AUTONNIC

A5905

0183 to 2K Wind Converter

FEATURES

- Interfaces NMEA-0183 Wind to 2K
- Push-button to set wind DIR = 0
- Screw terminals for 0183 termination for mast and deck cabling
- Plugs directly into 2K
- Powered from 2K

The A5905 passes the wind information from a NMEA-0183 masthead device—such as the Autonnic A5120—to the NMEA 2000 bus devices. The wind data is re-packaged from the 0183 to a 2000 format.

In this way a masthead unit can be installed with easily cut cable threaded through the mast and deck and terminated with a screwdriver to the terminals provided.

The power for the wind device is taken from the 2000 bus.

In addition, a button is provided which send a message to the masthead to set its direction to zero. It is intended that he boat is heading into wind when this button is pressed—**for a minimum time of 5s.** This is a one-time operation and the value is retained until the button is pressed again.

ABSOLUTE MAXIMUM RATINGS

PARAMETER	DESCRIPTION	NOTES	CONDITIONS	VALUE	UNIT
q_{STOR}	Storage Temp Range			-20 to +100	°C
q_{OPER}	Operating Temp Range			-20 to +65	°C
	Shock Resistance		Single impact	0	G
	Vibration Resistance		60Hz, 10 Minutes	±11	G
	Climate Test		+71°C, 95% Humidity -20°C, 85% Humidity	6	Hours
V_{CC}	Supply Voltage			16	Vdc

ORDER INFORMATION

PART	DESCRIPTION
A5905	Wind 2K Converter

NMEA-0183 WIND TERMINAL CONNECTIONS

SCREW	FUNCTION
1	12V
2	0183 Serial Input +
3	0183 Serial Input -
4	0183 Serial Output
5	GROUND

Example connection to Autonnic A5120 wind sensor.
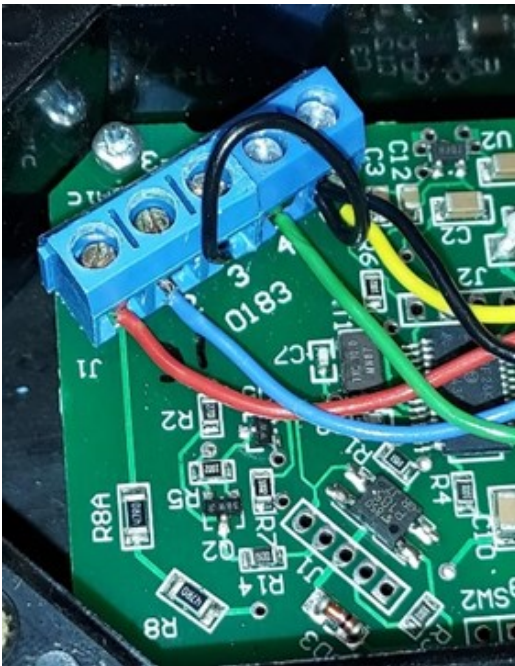
A5905 pin	Func-tion	A5120 Function	A5120 wire	
1	+12V	+12V	Red	
2	Input +	Output +	Blue	
3	Input -		Wired to GND	
4	Output +	Input +	Green	
5	GND	GND and	Black	and Yellow

Wiring description

The A5120 has a single-ended output and an isolated two-wire input. The same applies to the A5905 converter. This means that the A5120 output + is connected to the A5905 input + but the input – must be connected to GND. Similarly, the A5905 output + is connected to the A5120 input + but the A5120 input – must also be connected to GND.

NMEA 2000 PGNs

Output PGN

Standard Windspeed and Direction (PGN:130306) at 10 per second

Input PGNs

Custom (PGN: 127257). A 6-byte block of which only the first is used as follows:

Set Wind Heading to Zero = 7

File: A5905-04