GARMIN.
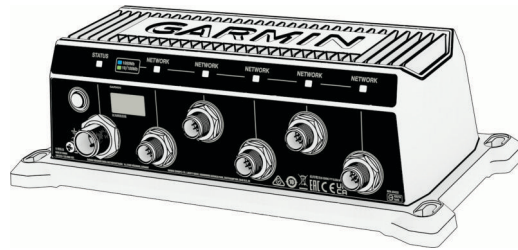

GARMIN BLUENET™ 20 SWITCH
INSTALLATION INSTRUCTIONS

Important Safety Information

<div>⚠ WARNING</div>

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.

<div>⚠ CAUTION</div>

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

<div>*NOTICE*</div>

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

Garmin BlueNet 20 Switch Overview

The Garmin BlueNet 20 switch allows for communication between Garmin® devices using Garmin BlueNet network technology. This device is compatible only with Garmin BlueNet devices and cannot be used to connect a legacy Garmin Marine Network device to a Garmin BlueNet device directly. If your network contains devices using both types of network protocols, you must use a Garmin BlueNet 30 gateway (sold separately) to enable communication between the devices. To learn more about Garmin BlueNet network technology, go to garmin .com/manuals/bluenet.

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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 5). 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.
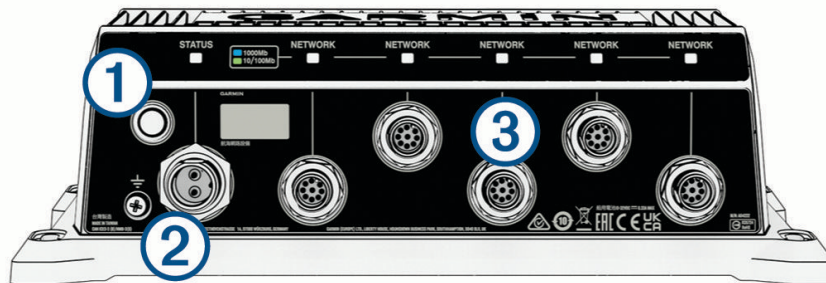
Before you mount the device, you must select a mounting location and determine the mounting hardware needed for the surface.

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

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 Garmin BlueNet cable ports	You can connect a Garmin BlueNet device to any of these ports. **NOTE:** This device is compatible with only Garmin BlueNet devices. If you have one or more legacy Garmin Marine Network devices, you must also install a Garmin BlueNet 30 gateway (sold separately) so the devices can communicate properly.
⏚	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).

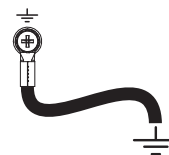## Connecting to Power

> ⚠ **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.
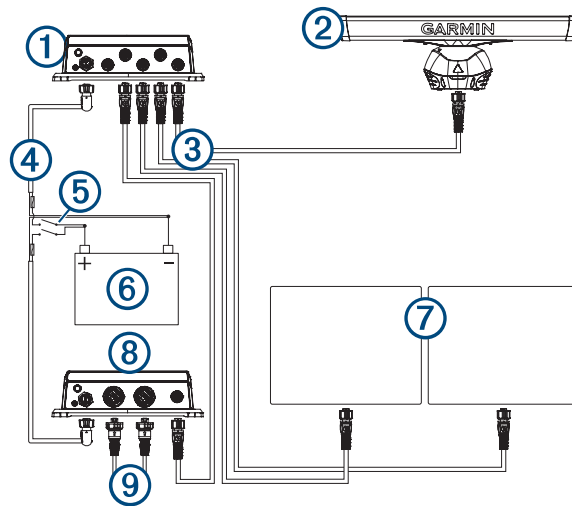
Additional Grounding Consideration

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

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

Item	Description	Notes
①	Garmin BlueNet 20 switch	You can connect any device that is compatible with the Garmin BlueNet network to any port on the switch. You cannot connect any legacy Garmin Marine Network devices to this switch. If you want to include both Garmin BlueNet devices and legacy Garmin Marine Network devices on the same network, you must use a Garmin BlueNet 30 gateway (sold separately).
②	Garmin BlueNet radar	
③	Garmin BlueNet network cables	Garmin BlueNet network cables have smaller connectors that look similar to NMEA 2000® connectors. **NOTE:** Garmin BlueNet network cables are not the same as NMEA 2000 cables, and you cannot use them interchangeably.
④	Power cable	
⑤	Ignition or power switch (not included)	You should connect the Garmin BlueNet 20 switch 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.
⑥	12 or 24 Vdc power source	The Garmin BlueNet 20 switch must connect to power using the included power cable.
⑦	Garmin BlueNet chartplotters or other devices	Some Garmin BlueNet devices, such as chartplotters, have multiple Garmin BlueNet ports. These ports also act as a switch, so you can connect additional Garmin BlueNet devices to those chartplotters if ports are available instead of installing multiple Garmin BlueNet 20 switch devices on the network.
⑧	Garmin BlueNet 30 gateway (optional)	If you want to include both Garmin BlueNet devices and legacy Garmin Marine Network devices on the same network, you must use a Garmin BlueNet 30 gateway (sold separately).
⑨	Legacy Garmin Marine Network devices (optional)	Any legacy Garmin Marine Network device must connect to a Garmin BlueNet 30 gateway to communicate with Garmin BlueNet devices.

Specifications

Material	Polycarbonate plastic and die-cast aluminum
Dimensions (W x H x D)	293.3 × 72 × 112.6 mm ($9^7/_{16}$ × $2^{13}/_{16}$ × $4^7/_{16}$ 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[1]
Power input	From 10 to 32 Vdc
Fuse	2 A
Max. power usage	3.6 W
Typical current draw	12 Vdc: 270 mA 24 Vdc: 140 mA
Max. current draw	330 mA
Compass-safe distance	10 cm (4 in.)

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.

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[1] 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.

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

联络地址：上海市徐汇区桂平路 391 号（新漕河泾国际商务中心 A 座 37 层）

电 话：021-60737675

客服专线：400-819-1899

連絡地址

製造銷售:台灣國際航電股份有限公司

聯絡地址:新北市汐止區樟樹二路 68 號

電　　話:(02)2642-8999

客服專線:(02)2642-9199

物質宣言

部件名称	有毒有害物质或元素									
	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	✗	○	○	○	○	○	○	○	○	○
金属零件	✗	○	○	○	○	○	○	○	○	○
电缆 电缆组件 连接器	✗	○	○	○	○	○	○	○	○	○
塑料和橡胶零件	○	○	○	○	○	○	○	○	○	○

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

* 该产品说明书应提供在环保使用期限和特殊标记的部分详细讲解产品的担保使用条件。

⑩ 产品

MN: A04222

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