XDP DIMR1

XDP Dome Light Dimmer with Delay User Manual

Model: DIMR1

1. PRODUCT OVERVIEW

The XDP Dome Light Dimmer with Delay is a universal module designed to enhance your vehicle's interior lighting system by providing a configurable dimming and delay function. This device allows for a smooth fade-in and fade-out of your dome light, with adjustable timeout settings. It is compatible with a wide range of vehicles and supports both positive and negative door switch systems.

Image 1.1: Front view of the XDP Dome Light Dimmer module, showing the compact design and attached wiring harness. The label indicates it is Wi-Fi configurable, 10 amp max current, 12V/24V compatible, Version 3.0, and Made in USA.

Key Features:

- **Universal Compatibility:** Designed to fit any car, working with both positive and negative door switch systems.
- **Wide Application Range:** Supports 10 amp current, 6V-18V operating voltage, and works with power or ground light control.
- **Configurable Parameters:** Settings can be adjusted via a smartphone using Wi-Fi connectivity.
- **Made in USA:** Manufactured in the United States.

2. SETUP AND INSTALLATION

Careful installation is crucial for proper operation. Ensure the vehicle's power is disconnected before beginning any wiring.
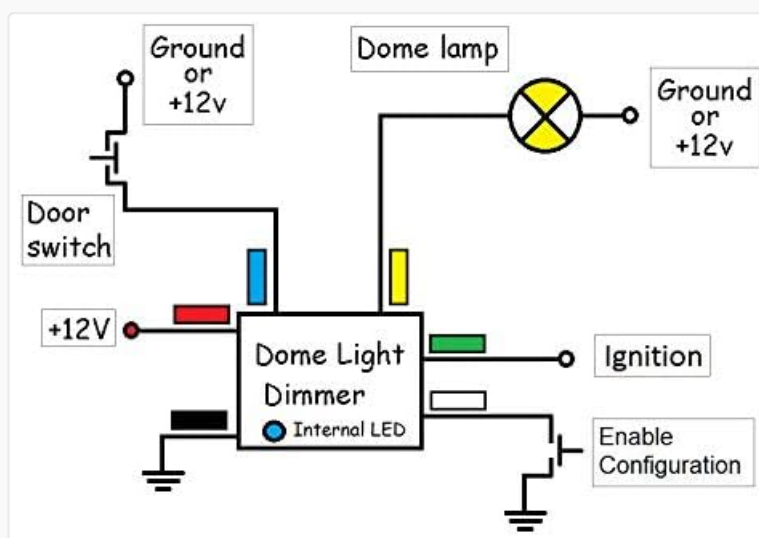

Image 2.1: Detailed wiring diagram illustrating connections for the Dome Light Dimmer. It shows connections for the door switch (Ground or +12V), +12V power, ground, dome lamp (Ground or +12V), ignition, and an 'Enable Configuration' wire.

Wiring Instructions:

1. **Identify Wires:** Refer to Image 2.1 and your vehicle's wiring diagram to identify the corresponding wires for your dome light, door switch, ignition, and power/ground.
2. **Power Connection:** Connect the module's power input (typically red wire) to a switched +12V power source. Connect the module's ground wire (typically black) to a reliable chassis ground.
3. **Door Switch Connection:** The module supports both positive and negative door switches. Connect the appropriate wire from the module (yellow or orange, depending on your vehicle's system) to your door switch signal wire.
4. **Dome Lamp Connection:** Connect the module's output wire to the dome lamp. The module can control either the positive or ground side of the dome lamp, depending on your vehicle's setup and the module's configuration.
5. **Ignition Connection:** Connect the module's ignition wire (typically green) to a wire that receives +12V when the ignition is ON. This allows the dimmer to react to the vehicle's ignition status.
6. **Enable Configuration:** The white wire is used to enable configuration mode. This can be done by momentarily grounding it or by using the door jam switch as described in the configuration section.

Important: Always verify your vehicle's specific wiring before making connections. Incorrect wiring can damage the module or vehicle electronics. The module operates between 6V and 18V and handles up to 10 Amps.

3. CONFIGURATION AND OPERATING

The XDP Dome Light Dimmer is configurable via Wi-Fi using a smartphone or computer. This allows for precise customization of its operation.

Entering Configuration Mode:

To enter configuration mode, you can either momentarily ground the white wire of the module or activate the door jam switch as described in the instructions. Once in configuration mode, the module broadcasts a Wi-Fi network.

Connecting to the Module:

1. Enable Wi-Fi on your smartphone or computer.
2. Search for available Wi-Fi networks and connect to the network broadcast by the dimmer module (e.g., 'UI_DOME_12252019' or similar).
3. Once connected, open a web browser and navigate to the IP address provided in the module's instructions (commonly 192.168.4.1).
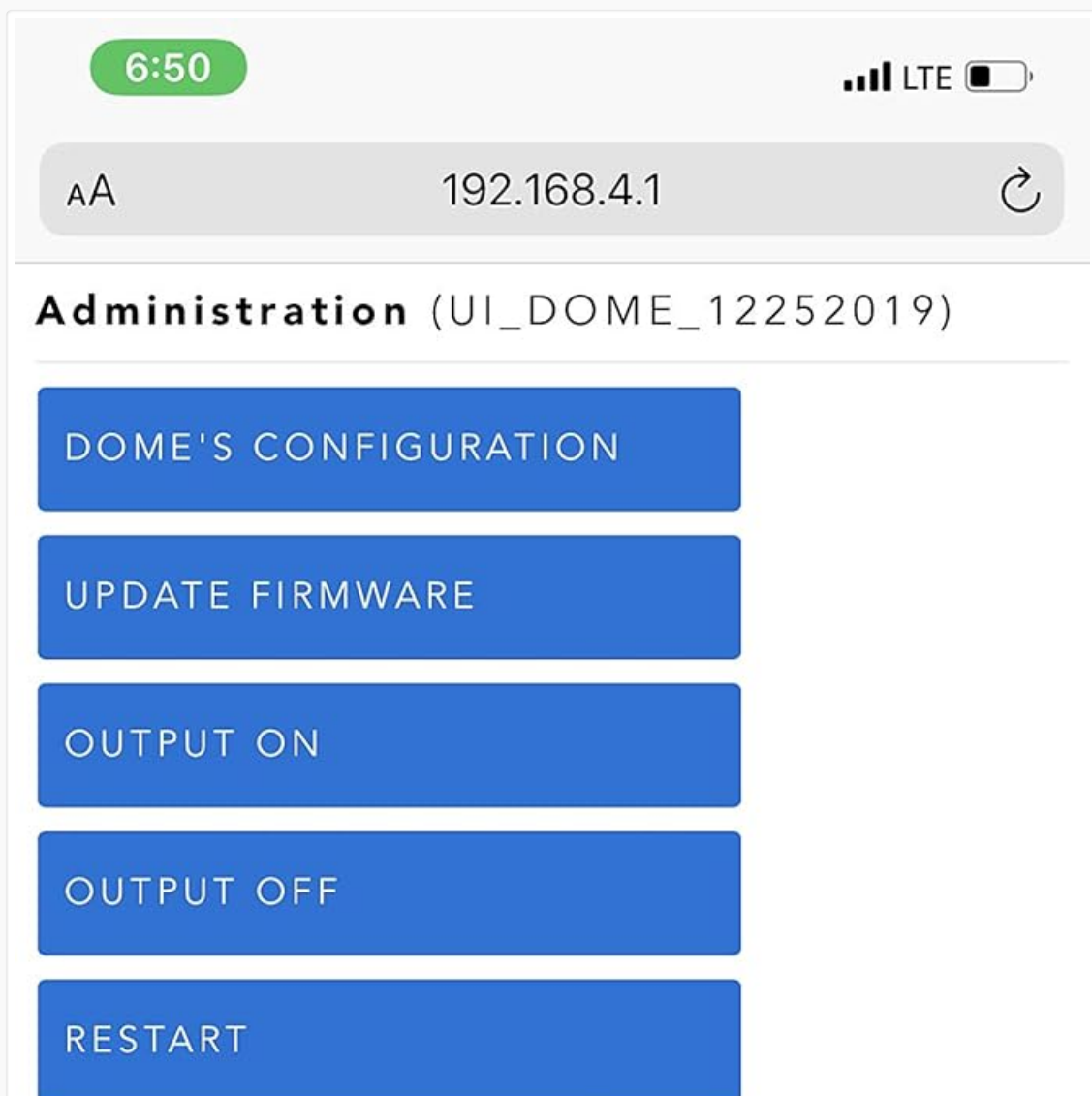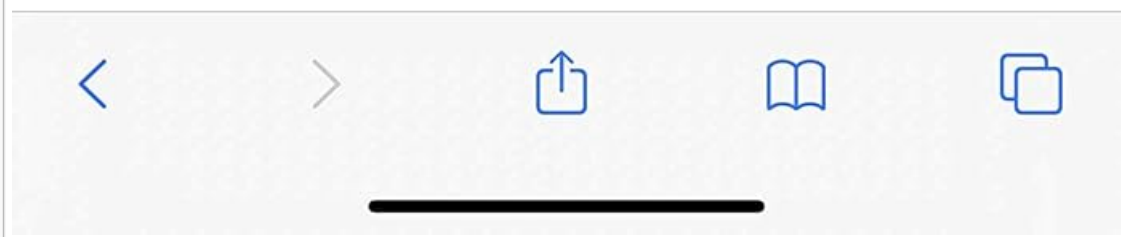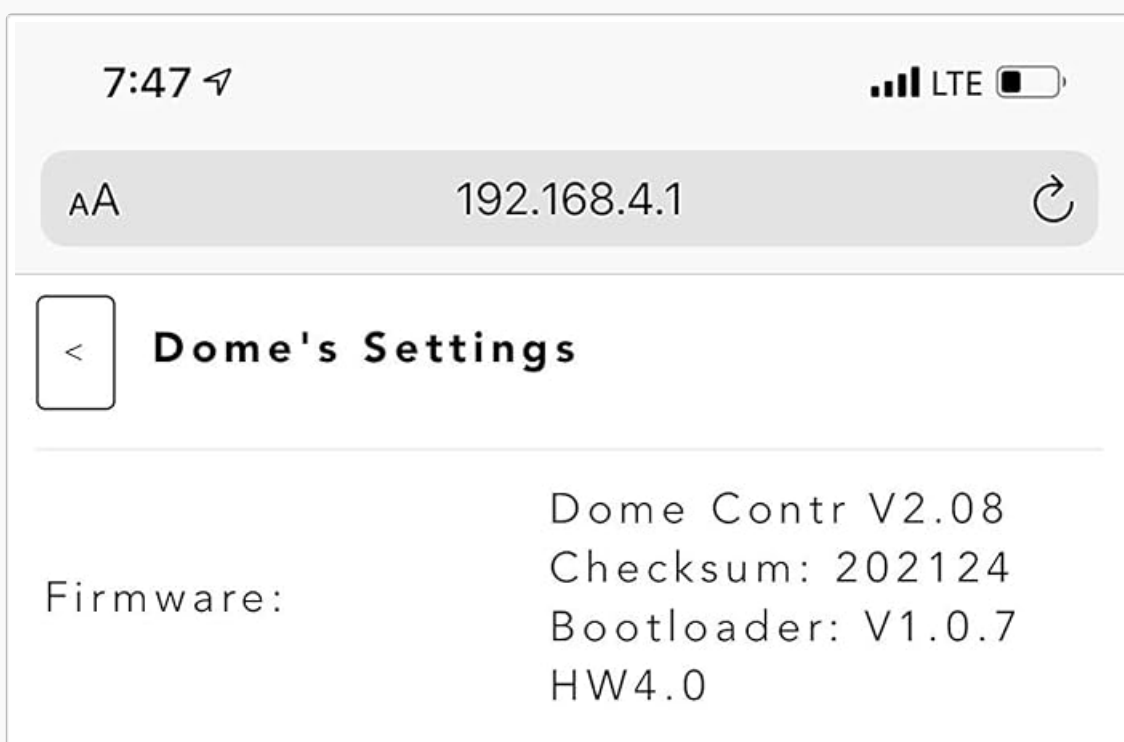
Image 3.1: Screenshot of the administration interface accessible via Wi-Fi, showing options for 'DOME'S CONFIGURATION', 'UPDATE FIRMWARE', 'OUTPUT ON', 'OUTPUT OFF', and 'RESTART'.

Adjusting Settings:

From the administration interface, select 'DOME'S CONFIGURATION' to access the adjustable parameters.

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< **Dome's Settings**

Firmware:

Dome Contr V2.08
Checksum: 202124
Bootloader: V1.0.7
HW4.0

Door closed timeout:	20	Sec
Door openned timeout:	600	Sec
Door open signal	Ground ▼	
Initial light intensity:	0	0-10
Output type	Positive ▼	
Timeout with Ign ON:	☑	

SAVE

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Image 3.2: Screenshot of the 'Dome's Settings' page, displaying configurable options such as 'Door closed timeout', 'Door opened timeout', 'Door open signal', 'Initial light intensity', 'Output type', and 'Timeout with Ign ON'.

- **Door closed timeout:** Sets the duration (in seconds) the light remains on after the door is closed and before it fades out.
- **Door opened timeout:** Sets the maximum duration (in seconds) the light remains on if the door is left open.
- **Door open signal:** Configures whether the door switch provides a 'Ground' or 'Positive' signal when the door is open.
- **Initial light intensity:** Adjusts the initial brightness level (0-10) when the light first comes on.

- **Output type:** Specifies whether the module controls a 'Positive' or 'Ground' switched dome light.
- **Timeout with Ign ON:** Enables or disables the timeout function when the ignition is on.

After making changes, ensure you click the 'SAVE' button to apply the new settings. A restart of the module may be required for all changes to take effect.

4. OPERATION

Once installed and configured, the XDP Dome Light Dimmer operates automatically based on your settings.

- **Door Open:** When a door is opened, the dome light will fade in to the set initial intensity.
- **Door Closed:** After the door is closed, the light will remain on for the 'Door closed timeout' duration, then smoothly fade out.
- **Ignition On:** If the ignition is turned on while the light is active, the light will fade out immediately, or according to the 'Timeout with Ign ON' setting.
- **Key Off:** When the ignition is turned off, the dome lights may fade back up before the door is opened, depending on configuration.

5. MAINTENANCE

The XDP Dome Light Dimmer is designed for long-term, maintenance-free operation. No routine maintenance is required.

- Ensure all wiring connections remain secure and free from corrosion.
- Keep the module free from excessive moisture or extreme temperatures.
- Periodically check for any signs of physical damage to the module or wiring.

6. TROUBLESHOOTING

If you encounter issues with your XDP Dome Light Dimmer, refer to the following troubleshooting steps:

- **Light does not turn on/off or dim:**
  - Verify all wiring connections are correct and secure according to the wiring diagram (Image 2.1).
  - Check the power supply to the module (6V-18V).
  - Ensure the 'Door open signal' and 'Output type' settings in the Wi-Fi configuration match your vehicle's system.
  - Confirm the module is not faulty. In rare cases, a module may fail; inspect for any signs of overheating or damage.

- **Module not broadcasting Wi-Fi network:**
  - Ensure the module is powered on.
  - Attempt to re-enter configuration mode by momentarily grounding the white wire or activating the door switch.
  - Restart the module by cycling power.

- **Settings not applying:**
  - Ensure you clicked 'SAVE' after making changes in the Wi-Fi configuration interface.
  - Perform a 'RESTART' from the administration interface (Image 3.1) after saving new settings.
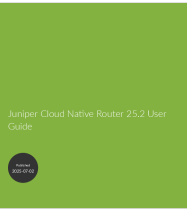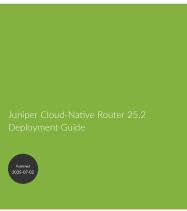
7. SPECIFICATIONS

Specification	Value
Brand	XDP
Model Number	DIMR1 (8542094785)
Operation Mode	Manual (Configurable via App)
Current Rating	10 Amps
Operating Voltage	6V-18V (Product label states 12V/24V, but specifications list 18V max)
Contact Type	Normally Open
Connector Type	Crimp
Terminal	Screw
Item Dimensions (L x W x H)	0.5 x 0.2 x 0.5 inches
Circuit Type	1-way
Actuator Type	Rotary
Contact Material	Stainless Steel
International Protection Rating	IP00
Number of Positions	2
Control Method	App (Wi-Fi)
Connectivity Protocol	Wi-Fi
Color	White
Item Weight	0.32 ounces
Manufacturer	OEM
Date First Available	October 6, 2015

8. SUPPORT

For further assistance or technical support, please refer to the manufacturer's official website or contact their customer service department. Specific warranty information may be available through the point of purchase or the manufacturer's documentation.

Related Documents - DIMR1

	[XDP Recreation Swing Set Limited Warranty and Product Information](#) Information regarding the limited warranty for XDP Recreation swing sets, including coverage details, exclusions, and customer support contact information. Also includes product registration and safety guidelines.
	[Juniper Cloud Native Router 25.2 User Guide](#) Explore the Juniper Cloud Native Router 25.2, a containerized routing solution designed for 5G networks. This guide covers its architecture, components, use cases in Radio Access Networks (RAN) and Telco virtual private clouds, and key features like DPDK and eBPF support.
	[Juniper Cloud-Native Router 25.2 Deployment Guide](#) A comprehensive guide to deploying and managing the Juniper Cloud-Native Router (JCNR) version 25.2. This document covers installation, configuration, and troubleshooting across various platforms including baremetal servers, OpenShift, Amazon EKS, Google Cloud Platform, Wind River, VMWare Tanzu, and Microsoft Azure. It details features, architecture, and use cases for 5G networks and cloud environments.
	[Juniper Cloud-Native Router 25.2 Release Notes](#) Release notes for Juniper Cloud-Native Router (JCNR) version 25.2, detailing new features, resolved issues, known limitations, and upgrade/downgrade options.
	[XDP Recreation Swing Set Limited Warranty and Product Information](#) This document outlines the limited warranty for XDP Recreation swing sets, covering defects in materials and workmanship for 180 days. It also provides important product information, safety guidelines, and customer support contact details.
	[Vertiv Liebert XDP with iCOM User Manual](#) Comprehensive user manual for the Vertiv Liebert XDP with iCOM, detailing installation, operation, maintenance, and troubleshooting of this indirect cooling system for data centers.