# MR-2100AC-XX/W1615MR-XX

## **Quick Installation Instructions**

Document Number: 830-04406-01

February 2021

#### Package Contents:

- 1 x MR-2100AC-XX or W1615MR-XX
- 1 x Quick Install Guide
- 1 x Power supply



### Installation

For installations with more than one MR-2100AC-XX/W1615MR-XX, select one unit to be used as the main MESH controller and follow the instructions presented on the current document.

#### 1. Mounting

The MR-2100AC-XX/W1615MR-XX may be mounted on flat surfaces such as a desktop. The MR-2100AC-XX/W1615MR-XX is equipped with an extendable base to enhance stability.

#### 2. Connect Power

- Plug the round two pin 12V DC power connector of power converter into the MR-2100AC-XX/W1615MR-XX power port
- b. Plug the input of power converter into a live AC outlet
- Verify that the POWER LED on the MR-2100AC-XX/W1615MR-XX is solid white indicating local power is on and voltage is good

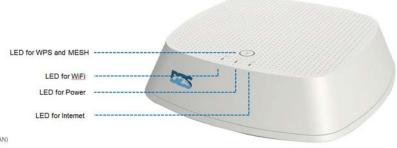
See MR-2100AC-XX/W1615MR-XX LED Behavior for a complete description of the LEDs.

## 3. Configuring SSID and Wi-Fi Key (Optional)

This step is optional. Each MR-2100AC-XX/W1615MR-XX comes with a set of default Wi-Fi SSID and passphrase located on the bottom information label. If using the defaults, step 3 (this step) may be skipped.

- Power up the MR-2100AC-XX/W1615MR-XX as described in the previous step, <u>Connect Power</u>. This is the main MESH controller
- Use a UTP cable between MR-2100AC-XX/W1615MR-XX Ethernet ports and a PC Ethernet port
- c. Configure a fixed IP address on your PC, for example 192.168.1.101 (for detailed instructions refer to your operating system documentation; for Windows OS follow these instructions <a href="https://support.microsoft.com/en-us/help/15089/windows-change-tcp-ip-settings">https://support.microsoft.com/en-us/help/15089/windows-change-tcp-ip-settings</a>)
- d. Open a web browser and input http://192.168.1.100
- e. When prompted for credentials enter "admin" as user and for password "DZSXXXXXXXXX" where

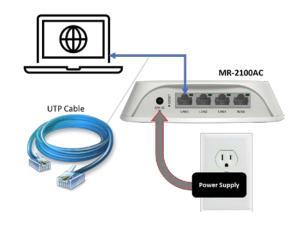




"XXXXXXXX" is the 9-digit serial number found on the unit label

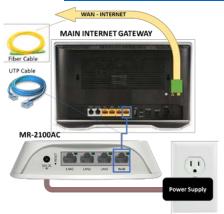
- f. Navigate to WiFi > EasyMesh > Advanced
- g. Click Configure BSS
- h. Click Edit BSS
- i. Change SSID
- j. Change Password
- k. Click Save and Apply
- I. If needed repeat for 2.4Ghz Wi-Fi

**NOTE:** by default, when changing the configuration of the 5GHz radio, the configuration of the SSID and passphrase will be replicated on all radios and all access points forming part of the MESH ecosystem.

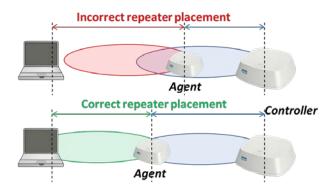


#### 4. Setting Up Your MESH Network

The first MR-2100AC-XX/W1615MR-XX is the MESH controller. This procedure assumes that the SSID and the Wi-Fi Key have been configured to match on all MR-2100AC-XX/W1615MR-XX devices. If the SSID and Wi-Fi keys for all the MESH devices do not match, follow the instructions in *Configuring SSID and Wi-Fi Key*.



- Connect the MR-2100AC-XX/W1615MR-XX acting as controller to any unused Ethernet port on your home gateway using CAT5E or CAT6 UTP cable; this will become the MESH controller automatically.
- Power on the rest of the available MR-2100AC-XX/W1615MR-XX devices.
- c. Place each MR-2100AC-XX/W1615MR-XX in a strategic location where the signal from the main gateway is still strong enough For maximum performance the MESH LED should remain SOLID GREEN. If the LED remains AMBER this is an indication that MESH link is still ACCEPTABLE, but signal level is either stronger than it needs to be or not strong enough to reach maximum performance. An ACCEPTABLE MESH link is still capable of delivering user bandwidth in the order of 200Mbps.
- d. As a rule of thumb, start by placing the MR-2100AC-XX/W1615MR-XX halfway between the main home gateway and the location that needs better Wi-Fi coverage. While doing so, make sure that the MESH LED remains solid as this is an indication that the MESH connection with the Master has been established.



MESH LED solid GREEN or solid AMBER. A solid RED MESH LED indicates that the MESH link quality is too low. While the LED is solid, even if its RED, the MESH link is active. A solid RED MESH LED is still good for internet browsing, email, etc. but Realtime applications like voice and video might suffer from low performance.

For a single MR-2100AC-XX/W1615MR-XX (when no remote agents are used) one device solution the indication of proper operation will have the power LED solid white and the MESH LED blinking.

 To connect to the Wi-Fi MESH network, use the Wi-Fi SSID and Password information located in the bottom label on your MR-2100AC-XX/W1615MR-XX device acting as controller.

If you want to change the SSID for the MESH Network log into the controller unit and change the 5GHz Wi-Fi SSID and Password, this configuration will be propagated automatically to 2.4GHz and all remote MESH devices.

For instructions on how to change the SSID and Password refer to **Configuring SSID and Wi-Fi Key**.

**NOTE:** When building your MESH network consider that the MR-2100AC-XX/W1615MR-XX acting as remote agent(s) can also utilize a wired or a wireless backhaul connection. Wired connectivity, if available, should always be the preferred method since it maximizes the performance of the Network as a whole.

LED	Status	Description
Power	Off	No Power
$\bigcirc$	Solid Green	Device is connected to power supply
	Off	MESH Disabled(un-MESHed)
Mesh	MESH Role Controller or MESH Role Remote Agent with wired connection	
	Solid Green	MESH connected
$\{ \mathcal{Y} \}$	MESH Role Remote Agent with wired connection	
	Solid Green	MESH Link Quality Excellent
	Solid Amber	MESH Link Quality Acceptable
	Solid Red	MESH Link Quality Low
GE 1-2	Off	Gigabit Ethernet Port disconnected
	Blinking Green	Gigabit Ethernet Port connected
WiFi	Solid Green	2.4G or 5G enabled

#### CE Marking:

When the product is marked with the CE mark on the equipment label, a supporting Declaration of Conformity may be downloaded from the DZS, Inc. World Wide Web site at <a href="https://www.dzsi.com">www.dzsi.com</a>.



To be protected against all verified adverse effects, the separation distance of at least 0.2m must be maintained between the antenna of the radio having max. 3.85dBi antenna and all persons.

The band 5150-5250 MHz for this device are restricted to indoor use only within all European Union countries.

Hereby, [DZS, Inc] declares that the radio equipment type [MR-2100AC-XX, W1615MR-XX] is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: http://www.dzsi.com.

#### **FCC Statement:**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**Note:** changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

## **Unique Identifier**

Trade Name: DZS

Model No.: MR-2100AC-XX/W1615MR-XX

### Responsible Party - U.S. Contact Information

DZS, Inc

5700 Tennyson Parkway, Plano, Texas, TX 75024, USA

Phone +1(510)541-1307

**NOTE:** Slots and openings in the housing are provided for ventilation. To ensure reliable operation of the product and to protect it from overheating, these slots and openings must not be blocked or covered.

This unit is also certified to operate effectively under the following conditions: Operating Temperature: 32° F to 104° F (0° C to 40° C). This product may contain copyrighted software that is licensed under the GNU General Public License ("GPL"), a copy of which is available at www.gnu.org/licenses. You may obtain a copy of such software, in source code form, from DZS for a period of three years after our last shipment of the product by following the instructions at www.dasanzhone.com/gplinfo.