



Weather Station Model NM150 Owner's Guide



Record the serial number found on the weather station for future reference.

Serial No. _____

Date of Purchase _____

INTRODUCTION

Thank you for purchasing the NM100 Ultrasonic Weather Station. This unique product is actually six different sensors in a single unit – without any moving parts. The integrated GPS and meteorological sensor package provides accurate indication of the weather for both moving and stationary conditions

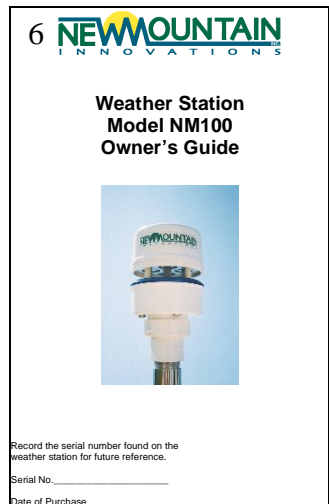
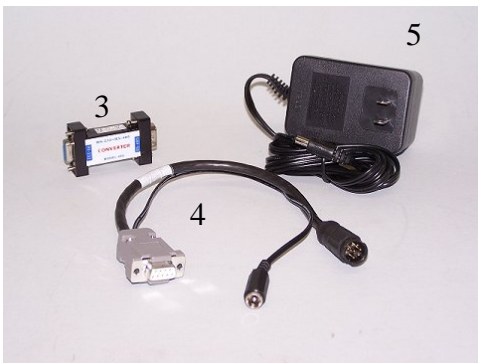
Functions of the Weather Station

- Apparent Wind Speed
- Apparent Wind Direction
- Magnetic Compass Heading
- Air Temperature
- Relative Humidity
- Dew Point Temperature
- Wind Chill Temperature
- Barometric Pressure
- Global Positioning System (GPS)
- True Wind Speed
- True Wind Direction
- Heading Relative to True North
- True Wind Chill Temperature

COMPONENTS

Your New Mountain NM100 weather station package should contain the following:

1. Weather Station Sensor Unit
2. Data Cable
3. RS485 to RS232 Converter
4. Data Cable Serial Interface Adapter
5. 12V Power Supply
6. Owners Manual



INSTALLING THE WEATHER STATION

Caution: The blue metal plate and the blue film found in the wind channel of the weather station are essential to its operation. Be careful not to scratch the plate, puncture the film, or damage them in any way.

Caution: The weather station must be installed vertically, - not tilted to one side.

Choosing mounting location

The weather station sensor unit must be mounted in “clean air” - away from obstructions in any direction that will interfere with air flowing through the unit. If on a vehicle ideally, this would be on the roof of the cab. Because the sensor unit has a magnetic compass it should be at least 3 feet away from strong magnetic fields

Assembling the weather station sensor unit and cable

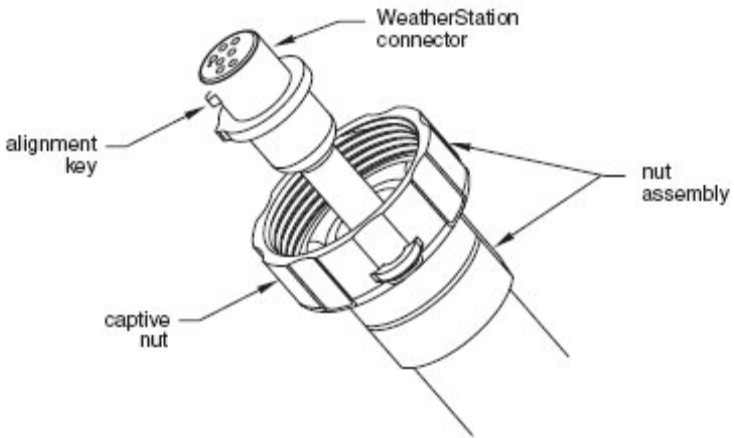
The weather station sensor unit has a 1” 14 unc thread (Standard Pipe Thread) adapter. Any 1” pipe (PVC or metal) can be attached by threading the cable through it. And simply screw the 1” pipe thread into the nut assembly.

Depending on your mounting preference the data cable can simply exit the bottom of the pipe. If the bottom of the pipe is blocked by a base, cut a vertical slot in the bottom end of the pipe to allow the data cable to exit before securing the bottom of the pipe to its base.

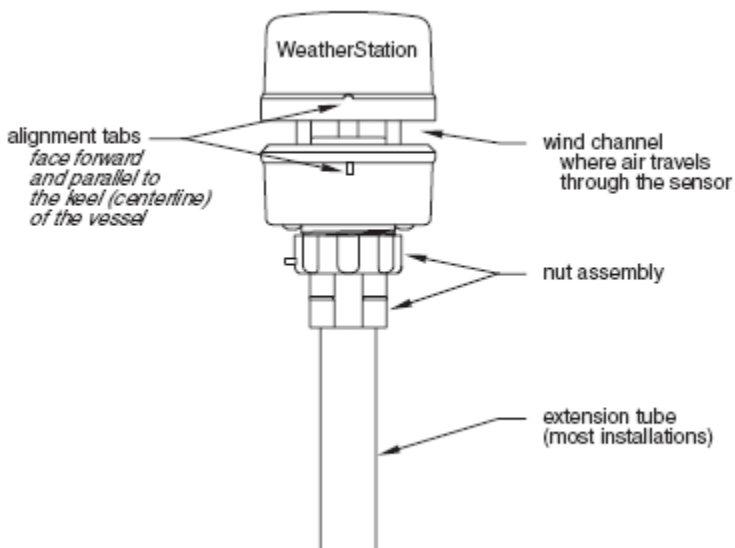
1. Thread the data cable through your selected mounting tube.
2. Screw the nut assembly onto the top of the mounting tube. Hand-tighten only. Do not over-tighten. Caution: If you want to use thread lock use plumber’s tape, Do

not use a liquid thread lock as it may weaken plastic, causing it to swell and crack.

3. Plug the 7 – pin connector into the weather station sensor unit. The alignment key on the connector fits into a notch in the base of the weather station sensor unit.



4. If mounting on a vehicle be sure the alignment tab on the weather station sensor unit are facing forward and parallel to the centerline of the vehicle. Slide the captive nut upward and screw it onto the base of the weather station sensor unit. Hand-tighten only. Do not over-tighten. Be careful NOT to rotate the weather station sensor unit or loosen the nut assembly from the mounting tube.



5. Attach the data cable serial interface adapter to the waterproof male connector, the alignment key on the connectors should line up. Plug the 12 volt power supply into its plug receptor. Attach the RS486 to RS232 adapter to the female DB9 connector and connect the Adapter female DB9 into the serial connector on your computer. If using USB interface or the mobility package follow their included instructions.



6. Follow included software instructions for computer operation

