



24F Distribution Box - TEN-FWB5 Installation Guide

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TELESTE

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Getting Started



TEN-FWB5 - 24-Fibre Optical Distribution Box

Introduction

Thank you for purchasing this Teleste product. The TEN-FWB5 is an Optical Distribution Box and part of our Enlighten Distribution Box Series. It is designed for outdoor mounting and allows easy connection between feeder cables and subscriber cables, moreover it is equipped with a splice tray and lock for secure fixing of box lid. This guide will take you through all the steps necessary for a successful installation.

Package Contents

Please unpack the TEN-FWB5 and verify that all items are at present, as shown in figure 1. If any items are missing then please do not hesitate to contact your local seller for help.

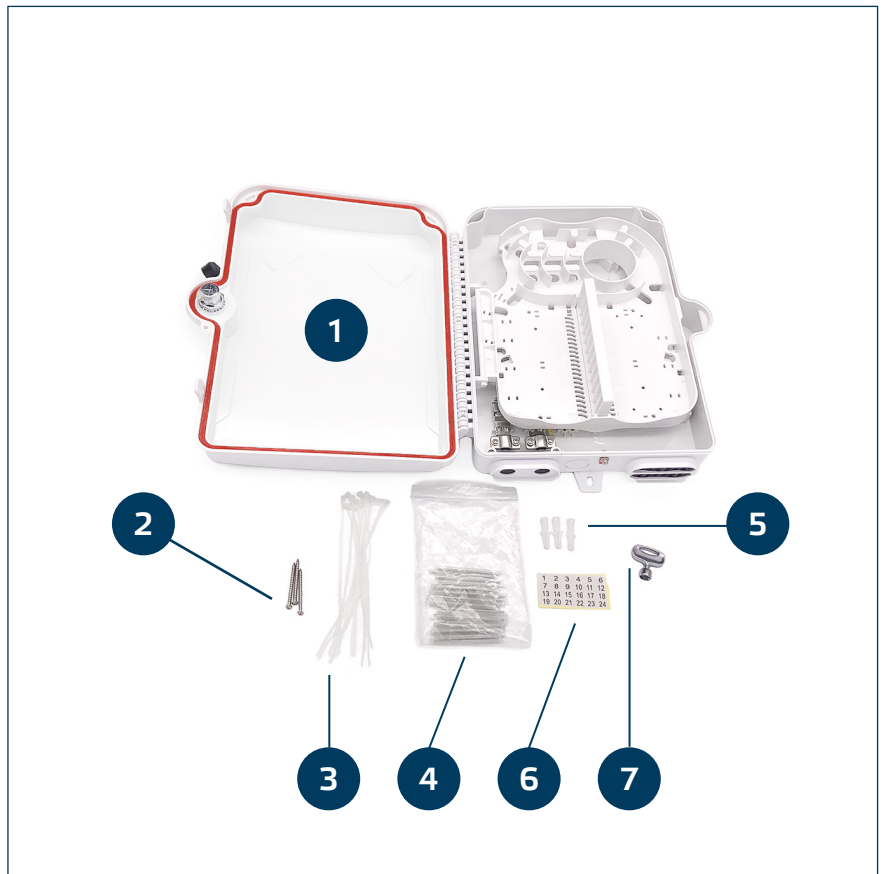


Figure 1 - Package contents

1. Box housing
2. Housing fixing wall screws
3. Cable ties
4. Splice protectors
5. Wall fixings
6. Identification labels
7. Key for lockable lid

About the TEN-FWB5 Distribution Box

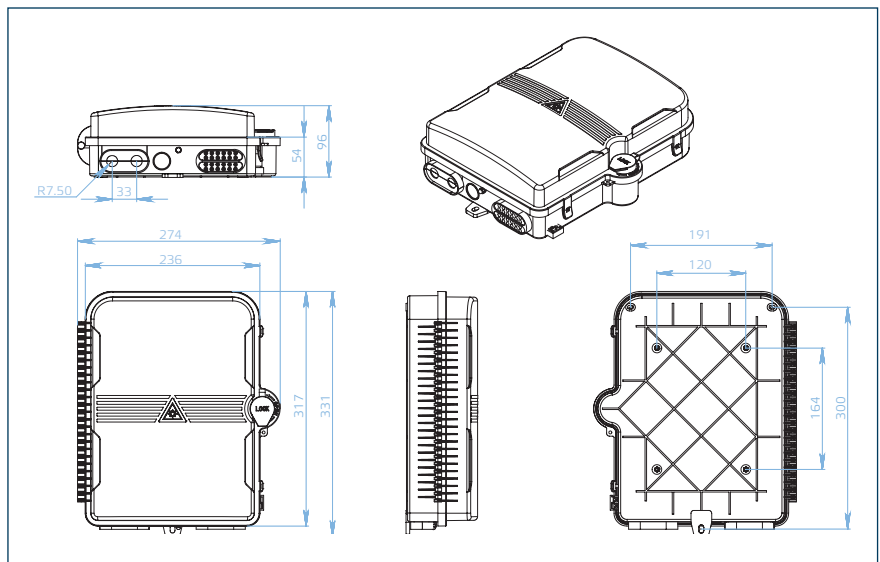
Designed for multi-purpose applications in FTTH projects - e.g. connecting single family homes and for floor distribution of residence buildings - the box comes with a dual layer design that supports direct termination, and also FTTH distributions via mini splitter. FTTH projects require compact design and weather durable characteristics, easy installation along with convenient maintenance. The FWB5 provides this via:

- Lockable lid to avoid unauthorized access.
- Separate tray for ease of splice connections.
- Multifunctional tray that can accommodate a mini-splitter.
- Clamping support for feeder and drop cables.
- The distribution panel can be flipped up and cables, pigtails and patch cords are routed in their own paths without disturbing each other.
- Produced in high quality plastics.
- IP65 protection class.

Product Specification

| | | | |
|------------------------------|-------------------|-------------------------------|---------------------------|
| Max. input cable dia. | 14.50 mm | Max. output cable dia. | 5.0 mm |
| Dimension (LxWxH) | 331 × 274 × 96 mm | Weight | 1.65 kg |
| Material | PC + ABS plastic | Supported adaptors | SC simplex, LC Duplex |
| Operating temperature | -40 - +80 °C | IP protection class | IP 65 |
| Colour | White (RAL9010) | Type of installation | Wall-mount and Pole-mount |

Mechanical Layout



Installation Instructions



Warning! Ensure you follow basic safety precautions to reduce risk of fire, electrical shock, and personal injury.



Warning! Never look directly into the end of a fibre or a fibre connector that may be carrying laser light. Laser light, visible or invisible, can seriously injure eyes or even cause blindness.



Note! Optical fibres should not be damaged. Cut the damaged fibre, and re-strip the fibre if any damage occurs.

Thank you for purchasing this Teleste product. Please take a moment and carefully read these instructions through before installing the product.

General Preparations and Precautions

1. Check the terminal box type, cable item, and all components before installation.
2. Keep all components dry and clean for installation.
3. Keep the working environment clean (dry and dust-free) and flat for installation.
4. Standard instruments and tools should be used during the installation.

Preparation of the Optical Cable

1. Determine the length to cut (about 100 cm) and stripping length.
2. Cut the reinforced core, keep the reserved length about 4 cm.

Installation Guidelines - directly spliced with pigtails

1. Install the adapters into the plate and tighten the fixing screw. Note; in some cases the adapters may already be fitted at the factory (Picture 1).



Picture 1



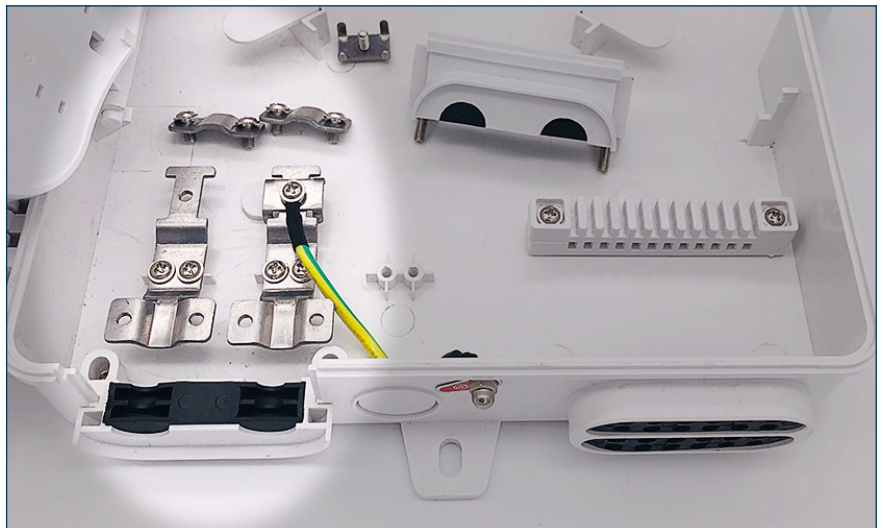
All necessary safety instructions must be followed during the installation and maintenance operations. The safety requirements for class 1M lasers are detailed in EN60825-1.

2. Install the pigtails into the adapters and route the pigtails on the splice wheel (Picture 2).



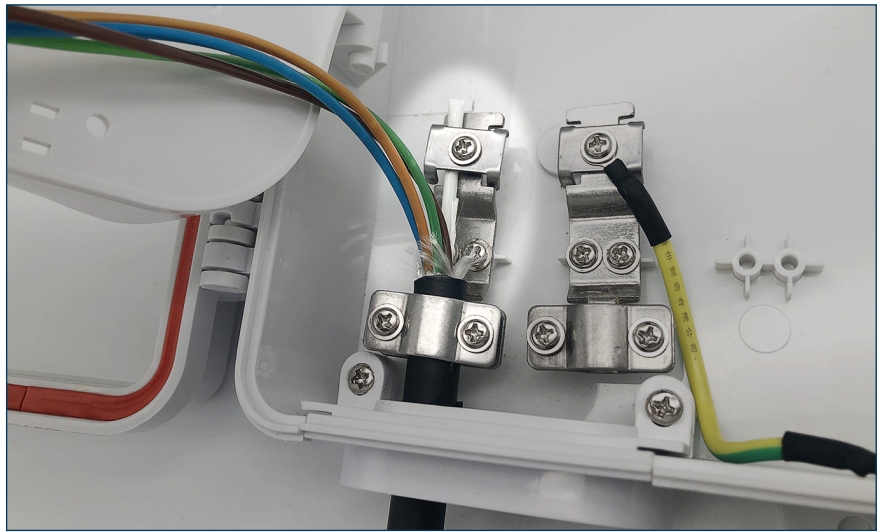
Picture 2

3. Undo the screw of support bracket and remove the fixing clamp (Picture 3).



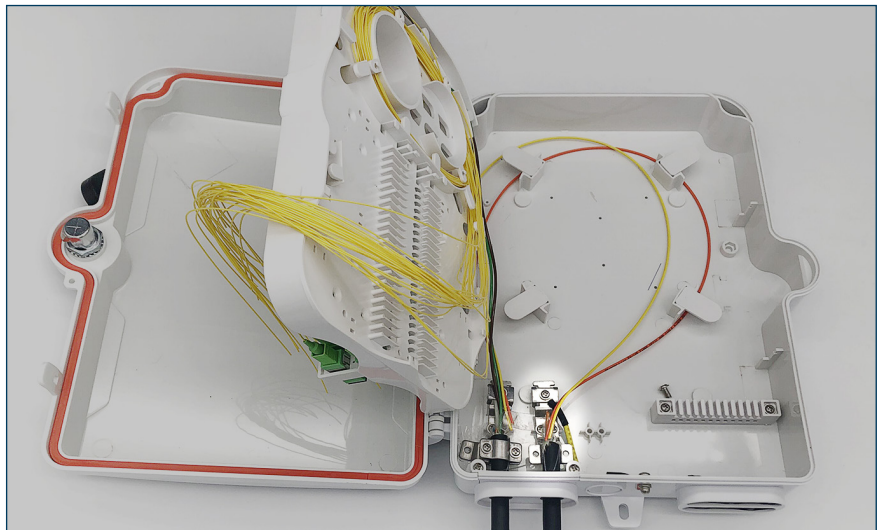
Picture 3

4. Feed the stripped cable into the box ensuring the plastic strip is in place to protect the fibres. Tighten the cable with the fixing clamp, fix a cable tie around the reinforced core screw, then tighten the fixing screw (Picture 4).



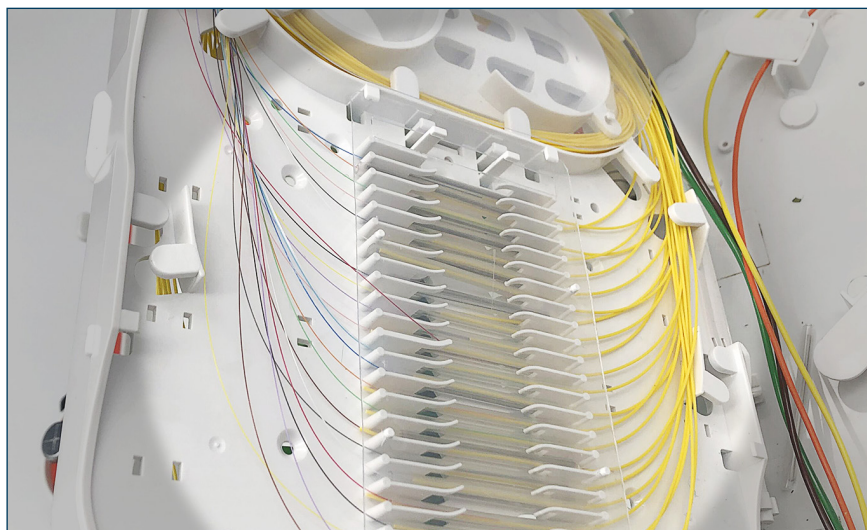
Picture 4

5. Install the uncut optical fibre at the bottom, allow at the least a radius of more than 30 mm, fix the cable sheath with the clamp (Picture 5).



Picture 5

6. Fibre Splicing. Put 24 optical fibres into the splice protective tubes separately, splice them one by one directly with pigtails and close the transparent cover (Picture 6).



Picture 6

7. Install the fibre connector on site (Picture 7).
 - Thread the drop cable from the entrance.
 - Install the fibre connector on site.
 - Connect the fibre connector into the adapters.



Picture 7

Installation Guidelines - spliced with splitter

1. Install the adapter on the plate and tighten the fixing screw. (Picture 8)



Warning! Ensure you follow basic safety precautions to reduce risk of fire, electrical shock, and personal injury.



Warning! Never look directly into the end of a fibre or a fibre connector that may be carrying laser light. Laser light, visible or invisible, can seriously injure eyes or even cause blindness.

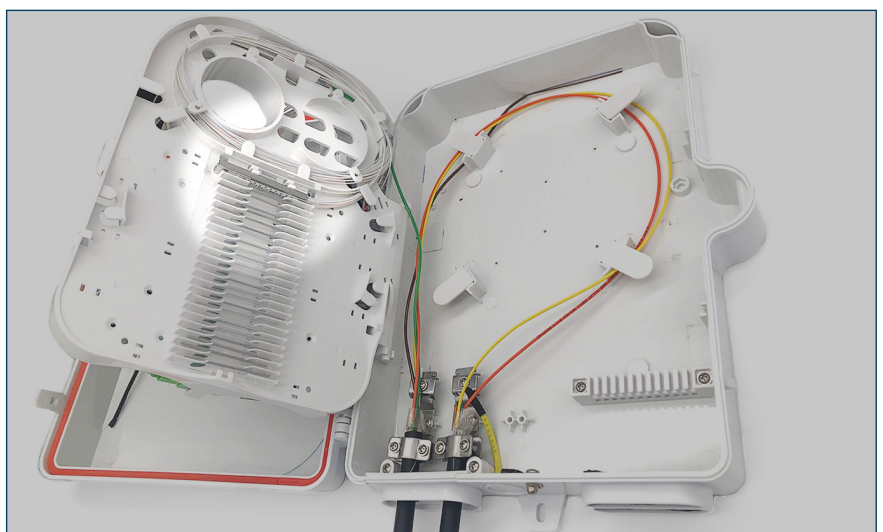


Note! Optical fibres should not be damaged. Cut the damaged fibre, and re-strip the fibre if any damage occurs.



Picture 8

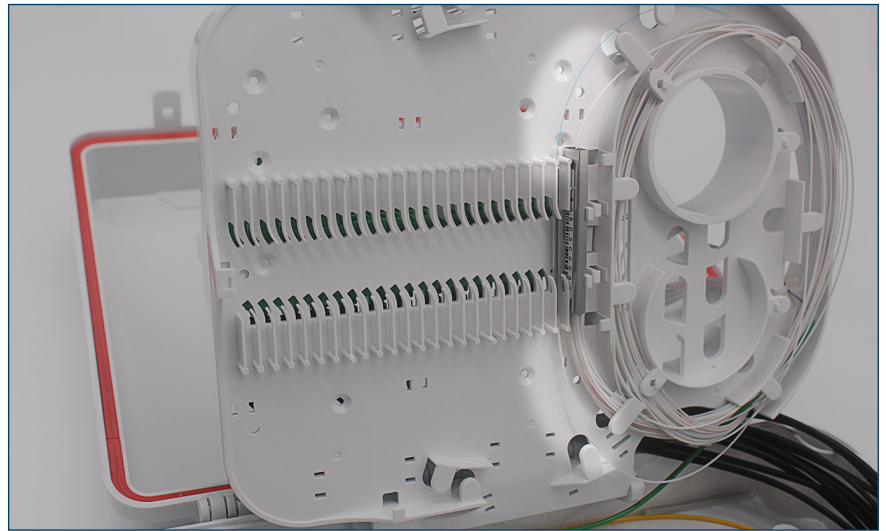
2. Install the splitter on the holder (Picture 9), splice with the 1 x X PLC splitter.
 - Put one optical fibre out of twelve fibres into the splice protective tube (Picture 10).
 - Splice the 1 x X PLC splitter and put the heatshrink tubes into the groove.



Picture 9

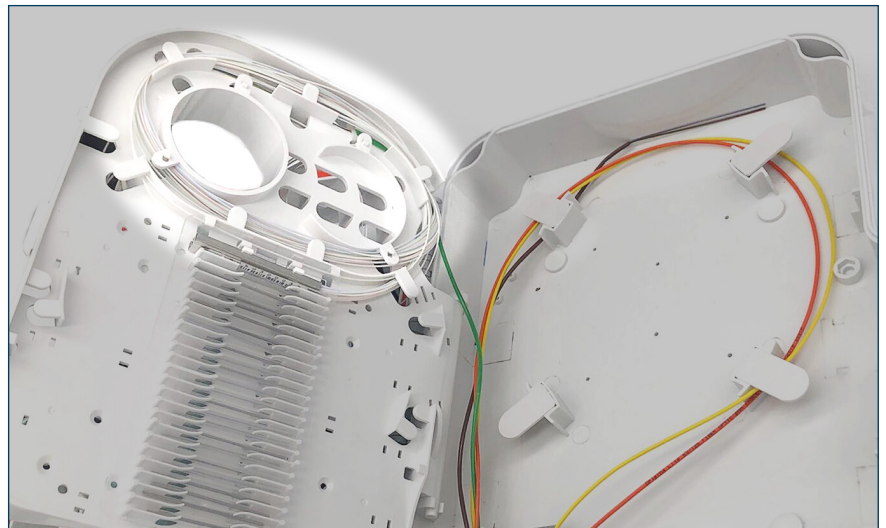


All necessary safety instructions must be followed during the installation and maintenance operations. The safety requirements for class 1M lasers are detailed in EN60825-1.



Picture 10

3. Route the extra fibre to the bottom for storage (Picture 11).
 - Fasten the splice tray and tighten the fixing screw.



Picture 11

4. Install the fibre connector on site (Picture 12).
 - Thread the drop cable from the entrance.
 - Install the fibre connector on site.
 - Connect the fibre connector into the adapters.



Picture 12

Seal the Cable Ports

When the diameter of fibre cable is smaller than the diameter of the inlet/outlet port, then sealing tape could be used to enlarge the external diameter of the fibre cable. Don't forget to seal up ports with rubber plugs and fasten all the screws tightly (Picture 13).



Picture 13



TEN-FWB5 - Wall mounted.

Mounting Guidance

To carry out a wall mount installation drill three holes over the wall, see figure 2 below. Place the expansion plugs, $\Phi 7.5 \times 40$ mm, place the box to match up the holes and use bolts to fasten, see figure 3. A pole mount installation is done by fixing a set of easy pole rings to the telecom pole, see figure 4.

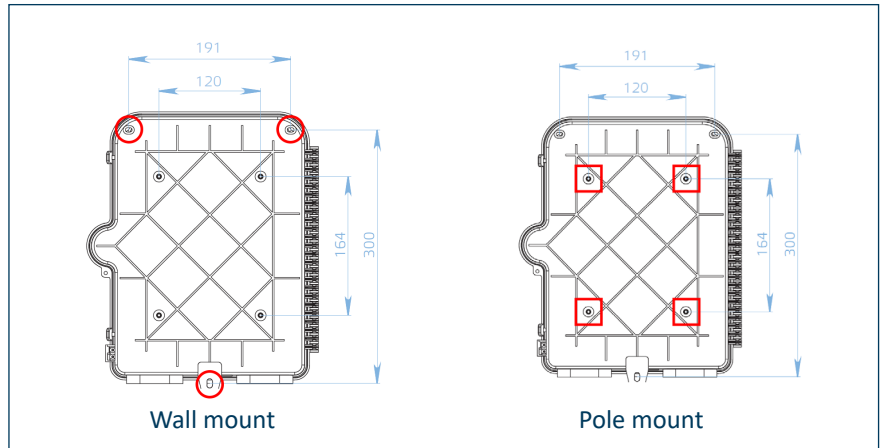


Figure 2

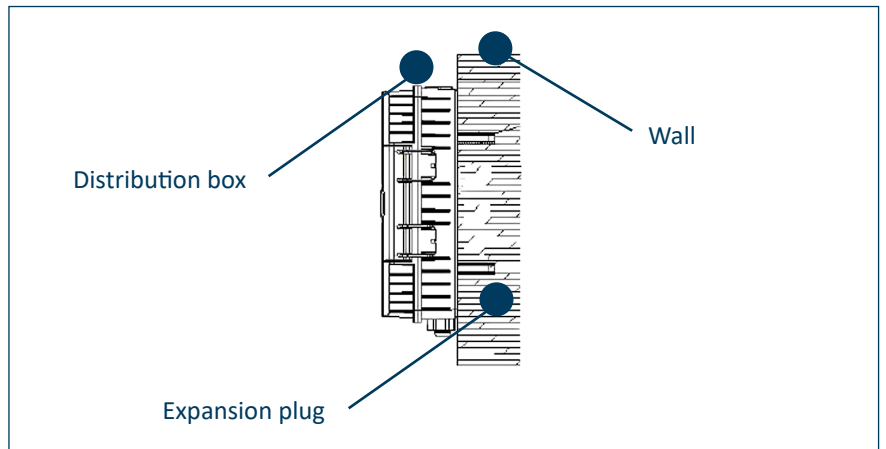


Figure 3

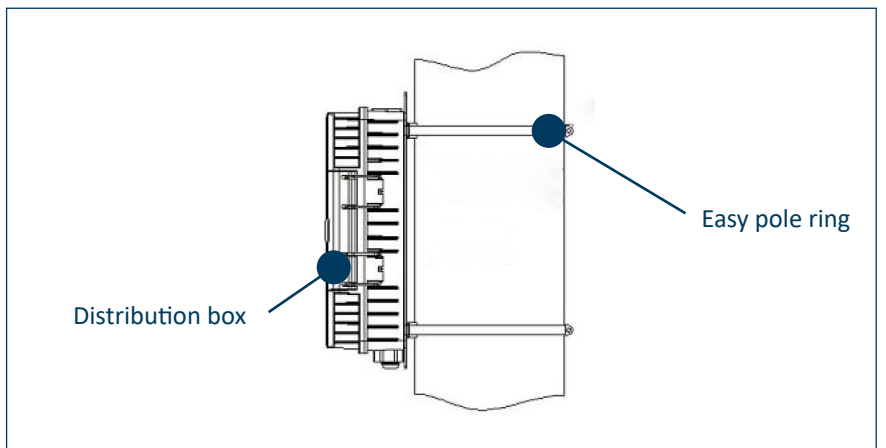


Figure 4

Legal Declarations

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TELESTE

TELESTE CORPORATION

P.O. Box 323

FI-20101 Turku, Finland

www.teleste.com

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