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> [NineLeaf IP66 Weatherproof Outdoor Electrical Junction Box Instruction Manual](#)

NineLeaf Medium+4*M20

NineLeaf IP66 Weatherproof Outdoor Electrical Junction Box Instruction Manual

Model: Medium+4*M20 (125x86x62mm)

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1. INTRODUCTION

This manual provides instructions for the safe and effective use of the NineLeaf IP66 Weatherproof Outdoor Electrical Junction Box. This enclosure is designed to protect electrical connections in outdoor environments from water, dust, corrosion, and other elements. Please read this manual thoroughly before installation and use.

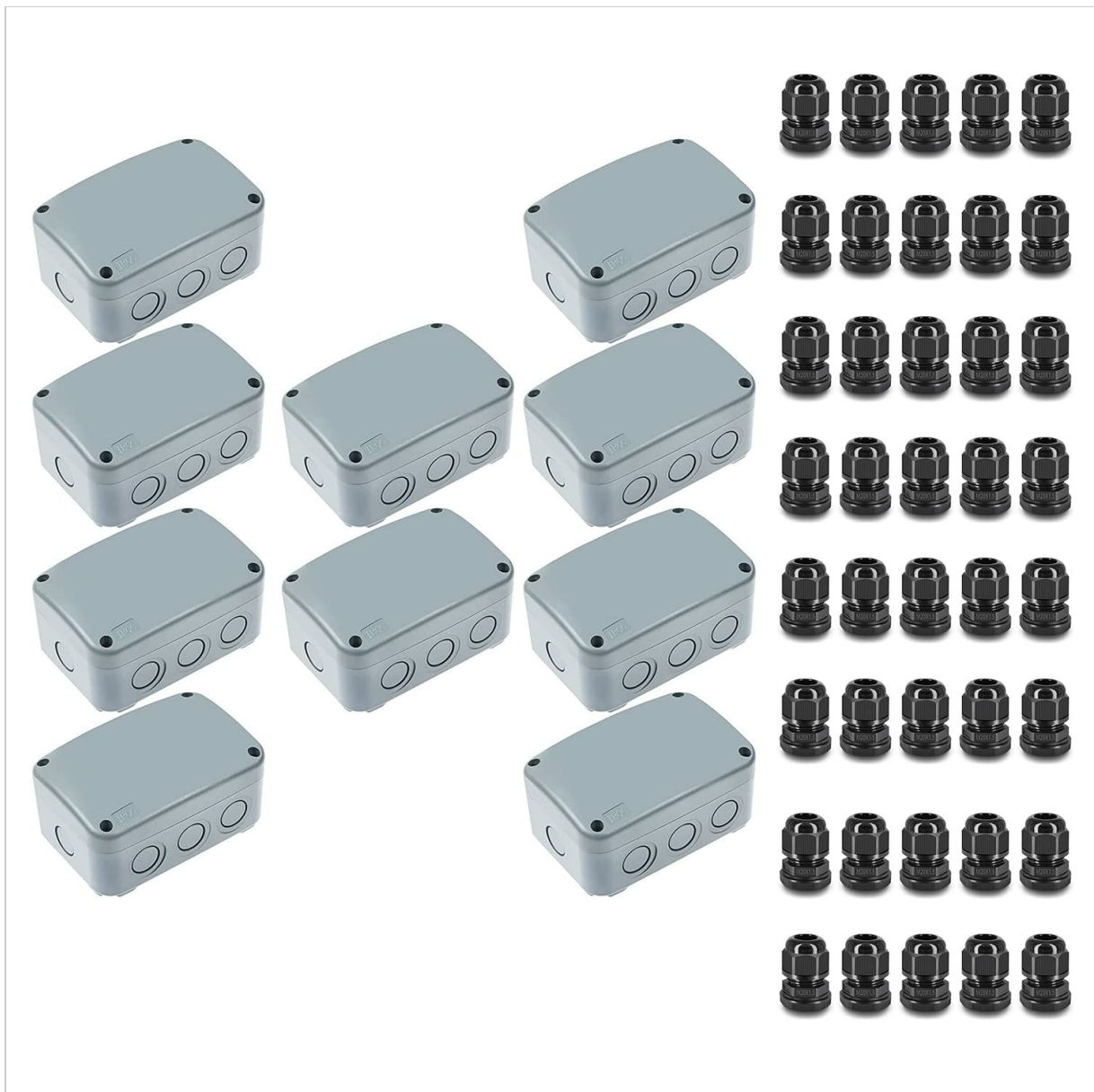


Figure 1: NineLeaf IP66 Weatherproof Outdoor Electrical Junction Box (Model Medium+4*M20)

2. SAFETY INFORMATION

WARNING: Risk of Electric Shock. Always disconnect power before installing or servicing electrical components.

- Ensure all electrical work is performed by a qualified electrician or in accordance with local electrical codes.
- Verify the product's IP66 rating is suitable for your specific environmental conditions.
- Do not modify the junction box in any way that could compromise its weatherproof integrity.
- Keep children and unauthorized personnel away from electrical installations.
- Always wear appropriate personal protective equipment (PPE) when working with electrical systems.

3. PRODUCT OVERVIEW AND COMPONENTS

The NineLeaf Outdoor Junction Box is constructed from durable ABS and PVC plastic, offering robust protection for your electrical connections. Key features include:

- **IP66 Weatherproof Rating:** Provides protection against dust ingress and powerful water jets.

- **Durable Construction:** Made from ABS and PVC plastic, designed to withstand sun exposure, corrosion, and impact.
- **Integrated Gasket:** A rubber gasket between the cover and the box ensures a tight, waterproof seal.
- **DIY Hole Design:** Features pre-marked areas for drilling up to 9 holes on its sides and bottom, allowing for customized cable entry.
- **Secure Fastening:** The cover is secured with four screws for a reliable closure.

What's Included:

For the "Medium+4*M20 10PK" variant, the package includes:

- 10 x NineLeaf Outdoor Junction Boxes
- 40 x M20*1.5 Cable Glands (4 per box)



Figure 2: Key protective features of the junction box.

Integrated Rubber Gasket



Figure 3: View of the integrated rubber gasket for superior sealing.

4. SPECIFICATIONS

Feature	Detail
Model	Medium+4*M20
Outer Dimensions (L x W x H)	125 x 86 x 62 mm (4.9 x 3.3 x 2.3 inches)
Inner Dimensions (Approx.)	117 x 76 x 38 mm (4.6 x 3 x 1.5 inches)
Material	ABS (Acrylonitrile Butadiene Styrene), PVC (Polyvinyl Chloride), Rubber
IP Rating	IP66 (Dust-tight and protected against powerful water jets)
Installation Type	Surface-mounted, Screw-In
Color	Grey
Included Accessories	4 x M20*1.5 Cable Glands per box

Wiring demonstration drawing



The dotted line position is the hole groove, which can be pierced with hard objects.

According to your requirements, you can open 9 holes.

Package only include one JunctionBox, the cable glands, TerminalStrips and wires are not included.

Figure 4: Dimensional diagram of the junction box.

5. SETUP AND INSTALLATION

Follow these steps for proper installation of your NineLeaf Outdoor Junction Box:

1. **Plan Cable Entry Points:** Identify the desired locations for cable entry on the box. The box features pre-marked circular areas on its sides and bottom for drilling. Up to 9 holes can be created.
2. **Drill Holes:** Using an appropriate drill bit (e.g., a step drill bit) for plastic, carefully drill holes at the chosen locations. Ensure the holes are sized correctly for the M20*1.5 cable glands (or other conduit connectors you plan to use). Keep the box stable during drilling to improve accuracy.

Your browser does not support the video tag.

Video 1: Demonstration of how to efficiently drill holes in the junction box for cable entry.

3. **Install Cable Glands:** Insert the M20*1.5 cable glands into the drilled holes and tighten them securely to maintain the IP66 seal. Ensure the rubber seals within the glands are properly seated around the cables once they are passed through.
4. **Mount the Box:** Position the junction box on your desired surface. Use the four mounting holes (one in each corner) to secure the box with appropriate screws. Ensure the mounting surface is flat to prevent distortion of the box, which could compromise the seal.

Water Proof Junction Box with Reserved-Holes

Choose IP66 Expertise for Waterproof Excellence!

NineLeaf

- ✔ Fit with water-resistant conduit connectors.
- ✔ Fit with M20*1.5mm cable glands.



Figure 5: Illustration of cable gland installation and conduit connection.

5. **Wire Connections:** Make all necessary electrical connections inside the box. Ensure all connections are secure and insulated according to electrical standards.
6. **Close the Cover:** Place the cover onto the box, ensuring the integrated rubber gasket is correctly positioned. Secure the cover with the four provided screws, tightening them evenly to achieve a proper seal.



Ultraviolet protection

Can be exposed outdoors for a long time



Fire and flame retardant

Flame retardant material can make the switch safer



IP66 Waterproof rating

It can adapt to water stained Road, shower, etc



Dustproof property

Can be used in harsh environment

Figure 6: Example of internal wiring and cable gland usage.

6. OPERATION

The NineLeaf Outdoor Junction Box functions as a protective enclosure for electrical connections. Once installed and sealed, it requires no active "operation." Its purpose is to passively safeguard the internal electrical components from environmental factors. Ensure all cables are properly routed through the cable glands and that the cover is securely fastened to maintain its IP66 rating.



Figure 7: Examples of suitable applications for the junction box.

7. MAINTENANCE

Regular maintenance helps ensure the longevity and continued protection provided by your junction box:

- **Periodic Inspection:** Annually inspect the box for any signs of damage, cracks, or degradation due to UV exposure or impact.
- **Seal Integrity:** Check the rubber gasket and cable glands for any signs of wear or hardening. Ensure all screws securing the cover are tight. If the gasket appears damaged, it should be replaced to maintain the waterproof rating.
- **Cleanliness:** Keep the exterior of the box clean from dirt, debris, and excessive dust buildup, which can affect material integrity over time.
- **Cable Gland Check:** Ensure cable glands remain tightly sealed around the cables. Loose glands can compromise the waterproof seal.

8. TROUBLESHOOTING

If you encounter issues with your NineLeaf Outdoor Junction Box, consider the following:

Issue: Water or Moisture Inside the Box

- **Cause:** Improperly tightened cover screws.
- **Solution:** Ensure all four cover screws are tightened evenly and firmly.
- **Cause:** Damaged or misaligned rubber gasket.
- **Solution:** Open the box, inspect the gasket for damage or displacement. Realign or replace if necessary.
- **Cause:** Loose or incorrectly installed cable glands.
- **Solution:** Check all cable glands. Ensure they are tightened securely around the cables and that the internal seals are intact.
- **Cause:** Cracks or damage to the box housing.
- **Solution:** Inspect the box for physical damage. If compromised, the box should be replaced to maintain its IP66 rating.

Issue: Difficulty Drilling Holes

- **Cause:** Using an unsuitable drill bit or incorrect technique.
- **Solution:** Use a step drill bit designed for plastic. Apply steady, moderate pressure and keep the box stable. Refer to the "How to open holes efficiently?" video in the Setup section.

9. WARRANTY AND SUPPORT

For warranty information or technical support, please contact NineLeaf customer service through the retailer where the product was purchased or visit the official NineLeaf website. Please have your product model number (Medium+4*M20) and purchase details ready when contacting support.