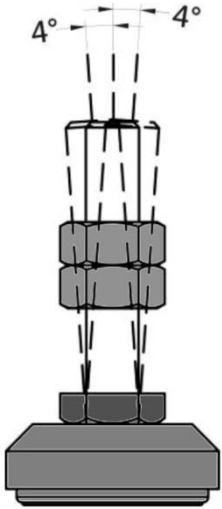
1. Please make sure that the LED Pixelfloor is properly aligned and completely leveled.
2. Before applying loads, please make sure that their exact weight and size are within the loading specifications.
3. There is no clear definition on the impact force for a stage as used in entertainment market. Normal walking or dancing on dance floor is OK, but jumping is not guaranteed.

The LED Pixelfloor has 2 RJ45 connection cables. One is for Kling-Net input and the other is for Kling-Net output. You can daisy-chain the LED Pixelfloor to another Kling-Net device depending on the number of pixels you want in a specific setup.

- Make sure that the installation surface can hold a minimum 10 times the pixelfloor's weight.
- Make sure no combustible or flammable materials are nearby.
- Consider component replacement and routine maintenance access, when choosing your installation location.

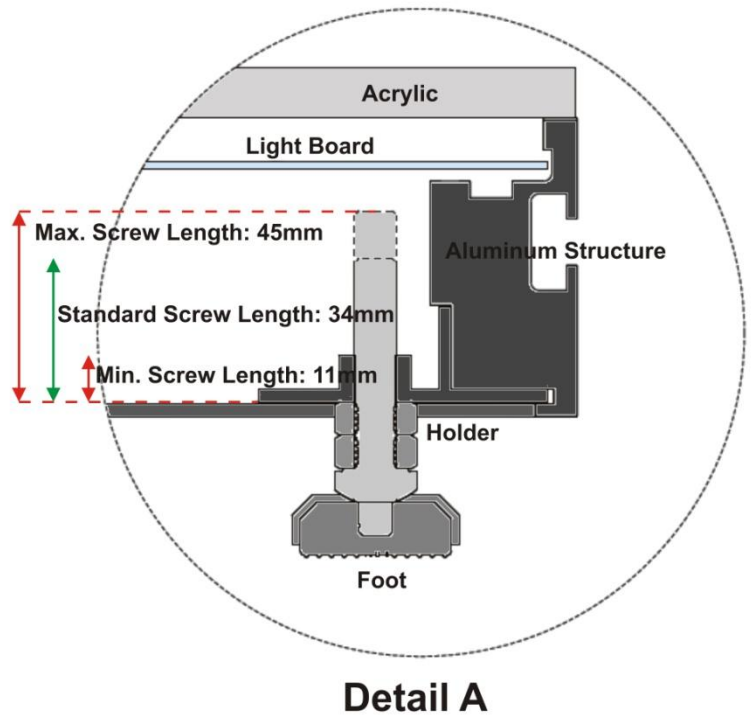
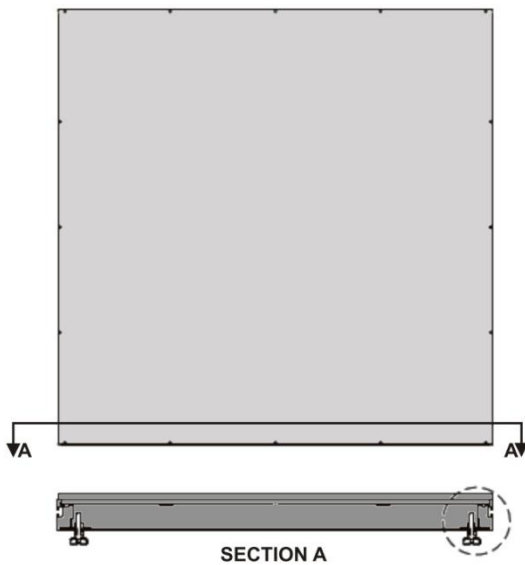
## Level Surface

The LED Pixelfloor has 5 adjustable feet, which can help you to make the floor set in level completely.



## Rigging

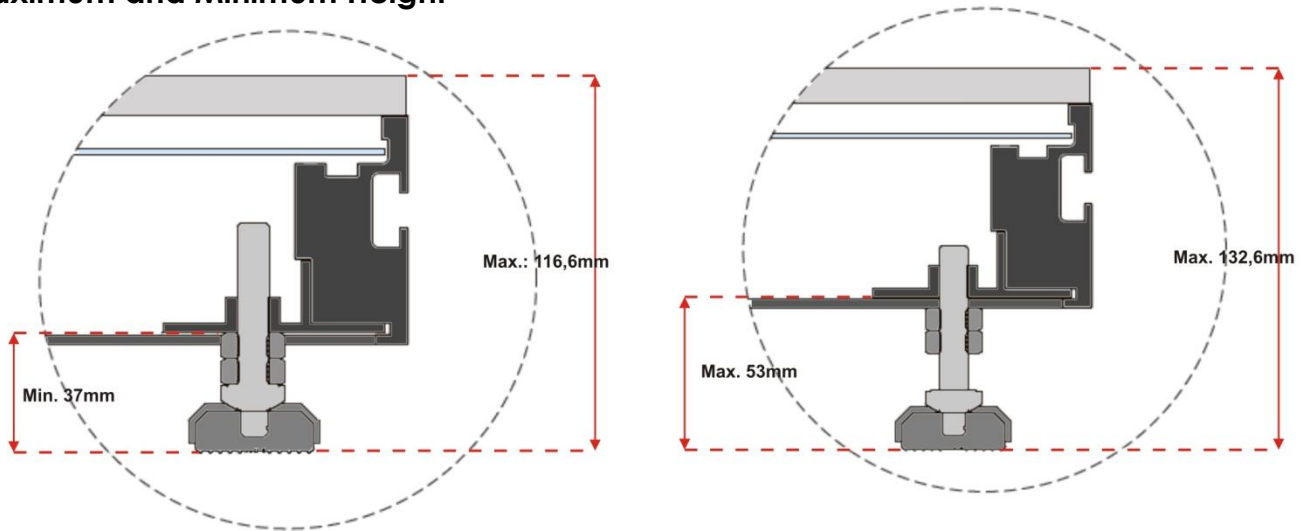
When rigging is necessary, you may need to remove the adjustable feet and replace them with M10 C-clamp to rig the LED Pixelfloor to the truss.



### Note:

To ensure enough holding force, the M10 screw length in the LED Pixelfloor must be longer than 11mm but shorter than 45mm, to avoid damage to the inner parts.

## Maximum and Minimum Height



## Connecting LED Pixelfloor

1. Install the Arkaos Software or DMT Vision Express on your computer (Windows or Mac).  
This software already includes the Kling-Net protocol.

Computer **Fixed IP Address:**

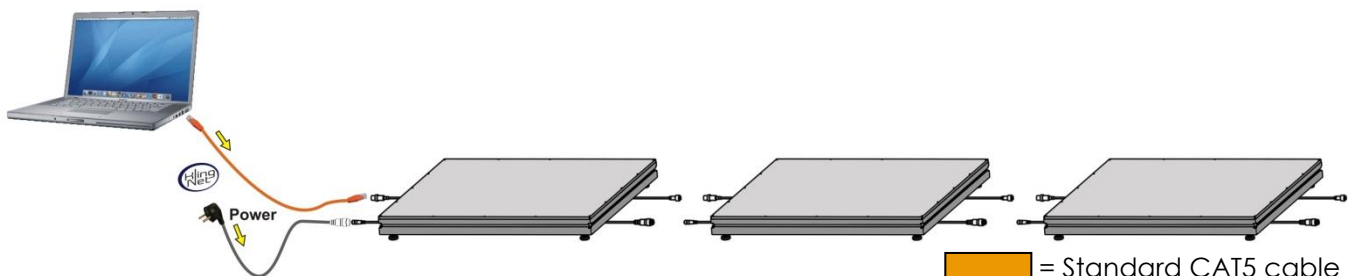
Example: 192.168.1.0 until 192.168.1.255  
Subnet mask: 255.255.255.0  
10.0.0.0 until 10.0.0.255  
2.0.0.1 until 2.0.0.255  
Etc.



Free Demo Software can be downloaded at [www.arkaos.net](http://www.arkaos.net)

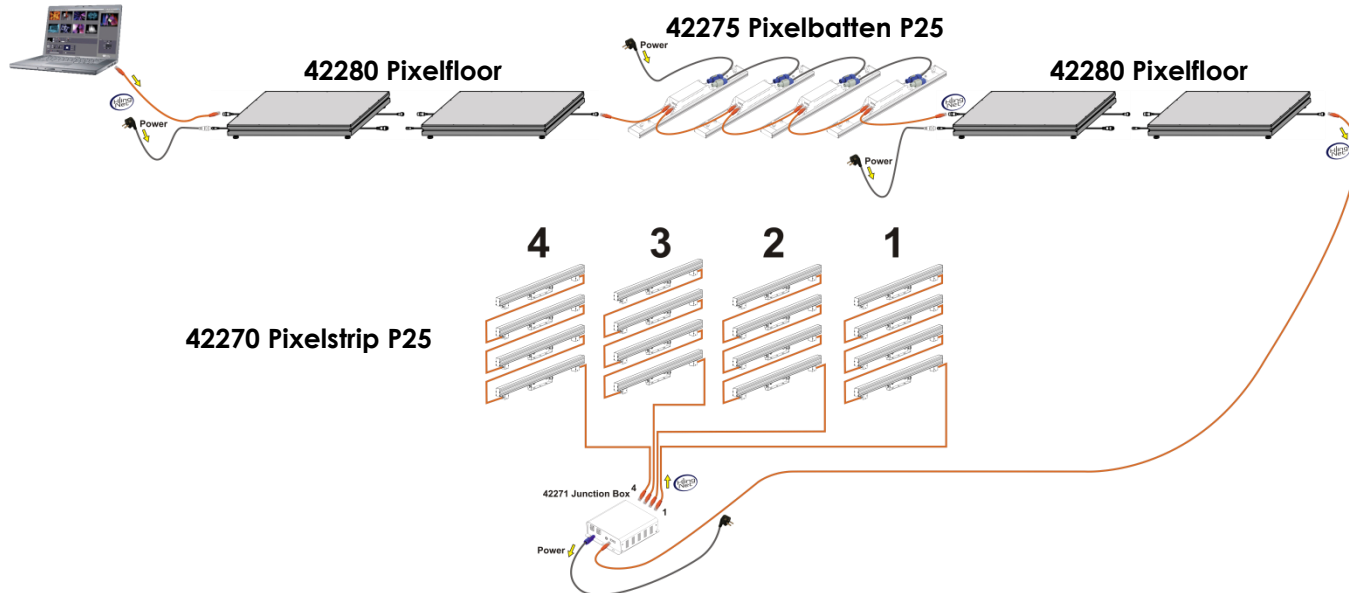
2. Connect the DMT Pixelfloors by a CAT-5 cable with your computer.  
Once you have connected the fixtures, the software immediately recognizes them.
3. Map the devices to the right position, a step which is very easy because you actually drag and drop the fixtures in "on-screen" interface into the right position. This only requires a few minutes and you are ready to go. Please read the Arkaos Mediamaster manual for more info).
4. When creating large setups, it is recommended to use an ethernet switch to distribute the Kling-Net data signal.

## Setup example LED Pixelfloor



## Setup example combination of Klingnet fixtures

PC or Mac



## How to make a Data Cable

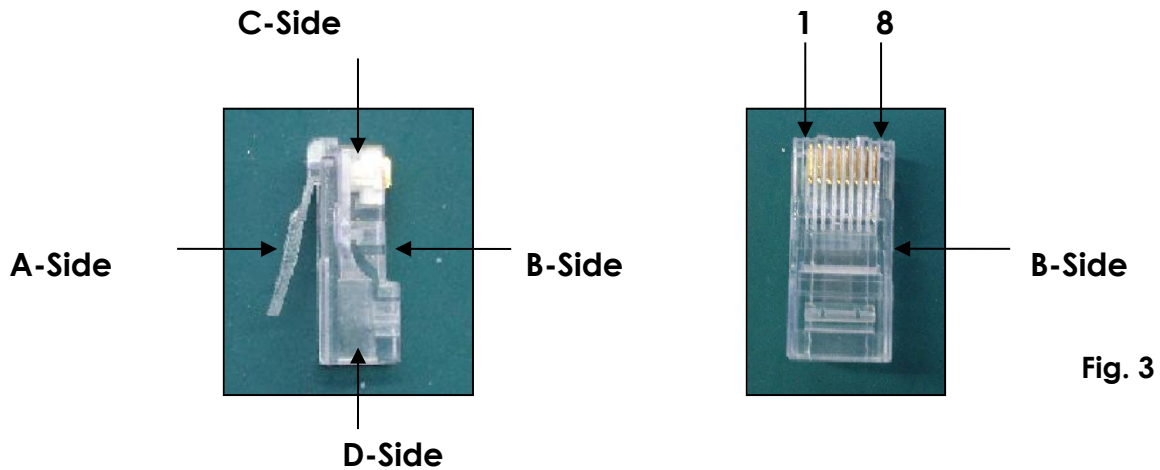


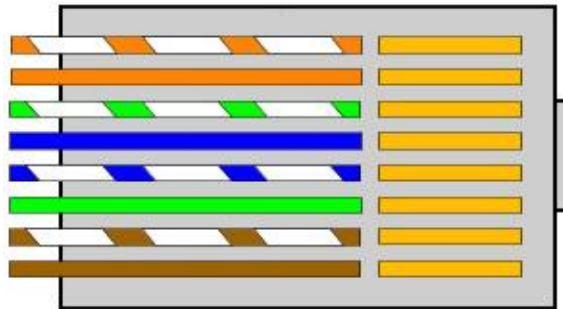
Fig. 3

**A Standard ETHERNET CABLE can be used** to replace the DATA CABLE required to transmit the data for the LED Pixelfloor.

**Please follow the following instructions in order to create extra NET CABLE.**

Take a standard net cable (Cat5/ 5E /6) and connect it to the RJ-45 connector just like displayed on the picture. The wires should now be colored as following:

- 1- white & orange
- 2- orange
- 3- white & green
- 4- blue
- 5- white & blue
- 6- green
- 7- white & brown
- 8- brown



RJ-45 Connector

Insert each wire into an RJ-45 connector with the white & orange wire connected to PIN 1, the orange wire connected to the second PIN, etc.  
Both ends of the NET WIRE are connected in this way.

## Software for controlling the LED Pixelfloor (Arkaos or DMT)

In combination with Arkaos or DMT Software, you are able to play video over the Pixelfloor (pixelmapping). You only have to connect all floors and run your software.

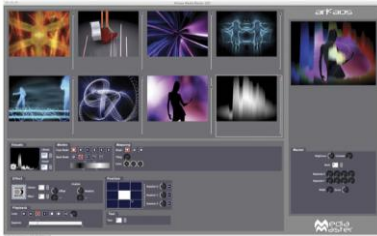
 **Just click on the following pictures or ordercodes for more information** 



[50227](#) DMT Vision Express: Easy to use and high performance at an affordable price



[50224](#) Arkaos Media Master Express: The latest update of the successful media server software



[50228](#) Arkaos Media Master 3.0: PRO DMX video software for lighting designers

## Maintenance

The Showtec LED Pixelfloor requires almost no maintenance. However, you should keep the unit clean. Otherwise, the fixture's light-output will be significantly reduced. Disconnect the mains power supply, and then wipe the cover with a damp cloth. Do not immerse in liquid. Wipe surface clean with glass cleaner and a soft cloth. Do not use alcohol or solvents. 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.

The operator has to make sure that safety-relating and machine-technical installations are to be inspected by an expert after every four years in the course of an acceptance test.

The operator has to make sure that safety-relating and machine-technical installations are to be inspected by a skilled person once a year.

The following points have to be considered during the inspection:

1. All screws used for installing the device or parts of the device have to be tightly connected and must not be corroded.
2. There may not be any deformations on housings, fixations and installation spots.
3. Mechanically moving parts like axles, eyes and others may not show any traces of wearing.
4. The electric power supply cables must not show any damages or material fatigue.

## Troubleshooting

### No Light

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 light effect does not operate properly, refer servicing to a technician.

Response: Suspect three potential problem areas: the power supply, the LEDs, the fuse.

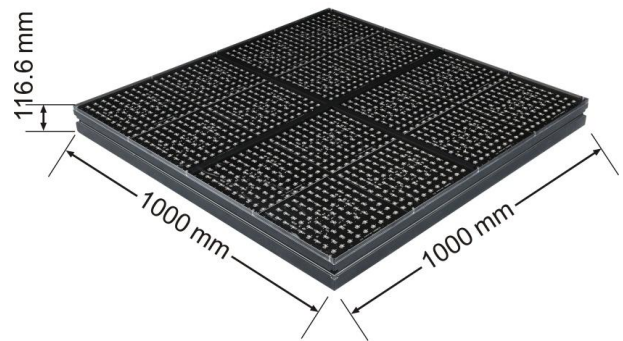
1. Power supply. Check that the unit is plugged into an appropriate power supply.
2. The LEDs. Return the LED Pixelfloor to your Showtec dealer.
3. The fuse. Since this is an internal fuse, return the device to your Showtec dealer.
4. If all of the above appears to be O.K., plug the unit in again.
5. If you are unable to determine the cause of the problem, do not open the LED Pixelfloor, as this may damage the unit and the warranty will become void.
6. Return the device to your Showtec dealer.



## Product Specification

Model: Showtec LED Pixelfloor (**42280**)

- Plug & Play with Klingnet protocol
- Quick setup due to deck brackets
- Liquid resistant CAT5 connections
- Bright colors
- The Pixelfloor P25 is a one square meter LED tile working on the Klingnet-protocol.
- Simple to integrate these dance floors in a setup with strips and battens.
- Klingnet allows you to display visuals across all fixtures in the right proportions, regardless their position.
- The Pixelfloor P25 has a 25mm pixelpitch and a wide viewing angle of 120 degrees.
- The power and data connections are liquid resistant and made for daisy chain setup.
- Coupling the floors is very easy with 2 special connection brackets which are included.
- New and revolutionary concept which makes pixel control easy and affordable.
- Pixel pitch: 25 mm
- Pixel quantity: 1600 pixels
- Klingnet-protocol controlled
- LED Light source: RGB 5050SMD LED
- Luminance: 1000 nits
- Refresh rate: 2000 Hz, ideal for TV use
- Viewing angle: 120 degrees
- RJ45 waterproof connectors for Kling-Net in/out connection
- Connection: CAT-5
- IP-Rating: IP-40
- Housing: Lightweight aluminum extrusion casing
- Finish: Black powder coat
- Dimensions: 1000 x 1000 x 110mm
- Max Load: 750Kg/m<sup>2</sup>
- Power supply: AC 100-230V / 50-60Hz
- **No PSU/ Junctionbox needed**
- Power consumption: 350W
- Weight: 40 kg



Optional accessories: 42281 Spare bracket  
42282 Spare powercable  
42283 Pixelfloor Data Cable

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



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