Quick Set Up Manual - Weather Station

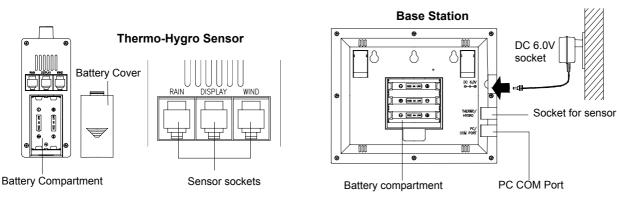
Using cable connection or 433MHz for wireless transmission of weather data, this unique weather station can be powered using batteries or AC power (or both at the same time) for all your weather needs in the home or office.

Carefully open and check that the following contents are complete:

Item:	Consisting of:	Fittings:	Illustration:
Base Station	1) Main unit	AD/DC 120V power Adaptor - optional use (included)	
Thermo-Hygro Sensor	Main unit Rain protection cover	32ft cable - optional connection to the base station (included) Wall mounting screws Plastic anchors for screws	
Wind Sensor	Main unit with wind vane 32ft cable (already attached the main unit) Mast holder	1) 2 x U-bolts for mast holder 2) 4 x Washers 3) 4 x Nuts 4) 1 x screw (to secure main unit to the mast holder)	
Rain Sensor	Base and funnel 32ft cable (already attached the main unit)		
'Heavy Weather" PC software	CD-ROM (English and German version only)	6.5 ft computer cable for PC function only - optional use (included)	S-ROM

Setting Up:

Important: Operating power is supplied to both the wind and rain sensors by the thermo-hygro sensor



Setting up using batteries:

- 1) Sensors: Pull and remove the protective rain cover to reveal three socket ports and the battery cover. Insert the cables of the wind and rain sensors in the correctly marked sockets. Slide open the battery compartment and checking the correct polarity insert 2 x AA 1.5V batteries and replace the cover and rain cover
- 2) **Base Station**: Now open the battery cover at the back of the unit and checking the correct polarity insert 3 x AA 1.5V batteries and replace the battery cover

Setting up using the AC/DC power adaptor:

- 1) Sensors: Set up the sensors as described above in Setting up using batteries.
- 2) **Base Station:** Using the AC power adaptor (included in this set) plug it into mains supply and connect it to the 6.0V DC adaptor socket located at the side of the base station.

Performing a function test:

After powering up the units, the base station has to synchronize to the sensors before the weather data can be received. The synchronization mode lasts for 15 minutes. Pressing the MIN/MAX key at any time will send the base station into the WWVB radio controlled time reception mode. Under normal conditions the radio controlled time is usually received within 3-5 minutes before returning to the normal operation. During the synchronization mode, perform the following function test to check operation:

- 1) Check that the wind-vane and fan of the wind sensor can freely rotate by moving the vane gently and also blowing into the fan to emulate wind speed and direction
- 2) Holding the rain sensor in both hands with the longest side facing you, tilt the unit from side to side and hear the rain counter flip which emulates rainfall
- 3) The base station will start to receive the 433MHz data transmitted from the sensors. Data such as rainfall will not be updated as regularly as the outdoor temperature since it does not rain constantly all the time. Therefore these readings may take up to two minutes before being shown on the LCD.
- 4) Now using the DISPLAY key on the base station, toggle between different weather modes on the LCD to check that the weather readings can be received for the relevant sections, for example outdoor temperature and humidity and etc.

Note: Should any outdoor data not be received from the sensors (when "- - - " is displayed), check all cables are correctly inserted and/ or the batteries or AC cord are plugged in, press and hold the PLUS(+) key for 2 seconds to hear a beep and the base station will synchronize to the sensors transmitting signal. Wind speeds that read zero does not mean reception failure, it simply means that there was no wind at the time of reading the data.

Mounting the units:

Users must take their surroundings into consideration before deciding which method is best suited for them. Connection by cable is advantageous in that data from the sensors to the base station is interference free. Using 433MHz wireless transmission gives users little restriction on placement as that all units can be positioned virtually anywhere to within a 100ft radius of the base station. You must decide which method is best suited to you. For cable connecting, please ensure that the 10 meters cable included in this set meets with your distance requirements (see accessories in the main user manual for adding extension cables).

To change from 433MHz to cable connection (or vice versa) simply connect (or disconnect) the 32ft cable from the base station to the sensor. The base station will automatically detect the connection and read the weather data. If the data cannot be received then press and hold the PLUS(+) key for 2 seconds to synchronize the base station with the sensor.

Important: Ensure all signals including the radio controlled time can be received and/or all cable distances meet with your requirements at the point of fixing particularly before you start drilling any mounting holes.

Wind sensor

Secure the main unit to the shaft of the mast holder using the single screw provided with the front of the sensor (marked E) facing in the East-West direction otherwise wind direction will not be accurate. Now fix the entire unit to a suitable mast using the 2 two U-bolts, 4 washers and nuts found in this set.

Note: For best results mount the wind sensor onto a mast to allow the wind to freely travel from all directions to enable an accurate reading (ideal mast size should be from $\emptyset6.3" - \emptyset1.3"$). Ensure that the 10 meter cable of the wind sensor meets your distance requirements.

Rain sensor

The rain sensor should be mounted horizontally about 2-3ft off from the ground in an open area away from trees or other coverings to allow rain to fall naturally for an accurate reading.

Note: For best results ensure the base is horizontal to allow maximum drainage of any collected rain

Thermo-hygro Sensor

To wall mount the thermo-hygro sensor, fix the wall holder onto the desired wall (2 screws are supplied), plug the sensor firmly into the wall holder and then carefully replace the rain cover back over the thermo-hygro sensor.

Note: After mounting the units, should the weather data not be received then press and hold the PLUS(+) key for 2 seconds to synchronize the base station with the sensor.

Weather station for use with your PC

Use your PC to read the latest weather data collected by the weather station. Just simply install the software from the enclosed CD-ROM onto your PC. For full details see the "Heavy Weather " PC software instructions in the CD-ROM (English version only).

System Requirements:

The minimum system requirement for use of "Heavy Weather" PC software is:

- Operating system: Windows 98 or above
- Processor: Pentium 166 MHz or above processor
- RAM: 32MB or above
- Hard-disc: 20MB free space
- CD-ROM drive