WEGMATT LLC

dAISy 2+ AIS Receiver

Quick Start Guide

Thank you for purchasing the dAISy 2+ AIS Receiver.

Disclaimer: dAISy 2+ is a reliable, dual-channel AIS Receiver. However, under no circumstances it should be solely relied on for collision avoidance or navigation. It's the user's responsibility to use the product prudently. Neither Wegmatt LLC nor its dealers accept responsibility or liability to the product user or their estate for any accident, loss, injury or damage whatsoever arising out of the use of this product.

Installation

1) No drivers are required on Windows 10 and newer, Mac OS X and Linux. For Windows 8, 7, Vista and XP download and unpack the driver before starting the installation https://wegmatt.com/files/daisyUSB%20inf%20v2.zip
2) Connect dAISy to a computer with the provided USB cable.
3) For Windows 8, 7, Vista and XP install the device driver when prompted.
4) The device will now be available as a virtual serial port. The serial port name can be found at:
    a. Windows Device Manager, under Ports (COM & LPT) as generic "USB Serial Device" (Windows 10) or "dAISy AIS Receiver" (Win 8, 7, XP)
    b. On Mac OS X, the command `ls /dev/*usb*` in the terminal app will show dAISy as `/dev/cu.usbmodemXYZ` where XYZ is a number depending on the environment
    c. On Linux, the command `ls /dev/ttyACM*` in a terminal will show dAISy as `dev/ttyACMxyz` where xyz is a number depending on the environment
5) Use the serial port identification to configure the receiving application, like for example OpenCPN. Additional serial parameters that your application may require are:

Baud rate	38400
Data bits	8
Parity	None
Stop bits	1
Flow control	None

See the full instruction manual for more detailed installation steps, particularly when not familiar with Windows driver installation procedure.

The instruction manual is available on our website: http://www.wegmatt.com

dAISy immediately starts receiving AIS messages when plugged in.

LED status indicator

dAISy features a red/green LEDs to indicate its status.

Indicator	Description
Green, short flash every 5 seconds	Device is in reception mode
Green, ¼ second flash	Device received a valid AIS message
Red, ¼ second flash	Device received an invalid message
Red, fast continuous blinking	Device error
No LED activity	Device is not in reception mode

Documentation

https://wegmatt.com/docs.html

Contact

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WEGMATT LLC

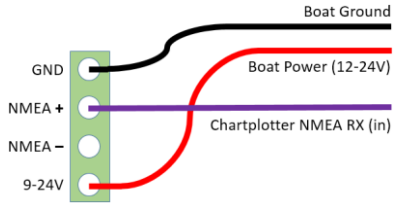
dAISy 2+ AIS Receiver

Using the NMEA 0183 output

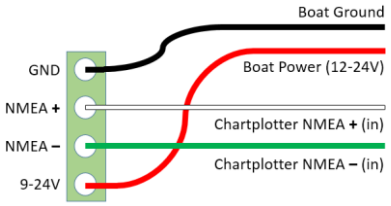
dAISy 2+ features a NMEA 0183 output to connect chartplotters and other marine equipment.

dAISy NMEA adapter	Chartplotter / boat	Comment
NMEA+	NMEA positive input	
NMEA-	NMEA negative input	If your device only has one RX wire per port, leave NMEA- unconnected
GND	Ground	If your device has only one RX wire or you connect external power, ground must be connected.
9-24V	Boat 12-24V power system	External power for dAISy if you are not using USB.

Below is an illustration on how to connect the dAISy NMEA output with a compatible device using single-wire or two-wire NMEA 0183 connection. Note that the colors may be different. Check the installation instructions of your chartplotter to identify the proper connections.



single-wire NMEA connection



two-wire NMEA connection

By default, dAISy 2+ is configured to output at 38400 Baud (NMEA high speed). This can be changed to other baud rates in the configuration and debug menu. You also need to check the configuration of your chartplotter. In many models, the NMEA port needs to be enabled in the settings menu and set to the correct protocol, like for example NMEA high speed).

As NMEA 0183 is compatible with RS-422, the NMEA output can also be used to connect dAISy with RS-422 to serial, RS-422 to Ethernet and other RS-422 compatible equipment. You may need to swap the NMEA+ and NMEA- leads.

Troubleshooting

Problem	Solution
No activity of the status LED	Verify the USB connection, also try a different USB cable.
Device in reception mode, but not valid AIS messages received (no ¼ second green flashes)	Verify the antenna connection and location. Good AIS reception requires line-of-sight, verify your setup from a location that is certain to have traffic, e.g. near a harbor.
Device indicates valid AIS messages (¼ second green flashes), but no messages received on PC	Verify that the serial port shows up on the PC. Try a different USB cable if this is not the case. Verify the serial configuration of your software. Verify the serial communication with a serial terminal program like Putty or screen.
Software receives positions, but fewer than expected and/or with worse range than expected.	Verify the antenna connection and location. Good AIS reception requires line-of-sight, so the higher up the antenna is positioned the better the range. Move the antenna away from sources of electrical noise.
After some time, dAISy indicates a device error (fast blinking red LED)	Sometimes the device is not properly initialized when the connected computer wakes up from sleep mode. Unplug dAISy and plug in again to resolve the error.

If a problem persists, contact Wegmatt LLC at daisy@wegmatt.com.