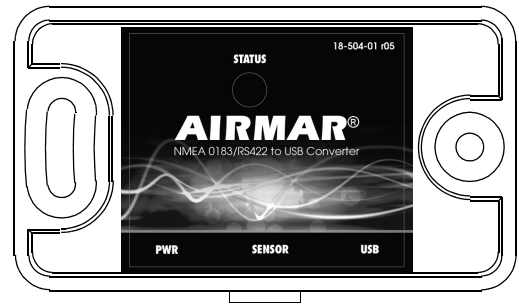


INSTALLATION INSTRUCTIONS

NMEA 0183 to USB

Data Converter

For WeatherStation® Instrument
GPS Receiver
Heading Sensor



Follow the safety precautions below to reduce the risk of poor product performance, property damage, personal injury, and/or death.

WARNING: Always wear safety goggles and a dust mask when installing.

WARNING: The power supply must be OFF before making electrical connections.

WARNING: The power supply voltage must be that specified for the model.

WARNING: A safe installation requires a 0.5 amp fast-blow fuse or circuit breaker. Except WeatherStation® models with a heater require a 3 amp fast-blow fuse or circuit breaker.

WARNING: Make power connections to a power source that is isolated from the engine start battery(s). Voltage drops may cause the instrument/receiver/sensor to lose information and/or change operating mode.

IMPORTANT: Read the instructions completely before proceeding with the installation. These instructions supersede any other instructions in your instrument manual if they differ.

Applications

The Data Converter allows information to be displayed on a PC by converting the data from NMEA 0183 to USB format.

Specifications

RS422 interface

Baud Rate

4,800

Tools & Materials

Safety goggles
Dust mask
Pencil
Electric drill
Drill bit: 3mm or 1/8"
Grommets (some installations)
Cutting pliers
Wire strippers
Heat-shrink tubing
Heat gun
Screwdrivers
Multimeter
Cable ties (some installations)

Cable Routing & Connecting Guidelines

CAUTION: To reduce electrical interference from other electrical wiring and any on-board equipment with strong magnetic fields such as radar equipment, radio transmitters, engines, generators, etc., separate the cables by at least 1 m (3'). Ensure that all the cable shields are appropriately grounded.

CAUTION: Do not remove the waterproof connector(s) to ease cable routing. Removing the waterproof connector will void the warranty.

CAUTION: Be careful not to tear the cable jackets when passing them through compartments, bulkheads, or walls. Use grommets to prevent chaffing.

CAUTION: Use a multimeter to check the polarity and the connections to the power supply before applying power to the instrument/receiver/sensor.

CAUTION: Coil any excess cable(s) and secure with cable ties to prevent damage.

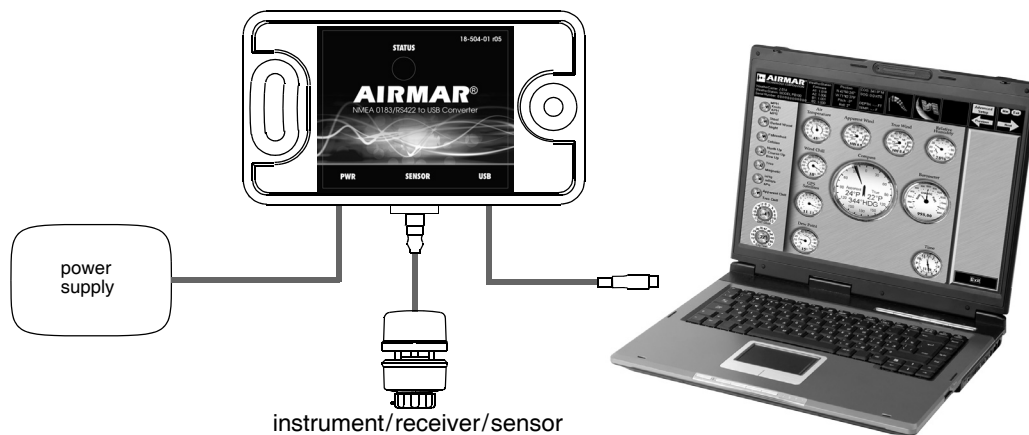


Figure 1. Installation (WeatherStation® Instrument shown)

Copyright © 2007 - 2011 Airmar Technology Corp.

Installation

Mounting Location

1. Select a convenient, dry, mounting location for the water-resistant Converter, a minimum of 1 m (3') from the PC (see Figure 1).
2. Hold the Converter at the selected location and mark the position of the screw holes. If the Converter will be mounted on a vertical surface, face the cables downward to avoid water seeping into the box.
3. At the marked locations, drill the holes for the screws.
Do not fasten the Converter in place at this time.

Instrument/Receiver/Sensor Cable

Route the instrument/receiver/sensor cable to the Converter. *Do not connect the cable or fasten it in place at this time.*

USB Cable

Route the USB cable coming from the Converter into the USB port on the PC. *Do not connect the cable or fasten it in place at this time.*

Power Cable

1. Route the power cable from the Converter to the power supply. Be sure it is isolated from the engine start batteries. *Do not fasten the power cable in place at this time.*
2. Allowing an extra 25 cm (10") for wiring ease, cut the cable to length.
3. Strip 60mm (2-1/2") of the outer jacket and foil shielding from the cut end of the cable.
4. Cut off the bare wire flush with the cable jacket.
5. Strip 10mm (3/8") of conductor insulation from the end of each colored wire.
6. Protect the cable's foil shielding from causing a short by using heat-shrink tubing around the jacket where the wires emerge from the cable. The tubing must overlap the wires a minimum of 6mm (1/4"). Use a heat gun to shrink the tubing.

7. Connect the wires to the power supply, *being sure the voltage is that specified for the model.* See the color code below.

Red	V+
Black	V- / ground

NOTE: The Converter is powered by the USB port and the instrument/receiver/sensor is powered by the power cable.

Completing the Installation

1. Fasten the Converter in place with the screws supplied.
2. Plug the instrument/receiver/sensor cable into the Converter.
3. Plug the USB cable into the PC.
4. Fasten all the cables in place. Coil any excess cable and secure it with cable ties to prevent damage.

Operation

The Converter is powered when it is connected to the USB port on the PC. The green LED indicator light will flash when the Converter is operating.

Parts

Obtain parts from your instrument manufacturer or marine dealer.

Gemeco
(USA)

Tel: 803.693.0777

Fax: 803.693.0477

email: sales@gemeco.com

Airmar EMEA
(Europe, Middle East, Africa)

Tel: +33.(0)2.23.52.06.48

Fax: +33.(0)2.23.52.06.49

email: sales@airmar-emea.com

AIRMAR®
TECHNOLOGY CORPORATION

35 Meadowbrook Drive, Milford, New Hampshire 03055-4613, USA

■ www.airmar.com

Copyright © 2008 - 2011 Airmar Technology Corp. All rights reserved.