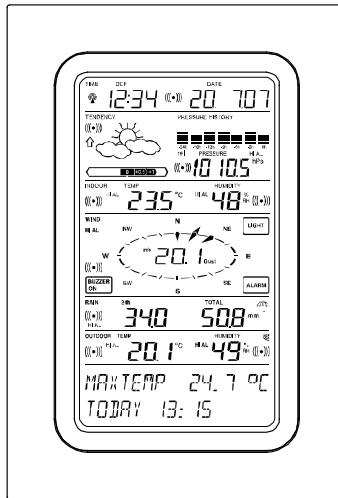


TOUCH SCREEN WEATHER STATION MODEL WS-3650

Operation Manual



« Instant Transmission+ » is the up and coming state-of-the-art new wireless transmission technology, exclusively designed and developed by LA CROSSE TECHNOLOGY. "IT +" offers you an immediate update of all your outdoor data measured from the transmitters: follow your climatic variations in real-time!

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1 General

The shipping contents of the Touch Screen Weather Station [WS-3650](#) include a Base Station (Receiver), a Thermo-Hygro Sensor (868 MHz transmitter), [Rain Sensor \(868MHz transmitter\)](#) and [Wind Sensor](#), an [AC/DC Adapter](#) and a [PC Software Package on CD-ROM](#).

The Base Station is equipped with a Touch Screen LCD Monitor and allows by use of comprehensive menu control the display of a vast variety of time and weather data (from top to bottom):

- Radio Controlled Time (Time)
- Calendar (Date)
- Weather Forecast (Tendency)
- Air Pressure and Air Pressure History (Pressure, Pressure History)
- Indoor Temperature and Humidity (Indoor Temp, Humidity)
- Wind
- Rain (Rain)
- Outdoor Temperature and Humidity (Outdoor Temp, Humidity)

Furthermore the display of a number of additional data can be realised by use of certain switching combinations (see further down).

Note: In case the menu is used all these indications are temporarily replaced by the menu steps directly operable from the text section.

As an important feature exceeding the display on the LCD Monitor the Weather Station allows by cable and software the readout of all measured and displayed time and weather data in form of complete history data sets, their processing and graphic presentation on a PC as well as their tie on to Internet Web Sites.

2 Important Touch Screen Operating Notes generally applicable

- All actions and functions of the Weather Station are started on the Touch Screen by slightly touching (**not pressing!**) the

switching areas appearing in star (*) symbols (only in the text section at the bottom of the LCD) or the displayed values respectively.

- The setting of functions, values and units is in all modes performed by use of the switching areas *ON* or *OFF*, *UP* or *DOWN* or by direct unit selection.
- Advancing to any next respective menu step with *NEXT*, leaving or terminating all respective modes with *EXIT*.
- Every programming step activated by touching a switching area on the Touch Screen is being acknowledged by an acoustic signal (with buzzer switched ON).
- If during any process previously activated by use of the Touch Screen no further action is activated for about 30 seconds the active process is automatically terminated and switched back to the normal display mode (automatic time out).

3 Putting into Operation

Note: When putting the Weather Station into operation it is important to tentatively perform in close proximity (e. g. on a table) a complete wiring and setup of the system in the configuration of its prospective use. This measure serves to test all components for correct function before placing and mounting them at their final destinations.

3.1 Power supply

The provision of power to the Weather Station can be performed by use of batteries, or by AC/DC mains adapter

1. Unwind the cable of the Wind sensor. Connect the Wind sensor to the Thermo-hygro transmitter by plugging the connector head into the socket of the Thermo-hygro transmitter.
2. First insert the batteries into the Thermo-hygro transmitter.
3. Then insert batteries into the Rain sensor.
4. Insert the batteries into the Weather Station (or use the provided AC/DC adapter (power up into a main outlet). Once the batteries are installed, all segments of the LCD will light up briefly and a short signal tone will be heard. It will then display the time as 0:00, the date as 1.1.05, the weather

icons, and air pressure value. "- - -" will be shown for outdoor data.

5. Afterwards, the Weather Station will start receiving data from the transmitters. The outdoor temperature, humidity windchill and wind speed should then be displayed on the Weather Station. If this does not happen after 45 seconds, the batteries will need to be removed from both units. You will have to start again from step 2.
6. The transmitter reception icon is now blinking again to indicate that the station is trying to receive the rain sensor data. It will stop blinking once the rain sensor has been detected. If this doesn't happen after 45s, you need to start again from step 2.

Note: if no thermo-hygro transmitter is detected, the weather station will display the message "THERMO TX OUT OF RANGE"; if no rain sensor has been detected, the message "RAIN TX OUT OF RANGE" will be display in the text section (last two lines on the LCD).

7. You may then check all cables for correct connection and all components for correct function by manually turning the wind-gauge, moving the weather-vane, tilting the rain sensor to hear the impact of the internally moving seesaw, etc (See **Placement** below).
8. After the Weather Station has been checked for correct function with regard to the above points and found fit, the initial set up of the weather station system is finished and the mounting of the system components can take place. It must be ensured however that all components work properly together at their chosen mounting or standing locations. If e.g. there appear to be problems with the 868 MHz radio transmission, they can mostly be overcome by slightly changing the mounting locations.

Note:

The radio communication between the receiver and the transmitter in the open field reaches distances of max 100 metres, provided there are no interfering obstacles such as buildings, trees, vehicles, high voltage lines, etc.

9. Radio interferences created by PC screens, radios or TV sets can in some cases entirely cut off radio communication. Please take this into consideration when choosing standing or mounting locations.

Important: it is important to observe this order of succession since the sensors will send an identification code which has to be received and stored by the Base Station within the first few minutes of operation.

After doing this full operation of the entire Weather Station System is ensured.

Note: If batteries are inserted in the weather station after connecting the AC/DC, the batteries will serve as a back-up power source for the weather station in case of electrical failure.

3.2 System Start

After completing the play mode the Touch Screen Weather Station will automatically switch to the normal display mode from which all further settings can be performed by the user. At this point of time the unit will also automatically start reception of the DCF77 time information.

Note: In case the user wants to start the system without waiting for completion of the play mode it can be terminated prematurely by once touching the TIME display in the upper left corner of the LCD.

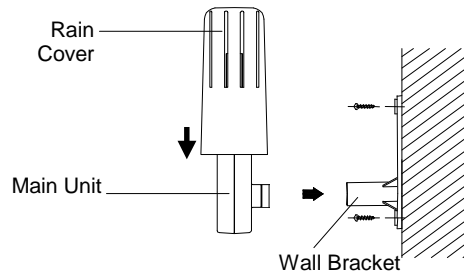
3.3 Placement

After the Weather Station has been checked for correct function with regard to the above points and found fit, the mounting of the system components can take place. It must be ensured however that all components work properly together at their chosen mounting or standing locations. If e.g. there appear to be problems with the 868 MHz radio transmission they can mostly be overcome by slightly moving the mounting locations.

Note: Commonly the radio communication between receiver and transmitter in the open field reaches distances of **100 meters maximum**, providing that there are no interfering

obstacles such as buildings, trees, vehicles, high voltage lines, etc.
Radio interferences created by PC screens, radios or TV sets can in bad cases entirely cut off radio communication. Please take this into consideration when choosing standing or mounting locations.

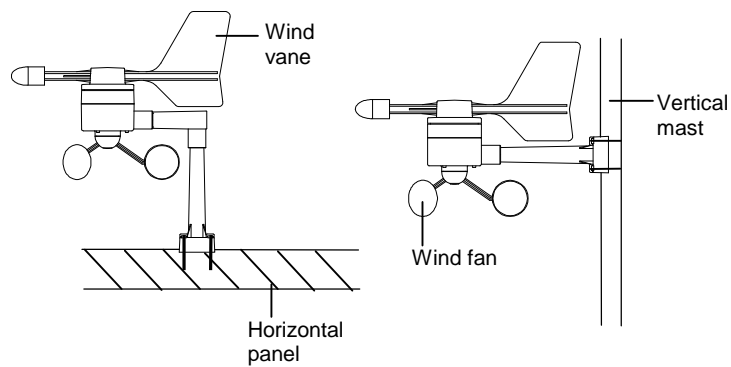
The Thermo-hygro Sensor



An ideal mounting place for the thermo-hygro sensor would be the outer wall beneath the extension of a roof, as this will protect the sensor from direct sunlight and other extreme weather conditions.

To wall mount, use the 2 screws to affix the wall bracket to the desired wall, plug in the thermo-hygro sensor to the bracket and secure both parts by the use of the supplied screw and ensure that the cables from the wind and rain sensors are correctly plugged in otherwise data transmission errors could occur.

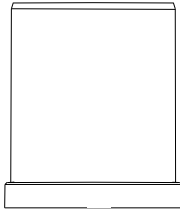
The Wind Sensor



Firstly, check that the wind-fan and the wind-vane can rotate freely before fixing the unit. For correct and accurate readings it is important to mount the sensor so that the front (marked E) is pointing in East-West direction. The wind sensor should now be mounted using the screw or cable tie provided onto a solid wall/ panel mast or mast to allow the wind to travel around the sensor unhindered from all directions (ideal mast size should be from diameter 16mm to 33mm).

Once the wind sensor is fixed onto the mast, connect the cable to the corresponding thermo-hygro sensor socket so that operating power supply can be received and data can be transmitted to the base station.

The Rain Sensor



For best results, the rain sensor should be securely mounted onto a horizontal surface about 1 meter above the ground and in an open area away from trees or other coverings where rainfall may be reduced causing inaccurate readings.

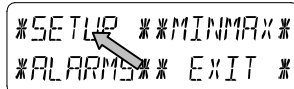
When securing into place, check that rain excess will not collect and store at the base of the unit but can flow out between the base and the mounting surface (test by pouring clean water).

The rain sensor is now operable. For testing purposes, very slowly pour a small amount of clean water into the rain sensor funnel. The water will act as rainfall and will be received and displayed at the base station after about 2 minutes delay i.e. when the reading interval is reached.

4 Setting Up:

Note: Because of the default settings already determined by the manufacturer it may not be necessary for the majority of users to perform - outside possibly the Relative Air Pressure (see further down) - any further basic settings. Changes however can easily be realized if desired.

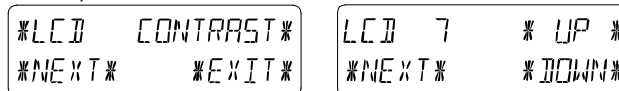
For basic settings the following menu is started by touching the Touch Screen in the center of the text display (last two lines on the LCD). Touching the display *SETUP* will enter the setup mode.



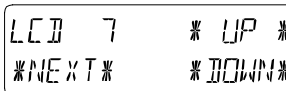
```
*SETUP *MINMAX*
*ALARMS* *EXIT*
```

The basic settings can now be performed in the following successive order:

LCD Contrast → Contrast can be set in 8 steps from 0 to 7 (Default 4).




```
*LCD CONTRAST*
*NEXT* *EXIT*
```

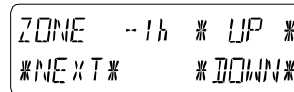


```
LCD 7 *UP*
*NEXT* *DOWN*
```

Time Zone → Time Zones can be set in the range from -12 to +12 hours (Default 0 hours for Central Europe).

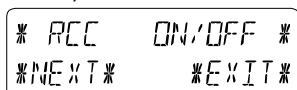


```
*ZONE*
*NEXT* *EXIT*
```

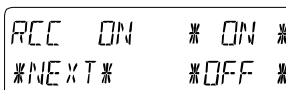


```
ZONE -1h *UP*
*NEXT* *DOWN*
```

DCF77 Radio Controlled Clock (RCC) → ON/OFF. In setting "OFF" the clock is operating as a normal Quartz clock (Default RCC ON).

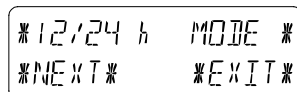


```
*RCC ON/OFF*
*NEXT* *EXIT*
```




```
RCC ON *ON*
*NEXT* *OFF*
```

12/24 hour Time Display Format (Default 24 h Format).



```
*12/24 h MODE*
*NEXT* *EXIT*
```



```
24 h *12h*
*NEXT* *24h*
```

Units

- Temperature Display (Temp) in °C or °F (Default °C) .
- Wind Speed Display (Wind) in km/h, mph, m/s, knots or Beaufort (Default km/h).

```
TEMP  °C * °C *  
*NEXT* * °F *
```

```
WIND  km/h * UP *  
*NEXT* *DOWN*
```

- Rain Amount Display (Rain) in mm or inch (Default mm).
- Air Pressure (Press) in hPa or inHg (Default hPa).

```
RAIN  mm * mm *  
*NEXT* * inch *
```

```
PRESS hPa * hPa *  
*NEXT* * inHg *
```

Relative Air Pressure (Rel. Pressure) → To be set to the locally valid reference air pressure with regard to the local height above sea level (Default 1013 hPa)

```
* REL PRESSURE *  
*NEXT* *EXIT*
```

```
1013.0 hPa * UP *  
*NEXT* *DOWN*
```

Weather Tendency (Tendency) → Setting to a definite switching threshold (2 hPa to 4 hPa) for a change in display of weather icons (Default 3 hPa).

```
* TENDENCY *  
*NEXT* *EXIT*
```

```
3 hPa * UP *  
*NEXT* *DOWN*
```

Storm Warning (Storm) → Setting to a definite switching threshold for storm warning display at a decrease of air pressure from 3 hPa to 9 hPa over 6 hours (Default 5 hPa).

```
* STORM WARNING *  
*NEXT* *EXIT*
```

```
5 hPa * UP *  
*NEXT* *DOWN*
```

Activate/Deactivate storm warning alarm with *ON* / *OFF* resp. (Default OFF).

```
WARNING OFF * ON *  
*NEXT* *OFF*
```

Relearn Mode (Relearn Tx) → Allows to clear all weather data in non-volatile buffer memory (EEPROM) and to newly recognize the outdoor transmitter (e. g. after a battery change in the transmitter) without the necessity of a comprehensive re-setup of all system components → Acknowledge with *CONFIRM*.

```
  * RELEARN TX *  
  *NEXT*      *EXIT*
```

```
  * CONFIRM *  
  *NEXT*
```

Default Settings (Factory Reset) → Allows the reset of all set and/or stored values to the factory settings set prior to shipment → Acknowledge with *CONFIRM*.

```
  *FACTORY RESET *  
                    *EXIT*
```

```
  * CONFIRM *  
                    *EXIT*
```

```
  FACTORY RESET  
  IN PROGRESS
```

```
  REMOVE BATTERY
```

Note:

It will take 5 minutes for the factory reset process. During this period, the text “Factory Reset In Progress” will be shown. After the reset process is finished, the LCD will switch off and the text “Remove Battery” will be displayed. Remove the battery and perform system start again. See “3 - Putting in Operation” paragraph.

Leaving the basic settings procedure (Setup Mode) with *EXIT*.

5 Display of stored Min/Max Values and Alarm Value Settings

Named values are in each case upon recall being simultaneously displayed and flashing in their respective display sections.

To recall named measuring and alarm values the menu shown below will have to be activated by touching the Touch Screen in the center of the text display section (last two lines at the bottom of the LCD). The display of the values is started by touching the displays *MINMAX* or *ALARMS* resp.

```

*SETUP *MINMAX*
*ALARMS* *EXIT*

```

The continuance of the recalling process is essentially self-explanatory.

With *MINMAX* the below shown menu step is activated, which in return leads to the displays of the stored Min/Max values by use of *MIN* / *MAX* resp., which on their part again can be directly selected.

Note: During individual displays of the stored Min/Max values the top line of the LCD screen will automatically display the time and date of their storage.

```

*MIN* *MAX*
*ALARMS* *EXIT*

```

The following menu item will appear upon touching the display *ALARMS* and will analog to the last described step lead through *LO AL* resp. *HI AL* to the displays of the set low resp. high alarm values, which on their part again can be directly selected.

```

*LO AL* *HI AL*
*MINMAX* *EXIT*

```

Because of the constant access to the respective opposite menu item *MINMAX* resp. *ALARMS* it is moreover possible at any time to toggle between the MIN/MAX and ALARMS value displays.

Any action can immediately be terminated through *EXIT*.

6 Radio Controlled DCF77 Clock

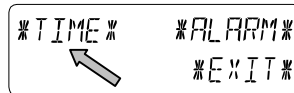
The Radio Controlled DCF77 Clock is normally controlled by the radio signal of the DCF77 time code transmitter and will thus set time and date automatically. Under bad reception conditions however both can be set manually as follows:

Setting the Time

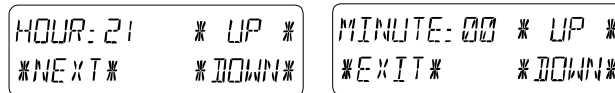
The action is started by touching the time display in the TIME section of the Touch Screen.



Start *TIME* in the menu section (last two lines on the LCD).



Set the hours and minutes. Leave the mode with *EXIT* or wait for automatic time-out.

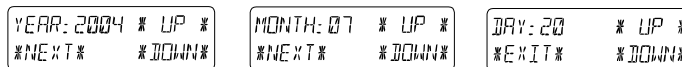


Setting the Date

The action is started by touching the date display in the DATE section of the Touch Screen.



Set the year, month and date of day. Leave the mode with *EXIT*.



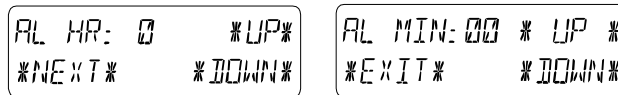
Note: By twice touching the DATE section the display will toggle between the following:

- Date in DD.MM.YY format (24 hour time format) or Date in MM.DD.YY format (12 hour time format)
- Weekday (Engl. abbrev.), Date of Day, Month (24 hour format) or Weekday, Month, Date of Day (12 hour time format)
- Seconds
- Set Wake-up Alarm Time

Setting of Wake-up Alarm

The action is started by touching the time display in the TIME section.

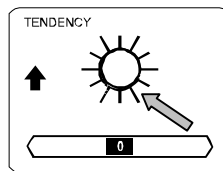
Start *ALARM* in the menu section (last two lines on the LCD). Set hours and minutes of the wake-up time. Leave the mode with *EXIT*.



Note: The wake-up alarm is activated/deactivated by twice touching the TIME section. Here the alarm symbol ((•)) will show or disappear after *EXIT* (or automatic time-out).

7 Weather Tendency

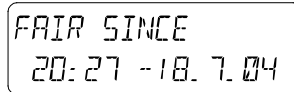
Call up the tendency display by touching the weather symbol in the TENDENCY section.



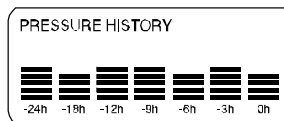
The text section (last two lines on the LCD) will show since when (with time and date) the weather condition corresponds to the presently displayed weather symbol Sunny, Fair (Cloudy with sunny intervals) or Rainy.

Note:

- Up and down arrow indicate weather tendency
- Advanced storm warning is displayed by Rainy symbol with a flashing down arrow
- Every minute, when a new pressure reading is obtained, this value is compared to pressure readings from last 2 hours and the biggest resulting difference is displayed in the difference barometer.



8 Air Pressure History (Pressure History)



The air pressure history shows the progress of the air pressure over a time period of 24 or 72 hours in form of a 7-step bar graph, where the length of the utmost right bar represents the present air pressure and the remaining bars show the progress of the air pressure with regard to the present air pressure.

Note: The time resolution of the bar graph can be changed from fine (0 to -24 h) to coarse (0 to -72 h) and back by once touching the **PRESSURE HISTORY** section.

9 Operating and Setting of the following Functions:

- **Air Pressure** (Pressure), Relative and Absolute
- **Indoor Temperature** (Indoor Temp)
- **Indoor Humidity** (Indoor Humidity)
- **Outdoor Temperature** (Outdoor Temp), **Wind Chill**, **Dew Point**
- **Outdoor Humidity** (Outdoor Humidity)
- **Wind Speed**, **Wind Gust**

Important Note!

Since operating procedures and settings are identical all steps to be carried out on the Touch Screen Weather Station for above functions shall be explained only once by means of the following example "Air Pressure".

9.1 Air Pressure (Pressure)

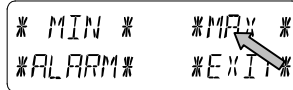
Example for Activating the Displays of Stored Maximum Values

Call up the menu on the text section by touching the PRESSURE section.



Start with *MAX* in the menu section.

Note: Display of the stored minimum values is from here possible through *MIN* analog to this example.

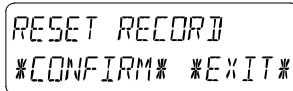


Display of stored value. Proceed with *MAX PRESSURE*.



Resetting of the displayed value to the present value with *CONFIRM*.

Without resetting advance with *EXIT*.



End of Example

Example for Setting of Alarms by means of the HI Alarms

As in the example above here too call up the menu on the text section by touching the PRESSURE section.

Start with *ALARM* in the menu section.


```

* MIN *      * MAX *
* ALARM *    * EXIT *

```

Proceed with *HI AL* in the menu section.

Note: Setting of the LO alarms is from here possible through *LO AL* analog to this example.

```

* LO AL *    * HI AL *
                * EXIT *

```

Setting of high alarm value with *UP* or *DOWN*.
Proceed with *ON/OFF*.

```

HI ALM. 0h Pa *UP*
*ON/OFF* *DOWN*

```

Activate or deactivate the alarm with *ON* or *OFF*.
Terminate with *EXIT*.

Note: Activation or deactivation of the alarm (Display or deletion of the ((•)) symbol) only pertains to the respective presently displayed value.

```

HI ALM OFF *ON *
*EXIT*      *OFF *

```

End of Example

Note: Twice touching the PRESSURE section toggles the displays of the Relative (rel) and Absolute (abs) air pressure.
All setting and display facilities only pertain to the respective presently displayed value.

10 Operating and Setting of Function Rain

Note: Besides the direct setting of the units for the rain amount in the basic setup procedure there is the possibility to toggle between the following displays by twice touching the left part of the RAIN section:

- Rain amount of the last hour
- Rain amount of the last 24 hours
- Rain amount of the last week
- Rain amount of the last month

Note: The rain amounts of the last week and of the last month do not represent the amounts collected up to the present point of time but those of the last complete week or the last complete month respectively.

All setting and display facilities only pertain to the respective presently displayed value.

Important Note!

Operation and settings of the function Rain are essentially corresponding to the ones described in [Item 9 above](#). Therefore a short description of the trivial differences with regard to [Item 9](#) should be sufficient.

- Since in the display function Rain the display of minimum rain values is unnecessary, the menu does not offer the item *MIN* but *MAX* only to display the various maximum rain amounts.
- Since because of the above no minimum alarms are necessary the menu will upon activating *ALARM* avoid Hi AL resp. LO AL selection and immediately proceed to the HI alarm setting as already described in [Item 9 above](#).

Note: The setting facility for the alarms is only offered during display of the rain amounts of the last hour resp. the one of the last 24 hours. Since for the rain amounts of the last week resp. the last month no exact definition for the alarm time is possible the alarm function has been omitted.

- When touching the display TOTAL in the RAIN section the total rain amount accumulated since the last deletion is displayed. This can be erased through *RAIN TOTAL* , followed by *CONFIRM*.

11 Additional Information to Function Outdoor Temperature (Outdoor Temp)

Note: By twice touching the OUTDOOR section the display will toggle between the following:

- Outdoor Temperature (Outdoor Temp)
- Wind Chill
- Dew Point

All setting and display facilities only pertain to the respective presently displayed value.

12 Additional Information to Function Wind

Note: By twice touching the WIND section the display will toggle between the following:

- Wind Speed
- Wind Direction (Abbreviations of the compass card descriptions)
- Wind Direction (Degrees)
- Wind Gust

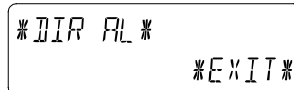
All setting and display facilities only pertain to the respective presently displayed value.

12.1 Operating and Setting of Function Wind Direction

In the display function Wind Direction the display of minimum or maximum values is unnecessary. There is however the possibility to realize wind direction alarms.

Start the menu in the text section by touching the center of the WIND section.

Proceed with *DIR AL*.



```
*DIR AL*
*EXIT*
```

In the following menu up to 16 separate alarms can be realized (depending on the basic setup clockwise around the compass card from N via NNE etc. through NNW or from 0° via 22.5° etc. through 337.5°). Here the wind direction can be selected with

UP or *DOWN* and switched ON or OFF with *(Wind Direction) ON/OFF* in the upper left part of the menu display.

```
* N OFF * * UP *  
*NEXT* *DOWN*
```

Activation or deactivation of every respective wind direction alarm with *ON* or *OFF* in the menu step shown below.

```
DIR ALM OFF *ON*  
*EXIT* *OFF*
```

Leaving the mode with *EXIT* .

13 Operating and Setting of Functions EL Backlight (Light), Buzzer and Alarm in the WIND Section

13.1 EL Backlight (Light)

For better readability of the LCD the EL backlight can be switched ON or OFF by once touching the LIGHT section. In condition ON the backlight will be switched on for approximately 15 seconds every time any one of the LCD sections is being touched.

The switching condition (Enabled/Disabled) is shown in the text section for about 30 seconds.

Note: In case the Touch Screen Weather Station is battery operated the repeated use of the EL backlight will result in a considerable decrease of battery lifetime. It is thus recommended to either operate the Weather Station on the included AC/DC adapter or entirely deactivate the EL backlight (see above).

13.2 Buzzer

The buzzer for the acoustic acknowledgement or alarm signals of the Weather Station can be switched ON or OFF by touching the BUZZER section.

The switching condition ON or OFF is displayed directly in the BUZZER section as well as for about 30 seconds in the text section (Enabled/Disabled).

13.3 Alarm

Upon touching the ALARM display in the WIND section will – numbered and sorted according to the time of appearance – with *NEXT* all those set and activated alarms (outside the wake-up alarm) be displayed that have reached an alarm condition since their last deletion.

Here for every respective alarm the time and date of appearance can be displayed by touching *ALARM*.

14 PC Connection

As an important feature exceeding the mere display on the Touch Screen the Weather Station allows the read-out of all measured and displayed time and weather data in form of complete history data sets on a PC.

14.1 Data Storage

For a comprehensive weather history the Base Station allows the internal storage of up to 1750 complete sets of weather data with time and date. These data sets are being stored in non-volatile ring buffer memory (EEPROM) and will not be lost even in case of an interruption of power supply (e. g. change of batteries). In case the memory capacity of the Weather Station is exhausted the oldest data sets stored will be overwritten by the new ones entered.

14.2 Data Recall

The weather data stored can only be read out, processed and displayed by means of a PC. Also the settings of the storing intervals from 1 minute to 24 hours for the storage of data sets can only be performed by means of a PC.

14.3 Connections and Software

The wiring between Weather Station and PC takes place by means of an included COM port cable. Furthermore the “Heavy Weather Pro 3650” software package also included in the shipping contents must be installed on the PC.

This software allows the display of all present weather data with graphic symbols. It further allows the display, storage and printing of history data sets, whose volume exceeding the

maximum 1750 data sets of the Weather Station is only limited by the capacity of the PC's main memory. Furthermore the present weather data can be tied on to web sites by means of the "Web Publisher" software. History data can be displayed as diagrams and graphs by means of the "Heavy Weather Pro" software. For further details to the subject "PC Connection" please see the Help File on the installation disk.

15 Low Battery indicator

Daily low battery detection is performed by the Weather Station:

- Low battery icon will appear when battery capacity for the Weather station is low.
- The message "THERMO TX BATTERY LOW" will be displayed when battery capacity for the Thermo-Hygro transmitter is low.
- The message "RAIN TX BATTERY LOW" will be displayed when battery capacity for the Rain sensor is low.

16 Technical Data

16.1 Outdoor Data:

Transmission Range in Open Field: . 100 m max.

Measuring Intervals:

Thermo-hygro (TX31-IT): every 4.5s

Rain sensor (TX34-IT):..... every 6.25s

Temperature Range: -40 °C to +59.9 °C (Display "OFL" outside this range)

Resolution: 0.1 °C

Measuring Range Rel. Humidity:..... 1% to 99% (Display "- -" outside this range or lower than 1%; display "99%" if higher than 99%)

Resolution: 1%

Rain Volume Display: 0 to 999.9 mm (1 hr, 24 hrs.)

0 to 9999 mm (last week, last month, total volume)

Resolution: 0.1 mm

Wind Speed..... 0 to 180 km/h or 1 to 50 m/s
Resolution: 0.1 km/h or 0.1 m/s
Wind Direction:..... Graphic Resolution 22,5
Degrees,
..... Numeric Resolution
Character Format

16.2 Indoor Data:

Measuring Intervals Indoor Data: ..every 20 s
Temperature Range: -40 °C to +59.9°C (Display
"OFL" outside this range)
Resolution: 0.1 °C
Measuring Range Rel. Humidity: ... 1% to 99%
Resolution: 1%
Measuring Range Air Pressure: 500 hPa to 1099 hPa
Resolution: 0.1 hPa
Alarm Duration: about 2 minutes

16.3 Power consumption:

Base Station:
Batteries: 3 ea. 1.5 V Batteries Type AA, IEC LR6
(Alkaline Batteries recommended, Life
Cycle without EL backlight appr. 1 year).
When batteries require replacement for
the base station, the low battery
indicator will light up on the LCD.
or Mains Voltage: AC/DC Adapter INPUT 230VAC / 50HZ
(use only the included Mains Adapter.
**Recommended for PC Connection
and frequent use of EL Backlight)**

Thermo-Hygro-Sensor:..... 2 x AA, IEC LR6, 1.5V batteries

Rain sensor: 2 x AA, IEC LR6, 1.5V batteries

16.4 PC Connection:

Wiring: COM Port Cable (included)
Data Processing: by PC only
Software: "Heavy Weather Pro 3650" (included)
Storage Intervals: 1 min through 24 h, settable

Data Volume:
Base Station: 1750 Data Sets max. in Ring Buffer
EEPROM
PC: Volume of Main Memory max.

16.5 Dimensions:

Base Station: 154 x 30 x 255mm
Thermo-Hygro-Sensor:.. 57 x 62 x 156mm
Rain Sensor:..... 131 Ø x 151mm
Wind Sensor:..... 250 x 145 x 276mm

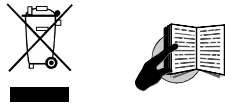
17 Care and maintenance

- Extreme temperatures, vibration and shock should be avoided as these may cause damage to the unit and give inaccurate forecasts and readings.
- Precautions shall be taken when handling the batteries. Injuries, burns, or property damage may be resulted if the batteries are in contact with conducting materials, heat, corrosive materials or explosives. The batteries shall be taken out from the unit before the product is to be stored for a long period of time.
- Immediately remove all low powered batteries to avoid leakage and damage. Replace only with new batteries of the recommended type.
- When cleaning the display and casings, use a soft damp cloth only. Do not use solvents or scouring agents as they may mark the LCD and casings.
- Do not submerge the unit in water.
- Special care shall be taken when handling a damaged LCD display. The liquid crystals can be harmful to user's health.
- Do not make any repair attempts to the unit. Return them to their original point of purchase for repair by a qualified engineer. Opening and tampering with the unit may invalidate their guarantee.
- Never touch the exposed electronic circuit of the device as there is a danger of electric shock should it become exposed.

- Do not expose the units to extreme and sudden temperature changes, this may lead to rapid changes in forecasts and readings and thereby reduce their accuracy.

18 Liability disclaimer

- The electrical and electronic wastes contain hazardous substances. Disposal of electronic waste in wild country and/or in unauthorized grounds strongly damages the environment
- Please contact your local or/and regional authorities to retrieve the addresses of legal dumping grounds with selective collection
- All electronic instruments must from now on be recycled. User shall take an active part in the reuse, recycling and recovery of the electrical and electronic waste.
- The unrestricted disposal of electronic waste may do harm on public health and the quality of environment.
- This product must however not be thrown in general rubbish collection points.
- As stated on the gift box and labeled on the product, reading the "User manual" is highly recommended for the benefit of the user.
- The manufacturer and supplier cannot accept any responsibility for any incorrect readings and any consequences that occur should an inaccurate reading take place.
- This product is not to be used for medical purposes or for public information.
- This product is only designed to be used in the home as indication of the future weather and is not 100% accurate. Weather forecasts given by this product should be taken only as an indication and not as being totally accurate.
- The specifications of this product may change without prior notice.
- This product is not a toy. Keep out of the reach of children.
- No part of this manual may be reproduced without written consent of the manufacturer.



R&TTE Directive 1999/5/EC

Summary of the Declaration of Conformity : We hereby declare that this wireless transmission device does comply with the essential requirements of R&TTE Directive 1999/5/EC.