Meteoclock Wall deco
SM1760 + ASM20 - *Instruction Manual*

English

INTRODUCTION

Congratulations on your purchase of this weather station, MeteoClock Wall Deco SM1760. Please take the time to read and understand this manual so you can begin to enjoy the convenience and features this product has to offer.

What exactly is a Weather Station?

Lexibook digital stations measure not only the time in progress – thanks to their built-in-clock but also the actual and upcoming weather.

The MeteoClock Wall deco SM1760 incorporates the following functions:
- Thermometer:
The temperature is displayed in real time to the nearest tenth of a degree Celsius. Thanks to its wireless sensor, the station can detect from a distance the outdoor temperature or that of another room.

- Hygrometer:
Outdoor or indoor hygrometry is expressed in percentage of humidity in the ambient air. The ideal 'Comfort Zone' for the human body ranges from 35 to 65% hygrometry for a given temperature between 18 and 24oC.

- Barometer:
The station also monitors the atmospheric pressure in real time. It displays the weather forecast by means of animated icons (sun, clouds, rain...) and for the next 8 to 12 hours.

And many extra features:

- Wide screen   - Extreme weather alerts
- Large digital display   - Wall Mount Holder
- Animated icons
- Comfort level icons

English

FEATURES

Main Display Unit SM1760

- Auto synchronizing radio controlled clock (DCF-77 and MSF).
- Perpetual Calendar.
- Inside and outside temperature and humidity display.
- Receives and monitors temperature and humidity from up to 3 remote sensors via RF technology of 433MHz.
- Maximum/minimum temperature and humidity records.
- Temperature and humidity trend indicator.
- Comfort level icons.
- Pressure and temperature historical chart.
- Temperature alarm.
- Animated weather forecast symbols.
- Moon phase symbols.
- Temperature display in user-selectable ºC or ºF.
- Battery: 3 x AA size.

Thermo sensor unit ASM20

- Drip-proof design with LCD.
- Socket of external sensor probe.
- Temperature display in user-selectable ºC or ºF
- Humidity display.
- Transmission range: up to 40 meters in open area
- Battery type: 2 x AA size
- Detachable cover with wall mount holder and stand.
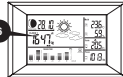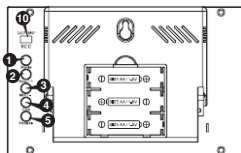
English

LAYOUT

Unit layout

1 **Mode:** scrolls through Clock 1 & 2, Alarm 1 & 2, Date & Year, and Temperature Alarm (high & low) mode.

2 **Hour/+:** shows maximum temperature; adjusts clock, alarm, date & year and temperature alarm values.

3 **Min/-:** shows minimum temperature; adjusts clock, alarm, date & year and temperature alarm values.

4 **Chn:** scrolls through remote channels Outside 1, Outside 2 and Outside 3); scrolls through local and remote channels (Outside 1, Outside 2 and Outside 3) in (high & low) temperature alarm mode; activates the learning procedure.

5 **Snooze:** toggles between °C and °F, 12 and 24 hour format, Alarm 1 & 2 On and Off; disables (resets) high & low temperature alarms; Alarm snooze.

6 Main **LCD** display with backlight.

7 **SET:** enter House code and Channel setting mode.

8 **C/F:** change between °C or °F, change channel and house code.

9 Battery compartment.

10 DCF/MSF RCC Switch : Select MSF for use in the UK and Ireland.

11 LCD display (Remote sensor.)

12 Wall Mount Holder & Tabl e Stand.
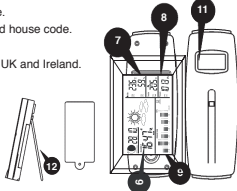
English

Display layout
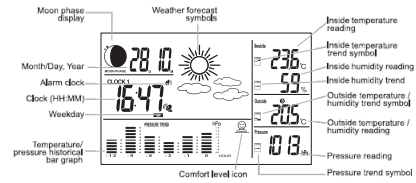
POWER SUPPLY

Your Meteoclock works with 3 AA batteries for the main unit and 2 AA for the remote sensor (all not included).

Main Unit   Remote Sensor

Battery installation

1. Main Unit: Use your finger to lift the battery door located at the back of the main unit. Insert 3 AA batteries according to the polarity. Close back the battery compartment.

2. Remote Sensor: Use a screwdriver to open the battery door located at the back of the remote sensor unit. Insert 2 AA batteries according to the polarity. Close back the battery compartment and tighten the screw.
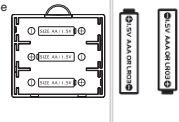
LOW BATTERY INDICATION: If the batteries of the remote sensor are low, the following indicator will be displayed on the main unit. The indicator will also be displayed on the bottom left corner of the remote sensor's screen. When the main unit's LCD display becomes dim, it indicates that the batteries are low and need to be changed.

Note: if the sensor is exposed to very low temperatures for an extended period of time, the batteries may lose power which may cause the transmission range to be limited. High temperatures also reduce the battery performance.

GETTING STARTED

Setting the remote sensor

❶ Unscrew the battery cover and insert batteries to begin the settings.

❷ **The house code** will flash for 8 seconds.

Select **a house code** (1-15) by pressing **°C/°F** [8] and then press **SET [7]**. The house code is the frequency signal sent by the remote sensor to the receiver. The remote sensors for each receiver must be set to the same house code, and remember to press **SET**.

❹ **The channel** will flash for 8 seconds.

❺ Select a **channel** (1-3) by pressing **°C/°F** [8] and then press **SET** [7]. The channel function allows the receiver to identify each remote sensor. Each receiver can receive up to 3 different remote channels. The preferred channel number (1, 2 or 3) for each individual remote sensor can be assigned. However, channel 1 is used for collecting data from outdoor and activating the weather forecast symbols. If you only have one remote sensor, please set it at channel 1 and place it outdoors.

❻ Humidity and temperature will be displayed.

❼ Toggle between °C or °F temperature display by pressing **°C/°F** key [8].

❽ Insert 3 x AA batteries at the back of the main unit.
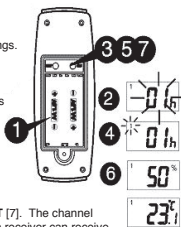
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Notes:
• The SM1760 comes with one receiver and one remote sensor. If you wish to buy additional sensors please refer to the section ACCESSORIES at the end of this manual.
• Use a different house code if your weather station detects other signals from neighbouring sources. Else, use default settings: house code = 01 and channel = 01

SETUP

Automatic Learning Function

1. Learn function executes automatically and runs for approximately 3 minutes when the batteries are first installed in the receiver.
2. Within these 3 minutes, the receiver picks up the temperature & humidity signals from the remote sensor and displays the readings.
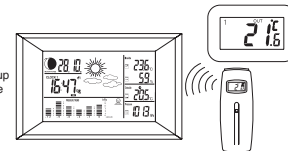
Manual-Learning (Searching for Remote Signals)

If a new remote sensor is added or if the signal is lost (outdoor display blinking), the learning function must be executed again.

1. Press and hold **CHN [4]** for 3 seconds to start.
2. A beep sound indicates that the learning function has started.
3. The 'Channel' symbol will flash and unit will beep as each remote sensor is detected.
4. Temperature & humidity readings of remote sensor are displayed on the receiver.

Note: Auto/Manual Learn will not operate while the radio controlled clock is receiving DCF77 or MSF signals.

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English

Fixing your remote sensor and receiver

The remote sensor has a detachable cover with both a wall mount holder and a stand [12]. To fix it on a wall, make sure the stand is not pulled out and fix the holder on a hook or nail. To fix the stand on a shelf or table, simply pull it out and make sure it is well secured. The remote sensor should be fixed on a smooth surface to prevent altering the range of the date transmission. To ensure a good transmission, the remote sensor should not installed on or near a large metal surface. Before choosing the location of the remote sensor, test that the receiver can receive the signals. It is also recommended that the remote sensor is placed as close as possible to the receiver to eliminate any interference. The receiver also has a wall mount holder and a stand. To place it, use the same precautions as for the remote sensor.

Backlight

The default state of the Backlight is **ON**. To turn the backlight on, press either Mode [1] or Snooze [5]. It will stay on for about 10 seconds.
To disable it: at year setting mode (see section on manual clock setting), press the SNOOZE [5] key once, press another time to switch it on again.

CLOCK AND DATE SETTINGS

RADIO CONTROL CLOCK

The SM1760 is designed to automatically synchronize its calendar clock once it is brought within the reception range of a radio signal. There are 2 different radio signals:
- DCF77 signal, for GMT +1 (France, Spain, Italy, Germany);
- MSF signal, for GMT (UK, Ireland, Portugal).
The DCF77 signal will be received if the main unit is within 1500 km of the Frankfurt atomic clock. Your main unit will be automatically synchronised with the MSF signal if located within the UK radio signal range.
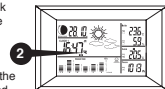
1. The clock automatically starts scanning the RF 433MHz signal after new batteries are inserted in the main unit. When receiving radio signal, the Radio Tower symbol starts to blink. A complete reception generally takes several minutes, depending on the strength of the radio signal. The scan can also be triggered manually by holding the Min/- key [3] for 3 seconds.

English

2. When the reception is complete, the Radio Tower symbol will stop blinking and remain solid. The clock automatically scans the time signal at 02:07 everyday to maintain accurate timing.

3. If the clock is within the range of both the DCF77 and MSF radio signals, you can toggle between the 2 signals by sliding the DCF/MSF RCC key [10].

Notes:
• For an optimal reception, place the clock away from metal objects and electrical appliances (i.e. television, computer, monitor, etc.) to minimize interference.
• If the user sets the time (year/month/date/hour/minute) manually, the unit will stop receiving the radio control clock signals.

MANUAL CLOCK SETTING

Clock 1 setting

1. Press and hold **mode [1]** for 3 seconds to enter the clock setting mode (the **CLOCK 1** symbol will appear, and the time will flash).
2. Press **Hour/+ [2]** to set the hour and Minute/- [3] to set the minutes.
3. Press **Snooze** during the clock settings to alternate between the 12 and 24 hour display.
4. Press **MODE [1]** to set the date and month.
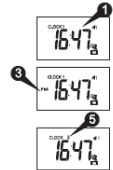
Note:
• If you do not press any key for one minute, the clock will accept the last settings entered.
• February will have either 28 or 29 days. Your weather station will display the 29th day on bissextile years.

English

English

DATE/MONTH/YEAR SETTING

❶ After clock 1 is set, press **mode [1]** to accept the time settings. Upon pressing **mode**, the month and date will flash.
❷ Press the **Hour/+ [2]** to set the month.
❸ Press the **Minute/- [3]** to set the date.
❹ Press **mode [1]**, the year will flash. Press the **Hour/+ [2]** to move the year upwards and **Minute/- [3]** to move the year downwards. Press **mode [1]** to confirm all your settings.

Clock 2 Settings (Dual Time)

❶ Scroll to Clock 2 using **mode [1]**.
❷ Press + [2] or – [3] key to change the hour (in hour increments/decrements relative to Clock 1).

ALARM SETTING

Alarm 1 and Alarm 2 Setting

Scroll to Alarm1 mode (Alarm2 mode) using **MODE** [1].
❶ Press **HOUR/+ [2]** to set the hour.
❷ Press **MIN/- [3]** to set the minutes.
❸ Press **Snooze [5]** to toggle alarm on and off. When the alarm is set ON, the bell symbol 🔔1/ 🔔2 will appear.

When Alarm Sounds

a. 🔔1 or 🔔2 will flash.
b. Press **Snooze [5]** to snooze the alarm for 5 minutes. After that the alarm will sound again.
c. Press **ANY** other key to turn the alarm sound off. If not manually interrupted, the alarm sound will automatically stop after one minute.

MOON PHASES

Throughout the 28 days of the lunar month, the aspect of the moon changes. Indeed, the moon, being spherical, is always half lightened up by the sun. As the moon rotates around the Earth, the appearance of its lightened side changes continuously. This phenomenon creates moon phases. The moon phase on your MeteoClock is automatically updated according to the year/ month/day.

Moon Phase Display

1. New Moon
2. Young Crescent
3. First Quarter
4. Waxing Gibbous
5. Full Moon
6. Waning Gibbous
7. Last Quarter
8. Old Crescent

TEMPERATURE & HUMIDITY DISPLAY

Check Inside Temperature and humidity

After inserting the batteries, the local temperature and humidity will be displayed [*].

English

Check Outside Temperature & Humidity

1. Press **CHN [4]** to toggle between the data of your various remote sensors: Outside 1 (channel 1), Outside 2 (channel 2) and Outside 3 (channel 3). Temperature and humidity readings will alternate on the receiver.

Note: if you do not have any additional sensors, please disregard this function.

°C or °F Temperature Display

2. Toggle between °C and °F by pressing **Snooze [5]** in Clock 2 mode.

Min and Max Temperature & Humidity

3. Press **MINUTE/- [3]** in Clock 1 mode to display minimum temperature and humidity records.
4. Press **HOUR/+ [2]** in Clock 1 mode to display maximum temperature and humidity records.

Display HI & LO

"Hi" and **"Lo"** displayed onscreen mean that the temperature or humidity is outside the range of specification.

Inside/ Outside	Temperature	Humidity	Display
Inside	> +55°C	> 95%	HI
Inside	< -20°C	< 15%	LO
Outside	> +70°C	> 95%	HI
Outside	< - 30°C	< 15%	LO

English

TEMPERATURE & HUMIDITY TREND

The trend indicator shows the trend of temperature & humidity determined by the particular sensor in the past half hour interval.

Arrow Indicator			
Trend	Rising	Steady	Falling

TEMPERATURE ALARM

You can set high temperature or low temperature alarms for one local channel and for one remote channel.

Local temperature alarm

1. Scroll to temperature alarm mode by using **MODE** (Inside).
2. The default value 14°C or existing preset will flash.
3. Press **Hour/+[2]** or **Minute/– [3]** keys to set the temperature limit value.
4. Press **Snooze [5]** key continuously to scroll and select the high temperature alarm ➚, low temperature alarm ➘ or disable the alarm function (blank).
5. Press **mode [1]** to save your settings.
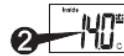
Outdoor temperature alarm

1. Scroll to remote channel temperature alarm mode by using **mode [1]**.
2. Press **CHN [4]** to select the channel of the desired transmitter.
3. The default value 14°C or existing preset will flash.
4. Press **Hour/+[2]** or **Minute/– [3]** keys to set the temperature limit value.
5. Press **Snooze [5]** key continuously to scroll and select the high temperature alarm ➚, low temperature alarm ➘ or disable the alarm function (blank).
6. Press **mode [1]** to save your settings.

English

When the temperature alarm sounds

The icon ![icon] signals that the temperature has exceeded the preset temperature limit.
a. Press any key to stop temperature alarm.
b. If no key is pressed, the temperature alarm will automatically stop itself after one minute.
c. Once triggered, temperature alarm comes on as a distinctive sound, different to that of Alarm1 and Alarm2.

WEATHER FORECAST & DISPLAY

Animated weather forecast symbols

This weather station is capable of detecting barometric pressure changes, and based on the data collected, can predict the weather for the next 12 to 24 hours. The effective range covers an area of 30 – 50km.

Sunny	Cloudy	Raining

Snowing	Freeze Warning	Storm Alert

Storm Alert

* The storm symbol will flash to warn of a thunderstorm.
* It is activated when pressure falls/rises and temperature plunges.

About Snow and Freeze Warning

* The snow symbol will flash to warn that it might snow.
* Activated when the temperature of Channel 1 is between -1.9 °C & +2.9 °C.
* The snow symbol will appear solid when the temperature of channel 1 falls below - 1.9 °C, and it is freezing.
Note:
* The remote sensor set at channel 1 displays the weather forecast icons (as well as the trend indication). Please place it outdoors.

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English

REMARKS:
• After having completed the settings of your weather station, please discard the readings of the weather forecast for the next 12-24 hours. This will allow sufficient time for the Weather Station to operate at a constant altitude and therefore result in a more accurate forecast.
• Absolute accuracy cannot be guaranteed regarding weather forecasting. The weather forecasting feature is estimated to have an accuracy level of about 75% due to the varying areas the Weather Station has been designed to be used in.
• If the Weather Station is moved to another location significantly higher or lower than its initial standing point (e.g. from ground floor to 1st floor of a house), remove the batteries and reinsert them after about 30 seconds. By doing this, the Weather Station will mistakenly consider the new location as a possible change in air pressure. Again, discard the weather forecasts for the next 12-24 hours as to allow time for operation at a constant altitude.

ATMOSPHERIC PRESSURE DISPLAY

Your weather station displays the existing atmospheric pressure in hectopascal (hPa). It is commonly acknowledged that a value of 1015 hPa is the limit between an anticyclone (good weather > 1015 hPa) and a low-pressure area (bad weather < 1015 hPa).

In order to establish a comparison between pressure values, the latter are expressed in hPa at sea level, i.e. zero altitude. Ambient pressure varies according to altitude (hence, the altitude at which your home stands is important). This is why it is possible and perfectly normal to notice a small difference between the pressure displayed by the MeteoClock® SM1760 unit (not corrected to the local altitude) and the official values broadcasted by the national weather agency. The reason being that the latter considers the altitude and corrects the measured pressure (to express it as if it was at sea level).
Therefore, the digital readings shown by this unit must not be regarded as final: What is in fact important in terms of weather forecast is the evolution and trend of those readings. A significant change in ambient pressure can be determined by an increase or a reduction of 5 hPa.

English

Why study barometric pressure?
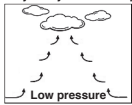
Low pressure

Generally, bad weather is associated with low barometric pressure and fine weather with high pressure. A low pressure area is surrounded by air of higher pressure. As the higher pressure air cannot move in the low pressure area, it will move upwards, causing condensation of water in the air and producing clouds. The opposite is true for high pressure: in a high pressure area, air of lower pressure will move downwards, warming up the air and evaporating the water in the air.

Pressure trend

The trend pointer displayed at [A2] indicates the trend of the barometric pressure.

TREND

Indicates that the barometric pressure trend is increasing.

TREND

Indicates that the barometric pressure trend is steady.

TREND

Indicates the barometric pressure trend is decreasing.

PRESSURE HISTORICAL BAR GRAPH

The bar graph lets you see the pressure trend over a period of 12 hours. The bar graph will show the pressure trend by default. To view the indoor temperature trend or the outdoor temperature trend, press **Snooze [5]** in Clock1 mode.

The sequence is:

Pressure Trend

Inside Temperature Trend

Outside Temperature Trend

OUTSIDE ❶ Channel 1

OUTSIDE ❷ Channel 2

OUTSIDE ❸ Channel 3

Pressure Trend

Inside Temperature Trend

Outside Temperature Trend
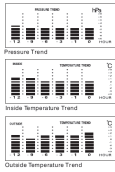
English

Note:

The weather forecast, by the means of the animated icons, depends on the evolution of the barometric pressure. By consulting the barometric pressure historical graph you can evaluate the likeliness or the strength of the weather forecast currently displayed. For example, if the pressure has steadily increased over the past 12 hours but decreases slightly in the next 3 hours, the weather station might forecast rain, but you could expect the probability of rain to remain low. On the other hand, if you observe a sudden and large shift in pressure, the weather forecast is more likely to be extreme. For example, if the forecast is rain, and you observe a large and sudden downward shift of pressure, the rain is likely to be heavy.

COMFORT LEVEL ICON

The comfort level will be established based on the data collected from indoor temperature/humidity. The indicator below will display whether the level is comfortable, normal or uncomfortable.

Comfort Level	Description
Comfort	It shows that the current environment is within the ideal range for indoor temperature and relative humidity.
Normal	It shows that the current environment is acceptable.
Uncomfort	It shows that the current environment is containing inadequate moisture, too cold or too hot.

English

TROUBLESHOOTING

Problem:

1. The main unit cannot receive radio control DCF-77 or MSF signals to update the clock.
2. The temperature measurements of the remote sensor and receiver do not match.
3. Temperature reading of outdoor remote sensor seems too high.
4. Receiver is no longer receiving remote sensor signals or display.
5. An abnormal operation has been observed and certain functions do not work.

Solution:

1. Place the clock away from metal objects or electrical appliances such as TVs, computers, monitors, etc. Trigger the scan manually by holding the Min/- key [3] for 3 seconds.
2. Wait for about 1-2 minutes to ensure the remote sensor and receiver are in phase. Otherwise, re-synchronize receiver by holding **CHN [5**] for 3 seconds until a beep is heard.
3. Ensure the remote sensor is out of direct sunlight, and away from sources of heat.
4. Repeat the learning procedures.
   - Temperature may be below -30°C.
   - Batteries in remote sensor may need changing.
   - Move remote sensor closer to the receiver.
   - Make sure remote sensor is away from sources of electrical disturbance.
5. Reset the unit by replacing the batteries in both the transmitters and receiver.

English

ACCESSORIES

Additional sensors:

Measure temperature and hygrometry in other places!
- Upstairs
- In the baby's bedroom
- In the basement
- In the garden
- In another room

To order, phone the Lexibook office located in your country or browse www.lexibook.com.

SPECIFICATIONS

Weather Station Receiver SM1760

Battery Type:	3 X1.5V AA batteries
Temp.Range:	-20 C to +55 C
Measurement Accuracy:	+/- 1 C
	Within measuring range of 0 to 40 C
Resolution:	0.1 C
Humidity Range:	15% to 95%
Measurement Accuracy:	+/- 5%
Resolution:	1%

Weather Station Transmitter ASM20

Battery Type:	2 X1.5V AA batteries
Temp. Range:	-30 C to + 70 C
Humidity Range	15% to 95%
Transmission Frequency:	433.92MHz
Transmission Range:	Up to 40 meters in open area.

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English

MAINTENANCE

In order to clean the unit, use only a soft cloth moistened with water; do not use any detergent product. Do not dismantle or drop the unit. Remove the batteries if the unit is not going to be used for an extended period of time.

WARRANTY

NOTE: Please keep this instruction manual, it contains important information.
This product is covered by our two-year warranty.
To make use of the warranty or the after-sales service, please contact your retailer and supply proof of purchase. Our warranty covers material or installation-related defects attributable to the manufacturer, with the exception of wear caused by failure to respect the instructions for use or any unauthorised work on the equipment (such as dismantling, exposure to heat or damp, etc.).

For technical assistance call 0808 100 3015
Web: http://www.lexibook.co.uk
Email: infouk@lexibook.com

Environmental Protection
Unwanted electrical appliances can be recycled and should not be discarded along with regular household waste! Please actively support the conservation of resources and help protect the environment by returning this appliance to a collection centre (if available).

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English

DECLARATION OF CONFORMITY

We, LEXIBOOK
2, Av de Scandinavie,
91953 Courtaboeuf Cedex

declare under our sole responsibility that the product

Kind of product: Weather station
Type number: SM1760

to which this declaration relates, is in conformity with the following standards and/or other normative documents:
EN301489 -1
EN301489 -3
EN300220 -1
EN300220 -3

We hereby declare that the above named product is in conformity to all the essential requirements of R&TTE Directive 1999/5/EC of 09.March 1999.

Can be used in EU countries.

Denis Mauduit
Quality Manager

CE0682

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