

WinFrog Device Group:	Speed Log
Device Name/Model:	NMEA WIND
Device:	National Marine Electronics Association PO Box 3435 New Bern NC 28564-3435, USA Tel: (252) 638-2626 Fax:(252) -638-4885 E-mail: nmea@coastalnet.com
Device Data String(s) Output to WinFrog:	\$--MWV o \$--MWD
WinFrog Data String(s) Output to Device:	N/A
WinFrog .raw Data Record Type(s):	Type: 374

DEVICE DESCRIPTION:

The NMEA 0183 Standard for Interfacing Marine Electronics Devices is a voluntary industry standard, first released in March of 1983. The NMEA 0183 Standard defines electrical signal requirements, data transmission protocol, timing and specific sentence formats for a serial data bus.

The Standard has been updated from time to time. This device driver expects the sentences defined in version 3.00 July 1, 2000.

The \$--MWV sentence contains either relative (apparent) or theoretical (computed) data, which is indicated within the sentence itself. In either case the wind direction is referenced to the ship head. If relative data is contained in the sentence WinFrog will calculate the absolute wind speed and the direction the wind is coming from relative to north. If theoretical data is contained in the sentence WinFrog will calculate the relative direction the wind is coming from relative to the ship head and the apparent speed.

The \$--MWV sentence contains the direction the wind is blowing from with respect to north and the speed. WinFrog will calculate the relative direction the wind is coming from relative to the ship head and the apparent speed.

In order to compute the values mentioned above the vessel requires a heading device.

Both the apparent and true wind directions may be selected for display in the Vehicle Text window. There is also a wind direction arrow that may be displayed in the Graphics window. It is toggled on or off from the Vehicle Presentation dialog box (Configure>Vehicles>Vehicle Presentation). The arrow shows the direction of the wind relative to north.

DEVICE CONFIGURATION INSTRUCTIONS

WINFROG I/O DEVICES > EDIT I/O:

Configurable Parameters

WINFROG I/O DEVICES > CONFIGURE DEVICE:

The NMEA WIND device is added to WinFrog from the SPEED LOG device group. There is no configuration required or available at the I/O Device window level.

WINFROG VEHICLE > CONFIGURE VEHICLE DEVICES > DEVICE DATA ITEM > EDIT:

Upon adding the NMEA WIND device to WinFrog, only one data item can be selected: WIND. There is no configuration required for this data item.

RAW DATA LOGGING:

The record is Type 473 and contains the following:

Device name, time, Ship speed, Ship heading, Wind speed true, Wind speed unit, Wind Dir True, Wind speed relative, Wind speed unit, Wind direction relative, Wind Dir Type, Status

Where:

Wind Dir Type is either "rel" or "true" and indicates the type of data that was in the original NMEA sentence. If the sentence was \$--MWV the status is either an A (indicating good data) or V (not good). If the sentence was \$--MWD this value will be a dash "-", as there is no status value in this sentence.