GARMIN®

12-PIN TRANSDUCER ADAPTER BOX INSTALLATION INSTRUCTIONS

Important Safety Information

⚠ 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.

Mounting Location Considerations

Use the adapter to connect your 12-pin sounder to a compatible bare wire, 12-pin, 8-pin, or 6-pin transducer.

- The adapter cable from the device should reach the transducer connector on the sounder easily when the device is mounted.
- The device should not be submerged in water.
- The device should be mounted at least 15.25 cm (6 in.) from a source of electrical interference, such as a motor.
- When a mounting surface is unsuitable for screws, you must secure the device to a structure using cable ties (not included).

Tools Needed

- Drill and 3.2 mm ($^{1}/_{8}$ in.) drill bit
- #2 Phillips screwdriver
- 3 mm flat screwdriver
- Cable ties (optional)
- Wire cutter
- Wire stripper
- 21 mm ($^{13}/_{16}$ in.) wrench
- 15 mm (or adjustable) wrench (optional)

Mounting the Adapter Box

1. Using the 3.2 mm ($^{1}/_{8}$ in.) bit, drill the pilot holes.
2. Insert the screws into the pilot holes, but do not tighten them flush with the surface.
3. Place the adapter box on the screws and slide it into place.
4. With the adapter box unmounted, connect the wires.
5. Tighten the screws until the adapter box is securely fastened to the surface.

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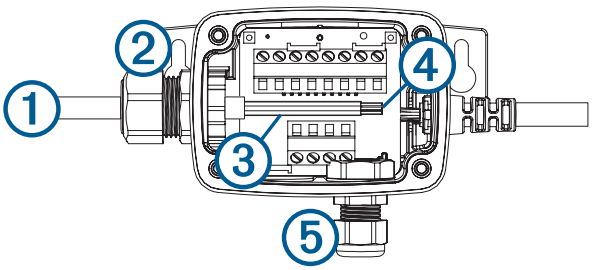
Connecting the Device to a Transducer

Preparing the Transducer to Connect to the Adapter

Before you can begin the installation, you must check your transducer compatibility. Water speed wheels are not supported on the 12-pin sounder connector.

1. For a transducer with a 12-pin (orange), 8-pin (blue), or 6-pin (black) connector, cut off the connector cable as close to the connector as possible.
2. Feed the cut end of the cable ① through the nut ② on the side of the housing and pull it out through the other side.
3. Use the wire stripper to remove about 90 mm (3 $^{1}/_{2}$ in.) of the outer cable jacket ③ and foil shield.
4. Use the wire stripper to remove about 6 mm ($^{1}/_{4}$ in.) of the insulation from each internal wire ④.

   NOTE: Tinning the stripped wires is recommended.



5. For transducers without a temperature sensor, you can use a 15 mm (or adjustable) wrench to connect a separate temperature sensor through the nut ⑤ on the bottom side of the housing (optional).

Connecting the Transducer Wires to the 12-pin Adapter

1. Using a 3 mm flat screwdriver, connect the transducer wires to the wire block in the 12-pin adapter as shown in the wiring block table.

   NOTE: You can consult the wire color tables to identify the wire functions for some Garmin® and Airmar™ transducers (*Wiring Block Tables*, page 3).

Wire Block Number	Wire Function	Description
1	Shield/Ground	Sonar system common ground
2	Temp +	Water temperature positive
3	GID	Garmin Transducer Identification
4	XID	Airmar Transducer Identification
5	Right - / Low depth -	Right Garmin SideVü™ negative or low-channel negative
6	Right + / Low depth +	Right Garmin SideVü positive or low-channel positive
7	Down - / Hi depth -	Garmin ClearVü™ negative or high-channel negative
8	Down + / Hi depth +	Garmin ClearVü positive or high-channel positive
9	Left +	Left Garmin SideVü positive
10	Left -	Left Garmin SideVü negative
11	Res. 1	Reserved 1
12	GID2[1]	Garmin Transducer Identification 2[1]

2. When the wire connections are secure, use a 21 mm ($^{13}/_{16}$ in.) wrench to tighten the nut around the transducer cable.
3. Place the lid on the adapter and secure it with the four captive Phillips screws.

[1] Present only on some Garmin 12-pin GT series transducers.

Wiring Block Tables

Garmin 12-pin Transducers

This Garmin 12-pin transducer adapter box is compatible with all 12-pin Garmin CV and GT series transducers.

Description	1: Shield/ Ground	2: Temp +	3: GID	4: XID	5: Right - / Low Depth -	6: Right + / Low Depth +	7: Down - / Hi Depth -	8: Down + / Hi Depth +	9: Left +	10: Left -	11: Res. 1	12: GID2
Garmin CV and GT series	Bare	White	Green	N/A	Yellow	Brown	Black	Blue	Orange	Red	N/A	Purple (not present on all transducers)

Garmin 8-pin Transducers

This Garmin 12-pin transducer adapter box is compatible with all 8-pin Garmin GT series transducers.

Description	1: Shield/ Ground	2: Temp +	3: GID	4: XID	5: Right - / Low Depth -	6: Right + / Low Depth +	7: Down - / Hi Depth -	8: Down + / Hi Depth +	9: Left +	10: Left -	11: Res. 1	12: Res. 2
Garmin Dual Beam 77/200 kHz[1]	Bare	White	N/A	N/A	N/A	N/A	Black	Red	N/A	N/A	N/A	N/A
Garmin Dual Frequency 50/200 kHz[2]	Bare/ Green	White	N/A	N/A	N/A	N/A	Black	Red	N/A	N/A	N/A	N/A
All other 8-pin Garmin GT transducers.	Bare	White	Yellow	N/A	N/A	N/A	Black	Red	N/A	N/A	N/A	N/A

[1] On your chartplotter, select **Transducer Type** > **Dual Beam (200/77 kHz)**.
[2] On your chartplotter, select **Transducer Type** > **Dual Freq (200/50 kHz)**.

Airmar Bare Wire and 8-pin Transducers

Description	1: Shield/ Ground	2: Temp +	3: GID	4: XID	5: Right - / Low Depth -	6: Right + / Low Depth +	7: Down - / Hi Depth -	8: Down + / Hi Depth +	9: Left +	10: Left -	11: Res. 1	12: Res. 2
Airmar B4[1]	Bare	White	N/A	N/A	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar B60[1]	Bare	White	N/A	N/A	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar B75H	Bare/ Brown	White	N/A	Orange	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar B75L	Bare/ Brown	White	N/A	Orange	N/A	N/A	Black/ White	Blue/ White	N/A	N/A	N/A	N/A
Airmar B75M	Bare/ Brown	White	N/A	Orange	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar P19[2]	Bare	White	N/A	N/A	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar P66[3]	Bare/ brown	White	N/A	N/A	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar P79[1]	Bare[4]	[4]	N/A	N/A	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar SS60[1]	Bare	White	N/A	N/A	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar TM150	Bare/ Brown	White	N/A	Orange	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar B117[1]	Bare	White	N/A	N/A	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar B150M	Bare/ Brown	White	N/A	Orange	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar B164	Bare	White	Brown	Orange	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar SS164	Bare	White	Brown	Orange	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar B175H (bare wire)	Bare/ Brown	White	N/A	Orange	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar B175H	Bare/ Brown	White	N/A	Orange	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar B175L (bare wire)	Bare/ Brown	White	N/A	Orange	N/A	N/A	Black/ White	Blue/ White	N/A	N/A	N/A	N/A
Airmar B175L	Bare/ Brown	White	N/A	Orange	N/A	N/A	Black/ White	Blue/ White	N/A	N/A	N/A	N/A
Airmar B175M (bare wire)	Bare/ Brown	White	N/A	Orange	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A

[1] On your chartplotter, select **Transducer Type** > **Dual Freq (200/50 kHz)**.
[2] On your chartplotter, select **Transducer Type** > **Dual Beam (200/77 kHz)**.
[3] Using the 12-pin wire block adapter for this transducer will prevent proper operation of the speed wheel (sonar and water temperature will function, but not speed). If speed wheel operation is needed, use an 8-pin sonar port with a 010-11613-00 wire block adapter.
[4] For transducers without temperature capability or a separate temperature sensor, you must install a jumper between connectors 1 and 2 on the wire block.

Description	1: Shield/ Ground	2: Temp +	3: GID	4: XID	5: Right - / Low Depth -	6: Right + / Low Depth +	7: Down - / Hi Depth -	8: Down + / Hi Depth +	9: Left +	10: Left -	11: Res. 1	12: Res. 2
Airmar B175M	Bare/ Brown	White	N/A	Orange	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar B175HW	Bare/ Brown	White	N/A	Orange	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar B258	Bare	White	Brown	Orange	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar B260	Bare	White	Brown	Orange	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar M260	Bare[1]	[1]	Brown	Orange	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar SS270W	Bare	White	Brown	Orange	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar TM260	Bare	White	Brown	Orange	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar P319[2]	Bare	White	N/A	N/A	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar B619[3]	Bare	White	N/A	N/A	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar B744V[4]	Bare/ brown	White	N/A	N/A	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar B744VL[4]	Bare/ brown	White	N/A	N/A	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A

[1] For transducers without temperature capability or a separate temperature sensor, you must install a jumper between connectors 1 and 2 on the wire block.
[2] On your chartplotter, select **Transducer Type** > **Dual Freq (200/50 kHz)**.
[3] On your chartplotter, select **Transducer Type** > **Dual Beam (200/77 kHz)**.
[4] Using the 12-pin wire block adapter for this transducer will prevent proper operation of the speed wheel (sonar and water temperature will function, but not speed). If speed wheel operation is needed, use an 8-pin sonar port with a 010-11613-00 wire block adapter.

Garmin/Airmar 6-pin 50/200 kHz Dual-Frequency Transducers

Description	1: Shield/ Ground	2: Temp +	3: GID	4: XID	5: Right - / Low Depth -	6: Right + / Low Depth +	7: Down - / Hi Depth -	8: Down + / Hi Depth +	9: Left +	10: Left -	11: Res. 1	12: Res. 2
Garmin Dual Frequency 50/200 kHz[1]	Bare/ Green	White	N/A	N/A	N/A	N/A	Black	Red	N/A	N/A	N/A	N/A
Airmar B117 depth only[1]	Bare[2]	[2]	N/A	N/A	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar B117 with temp[1]	Bare/ Brown	White	N/A	N/A	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar B744V[3]	Bare/ brown	White	N/A	N/A	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar P66[3]	Bare/ brown	White	N/A	N/A	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar B744VL[3] long stem	Bare/ brown	White	N/A	N/A	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar P319 Depth only[1]	Bare[2]	[2]	N/A	N/A	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar P319 with temp[1]	Bare/ Brown	White	N/A	N/A	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar P79 adjustable in-hull[1]	Bare[2]	[2]	N/A	N/A	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar M260 for 500W sonar units	Bare[2]	[2]	N/A	Orange[4]	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar B260 for 500W sonar units[1]	Bare/ Brown	White	N/A	N/A	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar B260	Bare	White	N/A	Orange[4]	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar M260	Bare[2]	[2]	N/A	Orange[4]	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar B258	Bare	White	N/A	Orange[4]	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar B60[1]	Bare/ Brown	White	N/A	N/A	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar B45 narrow stem[1]	Bare/ Brown	White	N/A	N/A	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar B164	Bare	White	N/A	Orange[4]	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A

[1] On your chartplotter, select **Transducer Type** > **Dual Freq (200/50 kHz)**.
[2] For transducers without temperature capability or a separate temperature sensor, you must install a jumper between connectors 1 and 2 on the wire block.
[3] Using the 12-pin wire block adapter for this transducer will prevent proper operation of the speed wheel (sonar and water temperature will function, but not speed). If speed wheel operation is needed, use an 8-pin sonar port with a 010-11613-00 wire block adapter.
[4] Brown for transducers made before February 1, 2007

Description	1: Shield/ Ground	2: Temp +	3: GID	4: XID	5: Right - / Low Depth -	6: Right + / Low Depth +	7: Down - / Hi Depth -	8: Down + / Hi Depth +	9: Left +	10: Left -	11: Res. 1	12: Res. 2
Airmar SS270W	Bare	White	N/A	Orange	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A
Airmar TM260	Bare	White	N/A	Orange	N/A	N/A	Black	Blue	N/A	N/A	N/A	N/A

Airmar Bare Wire and 12-pin Chirp Transducers

Description	1: Shield/ Ground	2: Temp +	3: GID	4: XID	5: Right - / Low Depth -	6: Right + / Low Depth +	7: Down - / Hi Depth -	8: Down + / Hi Depth +	9: Left +	10: Left -	11: Res. 1	12: Res. 2
Airmar M265LH	Bare/ Brown[1]	[1]	N/A	Orange	Black/ White	Blue/White	Black	Blue	N/A	N/A	N/A	N/A
Airmar B265LH	Bare/ Brown	White	N/A	Orange	Black/ White	Blue/White	Black	Blue	N/A	N/A	N/A	N/A
Airmar TM265LH	Bare/ Brown	White	N/A	Orange	Black/ White	Blue/White	Black	Blue	N/A	N/A	N/A	N/A
Airmar B265LM	Bare/ Brown	White	N/A	Orange	Black/ White	Blue/White	Black	Blue	N/A	N/A	N/A	N/A
Airmar B765LH	Bare/ Brown	White	N/A	Orange	Black/ White	Blue/White	Black	Blue	N/A	N/A	N/A	N/A
Airmar B765LM	Bare/ Brown	White	N/A	Orange	Black/ White	Blue/White	Black	Blue	N/A	N/A	N/A	N/A
Airmar TM265LM	Bare/ Brown	White	N/A	Orange	Black/ White	Blue/White	Black	Blue	N/A	N/A	N/A	N/A
Airmar PM265LH	Bare/ Brown	White	N/A	Orange	Black/ White	Blue/White	Black	Blue	N/A	N/A	N/A	N/A
Airmar PM265LM	Bare/ Brown	White	N/A	Orange	Black/ White	Blue/White	Black	Blue	N/A	N/A	N/A	N/A
Airmar TM265LH	Bare/ Brown	White	N/A	Orange	Black/ White	Blue/White	Black	Blue	N/A	N/A	N/A	N/A
Airmar B265LH	Bare/ Brown	White	N/A	Orange	Black/ White	Blue/White	Black	Blue	N/A	N/A	N/A	N/A
Airmar M265LH	Bare/ Brown [1]	[1]	N/A	Orange	Black/ White	Blue/White	Black	Blue	N/A	N/A	N/A	N/A
Airmar B275LHW	Bare/ Brown	White	N/A	Orange	Black/ White	Blue/White	Black	Blue	N/A	N/A	N/A	N/A
Airmar TM275LHW	Bare/ Brown	White	N/A	Orange	Black/ White	Blue/White	Black	Blue	N/A	N/A	N/A	N/A
Airmar PM275LHW	Bare/ Brown	White	N/A	Orange	Black/ White	Blue/White	Black	Blue	N/A	N/A	N/A	N/A
Airmar CM275LHW	Bare/ Brown	White	N/A	Orange	Black/ White	Blue/White	Black	Blue	N/A	N/A	N/A	N/A

[1] For transducers without temperature capability or a separate temperature sensor, you must install a jumper between connectors 1 and 2 on the wire block.

Specifications

Specification	Measurement
Dimensions (W x H x L)	59.1 x 48.97 x 104 mm (2.3 x 1.9 x 4.1 in.)
Cable length	61 cm (24 in.)
Water rating	IEC 60529 IPX7[1]

[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.