

Grandstream Networks, Inc.

**GWN7062M - Setting Up Mesh Using the SYNC
Button**



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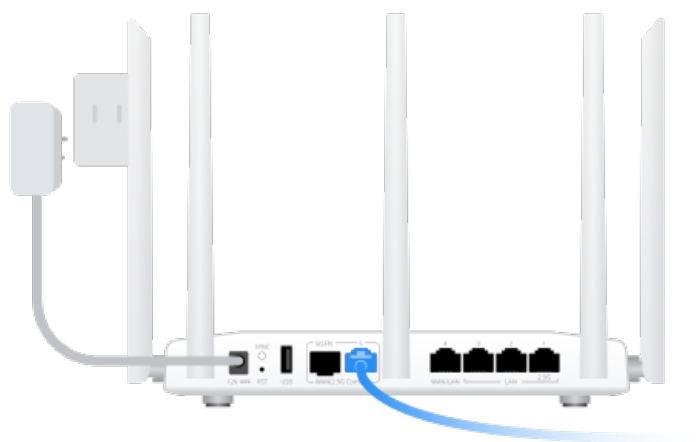
This guide explains how to create a **wired** or **wireless** Mesh connection between two GWN7062M routers using their physical **SYNC** buttons. The router connected to the internet acts as the **primary router**; the second device acts as the **sub-router**.

Before You Start

- Power on both routers.
- Connect the primary router to the internet through its **WAN/uplink** connection and complete the initial setup. Before pairing, confirm that its LED is **solid blue**.
- Reset the sub-router to factory defaults by holding the **RESET** button for about 10 seconds. The LED turns red after you release the button, confirming the reset. Wait until it starts blinking **yellow**.
- Choose the appropriate setup method below. A **wired Mesh** link uses Ethernet, while a **wireless Mesh** link uses Wi-Fi. The final SYNC-button action also differs between the two methods.



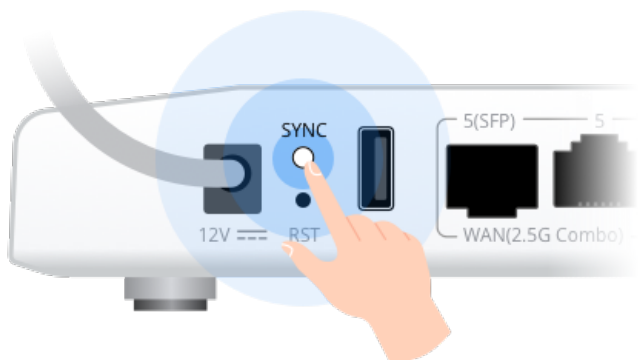
Sub router LED blinking yellow after a factory reset



Primary router ready after initial setup

Prepare the Sub-Router

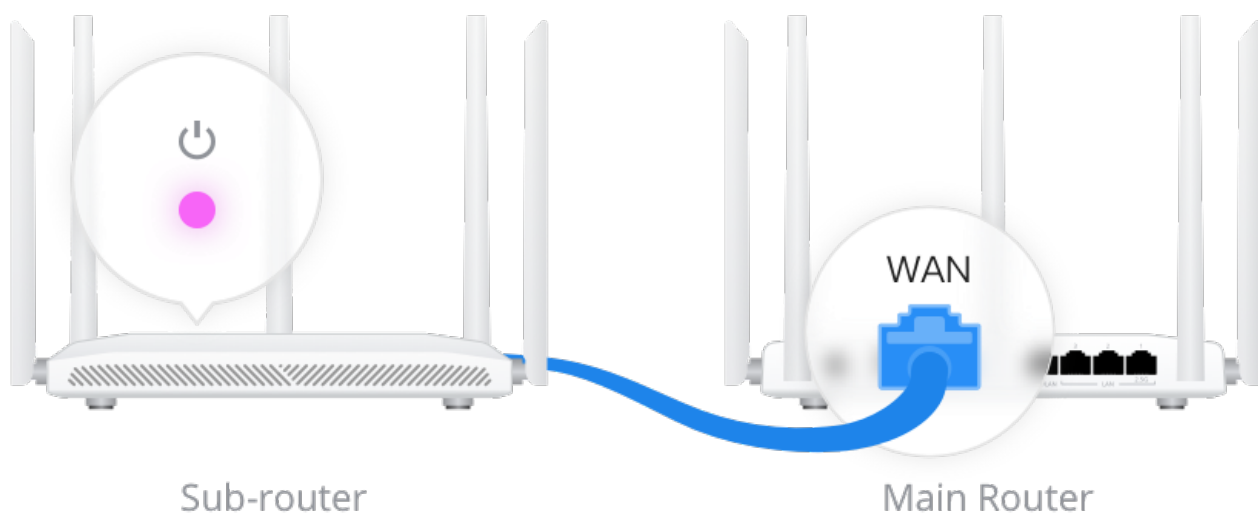
1. While the sub-router LED is blinking **yellow**, double-press the **SYNC** button.
2. Wait about one minute for the LED to turn **solid pink**, indicating that the sub-router is in Mesh pairing mode.



Double pressing SYNC on the sub router

Wired Mesh Setup

Use this method when the Mesh link between the routers will use Ethernet.



Wired Mesh setup

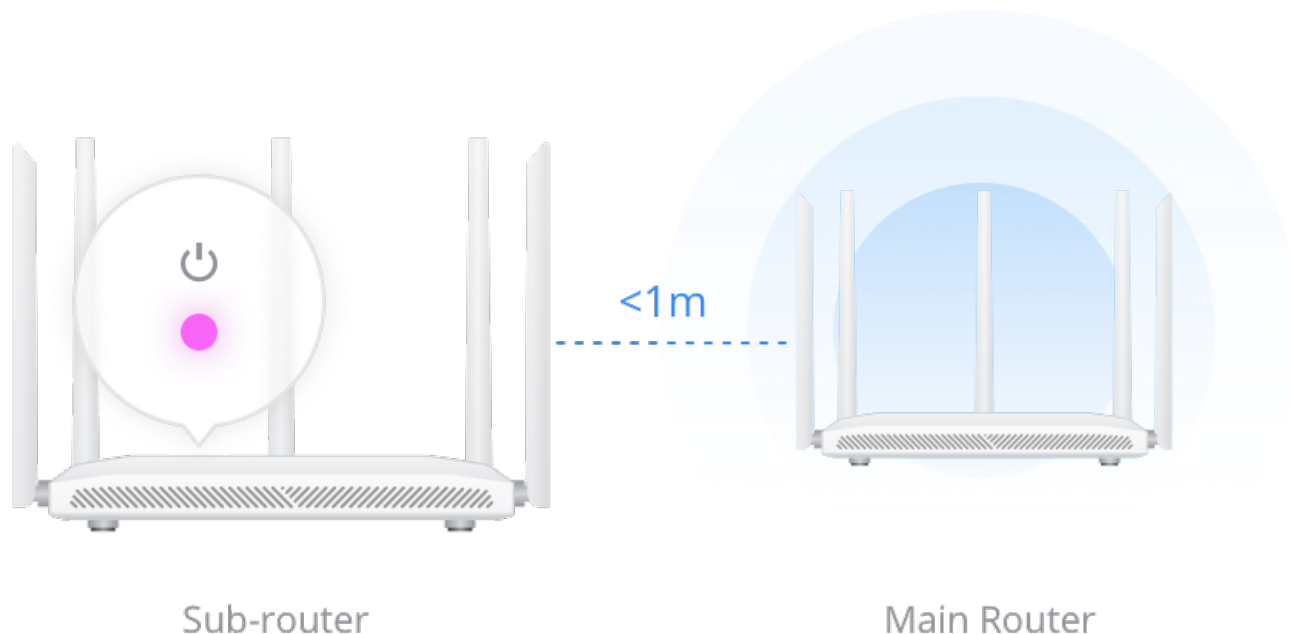
1. Connect **any port** on the sub-router to a **LAN port** on the primary router using an Ethernet cable.
2. Press and hold the **SYNC** button on the primary router for **3 seconds**. Its LED changes from solid blue to **pink** and begins blinking slowly as it searches for the sub-router.
3. When the sub-router is detected, the primary router adds it automatically, and both LEDs blink **pink rapidly**. **For a wired setup, do not press the SYNC button on the sub-router again.**
4. Both LEDs then turn **solid pink** while pairing is in progress.
5. Pairing may take a few minutes. When it is complete, both LEDs turn **solid blue**.

Note: If either router's LED turns **solid red**, pairing failed. Verify the Ethernet connection, reset the sub-router to factory defaults, prepare it again, and repeat the wired pairing procedure.

Note - Expected synchronization behavior: After the Mesh connection is established, the sub-router automatically synchronizes configuration from the primary router, including its wireless settings. This process restarts Wi-Fi on the sub-router, but the Ethernet Mesh link remains connected.

Wireless Mesh Setup

Use this method when the Mesh link between the routers will use Wi-Fi.



Wireless Mesh setup

1. Place the sub-router within **1 meter** of the primary router, and do not connect an Ethernet cable between them.
2. Press and hold the **SYNC** button on the primary router for **3 seconds**. Its LED changes from solid blue to **pink** and begins blinking slowly as it searches for the sub-router.
3. When the sub-router is detected, both LEDs blink **pink rapidly**. Press and hold the **SYNC** button on the sub-router for **3 seconds** to confirm wireless pairing.
4. Both LEDs then turn **solid pink** while pairing is in progress.
5. Pairing may take a few minutes. When the Mesh connection is established, both LEDs turn **solid blue**.

Note: If either router's LED turns **solid red**, pairing failed. Confirm that the routers are within 1 meter of each other and that no Ethernet cable connects them, reset the sub-router to factory defaults, prepare it again, and repeat the wireless pairing procedure.

Note - Expected synchronization behavior: After the Mesh connection is established, the sub-router automatically synchronizes configuration from the primary router, including its wireless settings. This process restarts Wi-Fi on the sub-router and temporarily disconnects the wireless Mesh link. The link should reconnect automatically once synchronization is complete. This interruption is expected and does not indicate that setup failed. Wait for the link to reconnect before repeating the pairing procedure.

Place the Sub-Router

After synchronization finishes and the Mesh link reconnects, disconnect the sub-router from power and move it to the area where Wi-Fi coverage must be extended, ideally with no more than one wall between it and the primary router. Power it on and wait for the LED to turn **solid blue**.

Mesh LED Indicator Reference

Refer to the table below to identify the Mesh status based on the LED state and router role.

LED State	Router Role	Description
Yellow (blinking)	Sub-router	The sub-router is brand new or has been reset to factory defaults and is waiting to enter Mesh pairing mode. Double-press SYNC to continue.
Pink (solid)	Sub-router	The sub-router is in Mesh pairing mode after the SYNC button was double-pressed.
Pink (blinking slowly)	Primary router	The primary router is scanning for nearby sub-routers.
Pink (blinking rapidly)	Both routers	The sub-router has been detected. No further SYNC action is required for wired pairing; for wireless pairing, press and hold SYNC on the sub-router for 3 seconds.
Pink (solid)	Both routers	Pairing is in progress, and the required SYNC action was accepted.
Blue (solid)	Primary router	The WAN/uplink is connected, initial setup is complete, and the router is ready for pairing.
Blue (solid)	Both routers	The Mesh connection is established. The sub-router then applies configuration from the primary router. In a wireless Mesh setup, the Wi-Fi restart can temporarily disconnect the Mesh link; it should reconnect automatically after synchronization finishes.
Red (solid)	Either router	Pairing failed. Reset the sub-router to factory defaults, prepare it again, and then repeat the applicable pairing procedure.

Mesh LED indicator reference
