



# GARMIN BLUENET™ 30 GATEWAY INSTALLATION INSTRUCTIONS

# **Important Safety Information**

#### **↑** WARNING

See the *Important Safety and Product Information* guide in the product box for product warnings and other important information.

Failure to install this device according to these instructions could result in personal injury, damage to the vessel or device, or poor product performance.

#### **↑** CAUTION

To avoid possible personal injury, always wear safety goggles, ear protection, and a dust mask when drilling, cutting, or sanding.

#### **NOTICE**

When drilling or cutting, always check what is on the opposite side of the surface to avoid damaging the vessel.

## **Garmin BlueNet 30 Gateway Overview**

The Garmin BlueNet 30 gateway allows you to connect legacy Garmin® Marine Network devices to a Garmin BlueNet chartplotter or network. When installing this gateway, it is important to analyze all of the devices you plan to connect to ensure proper communication. You should read all of these instructions before proceeding. To learn more about Garmin BlueNet network technology, go to garmin.com/manuals/bluenet.

**NOTE:** This gateway is designed for use only when connecting legacy Garmin Marine Network devices to a Garmin BlueNet chartplotter or network. It should not be used if you do not have any Garmin BlueNet chartplotters.

# **Mounting Considerations**

#### **NOTICE**

This device should be mounted in a location that is not exposed to extreme temperatures or conditions. The temperature range for this device is listed in the product specifications (*Specifications*, page 7). Extended exposure to temperatures exceeding the specified temperature range, in storage or operating conditions, may cause device failure. Extreme-temperature-induced damage and related consequences are not covered by the warranty.

- You must mount the device in a location where it will not be submerged.
- · You must mount the device in a location with adequate ventilation so it does not trap heat.
- You must mount the device at least 2.54 cm (1 in.) from cables and other potential sources of interference.
- · You must mount the device in a location that allows room for the routing and connection of all cables.
- If needed, you can install this device on an optional mounting bracket that holds a Garmin BlueNet 30 gateway and a Garmin BlueNet 20 switch. Contact your local Garmin dealer or go to buy.garmin.com to purchase this bracket.

## **Mounting the Device**

#### NOTICE

If you are mounting the device in fiberglass, when drilling the pilot holes, use a countersink bit to drill a clearance counterbore through only the top gel-coat layer. This will help to avoid cracking in the gel-coat layer when the screws are tightened.

Before you mount the device, you must select a mounting location and determine the mounting hardware needed for the surface.

**NOTE:** Mounting hardware is included with the device, but it may not be suitable for the mounting surface.

- 1 Place the device in the mounting location and mark the location of the pilot holes.
- 2 Using a bit appropriate for the surface and the mounting hardware, drill a pilot hole for one corner of the device.
- 3 Loosely fasten the device to the surface with one corner and examine the other three pilot-hole marks.
- 4 Mark new pilot-hole locations if necessary.
- **5** Remove the device from the mounting surface.
- 6 Drill the appropriate pilot holes for the other three marks.
- 7 Secure the device to the mounting location.

## **Connection Considerations**

When connecting the Garmin BlueNet 30 gateway to power and to other Garmin devices, you should observe these considerations.

#### **NOTICE**

Only one Garmin BlueNet 30 gateway can be installed in a mixed network. Attempting to install more than one gateway in a network will result in poor performance or no communication between devices.

You should connect the Garmin BlueNet 30 gateway to power through the ignition or another physical switch. The device continues to draw power when the system is off and drains the battery if it is connected to it directly.

## **Device and Port Overview**



Item	Description	Notes
1	Power button	The power button is provided for troubleshooting purposes. The device turns on automatically when it receives power.
2	Power cable port	You must connect this device to a 12 to 24 Vdc power source using the included cable.
3	Garmin Marine Network cable ports	All legacy Garmin Marine Network devices must connect through one of these ports to communicate with Garmin BlueNet devices on the vessel.  NOTE: It is not necessary to use both of these network ports if you are using a GMS <sup>™</sup> 10 or a chartplotter with multiple network ports to connect your Garmin Marine Network devices.
4	Garmin BlueNet cable port	All Garmin BlueNet devices must connect through this port to communicate with legacy Garmin Marine Network devices on the vessel.
=	Optional grounding location	If necessary, you can connect the device to the water ground of the boat to help avoid interference (Additional Grounding Consideration, page 3).

### **Connecting to Power**

#### **⚠ WARNING**

When connecting the power cable, do not remove the in-line fuse holder. To prevent the possibility of injury or product damage caused by fire or overheating, the appropriate fuse must be in place as indicated in the product specifications. Connecting the power cable without the appropriate fuse in place voids the product warranty.

You should connect the red wire to the power source through the ignition or another manual switch to turn the device on and off.

- 1 Route the power cable between the power source and the device.
- 2 Connect the red power wire to the ignition or another manual switch, and connect the switch to the positive (+) battery terminal if necessary.
- 3 Connect the black wire to the negative (-) battery terminal or to ground.
- 4 Connect the power cable to the device, and turn the locking ring clockwise to tighten it.

#### **Additional Grounding Consideration**

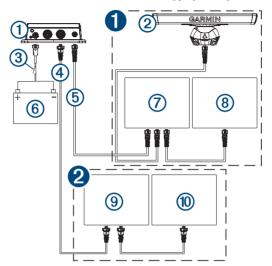
This device should not need additional chassis grounding in most installation situations. If you experience interference, you can use the grounding screw on the housing to connect the device to the water ground of the boat to help avoid the interference.



# **Garmin BlueNet Network Construction Example**

Creating a Garmin BlueNet network containing legacy Garmin Marine Network devices may be confusing, and it is critical that the network is constructed correctly in order for all connected devices to communicate effectively. You can use this example to better understand how to properly connect legacy Garmin Marine Network devices to a Garmin BlueNet network.

For more information about Garmin BlueNet network technology, go to garmin.com/manuals/bluenet



Item	Description	Notes
1	Garmin BlueNet network devices	All Garmin BlueNet network devices must connect to one another or to a Garmin BlueNet 20 switch.  Only one Garmin BlueNet network device or Garmin BlueNet 20 switch may connect to the Garmin BlueNet 30 gateway to communicate with the legacy Garmin Marine Network devices.  Depending on the types of devices you plan to connect, there are requirements you may need to follow when constructing the network (Specific Garmin BlueNet Device Network Connection Requirements, page 5).
2	Legacy Garmin Marine 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.  Only one legacy Garmin Marine Network device or GMS 10 switch needs to connect to 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 them both to the Garmin BlueNet 30 gateway without first connecting them to one another.

Item	Description	Notes
		All Garmin BlueNet network devices must be connected on one "side" of the gateway, and all legacy Garmin Marine Network devices must be connected to the other "side."
(1)	Garmin BlueNet 30	NOTICE
	gateway	Only one Garmin BlueNet 30 gateway can be installed in a mixed network.  Attempting 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 ignition 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 Network cable	Garmin Marine Network cables have larger connectors that look more like a common RJ45 network connector.
5	Garmin BlueNet network cable	Garmin BlueNet network cables have smaller connectors to allow for easier cable routing and installation.  NOTE: Although they have a similar appearance, Garmin BlueNet network cables are not the same as NMEA 2000° cables, and you cannot use them interchangeably.
6	12 to 24 Vdc power source	The Garmin BlueNet 30 gateway must connect to power using the included power cable.
7	Garmin BlueNet 20 switch or Garmin BlueNet chart- plotter	If you are using a Garmin BlueNet 20 switch, the best practice is to connect that 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- plotter 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 chartplotter	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 with 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 Network chartplotter or other device	

# **Specific Garmin BlueNet Device Network Connection Requirements**

When connecting devices to a Garmin BlueNet network, you should observe the following requirements for specific devices that may be present in the network.

For more information about these specific connection requirements, including example diagrams, go to garmin .com/manuals/bluenet.

## OnDeck<sup>™</sup> GTB IO Hub Connection Requirements

The OnDeck GTB 10 hub is a notable exception to the common requirement for connecting legacy Garmin Marine Network devices through a Garmin BlueNet 30 gateway. Due to the nature of this device, you must connect an OnDeck GTB 10 hub directly to a Garmin BlueNet chartplotter or Garmin BlueNet 20 switch using a Garmin BlueNet network to RJ45 adapter cable (010-12531-01).

#### **NOTICE**

Connecting an OnDeck GTB 10 hub to a Garmin BlueNet network through a Garmin BlueNet 30 gateway will result in network performance issues.

## Fusion Network Stereo Connection Requirements

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 switch dedicated to the Fusion PartyBus network stereos to a Garmin BlueNet chartplotter or Garmin BlueNet 20 switch for the best performance.

You should use the proper Garmin BlueNet network to RJ45 adapter cable (010-12531-02) to connect a Fusion network stereo to a Garmin BlueNet chartplotter or Garmin BlueNet 20 switch.

## **IP Camera Connection Requirements**

#### 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.

All compatible IP cameras should connect to a Garmin BlueNet chartplotter or Garmin BlueNet 20 switch for the best performance.

**NOTE:** If you presently have an IP camera installed and connected to a legacy Garmin Marine Network chartplotter on your boat, it is not necessary to disconnect it and rewire the camera so it can connect to a Garmin BlueNet chartplotter. If you have removed all legacy Garmin Marine Network chartplotters, however, you must connect the camera to a Garmin BlueNet chartplotter or Garmin BlueNet 20 switch.

Although it is necessary to install a PoE isolation coupler when connecting a compatible IP camera to a legacy Garmin Marine Network device, this isolation coupler is not required when connecting a compatible IP camera to a Garmin BlueNet chartplotter or Garmin BlueNet 20 switch.

You should use the proper Garmin BlueNet network to RJ45 adapter cable (010-12531-02) to connect a compatible IP camera to a Garmin BlueNet chartplotter or Garmin BlueNet 20 switch.

#### **NOTICE**

You can only use this adapter cable (010-12531-02) to connect a compatible IP camera to a Garmin BlueNet chartplotter or Garmin BlueNet 20 switch. Using this adapter cable to connect a camera to a legacy Garmin Marine Network device may damage the camera or legacy Garmin Marine Network devices.

#### **Connection Requirements for Garmin Devices with Small Network Connectors**

A number of 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 function on a legacy Garmin Marine Network.

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 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.

#### **Connection Requirements for Garmin Devices with Split Connector Cables**

Some Garmin devices have a split cable that allow for power, network, and in some cases, audio output though the single small connector on the device. Connecting these devices to a Garmin BlueNet network depends on the installation needs of your vessel.

Connection considerations for a GC<sup>™</sup> 200 camera:

- As with other IP cameras, this should connect to a Garmin BlueNet chartplotter or Garmin BlueNet 20 switch
  for the best performance, but it is not necessary to disconnect and rewire an existing camera if it is already
  connected to a legacy Garmin Marine Network chartplotter.
- When connecting the camera to a 12 Vdc power source (direct power method), you can use a Garmin BlueNet extension cable to connect the camera to a Garmin BlueNet chartplotter or Garmin BlueNet 20 switch.
- When connecting the camera to a 24 Vdc power source using a Garmin power module, you must use a
  Garmin BlueNet network to legacy Garmin Marine Network adapter cable (010-13094-00) to connect the
  power module to a Garmin BlueNet chartplotter or Garmin BlueNet 20 switch.

Connection considerations for a GXM<sup>™</sup> 53/54 antenna:

- These antennas use a Garmin power and audio module to connect to power, audio, and legacy Garmin Marine Network devices.
- These antennas connect to a Garmin BlueNet chartplotter or Garmin BlueNet 20 switch for the best performance, but it is not necessary to disconnect and rewire an existing antenna if it is already connected to a legacy Garmin Marine Network chartplotter.
- When connecting these antennas to a Garmin BlueNet network, you must use a Garmin BlueNet network to legacy Garmin Marine Network adapter cable (010-13094-00) to connect the power and audio module to a Garmin BlueNet chartplotter or Garmin BlueNet 20 switch.

# **Specifications**

Material	Polycarbonate plastic and die-cast aluminum
Dimensions (W x H x D)	$293.3 \times 72 \times 112.6 \text{ mm } (9^7/_{16} \times 2^{13}/_{16} \times 4^7/_{16} \text{ in.})$
Weight	0.5 kg (1 lb. 2 oz.)
Operating temperature range	From -15° to 70°C (from 5° to 158°F)
Water rating	IEC 60529 IPX7 <sup>1</sup>
Power input	From 10 to 32 Vdc
Fuse	2 A
Max. power usage	2.3 W
Typical current draw	12 Vdc: 150 mA 24 Vdc: 90 mA
Max. current draw	200 mA
Compass-safe distance	10 cm (4 in.)

<sup>&</sup>lt;sup>1</sup> The device withstands incidental exposure to water of up to 1 m for up to 30 min. For more information, go to www.garmin.com/waterrating.

# **Status LEDs**

#### **STATUS LED**

LED Activity	Status
Flashing green	The device is operating normally.
Flashing orange	The device software is being updated.
Solid red	The device is booting.
Flashing red	There is an error with the device. Contact Garmin product support.
Off	The device is off.

#### **NETWORK LEDs**

LED Activity	Status
Green	The connected device is communicating with a data transmission rate of 10/100 Mbps (10 or 100 megabits per second).  This LED flashes to indicate data-transfer activity.
Blue	The connected device is communicating with a data transmission rate of 1,000 Mbps (gigabit). This LED flashes to indicate data-transfer activity.
Off	No device is connected, the connected device is off, or the connected device or cable is malfunctioning.

# 联系信息

制造厂商:台湾国际航电股份有限公司销售厂商:上海佳明航电企业管理有限公司

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电话: 021-60737675 客服专线: 400-819-1899

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電 話:(02)2642-8999 客服專線:(02)2642-9199

## 物質宣言

	有毒有害物质或元素									
部件名称	铅	汞	镉	六价铬	多溴联苯	多溴二苯醚	邻苯二甲酸 二(2-乙基 己)酯	邻苯二甲 酸丁苄酯	邻苯二甲 酸二丁酯	邻苯二甲酸 二异丁酯
印刷电路板组 件	X	0	0	0	0	0	0	0	0	0
金属零件	X	0	0	0	0	0	0	0	0	0
电缆 电缆组件 连接器	×	0	0	0	0	0	0	0	0	0
塑料和橡胶零 件	0	0	0	0	0	0	0	0	0	0

本表格依据 SJ/T11364 的规定编制。

○: 代表此种部件的所有均质材料中所含的该种有害物质均低于 (GB/T26572) 规定的限量



★: 代表此种部件所用的均质材料中,至少有一类材料其所含的有害物质高于(GB/T26572) 规定的限量

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