

## **GARMIN C3D5DCE9 BlueNet Network Technology User Guide**

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### TECHNICAL REFERENCE FOR GARMIN BLUENET™ NETWORK TECHNOLOGY

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### **Garmin BlueNet Technology Overview**

This reference provides technical information about Garmin BlueNet technology, Garmin BlueNet components, and general Garmin BlueNet network-building instructions, including best practices when building a Garmin BlueNet network that includes devices using the legacy Garmin® Marine Network technology. Garmin BlueNet is a standards-based network communications protocol acting as a successor to the current Garmin Marine Network technology used for communication between Garmin marine devices. Garmin BlueNet technology adds or improves on these networking features:

- It utilizes standards-based network protocols.
- It requires minimal or no configuration.
- It supports a network connection speed up to 1 Gbps. This supports more video streams and better resolutions, and allows for more-advanced sensors and devices.
- It uses compact, water-resistant marine connectors.
- It is compatible with Power over Ethernet (PoE) devices.
- It is compatible with legacy Garmin Marine Network devices when using a Garmin BlueNet 30 gateway.

Primary Differences Between the Garmin BlueNet Network and the Legacy Garmin Marine Network Although the legacy Garmin Marine Network is an Ethernet-based communication protocol, Garmin BlueNet technology improves on it in many ways.

Cabling

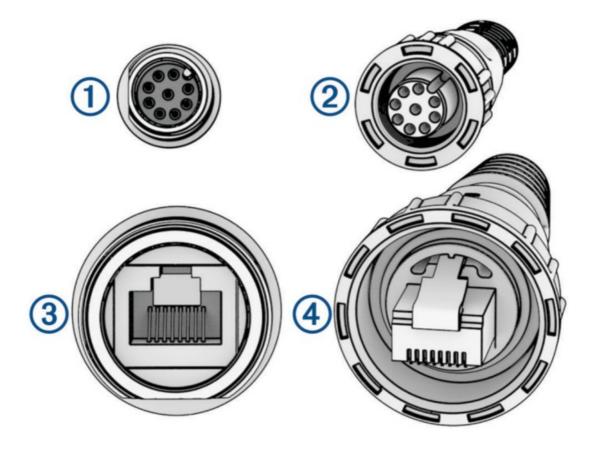
- Legacy Garmin Marine Network cables consist of 2 twisted pairs for data and 2 twisted pairs for power-on functionality.
- Garmin BlueNet network cables consist of 4 twisted pairs combined for data and for Wake on Lan (WoL) poweron functionality.

### Connectors

- The legacy Garmin Marine Network uses standard RJ45 network connectors. Although they are an industry standard, RJ45 connectors are not ideal for use in a marine environment and require large water-resistant locking collars.
- The Garmin BlueNet network uses compact connectors, similar in size to a NMEA 2000® connector, designed for routing and maintaining connections in a marine environment.

### **Network Connector Identification**

You can identify Garmin BlueNet devices and cables and legacy Garmin Marine Network devices and cables by examining the ports and connectors.



1	Garmin BlueNet device port This port may be all black on some older devices and blue on newer and current devices.	
2	Garmin BlueNet cable connector	
3	Legacy Garmin Marine Network device port	
4	Legacy Garmin Marine Network cable connector	

### **Garmin BlueNet Network Planning**

Although Garmin BlueNet technology is fairly straightforward and easy to install, proper planning is helpful, especially when creating a network that contains both Garmin BlueNet devices and legacy Garmin Marine Network devices. Constructing a network incorrectly can prevent the devices from communicating as expected.

### NOTICE

You must include a Garmin BlueNet chartplotter, such as a GPSMAP® 9000 series chartplotter, when creating a Garmin BlueNet network. If you do not have an available Garmin BlueNet chartplotter, you must connect all of the devices using legacy Garmin Marine Network cables and adapters.

When you design a network, you should start by creating a diagram of the network. When creating the diagram, be as detailed as possible, observing these considerations.

- You should include all of the devices you intend to connect to the network
- You should identify which devices support Garmin BlueNet technology and which support the legacy Garmin Marine Network and group the two types of devices by their network type (Garmin BlueNet Device Compatibility, page 17).
- You should determine whether the network requires a Garmin BlueNet 30 gateway (Connecting Legacy Garmin Marine Network Devices to a Garmin BlueNet Network, page 3).
- You should note the network connector or connectors on each device to determine if any adapters are needed (Garmin BlueNet Adapter Cables, page 15).

- You should note the approximate location on the boat for each of the connected devices.
- You should measure the distances between the location of each device.

You can refer to the additional guidelines and examples in the following sections when planning a Garmin BlueNet network.

### **Networks Containing Only Garmin BlueNet Devices**

Creating a network consisting of only Garmin BlueNet devices is very straightforward with few considerations.

### **NOTICE**

Connecting a legacy Garmin Marine Network device directly to a Garmin BlueNet chartplotter or a Garmin BlueNet 20 switch is not possible, and will result in poor network performance. If you plan to connect a legacy Garmin Marine Network device to a Garmin BlueNet network, you must install a Garmin BlueNet 30 gateway (Connecting Legacy Garmin Marine Network Devices to a Garmin BlueNet Network, page 3).

- You should confirm that your device supports Garmin BlueNet network technology by observing the connector type (Network Connector Identification, page 2) and consulting the compatibility reference in this document (Garmin BlueNet Device Compatibility, page 17).
- Some devices, such as a GPSMAP 9000 series chartplotter, have multiple NETWORK ports on the back.
- When a device has multiple Garmin BlueNet NETWORK ports, it acts as a network switch, and you can connect additional Garmin BlueNet devices to open ports on the device.
- For example, if you have two GPSMAP 9224 chartplotters, they each have four NETWORK ports on the back.

  After connecting them together using a Garmin BlueNet network cable, you can connect up to six additional Garmin BlueNet devices to the open ports on the chartplotters.
- Some devices, such as a GMR™ xHD3 open-array radar, have a single NETWORK port.
- When a device has a single Garmin BlueNet NETWORK port, it should connect to another device with multiple ports so the data can be shared with other Garmin BlueNet devices.
- If needed, you can install a Garmin BlueNet 20 switch if you do not have enough open ports on other devices in the network.

### Connecting Legacy Garmin Marine Network Devices to a Garmin BlueNet Network

You can connect many legacy Garmin Marine Network devices to a Garmin BlueNet network using a Garmin BlueNet 30 gateway.

You can refer to these considerations and examples for information about how to organize your Garmin BlueNet network when connecting legacy Garmin Marine Network devices.

### Important Considerations When Using a Garmin BlueNet 30 Gateway

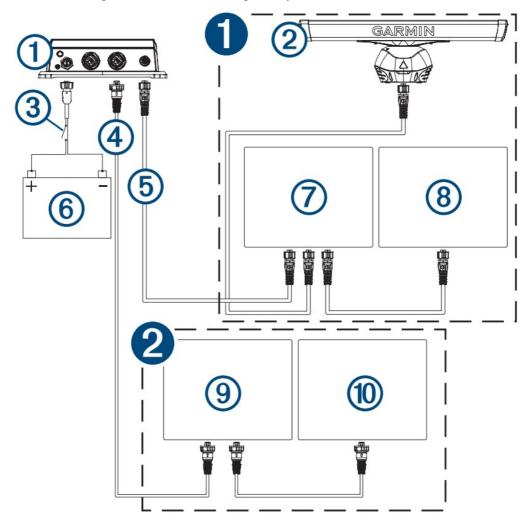
There are important things to consider when connecting legacy Garmin Marine Network devices to a Garmin BlueNet network to ensure the best performance and communication between all devices on the network.

- You must connect only one Garmin BlueNet 30 gateway to a Garmin BlueNet network. Connecting more than one gateway will cause network performance issues.
- You can connect up to two legacy Garmin Marine Network devices directly to the Garmin BlueNet 30 gateway because the gateway has two legacy Garmin Marine Network ports.
- If you have more than two legacy Garmin Marine Network devices you want to connect to the gateway, you must connect them to one another using one or more chartplotters with multiple NETWORK ports or using a GMS<sup>™</sup> 10 switch. Only one interconnected chartplotter or the GMS 10 switch needs to connect to the gateway, but you can use both legacy Garmin Marine Network ports on the gateway if that is best for your installation.
- If you have more than one Garmin BlueNet device you want to connect to the gateway, you must connect the devices to one another using one or more chartplotters with multiple Garmin BlueNet NETWORK ports or

using a Garmin BlueNet 20 switch. Only one interconnected chartplotter or the Garmin BlueNet 20 switch can connect to the gateway because the gateway has only one Garmin BlueNet NETWORK port.

### **Garmin BlueNet Network Containing Legacy Garmin Marine Network Devices Example**

You can refer to this diagram to better understand how to connect legacy Garmin Marine Network devices to a Garmin BlueNet network using a Garmin BlueNet 30 gateway.



Ite m	Description	Notes
1	Garmin BlueNet network devices  All Garmin BlueNet network devices must connect to one another or to a Garmin BlueNet network devices  All Garmin BlueNet network device or Garmin BlueNet 20 switch ma the Garmin BlueNet 30 gateway to communicate with the legacy Garmin M rk devices.  Depending on the types of devices you plan to connect, there are requirem y need to follow when constructing the network (Specific Garmin BlueNet D ork Connection Requirements and Considerations, page 5).	
2	Legacy Garmin Marine Network devices  If you have more than two legacy Garmin Marine Network devices, these device connect to one another or to a GMS 10 switch.  Only one legacy Garmin Marine Network device or GMS 10 switch needs to content the Garmin BlueNet 30 gateway to communicate with the Garmin BlueNet network devices.  If you have only two legacy Garmin Marine Network devices, you can connect h to the Garmin BlueNet 30 gateway without first connecting them to one another.	

Ite m	Description	Notes
1	Garmin BlueNet 30 gate way	All Garmin BlueNet network devices must be connected on one "side" of the g ateway, and all legacy Garmin Marine Network devices must be connected to the other "side."  **NOTICE**  Only one Garmin BlueNet 30 gateway can be installed in a mixed network. At tempting to install more than one gateway in a network will result in poor performance or no communication between devices.
2	Garmin BlueNet radar	
3	Ignition or power switch ( not included)	You should connect the Garmin BlueNet 30 gateway to power through the ign ition or another physical switch. The device continues to draw power when the system is off and drains the battery if it is connected directly.
4	Legacy Garmin Marine N etwork cable	Garmin Marine Network cables have larger connectors that look more like a c ommon RJ45 network connector.
5	Garmin BlueNet network cable	Garmin BlueNet network cables have smaller connectors to allow for easier c able routing and installation.  NOTE: Although they have a similar appearance, Garmin BlueNet network ca bles are not the same as NMEA 2000 cables, and you cannot use them interc hangeably.
6	12 to 24 Vdc power source	The Garmin BlueNet 30 gateway must connect to power using the included p ower cable.
7	Garmin BlueNet 20 switc h or Garmin BlueNet chart plotter	If you are using a Garmin BlueNet 20 switch, the best practice is to connect th at switch to the gateway. If you are not using a switch, you can connect a chartplotter with multiple Garmin BlueNet network ports or a single Garmin BlueNet chartplotter to the gateway, depending on the types of devices on your vessel.
8	Garmin BlueNet chart plo tter or other device	<b>NOTE:</b> You must have at least one Garmin BlueNet chartplotter on the boat. The Garmin BlueNet 30 gateway is not necessary without a Garmin BlueNet chartplotter.
9	GMS 10 switch or legacy Garmin Marine Network c hartplotter	If you are using a GMS 10 switch, it is the best practice to connect that switch to the gateway. If you are not using a switch, you can connect a chartplotter w ith multiple legacy Garmin Marine Network ports or up to two single legacy Garmin Marine Network devices to the gateway, depending on the types of devices on your vessel.
10	Legacy Garmin Marine N etwork chartplotter or oth er device	

### Specific Garmin BlueNet Device Network Connection Requirements and Considerations

Because there are a few unique device requirements to consider when creating a Garmin BlueNet network that contains legacy Garmin Marine Network devices, those specific situations may be confusing. When creating a Garmin BlueNet network that contains these devices, you must construct the network correctly in order for all of the connected devices to communicate effectively. You can use these examples to better understand how to properly connect specific Garmin and third-party devices to a Garmin BlueNet network.

## **Garmin Devices with Small Network Connectors**

Many Garmin devices were produced with small network connectors prior to the introduction of Garmin BlueNet network technology, and these devices were packaged with an adapter that allowed them to connect to and function on a legacy Garmin Marine Network. When determining how best to connect these types of devices when constructing a Garmin BlueNet network, observe these considerations.

 All Garmin devices with small network connectors should connect to a Garmin BlueNet chartplotter or Garmin BlueNet 20 switch for the best performance.

**NOTE:** If the device was packaged with an adapter, the adapter is not needed when connecting directly to a Garmin BlueNet chartplotter or Garmin BlueNet 20 switch.

- If you presently have Garmin device with a small network connector installed and connected to a legacy Garmin Marine Network chartplotter or GMS 10 switch on your boat, it is not necessary to disconnect it and rewire the device so it can connect to a Garmin BlueNet chartplotter. These devices will continue to function as expected when connected through the Garmin BlueNet 30 gateway, although it is preferable to connect to a Garmin BlueNet chartplotter or Garmin BlueNet 20 switch if the installation allows for it.
- The first time you perform a marine software update on a connected Garmin BlueNet chartplotter, all of the connected devices will be updated to communicate properly on the Garmin BlueNet network.

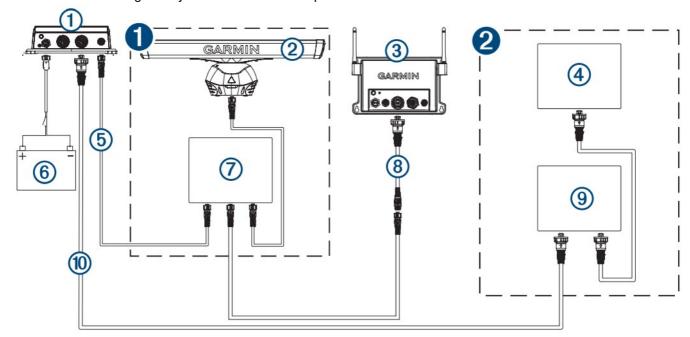
### Garmin BlueNet Network with an OnDeck™ GTB 10 hub and Legacy Garmin Marine Network Devices

If your Garmin BlueNet network includes an OnDeck GTB 10 hub and legacy Garmin Marine Network devices, you must connect the OnDeck GTB 10 hub directly to a Garmin BlueNet chartplotter or Garmin BlueNet 20 switch for proper functionality.

You should use the appropriate Garmin BlueNet network to RJ45 adapter cable (010-12531-01) to connect an OnDeck GTB 10 hub directly to a Garmin BlueNet chartplotter or Garmin BlueNet 20 switch.

### **NOTICE**

This is a notable exception to the common requirement for connecting legacy Garmin Marine Network devices through a Garmin BlueNet 30 gateway. Connecting an OnDeck GTB 10 hub to a Garmin BlueNet network through a Garmin BlueNet 30 gateway will result in network performance issues.



Ite m	Description Notes		
1	Garmin BlueNet netw ork devices	All Garmin BlueNet network devices must connect to one another or to a Garmin BlueNet 20 switch.	
2	Legacy Garmin Marin e Network devices	If you have more than two legacy Garmin Marine Network devices, these devices must connect to one another or to a GMS 10 switch.  If you have only two legacy Garmin Marine Network devices, you can connect th em both to the Garmin BlueNet 30 gateway without first connecting them to one another.	

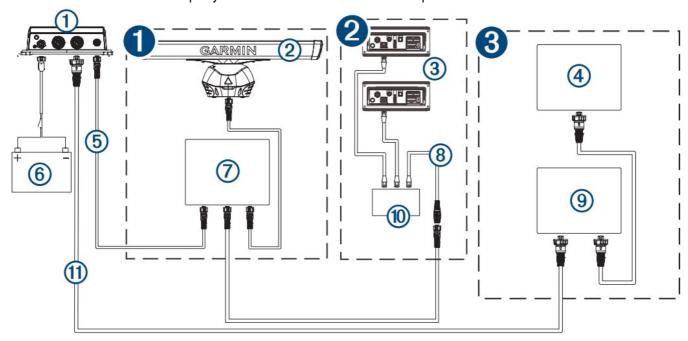
Ite m	Description	Notes
1	Garmin BlueNet 30 gateway	
2	Garmin BlueNet radar	
3	OnDeck GTB 10 hub	NOTICE You must connect an OnDeck GTB 10 hub directly to a Garmi n BlueNet chartplotter or Garmin BlueNet 20 switch. Connecti ng an OnDeck GTB 10 hub through a Garmin BlueNet 30 gat eway will result in poor system performance.
4	Legacy Garmin Marine Network chart plot ter or other device	
5	Garmin BlueNet network cable	
6	Power source	Although not illustrated in this diagram, all devices must conn ect to power according to the installation instructions provide d with the device.
7	Garmin BlueNet chartplotter	
8	Legacy Garmin Marine Network to Garmi n BlueNet adapter cable (010-12531-01)	NOTICE You must not use this cable to connect other legacy Garmin Marine Network devices directly to a Garmin BlueNet device. Other than the OnDeck GTB 10 hub, you must connect other compatible legacy Garmin Marine Network devices to a Gar min BlueNet network using a Garmin BlueNet 30 gateway.
9	GMS 10 switch or legacy Garmin Marine Network chartplotter	
10	Legacy Garmin Marine Network cable	

# Garmin BlueNet Network with Fusion PartyBus™ Stereos and Legacy Garmin Marine Network Devices

If you have connected multiple compatible Fusion® stereos together using Fusion PartyBus networking technology and you want to connect one of them to a chartplotter, you should connect one of the stereos or a third-party switch dedicated to the Fusion PartyBus network stereos directly to a Garmin BlueNet chartplotter or Garmin BlueNet 20 switch for the best performance.

You should use the appropriate Garmin BlueNet network to RJ45 adapter cable (010-12531-02) to connect a

Fusion network stereo or third-party switch to a Garmin BlueNet chartplotter or Garmin BlueNet 20 switch.



	lte m	Description	Notes	
	1	Garmin BlueNet netw ork devices	All Garmin BlueNet network devices must connect to one another or to a Garmin BlueNet 20 switch.	
	2	Fusion PartyBus netw ork stereos	You should connect one of the stereos or a third-party switch dedicated to the Fusion PartyBus network stereos directly to a Garmin BlueNet chartplotter or Garmin BlueNet 20 switch for the best performance.	
;	3	Legacy Garmin Marin e Network devices	If you have more than two legacy Garmin Marine Network devices, these devices must connect to one another or to a GMS 10 switch.  If you have only two legacy Garmin Marine Network devices, you can connect the m both to the Garmin BlueNet 30 gateway without first connecting them to one another.	

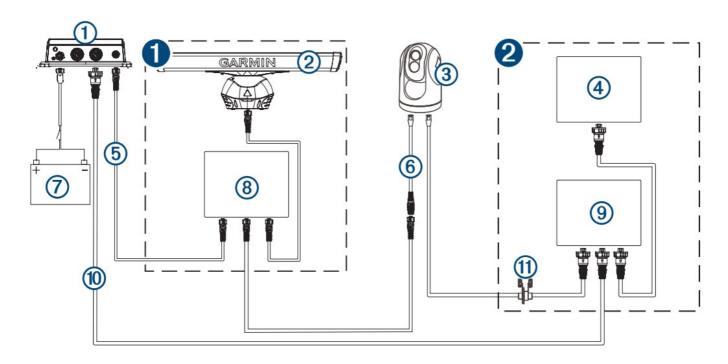
Ite m	Description	Notes
1	Garmin BlueNet 30 gateway	
2	Garmin BlueNet radar	
3	Fusion PartyBus stereos, such as an Apollo™ RA770	
4	Legacy Garmin Marine Network chart plot ter or other device	
5	Garmin BlueNet network cable	
6	Power source	Although not illustrated in this diagram, all devices must conn ect to power according to the installation instructions provided with the device.
7	Garmin BlueNet chartplotter	
8	RJ45 to Garmin BlueNet adapter cable (0 10-12531-02)	NOTICE You must not use this cable to connect other legacy Garmin Marine Network devices directly to a Garmin BlueNet device. Other than Fusion PartyBus stereos and compatible IP camer as, you must connect other legacy Garmin Marine Network devices to a Garmin BlueNet network using a Garmin BlueNet 30 gateway.
9	GMS 10 switch or legacy Garmin Marine Network chartplotter	
10	Third-party network switch	When creating a Fusion PartyBus network with multiple stere os, you may use one or more third-party network switches to connect the stereos. You should connect the switch to a Gar min BlueNet device. If you have only one Fusion PartyBus ste reo using a wired connection, you can connect it to the Garmin BlueNet device without a switch.
11	Legacy Garmin Marine Network cable	

### Garmin BlueNet Network with an IP Camera and a Legacy Garmin Marine Network Chartplotter

If your Garmin BlueNet network includes a compatible Internet Protocol (IP) camera and at least one legacy Garmin Marine Network chartplotter, you can connect the camera to either a Garmin BlueNet chartplotter or Garmin BlueNet 20 switch, or you can connect the camera to a legacy Garmin Marine Network chartplotter or a GMS 10 switch (using a PoE isolator). You can select the option that works best for your device and network layout.

### **NOTICE**

Some jurisdictions may prohibit or regulate recording audio and video, or taking photographs. Jurisdictions may require that all parties have knowledge of the recording and provide consent before you record audio and video or take photographs. It is your responsibility to know and comply with all laws, regulations, and any other restrictions in your jurisdiction.



Ite m	Description Notes		
1	Garmin BlueNet netw ork devices	All Garmin BlueNet network devices must connect to one another or to a Garmin BlueNet 20 switch.	
2	Legacy Garmin Marin e Network devices	If you have more than two legacy Garmin Marine Network devices, these devinest connect to one another or to a GMS 10 switch.  If you have only two legacy Garmin Marine Network devices, you can connect em both to the Garmin BlueNet 30 gateway without first connecting them to canother.	

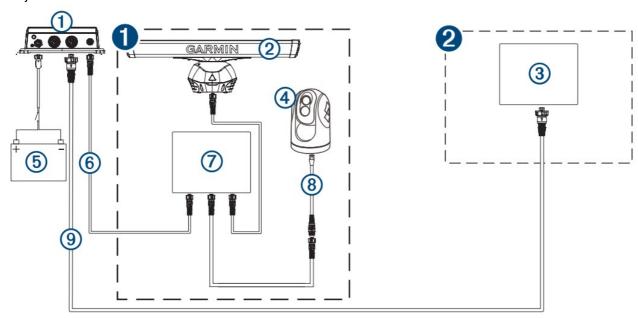
Ite m	Description	Notes
1	Garmin BlueNet 30 gateway	
2	Garmin BlueNet radar	
3	Compatible IP camera	If a legacy Garmin Marine Network chartplotter is present, you can connect a compatible IP camera to either the legacy Garmin Marine Network device s or to the Garmin BlueNet devices without any performance concerns. Yo u can choose the option that is easiest for your network.  NOTE: You must connect a compatible IP camera either legacy Garmin Ma rine Network devices or to Garmin BlueNet devices. You cannot connect a single camera directly to both types if devices if the camera happens to have two RJ45 ports.
4	Legacy Garmin Marine Net work chartplotter or other d evice	
5	Garmin BlueNet network ca ble	
6	RJ45 to Garmin BlueNet ad apter cable (010-12531-02)	If a legacy Garmin Marine Network chartplotter is present, you can connect a compatible IP camera to either the Garmin BlueNet devices or to the lega cy Garmin Marine Network devices without any performance concerns. Yo u can choose the option that is easiest for your network.  When connecting a compatible IP camera to a Garmin BlueNet device, a P oE power isolator is not necessary.  NOTICE  You must not use this cable to connect other legacy Garmin Marine Network devices directly to a Garmin BlueNet device. Other than Fusion PartyBus stereos and compatible IP cameras, you must connect other compatible legacy Garmin Marine Network devices to a Garmin BlueNet network using a Garmin BlueNet 30 gateway.
7	Power source	Although not illustrated in this diagram, all devices must connect to power a ccording to the installation instructions provided with the device.
8	Garmin BlueNet chartplotter	
9	GMS 10 switch or legacy G armin Marine Network chart plotter	
10	Legacy Garmin Marine Net work cable	
11	PoE isolator (010-10580-10 )	When connecting a compatible IP camera to a legacy Garmin Marine Netw ork chartplotter or a GMS 10 switch, you must install a PoE isolator on the connection from the camera (010-10580-10). Connecting a compatible IP camera to Legacy Garmin Marine Network chartplotter or a GMS 10 switch without a PoE isolator can damage the Garmin devices, the camera, or bot h.

### Garmin BlueNet Network with an IP Camera and no Legacy Garmin Marine Network Chartplotters

If your Garmin BlueNet network includes a compatible IP camera, but does not contain any legacy Garmin Marine Network chartplotters, you must connect the camera to a Garmin BlueNet chartplotter or Garmin BlueNet 20 switch for proper functionality (no PoE isolator needed).

### **NOTICE**

Some jurisdictions may prohibit or regulate recording audio and video, or taking photographs. Jurisdictions may require that all parties have knowledge of the recording and provide consent before you record audio and video or take photographs. It is your responsibility to know and comply with all laws, regulations, and any other restrictions in your jurisdiction.



Ite m	Description	Notes
2	Garmin BlueNet networ k devices	All Garmin BlueNet network devices must connect to one another or to a Garmin BlueNet 20 switch.
2	Legacy Garmin Marine Network device or devic es (not chartplot ters)	If you have more than two legacy Garmin Marine Network devices (that are not chartplotters in this instance), these devices must connect to a GMS 10 switch. If you have only two legacy Garmin Marine Network devices (that are not chart plotters in this instance), you can connect them both to the Garmin BlueNet 30 gateway without first connecting them to a GMS 10 switch.

Ite m	Description	Notes
1	Garmin BlueNet 30 gateway	
2	Garmin BlueNet radar	
3	Legacy Garmin Marine Network de vice (not a chartplotter)	
4	Third-party IP camera	If you have no legacy Garmin Marine Network chartplotters connected to the Garmin BlueNet network through a Garmin BlueNet 30, you must connect any compatible IP camera to a Garmin Blue Net device for proper functionality.
5	Power source	Although not illustrated in this diagram, all devices must connect to power according to the installation instructions provided with the device.
6	Garmin BlueNet network cable	
7	Garmin BlueNet chartplotter	
8	RJ45 to Garmin BlueNet adapter c able (010-12531-02)	When connecting a compatible IP camera to a Garmin BlueNet device, a PoE power isolator is not necessary.  **NOTICE**  You must not use this cable to connect other legacy Garmin Marine Network devices directly to a Garmin BlueNet device. Other than Fusion PartyBus stereos and compatible IP cameras, you must connect other compatible legacy Garmin Marine Network devices to a Garmin BlueNet network using a Garmin BlueNet 30 gateway.
9	Legacy Garmin Marine Network ca ble	

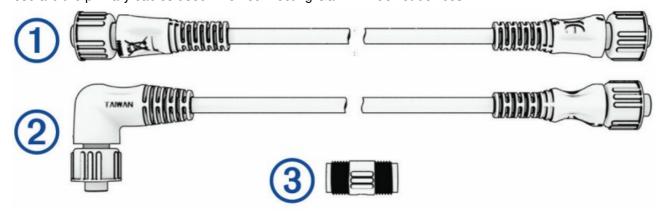
### **Garmin BlueNet Hardware**

You can refer to these diagram and tables when selecting the appropriate cables and adapters for creating a Garmin BlueNet network.

See the device compatibility table for more information on Garmin BlueNet devices and legacy Garmin Marine Network devices (*Garmin BlueNet Device Compatibility*, page 17).

### **Garmin BlueNet Cables**

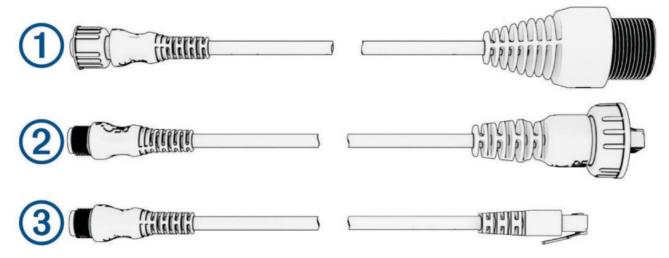
These are the primary cables used when connecting Garmin BlueNet devices.



Item	Description	Garmin Part Numbe r	Notes
1	Standard Garmin BlueNet network cable	010-12528-11: 0.3 m (1 ft.) 010-12528-30: 2 m ( 6.5 ft.) 010-12528-31: 6 m ( 20 ft.) 010-12528-02: 12 m (40 ft.) 010-12528-03: 15 m (50 ft.)	This is the basic cable used to connect Garmin BlueNet devices to one another. These cables can be extended using a Garmin BlueNet c able coupler.
2	Right-angle Garm in BlueNet network cable	010-12528-10: 15 m (50 ft.)	This is a standard Garmin BlueNet network cable with a 90-degree connector on one end. It is helpful when the c onnection to a device must be as low-profile as possible.
3	Garmin BlueNet c able coupler	010-12531-00	This coupler connects two Garmin BlueNet cables togeth er.  NOTE: A single Garmin BlueNet network cable run shoul d not contain more than one coupler and should not exce ed 87 m (285 ft.)
Not sh wn	o Bulk Garmin Blue Net network cabl e	010-12528-12: 150 m (500 ft.)	You can use bulk cable to create custom lengths of Gar min BlueNet network cable. You must terminate both ends of the bulk cable using fiel d install connectors.  NOTE: A single Garmin BlueNet network cable run shoul d not exceed 87 m (285 ft.)  NOTICE Using third-party network cable is not supported because many third-party cables do not meet the minimum perfor mance specifications for network cables. Using anything other than official bulk Garmin BlueNet network cable may result in poor system performance.

## **Garmin BlueNet Adapter Cables**

Some Garmin BlueNet devices may have specific connection requirements, such as an OnDeck GTB 10 hub (*Specific Garmin BlueNet Device Network Connection Requirements and Considerations*, page 5). You can refer to the table below to select the appropriate adapter cable when installing these specific devices.



Ite m	Description	Garmin Part N umber	Notes
1	Garmin BlueNet n etwork to legacy Garmin Marine Ne twork adapter cabl e	010-13094-00	Connects a Garmin BlueNet device to a legacy Garmin Marine Net work device. This may be useful when you are replacing an existin g legacy Garmin Marine Network device with a Garmin BlueNet device and connecting to the existing legacy Garmin Marine Network devices is the only available or most-efficient connection method.
2	Legacy Garmin M arine Network to Garmin BlueNet n etwork adapter ca ble	010-12531-01	Connects specific Garmin devices, such as an OnDeck GTB 10 hub or a GSV <sup>™</sup> 10 black box to a Garmin BlueNet device.
			NOTICE
			You must not use this adapter cable to connect other legacy Garmi n Marine Network devices directly to a Garmin BlueNet device. Except for the OnDeck GTB 10 hub or GSV10 black box, you must connect all other compatible legacy Garmin Marine Network devices to a Garmin BlueNet network using a Garmin BlueNet 30 gateway.
3	RJ45 to Garmin Bl ueNet network ad apter cable	010-12531-02	Connects a network-compatible Fusion PartyBus stereo to a Garmi n BlueNet device.
			Connects a compatible IP camera to a Garmin BlueNet device. Co nnects a PC or other compatible third-party network device to a Ga rmin BlueNet device. <b>NOTICE</b>
			You must not use this adapter cable to connect other legacy Garmi n Marine Network devices directly to a Garmin BlueNet device. Except for a compatible Fusion PartyBus stereo or IP camera, you must connect all other compatible legacy Garmin Marine Network devices to a Garmin BlueNet network using a Garmin BlueNet 30 gateway.

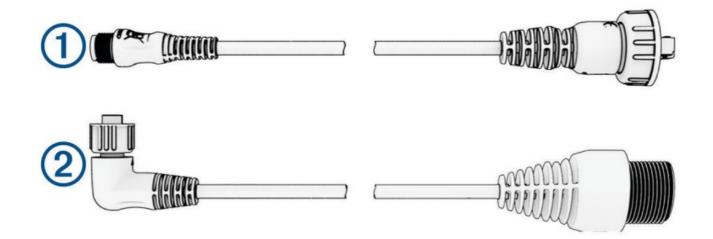
### **Legacy Garmin Marine Network Adapter Cables**

You can connect most Garmin BlueNet peripheral devices to a legacy Garmin Marine Network device using an adapter cable. For example, a GMR Fantom™ radar and various transducers have smaller Garmin BlueNet

network connectors that are compatible with Garmin BlueNet network cables, but you might not have a Garmin BlueNet chartplotter, or you may find it is easier to connect the peripheral device to existing legacy Garmin Marine Network devices due to installation constraints. Some of these peripheral devices may be packaged with an adapter cable that allows you to connect it to another legacy Garmin Marine Network device or to a GMS 10 switch. You can refer to the table below to select the appropriate adapter cable, if needed.

### **NOTICE**

You cannot connect a legacy Garmin Marine Network device directly to a Garmin BlueNet chartplotter or Garmin BlueNet 20 switch using these adapter cables. If you want to use both types of devices in a network, you must install a Garmin BlueNet 30 gateway to connect one or more Garmin Marine Network devices to Garmin BlueNet devices (Connecting Legacy Garmin Marine Network Devices to a Garmin BlueNet Network, page 3).



Ite m	Description	Garmin Part Nu mber	Notes
1	Garmin Marine Network to Garmin BlueNet netw ork adapter cable. This c able has two network co nnectors (male to male).	010-12531-01: 5 00 mm (20 in.)	This Garmin BlueNet network adapter cable is often includ ed with transducers.  When using this adapter cable, you should connect the Garmin BlueNet connector to a Garmin BlueNet device (with a small female network port) or extend it with a longer Garmin BlueNet cable. You should connect the other end of the adapter cable directly to a network port on a legacy Garmin Marine Network device or GMS 10 switch.
2	Right-angle Garmin Mari ne Network to Garmin Bl ueNet network adapter c able. This adapter cable has t wo network ports (femal e to female).	010-13094-00: 3 00 mm (12 in.)	This Garmin BlueNet network adapter cable has a 90- deg ree connector on one end. It is often included with devices such as a GMR Fantom radar.  When using this adapter cable, you should connect the Garmin BlueNet connector to the Garmin BlueNet device (with a small male network connector). You should connect the other end of the adapter to a longer legacy Garmin Marine Network cable to connect to other legacy Garmin Marine Network devices.

### **Garmin BlueNet Device Compatibility**

You can use this table to determine which devices can be connected directly to a Garmin BlueNet network and which devices must use a Garmin BlueNet 30 gateway (*Connecting Legacy Garmin Marine Network Devices to a Garmin BlueNet Network*, page 3).

### **NOTICE**

If you have a legacy Garmin Marine Network chartplotter or peripheral device that is not listed in this table, it is most likely not compatible with Garmin BlueNet technology. Connecting a legacy Garmin Marine Network device not listed in this table to Garmin BlueNet network may result in poor system performance.

**NOTE:** Other than the GPSMAP 9000 series chartplotter, Garmin BlueNet 20 switch, and the Garmin BlueNet 30 gateway, all peripheral devices with a Garmin BlueNet connector can connect to a legacy Garmin Marine Network device using the appropriate adapter cable.

Device	Does the Device h ave a Garmin Blue Net Connector?	Can You Connect the Dev ice Directly to a Garmin BlueNet Device?	Can You Connect t he Device to a Gar min BlueNet Netwo rk through a Garmi n BlueNet 30 Gate way?
GPSMAP 9000 series chartplotter	Yes	Yes	N/A
GPSMAP 8400/8600 series chartplotter	No	No	Yes
GPSMAP 1000/1200 series chartplotter	No	No	Yes
Garmin BlueNet 20 switch	Yes	Yes	N/A
Garmin BlueNet 30 gateway	Yes	Yes	N/A
GPSMAP 7400/7600 series chartplotter	No	No	Yes
GPSMAP 7×2/9×2/12×2 series chartplotter	No	No	Yes
GPSMAP 7×3/9×3/12×3 series chartplotter	No	No	Yes
CL7/A7/A12 series chartplotter	No	No	Yes
B7/B9/B12 series chartplotter	No	No	Yes
GHC™ 50	Yes	Yes	Yes
TD 50	Yes	Yes	Yes
GRID™ 10	No	No	Yes
Garmin card reader	No	No	Yes
GMR HD and xHD2 series radar	No	No	Yes
GMR xHD3 series radar	Yes	Yes	Yes
GMR Fantom 4/6 series radar	No	No	Yes
GMR Fantom 5x/12x/25x series radar	Yes	Yes	Yes
GMR Fantom 18/24 series radome	No	No	Yes
GMR Fantom 18x/24x series radome	Yes	Yes	Yes
GSI™ 10	No	No	Yes
LiveScope™ GLS™ 10	Yes	Yes	Yes
Panoptix <sup>™</sup> PS21/PS22/PS30/PS31/PS51/ P S60 transducer	No	No	Yes
GCV™ 10/20 sonar module	No	No	Yes
GSD™ 24/25/26 sonar module	No	No	Yes
Fusion Apollo stereos (RA770, RA670, WB67 5, and so on)	No1	Yes	No2
GC 200 camera	No	No	Yes

GC 100 camera	No	Yes3	N/A
VIRB® cameras	No	Yes4	N/A
Surround View camera system	Yes	Yes	Yes
GXM™53/54	Yes	Yes	Yes
Force® and Force Kraken trolling motor	No	Yes4	N/A
EmpirBus™ WDU	No	No	Yes
EmpirBus WDU v2	Yes	Yes	Yes
OnDeck GTB 10 hub	No	Yes5	No6
Reactor™ 40 autopilot system	No	No	Yes
ActiveCaptain® app	N/A	Yes4	N/A

- 1. Has a standard RJ45 connector. Requires an adapter (010-12531-02).
- **2.** hould connect to a Garmin BlueNet device using the appropriate adapter.
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- 3 Uses a Wi-Fi connection.
- 4 Uses a Wi-Fi connection.
- 5 This must connect to a Garmin BlueNet device using an adapter (010-12531-01).
- **6** You should not install this device using the gateway (Specific Garmin BlueNet Device Network Connection Requirements and Considerations, page 5).



### **Documents / Resources**



GARMIN C3D5DCE9 BlueNet Network Technology [pdf] User Guide

C3D5DCE9 BlueNet Network Technology, C3D5DCE9, BlueNet Network Technology, Network Technology

## References

• User Manual

Manuals+, Privacy Policy