

Introducing the Jaguar Communications Gigacenter and 804 Mesh Unit! The Gigacenter will provide you and your family with unsurpassed carrier class Wi-Fi as well as wireless TV throughout your home when used with the 804 Mesh unit.

Get to know the Gigacenter



Note: Under no circumstances should you insert anything into the reset button hole. This will result in a failure of services.

Front left side LED Operation



- Power LED**= Normal operation solid green.
- Broadband LED**= Normal operation solid Green.
- Service LED**= Normal operation flashing green.
- WiFi 2.4 GHz LED**= Normal operation is solid green or flashing green if devices are connected to the radio.
- WiFi 5 GHz LED**= Normal operation is solid green or flashing green if devices are connected to the radio.
- Ethernet LEDs 1-4**= flashing green if the ports are used.
- WPS Button**= Used when pairing devices to the Gigacenter.
- WPS LED**= Used only when pairing an 804 Mesh unit or another wireless internet device.

Rear Ports



- Reset Button**= Under no circumstances should you insert anything into the reset button hole. This will result in a failure of services.
- Yellow Ethernet LAN ports**= Used to feed internet or video service devices.
- Phone 1 & 2**= Not Used
- On/OFF Button**= The in position is on.
- Power Connector**= This is where the power cord plugs into the unit.
- White ETH-WAN port**= This is where the main Ethernet feed for your internet and TV services plugs into from the main fiber equipment located in another area of your home.

Pairing devices to the Gigacenter using WPS

804 Mesh Unit

Press and hold the WPS button on the Gigacenter for 5 seconds and then release. The WPS LED on the Gigacenter will blink amber after approximately 10 seconds and flashes for up to 120 seconds. The GigaFamily device has entered pairing mode. Press and release the WPS button on the back of the 804.

Once the units are paired, the WiFi backhaul LEDs on the 804 will show the signal rate.

The 804 mesh unit can now provide IPTV services and extend the wireless signal from the Gigacenter.

If no device is found, the WPS LED turns red after the 120 second time-out and remains red for 120 seconds.

Internet Device

Press and release the WPS button on the Gigacenter. The WPS LED on the Gigacenter will illuminate green and flashes for up to 120 seconds. Wi-Fi 5.0 GHz LED begins flashing after approximately 10 seconds indicating the pairing process has begun.

Initiate the WPS pairing procedure for your internet device per the manufacturer instructions.

If no device is found, the WPS LED turns red after the initial 120 second time-out and remains red for another 120 seconds.

Wireless Internet Access

In most cases when your Gigacenter was installed it was set up with separate SSIDs for the 2.4 and 5GHz radios. One for the 2.4 GHz radio and one for the 5GHz radio. Example: Jaguar and Jaguar_5G. This allows you to easily choose which radio you want individual devices to connect to for the best performance.

To get the best internet access speeds you should connect your devices to the 5G radio.

2.4GHz has a greater signal distance and is better going through walls etc. but will be slower and 5GHz is faster but will not have the same coverage distance as the 2.4 GHz radio.

Wired Internet access

If there is an open port Ethernet LAN port (yellow ports) on the Gigacenter you may plug an internet device into one of these ports using an Ethernet cable to your device.

Troubleshooting

If you find that your fiber internet service is not working and you cannot browse the internet or you are having an issue with TV services, please check the following items before contacting technical support.

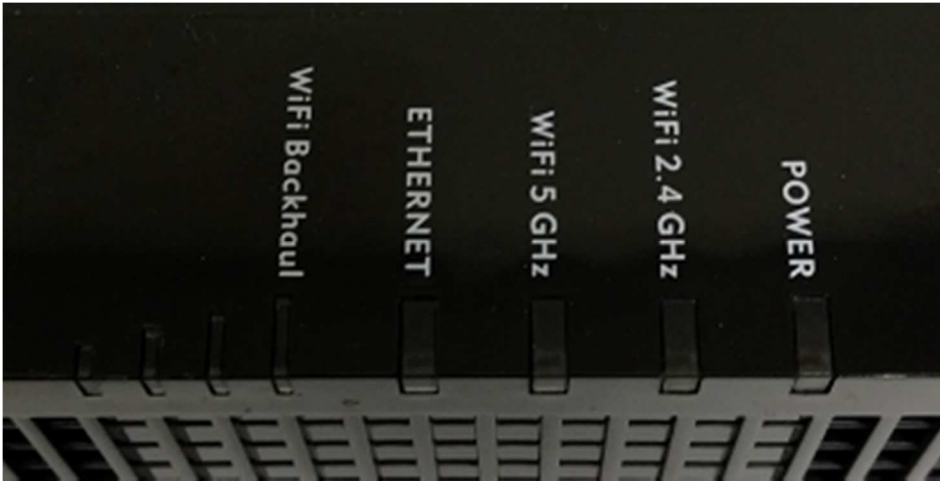
1. Push the power button on the back of the Gigacenter to allow it to pop out into the off position. You should see all LEDs go dark. Wait approximately one minute and then push the power button back into the on position. Wait approximately two minutes for the Gigacenter to fully boot up and then check to make sure the Service and Broadband LEDs are displaying normal operation per the LED operation above. Re-start your internet device. This will resolve most issues.
2. Check to make sure the Ethernet cable that plugs into the White ETH-WAN port is securely plugged in. This is where the main Ethernet feed for your internet and TV services plugs into from the main fiber equipment located in another area of your home.
3. None of the LAN lights are lit. If using a wired Ethernet connection to the Gigacenter for a device, check to make sure that an Ethernet cable is properly plugged into the one of the yellow LAN ports labeled 1,2,3 or 4 on the rear of the Gigacenter and the other end is properly plugged into the device.
4. No power light. Make sure the units power cord is properly plugged into the Gigacenter power connector and a working electrical outlet. Make sure the power button is pushed in.
5. No Wireless access. You should see the 2.4 GHz and 5 GHz LEDs lit on the Gigacenter. See LED operation above. Check to make sure your device is connected to one of the WiFi SSIDs on the Gigacenter.
6. Contact technical support at 800-250-1517 24/7 if you require further assistance.

Get to know the 804 Mesh Unit

The 804 mesh unit can be used to extend the carrier class WiFi network of the Gigacenter to other areas of your home as well as provide wireless TV services to a set top box. Up to four 804 mesh units can be installed per Gigacenter.



Top Side LED Operation



The following table details common LED states during boot-up and/or operation.

LED Name	Behavior	Default Condition
Power	Off	Service Gateway is powered off
	Flashing Green	Service Gateway is booting up. Flashing green has a 50% duty cycle.
	Flashing Red	Power On Self Test (POST) in progress. (50% duty cycle.)
	Solid Green	Service gateway is powered on, POST completed successfully
	Solid Red	POST has failed to complete or 804Mesh has malfunctioned.
	Flashing Amber	Performing firmware upgrade (50% duty cycle).

LED Name	Behavior	Default Condition
Wi-Fi (2.4 GHz or 5 GHz)	Off	Radios are off and not functional
	Flashing Green	Service Activity is present, passing traffic
	Solid Green	Radios are up and functional.

LED Name	Behavior	Default Condition
Ethernet	Off	The device is not powered, no cable or no powered devices connected to the associated port.
	Flashing Green	Activity seen from devices associated with the port (traffic only in the inbound direction on the associated port). The flickering of the light should be synchronized to actual data traffic.
	Solid Green	Powered device connected to the associated port (includes devices with wake-on-LAN capability where a slight voltage is supplied to an Ethernet connection).

LED Name	Behavior	Default Condition
WiFi Backhaul	Off	Broadband interface is powered off or backhaul signal not detected.
	Solid Green	When backhaul signal is Active and if Link has been established (paired) with the gateway.
	Flashing Green	A backhaul signal is detected and is attempting to sync (50% duty cycle).
	Red	WPS pairing has failed.
	Flashing Red	A Session Overlap has occurred.

Backhaul signal strength can be monitored via the bank of four LED's located on top of the 804Mesh. These lights display the relative signal strength of the 804Mesh in the network.

The table below explains possible LED states as it pertains to RSSI.

LED Display	Description	Comment
	RSSI > -50 dBm	The 804Mesh is too close to the GigaCenter.
	-50 dBm >= RSSI >= -60 dBm	The distance between the 804 Mesh and the GigaCenter is optimal.
	-60 dBm > RSSI >= -70dBm	The distance between the 804Mesh and the GigaCenter is optimal.
	-70 Dbm > RSSI >= -80 dBm	The distance between the 804Mesh and the host device (GigaCenter) provides adequate results.
	RSSI < -80 dBm	The 804Mesh is too far from the GigaCenter.

Rear Ports



Reset Button= Under no circumstances should you insert anything into the reset button hole. This will result in a failure of services.

WPS Button= Used for pairing the 804 unit to the Gigacenter. See pairing above in the Gigacenter section.

Power Connector= This is where the power cord plugs into the unit.

Ethernet Port= This is where an Ethernet cable for either a set top box for TV services connects to or for an Ethernet cable for "hardline" feeding internet to the device instead of the wireless backhaul.

Troubleshooting

If you find that your fiber internet service from the 804 mesh is not working and you cannot browse the internet or TV service to a set top box that is using an 804 mesh unit is not working, please check the following items before contacting technical support.

1. See troubleshooting for the Gigcenter above.
2. Unplug the power cord from the back of the 804 mesh unit. You should see all LEDs go dark. Wait approximately one minute and plug back in. Wait approximately two minutes for the unit to reboot.
3. Verify that the correct LED lights are lit per LED operation and the tables above.
4. If the 804 is being used to feed a set top box, unplug power to the set top box and wait 30 seconds and plug back in.
5. Make sure the Ethernet cable going to the yellow Ethernet port is securely plugged in.
6. Reboot/Restart your internet device.
7. Try to reconnect your internet device to the Wifi network SSID for either 2.4 GHz or 5 GHz.
8. Contact technical support at 800-250-1517 24/7 if you require further assistance.

Wifi Best Practices

In most cases the installer would have located the Gigcenter and Mesh units in an optimal signal location. However if you relocate a unit, please keep the following items in mind.

- Keep the Gigcenter and 804 Mesh units away from interference generators, such as a microwave oven, wireless speaker, or frequency hopping spread spectrum (FHSS) devices such as a baby monitor.
- Away from any building materials that block Wi-Fi signals, such as metal, in-floor heating systems, stucco, or reinforced concrete. Do Not place within a metal cabinet or next to a bulky obstacle, such as a brick fireplace or refrigerator.
- All objects that the wireless signal needs to pass through will reduce distance and speed including furniture and cabinets etc.
- Position the Gigcenter and the 804 as high as possible.
- Position the 804 mesh units at least 20 feet apart from one another.
- Many wireless devices used today support rates of 75Mbps to 300Mbps. Phones and tablets typically have lower capacity WiFi hardware than laptops and desktop computers.
- Multiple wireless devices accessing the internet at one time will be draw bandwidth together and get the advantage of the higher overall capacity of the GigaCenter and 804Mesh.

To get the best internet access speeds you should connect your devices to the 5G radio.

2.4GHz has a greater signal distance and is better going through walls etc. but will be slower and 5GHz is faster but will not have the same coverage distance as the 2.4 GHz radio.

Please also see the document on our support page titled. Wireless Device Tips.