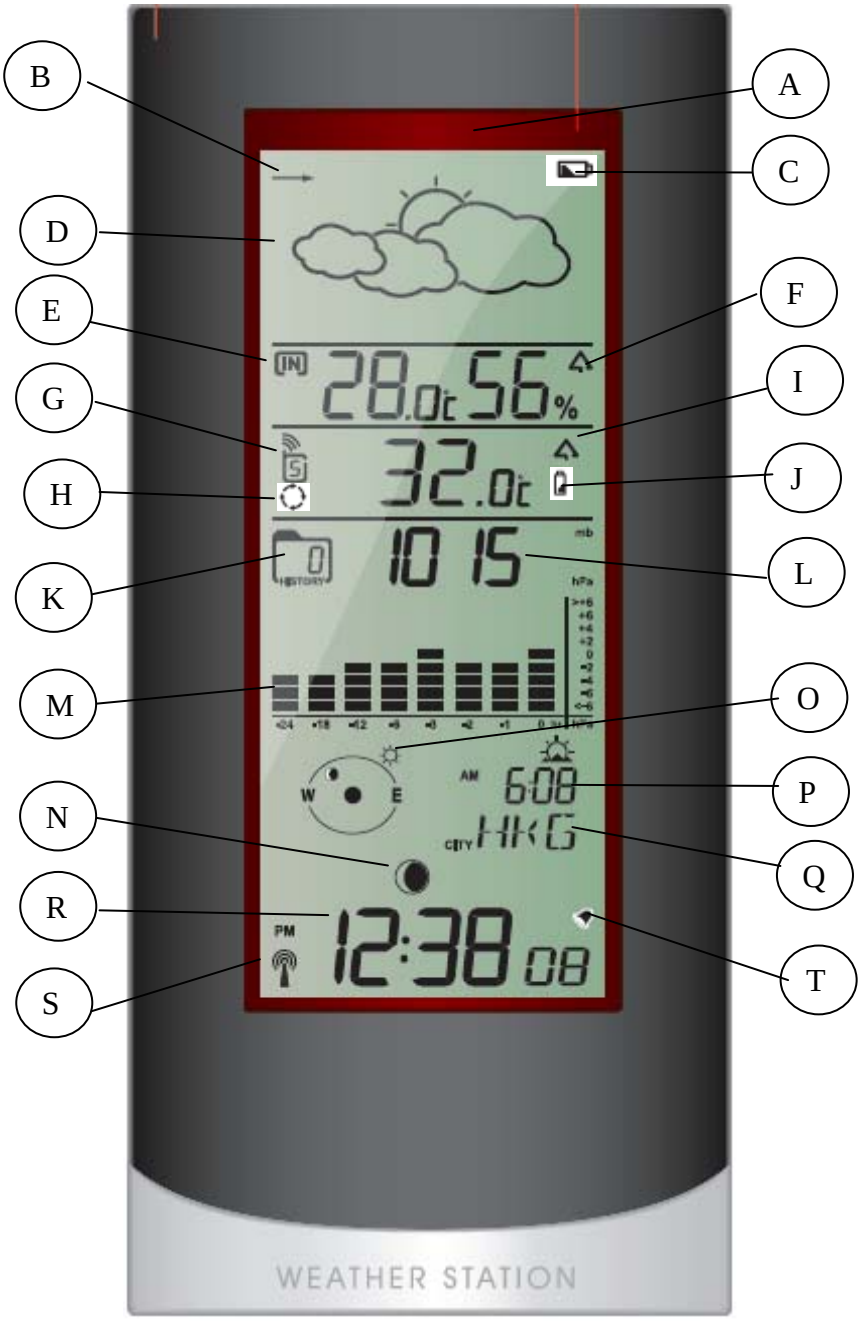
INSTRUCTION MANUAL



FEATURES: MAIN UNIT

A. IR sensor
   It is a contactless key for user to wave hand within 3 inches distance to activate the backlight or snooze function
B. Air pressure trend
C. Low battery indicator
D. Weather forecast display
   Displays the weather-forecast icons for sunny, slightly cloudy, cloudy, rainy, stormy and snowy.
E. Indoor temperature and humidity display
F. MIN/MAX display for indoor temperature and humidity
G. Outdoor temperature display
H. Auto scroll icon
I. MIN/MAX display for outdoor temperature
J. Low battery indicator for outdoor transmitter
K. Barometric history indicator
   Indicates the recorded air pressure reading in the past 24 hours
L. Barometric pressure window
   Displays the barometric pressure reading in mb hpa or inHg.
M. Barometric pressure chart
   Shows the barometric pressure trend chart for the past 24 hours
N. Moon phase
O. Sun position and Moon position
   Sun rises from the east (E) and goes down in the west (W) everyday. This weather station can calculate the different sunrise, sunset, moonrise and moonset time according to the input city and diagrams the sun and moon position in a day at 3 hour interval.
P. Sunrise and Sunset time
   Shows the exact sunrise time of a pre-set city in a specific day. Press [CITY] button once to toggle to see the sunset time.
Q. City name
   Abbreviation of a city name in Europe. The user must set to his own located city before start to use this weather station to have the correct sunrise, sunset time & moon phase.
R. Radio controlled time
   Display current time, current time and weekday, calendar or alarm time
S. Radio reception signal
   Indicates the condition of DCF77 radio controlled time reception
T. Alarm on icon
   Appears when alarm is activated

DESCRIPTION OF BUTTONS

Sculpture has 10 major function buttons on the back

1. [MEMORY]
   - Toggle to view the Max/Min reading of the Indoor Temperature/Humidity & Remote temperature.
   - Press & hold 2 seconds to clear Indoor temperature/humidity memories & Remote temperature records.
2. [CHANNEL]
   - Select among channel 1, 2, 3, 4, 5 or to enter auto scroll mode.
   - Press and hold 2 seconds to activate or deactivate the sensor searching mode

3. [HISTORY]
   - Press to view the past 24-hour barometric readings.
   - Press and hold 2 seconds to enter the altitude adjustment mode.
4. [C/F]
   - Toggle the temperature unit °C ←→ °F
5. [UNIT]
   - Press to toggle the pressure unit. (hPa/mb→ inHg)
6. [▲]
   - Press once to increase the date to view the MOON PHASE status, Sunrise and Sunset time of a specific day in Day-Month-Year (or Month-Day-Year depends on the date format setting)
   - Press once to increase the setting in CLOCK, CALENDAR or ALARM setting mode
   - Press & hold 2 seconds to manually activate or deactivate the radio controlled function
7. [▼]
   - Press to decrease the date to view the MOON PHASE status, Sunrise and Sunset time of a specific day in Day-Month-Year (or Month-Day-Year depends on the date format setting)
   - Press once to decrease the setting in CLOCK, CALENDAR or ALARM setting mode
   - Press once to arm or disarm the daily alarm under alarm display mode
8. [CITY]
   - Press once to toggle between the sunrise and sunset time of a pre-set city in a specific day
   - Press and hold 2 seconds to enter city setting mode, use **[▲] and [▼]** to select the abbreviation of country name and then the city name according to the list in the appendix, press [CITY] button to confirm. Use **[▲] and [▼]** to select the DST (Daylight Saving Time) 'ON' or 'OFF', press [CITY] button to confirm.
9. [CLOCK]
   - Toggle amongst display for Clock-Sec (HR-MIN-Sec), Clock-day (HR-MIN-Weekday), Calendar (Date-Month-Year), alarm time and repeat…
10. [MODE]
    - Press & hold 2 seconds to enter backlight color setting mode.

Slide switch [BACKLIGHT] on the rear side to select the backlight mode

	Power Supply		
Slide switch position	**Battery Only**	**Battery & Adapter**	**Adapter only**
Auto	Wave hand in front of the IR sensor to activate backlight for 5 seconds		
OFF	Disable the backlight function		
ON	Wave hand in front of the IR sensor to activate backlight for 5 seconds	Backlight always on	

GETTING STARTED

This Weather Station was designed for easy set up. For best operation, the following steps are required to be done in the proper sequence.

1. FIRST INSERT BATTERIES IN THE MAIN UNIT, THEN IN TRANSMITTER
2. MAIN UNIT CANNOT BE SET MANUALY UNTIL THE WIRELESS TRANSMITTER REGISTRATION PROCEDURE HAS BEEN COMPLETED.
3. POSITION THE REMOTE UNIT AND MAIN UNIT WITHIN EFFECTIVE TRANSMISSION RANGE, WHICH, IN USUAL CIRCUMSTANCES, IS 75 METERS.

Although the remote unit is weather resistant, it should be placed away from direct sunlight, rain or snow.

BATTERY INSTALLATION FOR MAIN UNIT

1. Turn the metal nut anti-clockwise on the bottom of the unit to open and release the battery compartment;
2. Insert 4 AA size 1.5V alkaline battery as indicate by the polarity;
3. Push the battery compartment back, turn the metal nut clockwise to lock;

Note: Replace the batteries when the low battery indicator appears.

WIRELESS REMOTE SENSOR REGISTRATION PROCEDURE

1. Insert 4 x AA batteries first to the main unit, the outdoor temperature display shows **- - . –** While the wave icon will keep blinking for 2 minutes indicate unit is in sensor searching mode.
2. In a second step, insert the 2 x AAA batteries in the transmitter unit. The LED on the front panel will start flashing at a rate of one time per around 2 seconds indicates channel-1 is in use.
3. While the LED in the sensor unit is flashing, press once the [CH] key will change the sensor channel setting to 2. Keep toggle on [CH] key can change channel setting up to 5. The LED is blinking at a frequency to indicate the channel setting. i.e. continous blinks 2 times indicate channel-2 is selected.

Note: If user does not press any key for 10 seconds, it will exit the channel setting mode and transmit the RF signal. The main unit will register the temperature reading.

(If the transmitter has the LCD display, the C/F key will toggle the temperature unit on the LCD.)

REMOTE CHANNEL AUTO-SCROLLING

This weather station is equipped with an auto-scroll function. While the auto-scroll function is set, the unit will automatically cycle to display the temperature of each remote sensor for 6 seconds.

1. To retrieve manually the specific sensor temperature reading, press CHANNEL key until desired channel number is displayed.

2. To enable auto-scroll function, use CHANNEL button to select channel 1, 2, ... until auto scroll icon appears on the left hand corner of the 3rd line display.

DCF 77 RADIO CONTROLLED CLOCK

There are 4 wave icons flash to indicate 4 levels of RCC signal status:

If there has no wave above the reception tower that means the signal is very weak and the clock can not be set by the RCC signal, please try to rotate the unit or other windows to seek for a better RCC reception location. Besides, the RCC signal is the strongest at night, the user can manually set the clock to locale time and leave it overnight to receive the RCC signal.
If nothing else works, take the clock outdoors after dark at night, remove and re-install the batteries and leave it overnight to force it to look for the radio controlled time signal. If the clock works outdoors but not indoors, you probably have a local interference problem inside your house or building.
Once the time signal is received, the wave icon will stay on the LCD, and time and calendar will automatically be updated.

Note: During 10 minutes of time signal reception, all manual settings will be suspended. If setting is desired, press once [▲] key to deactivate the reception. You can also press and hold the same key for 3 seconds to manually activate the reception in normal mode. The clock will work as a normal quartz clock if it can't receive the RCC signal.

SET THE CLOCK, CALENDAR & LANGUAGE

1. In clock time display mode, press & hold [CLOCK] button for 2 seconds to enter clock setting mode. Flashing 24 hours will appear.
2. Press [▲] or [▼] button to switch between 24 hours and 12 hours format, and then press [CLOCK] button to confirm.
3. The hour digits will flash. Use the [▲] button to increase by one hour or [▼] button to decease by one hour to your desired hours. Holding down either button will change the increment unit rapidly. Press [CLOCK] button to confirm.
4. The minute digits will flash. Use the [▲] button or [▼] button to set your desired minutes. Holding down either button will change the increment unit rapidly. Press [CLOCK] button to confirm.

Note: Every change of minute digit will automatically reset the seconds to zero.

5. The year digit will flash and Yr icon appears. Press [▲] or [▼] button to set your desired year. Press [CLOCK] button to confirm.

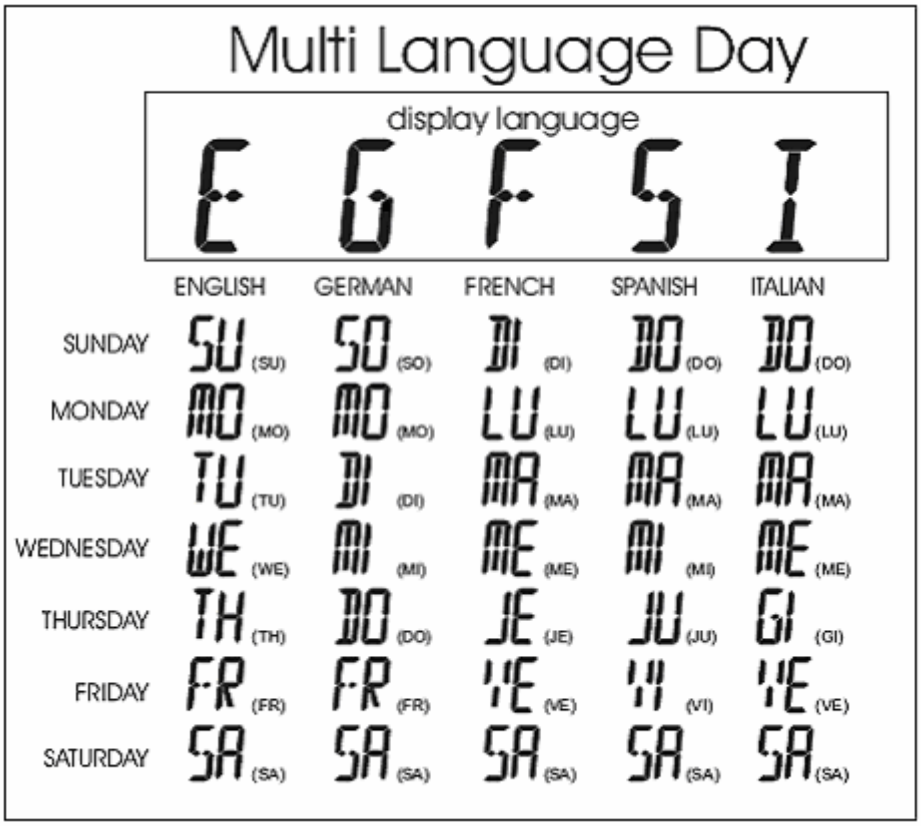
Note: Year range is from 2000 to 2099.

6. D and M icons will flash. Press [▲] or [▼] to select D M (Date Month) or M D (Month Date) format. Press [CLOCK] button to confirm.
7. Month digits will flash. Press [▲] or [▼] button to set your desired month. Press [CLOCK] button to confirm. Do the same to set Date.

Note: The moon phase and the weekday will be automatically calculated and displayed for the date set above.

8. E digit will flash. Press [▲] or [▼] button to switch 5 languages display of weekday (English/German/French/Spanish/Italian. See table 1). Press [CLOCK] button to confirm and exit setting mode.

Table 1



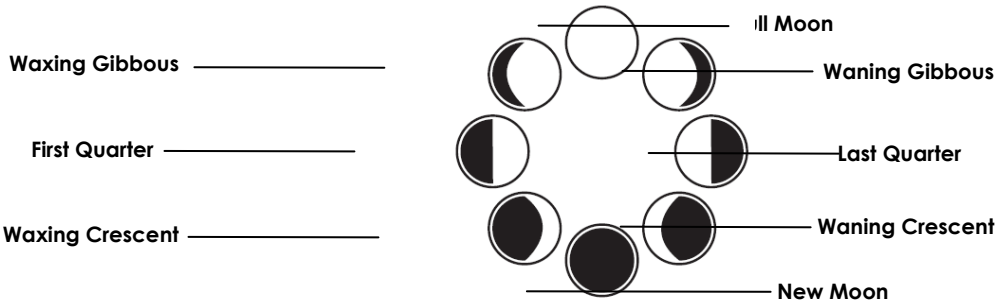
Note: If no key press during setting mode for 10 seconds, it will automatically keep the setting and exit to normal display.

To set daily alarm

1. In clock time display mode, press [CLOCK] button thrice to switch to display alarm time.
2. Press and hold [CLOCK] button for 2 seconds to enter alarm setting mode.
3. The hour digits will flash, use [▲] button to increase by one hour or [▼] button to decease by one hour to your desired hours. Holding down the button will change the increment unit rapidly. Press [CLOCK] button to confirm.
4. The minute digits will flash. Use [▲] button to increase by one minute or [▼] button to decease by one minute to your desired minutes. Holding down the button will change the increment unit rapidly. Press [CLOCK] button to confirm and finish the setting.
5. **When alarm is beeping, wave hand in front of the IR sensor to snooze for 5 minutes. Press [CLOCK], [▲], [▼] or [CITY] button to stop the alarm for a day.**

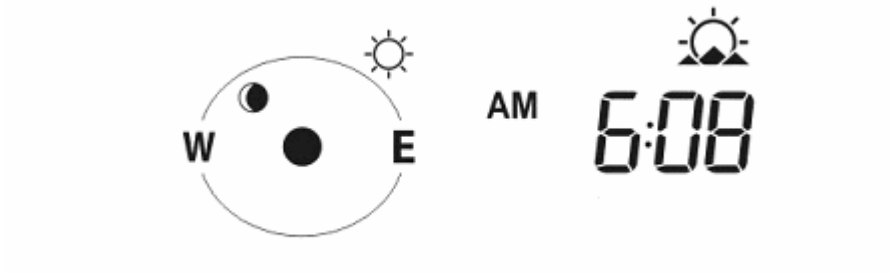
MOON PHASE

The weather station is equipped with 8 moon phases display (i.e. from new moon to waning crescent) on the screen.



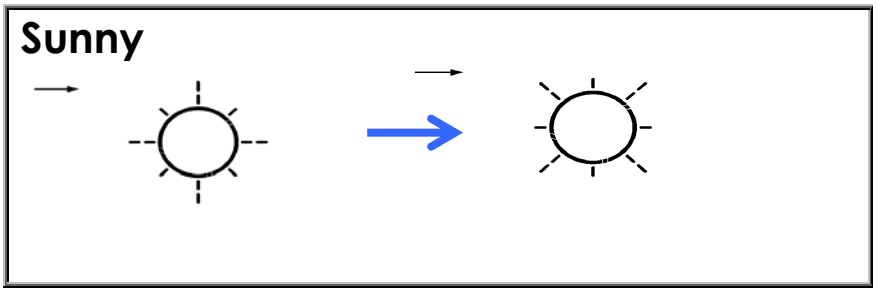
- The animated rolling moon phase will pause 5 seconds in the place of the current moon phase calculated by the current calendar date
- The user also can press [▲] button or [▼] button go through the calendar to check the moon phase for a specific date other than the current date

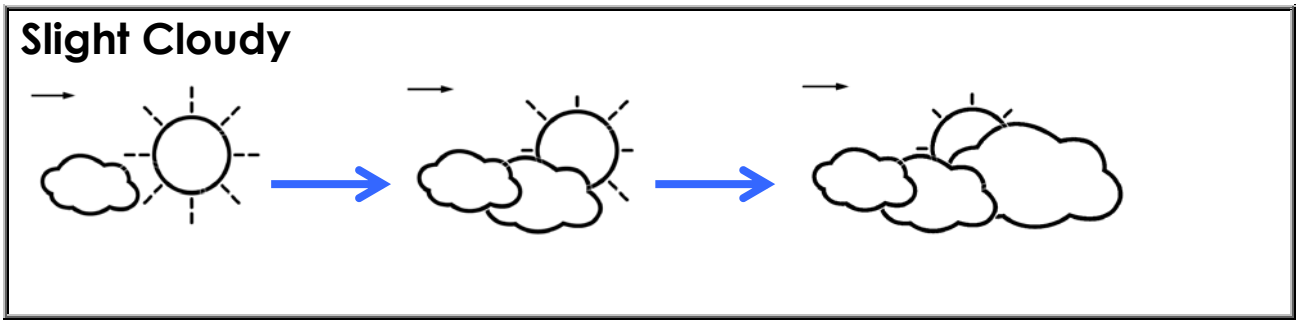
SUN POSITION, MOON POSITION, SUNRISE and SUNSET TIME

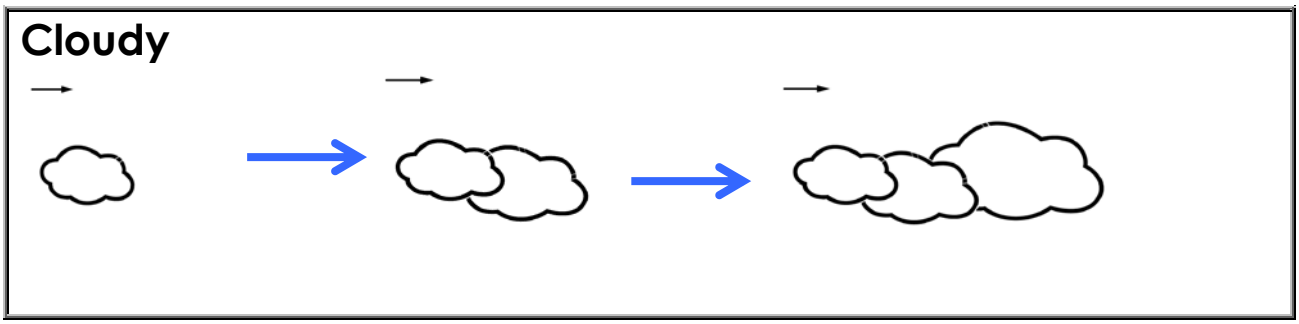


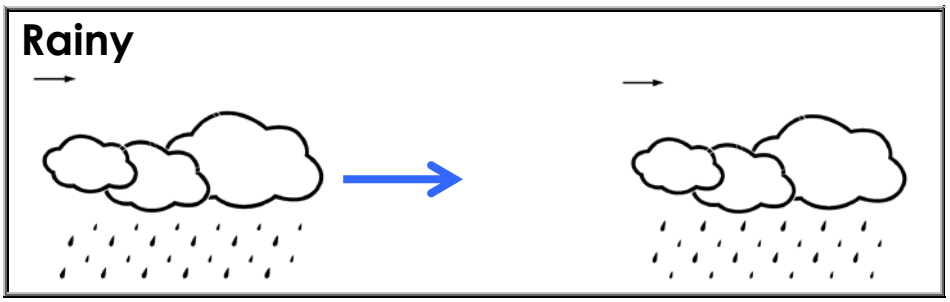
The weather station will automatically calculate the sun position, moon position, sunrise and sunset time based on the input city location and the set data.

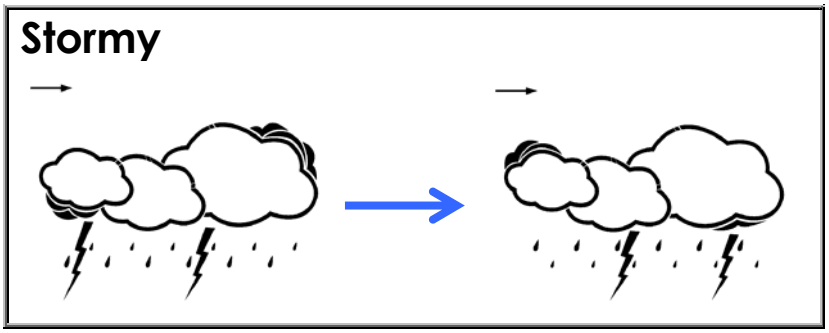
WEATHER FORECAST

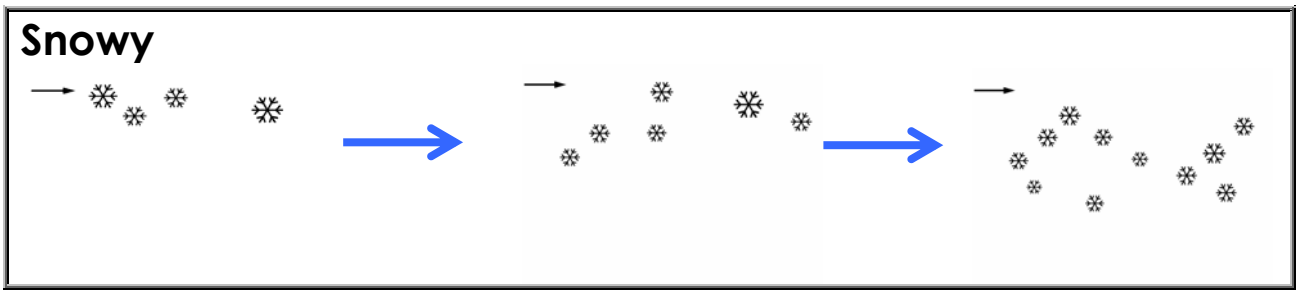












The weather station is capable of detecting local barometric pressure changes, and based on the data collected, can predict the weather for the next 12 to 24 hours.

Note:

1. **The accuracy of a general pressure-based weather forecast is about 70 to 75%, and therefore, we cannot be held responsible for any inconveniences so caused by an inaccurate one.**
2. **The weather forecast is meant for the next 12 to 24 hours. It may not necessarily reflect the current situation.**
3. **The 'Sunny' forecast covering night hours indicates clear weather.**

HOW TO CHECK THE BAROMETRIC PRESSURE

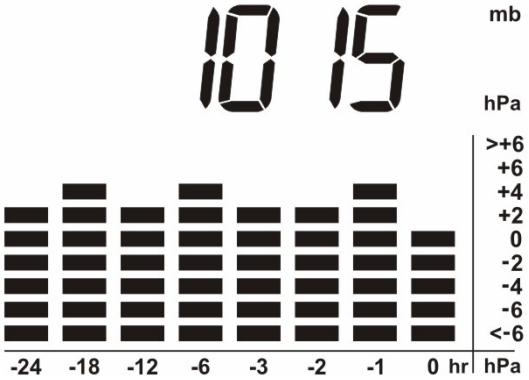
The current and historical barometric pressure is shown on the atmospheric pressure window.
For monitoring the Sea Level barometric pressure reading at certain altitude, the user needs to select the local altitude (-100 to 2500 meter or -330 to 8200 foot) for the altitude setting. The weather station requires entry of elevation in meter and in foot separately. To determine your location elevation, please either contact your local library, TV/radio weather forecaster, or via Internet.
1. To enter the altitude compensation setting mode, press and hold [HISTORY] button for 2 seconds to switch from Barometric Pressure to Altitude adjust mode for 10 seconds and the meter icon flashes.
2. During Altitude adjust mode, press [UNIT] button to toggle between meter and foot unit. Then press [HISTORY] button to confirm.
3. Last altitude reading will flash, press [UNIT] button to increase the value by 10. Hold down the button to have fast stepping. Press [HISTORY] button once to confirm and exit setting.

The atmospheric pressure can be displayed in mb/hPa, inHg. Press [UNIT] to select the pressure unit. The weather station is equipped with barometer reading for 24hr history. If you want to check the pressure history for a particular hour during the past 24 hours, press [HISTORY] button, each press on the button will go back by an hour.

Note:

If the weather station was just installed with batteries and past data was not yet measured, it will display '----'.

The recorded barometric changes for the past 24 hours are displayed in a bar chart below the barometric pressure window.



SET BACKLIGHT COLOR

Make sure the backlight switch is not on 'OFF' position, press & hold [MODE] for 2 seconds to enter the backlight color setting and the barometric chart displays a "C" pattern to prompt the user to set the color, the alternate backlight indicates the backlight is set to auto mode and its color is changed according to the weather condition (see more details in 'BACKLIGHT COLOR CHANGE ACCORDING TO FORECAST WEATHER CONDITION'), press [UNIT] button to select fix backlight color in the sequence, '**AMBER' → 'BLUE' → 'PURPLE**' and then cycle back to 'auto mode'. Press [MODE] button to confirm the setting or auto exit after 10 second.

BACKLIGHT COLOR CHANGE ACCORDING TO FORECAST WEATHER CONDITION

While the backlight is set to auto mode, the color of the backlight will change according to the forecast weather condition to acknowledge the user for the forecast weather.

Sunny - **amber** color

Slight Cloudy & Cloudy - **purple** color

Rainy & Stormy (or Snowing) - **blue** color

Specifications

Main Unit (WS6501)

Displayed temperature range	:	-10°C to +60.0°C (14°F to 140.0°F)
Proposed operating range	:	0°C to +50.0°C (32.0°F - 122.0°F)
Temperature resolution	:	0.1°C (0.2°F)

Remote Temperature measurement

Indoor relative humidity measurement ranging from 25%RH to 95%RH at 25°C(77°F)

Batteries : Use 4 pieces UM-3 AA size 1.5V alkaline battery

Caution:

Under severe environment with radio frequency interference, the unit may not establish or maintain communication link under this condition. It will return to normal state when interference stops.

Remote Unit (TX302)

Displayed range	:	-20.0°C to +60.0°C (-4.0°F to 140.0°F)
Proposed operating range	:	-10.0°C to +50.0°C (14.0°F to 122.0°F)
Temperature resolution	:	0.1°C (0.2°F)
RF Transmission Frequency	:	433 MHz
RF Transmission Range	:	Maximum 75 meters
Temperature sensing cycle	:	60 - 75 seconds

Batteries : Use 2 pieces UM-4 AAA size 1.5V alkaline battery

Appendix

Europe City Abbreviation List

City	City code	Country	Country Code
Berlin	BER	Germany	DEU
Duesseldorf	DUS	Germany	DEU
Dresden	DRE	Germany	DEU
Frankfurt	FRA	Germany	DEU
Flensburg	FLE	Germany	DEU
Freiburg	FRE	Germany	DEU
Hannover	HAN	Germany	DEU
Bremen	BRM	Germany	DEU
Hamburg	HAM	Germany	DEU
Rostock	HRO	Germany	DEU
Stralsund	HST	Germany	DEU
Koblenz	KOB	Germany	DEU
Kiel	KIE	Germany	DEU
Kassel	KAS	Germany	DEU
Leipzig	LEZ	Germany	DEU
Muenchen	MUE	Germany	DEU
Magdeburg	MAG	Germany	DEU
Nuernberg	NUR	Germany	DEU
Regensburg	REG	Germany	DEU
Stuttgart	STU	Germany	DEU
Saarbruecken	SAA	Germany	DEU
Schwerin	SCH	Germany	DEU
Alborg	ALB	**Denmark**	**DNK**
Arhus	ARH	**Denmark**	**DNK**
Copenhagen	CPH	**Denmark**	**DNK**
Odense	ODE	**Denmark**	**DNK**
Alicante	ALI	Spain	ESP
Andorra	AND	Spain	ESP
Badajoz	BAD	Spain	ESP
Barcelona	BAR	Spain	ESP
Bilbao	BIL	Spain	ESP
Cadix	CAD	Spain	ESP
Cordoba	COR	Spain	ESP
Ibiza	IBZ	Spain	ESP
La Coruna	LCO	Spain	ESP
Leon	LEO	Spain	ESP
Las Palmas	LPA	Spain	ESP
Madrid	MAD	Spain	ESP
Malaga	MAL	Spain	ESP

Salamanca	SAL	Spain	ESP
Sevilla	SEV	Spain	ESP
Valencia	VAL	Spain	ESP
Zaragoza	ZAR	Spain	ESP
Besancon	BES	France	FRA
Biarritz	BIA	France	FRA
Bordeaux	BOR	France	FRA
Brest	BRE	France	FRA
Cherbourg	CHE	France	FRA
Clermont Ferrand	CMF	France	FRA
Lyon	LYO	France	FRA
Marseille	MAR	France	FRA
Monaco	MCO	France	FRA
Metz	MET	France	FRA
Nantes	NAN	France	FRA
Nice	NIC	France	FRA
Orleans	ORL	France	FRA
Paris	PAR	France	FRA
Perpignan	PER	France	FRA
Lille	LIL	France	FRA
Rouen	ROU	France	FRA
Strasbourg	STR	France	FRA
Toulouse	TOU	France	FRA
Helsinki	HEL	Finland	FIN
Aberdeen	ABD	UK	GBR
Belfast	BEL	UK	GBR
Birmingham	BIR	UK	GBR
Bristol	BRI	UK	GBR
Edinburgh	EDH	UK	GBR
Kingston	KIN	UK	GBR
Liverpool	LVP	UK	GBR
London	LON	UK	GBR
Manchester	MAN	UK	GBR
Newcastle upon Tyne	NUT	UK	GBR
Plymouth	PLY	UK	GBR
Budapest	BUD	Hungary	HUN
Zagreb	ZAG	Croatia	HRV
Ancona	ANC	Italy	ITA
Bari	BAI	Italy	ITA
Bologna	BOL	Italy	ITA
Cagliari	CAG	Italy	ITA
Catania	CAT	Italy	ITA
Firenze	FIR	Italy	ITA

Foggia	FOG	Italy	ITA
Genova	GEN	Italy	ITA
Lecce	LEC	Italy	ITA
Messina	MES	Italy	ITA
Milano	MIL	Italy	ITA
Napoli	NAP	Italy	ITA
Palermo	PAL	Italy	ITA
Parma	PAM	Italy	ITA
Perrero	PRO	Italy	ITA
Roma	ROM	Italy	ITA
Torino	TOR	Italy	ITA
Trieste	TRI	Italy	ITA
Venezia	VEN	Italy	ITA
Verona	VER	Italy	ITA
Ventimiglia	VTG	Italy	ITA
Dublin	DUB	Ireland	IRL
Luxembourg	LUX	Luxembourg	LUX
Bergen	BGN	Norway	NOR
Oslo	OSL	Norway	NOR
Stavanger	STA	Norway	NOR
Amsterdam	AMS	Netherlands	NLD
Arnhem	ARN	Netherlands	NLD
Eindhoven	EIN	Netherlands	NLD
Enschede	ENS	Netherlands	NLD
Groningen	GRO	Netherlands	NLD
Den Haag	HAA	Netherlands	NLD
Rotterdam	ROT	Netherlands	NLD
Evora	AVO	Portugal	PRT
Coimbra	COI	Portugal	PRT
Faro	FAR	Portugal	PRT
Leiria	LEI	Portugal	PRT
Lisbon	LIS	Portugal	PRT
Porto	POR	Portugal	PRT
Gdansk	GDZ	Poland	POL
Krakow	KKW	Poland	POL
Poznan	POZ	Poland	POL
Szczecin	SZC	Poland	POL
Warsaw	WAW	Poland	POL
Krasnodar	KRA	Russia	RUS
Moscow	MOS	Russia	RUS
Novosibirsk	NOV	Russia	RUS
Samara	SAM	Russia	RUS
St. Petersburg	PET	Russia	RUS

Ufa	UFA	Russia	RUS
Vladivostok	VLA	Russia	RUS
Yekaterinburg	YEK	Russia	RUS
Gothenburg	GOT	Sweden	SWE
Malmo	MLO	Sweden	SWE
Stockholm	STO	Sweden	SWE
Bratislava	BRV	Slovakia	SLO
Ljubljana	LJU	Slovenia	SLO
Berlgrade	BEO	Serbia and Montenegro	SCG
Graz	GRZ	Austria	AUT
Innsbruck	INN	Austria	AUT
Linz	LNZ	Austria	AUT
Salzburg	SLZ	Austria	AUT
Vienna	VIE	Austria	AUT
Antwerpen	ANT	Belgium	BEL
Brugge	BRG	Belgium	BEL
Bruxelles	BRU	Belgium	BEL
Charleroi	CHA	Belgium	BEL
Liege	LIE	Belgium	BEL
Basel	BAS	Switzerland	CHE
Bern	BRN	Switzerland	CHE
Chur	CHR	Switzerland	CHE
Geneva	GNV	Switzerland	CHE
Locarno	LOC	Switzerland	CHE
Lucerne	LUC	Switzerland	CHE
St Moritz	MOR	Switzerland	CHE
St Gallen	SGL	Switzerland	CHE
Sion	SIO	Switzerland	CHE
Zurich	ZUR	Switzerland	CHE
Prague	PRG	Czech Republic	CZE
Hong Kong	HKG	China	CHN