UZOLI

EM3403 Weather Station User manual







Contents

I. Introduction	1
II. Technical data and functions	1
III. Appearance of the weather station	3
Part A - Positive LCD	
Part B - Function keys and connections	
Part C - Wireless remote sensor	6
IV. Installation instructions	7
V. Default setting	
VI. Operating instructions	8
1. Manual time setting	8
Alarm clock and outdoor temperature alarm settings	
3. Switching the alarm clock and outdoor temperature alarm on/ offoff	
4. Deactivate the wake-up call	
5. Snooze function	
6. Alarm activation status of outdoor temperature	
7. Frost point alarm	
8. Moon phases and tide display	
9. City selection mode (selection of the city of your location)	
10. Manual setting of the city	
11. Wireless sensor transmission	
12. Temperature and humidity measurement	
13. Display of temperature/ humidity with trends	
14. Max/ Min display for temperature and humidity	
15. Comfort level and mold risk	
16. Display of air pressure with trends and histogram of historical pressure development	
17. Weather forecast	
18. Reception of the radio clock signal	20
19. Low battery status	
20. Backlight with adjustable night mode	21

I. Introduction

- ▶ Thank you for choosing the Uzoli EM3403 weather station. The EM3403 weather station consists of a base station (receiver), a remote sensor and a power adapter with USB type C connector. The following manual contains step-by-step instructions for installation, operation and setting, please read it carefully and keep it.
- ▶ Please leave the base station and the sensor in the same place for 48 hours after switching it on for the first time so that the temperature/ humidity sensor can calibrate itself and adapt to the local weather.
- If you encounter difficulties when using the weather station or find that the product has quality problems, please take photos and contact us first, we will analyse the possible causes of the problems and provide solutions for you.
- If the product does not meet your expectations and you wants to return it, please repackage the product and contact Amazon Customer Service to request a return. If you are unsure whether the product has a hardware fault, please do not mark it as "damaged" as Amazon will simply dispose of it, which results in a huge waste of resources.

II. Technical data and functions

- ▶ DCF radio clock
- ▶ Perpetual calendar until 2099
- ▶ Time display in 12/24 hour format
- ▶ Weekday display available in 7 languages: German, Italian, French, Spanish, Dutch, Danish and English
- 2 alarm clocks with snooze function
- ▶ Display of indoor/ outdoor temperature and humidity with trends
- ▶ Temperature display selectable in °C or °F
- Max/ Min display for temperature and humidity
- Outdoor temperature alarm and frost point alarm
- Display of air pressure with trends and histogram of historical pressure development
- Pressure display selectable in hPa/mb or inHa
- ▶ 5 levels of comfort for indoors
- 4 levels of mould risk for indoors
- ▶ Sunrise and sunset (select/ locate city)
- ▶ 6 weather forecast symbols: sunny, partly cloudy, cloudy, rainy, stormy, snowy
- Moon phases and tides
- ▶ 5 levels of brightness for backlight (LV4 to LV1 and then off)

▶ Measuring range:

Indoor temperature	-9.9°C (15°F) to 50°C (122°F), accuracy ±1°C (=2°C)
Outdoor temperature	-40°C (-40°F) to 70°C (158°F), accuracy ±1°C (=2°C)
Humidity	20% to 95%RH, accuracy ±5% (=10%)
Air pressure	600 to 1100 hPa/mb or 17.72 to 32.48 inHg

▶ 1 wireless outdoor sensor:

- Install using hanging holes or table stand
- RF transmission frequency is 433.92MHz
- 60m transmission range when without obstructions
- 1 base station is compatible with a maximum of 3 sensors, but only one is included in the order

▶ Power supply:

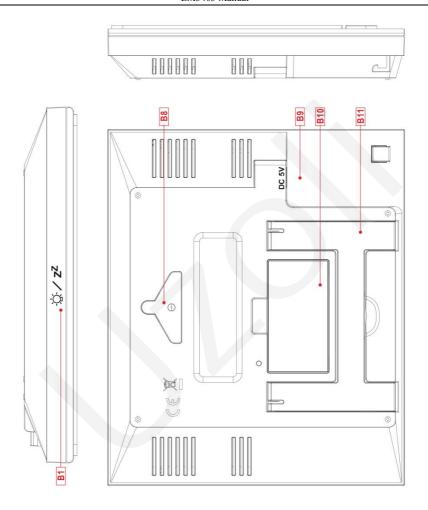
Base station	DC 5V power adapter with USB type C plug (included in the scope of delivery) or
base station	2 x LR03/ AAA battery (NOT included in the scope of delivery)
Outdoor sensor	2 x LR6/ AA battery (NOT included in the scope of delivery)

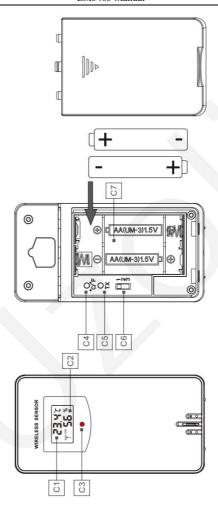
Note: The wireless outdoor sensor can operate at -40°C to +70°C. In winter, please select the cold-resistant battery according to the limit temperature of the wireless sensor:

- Alkaline zinc manganese dioxide battery can normally work at -20°C to +60°C.
- Polymer lithium-ion battery can normally work at -40°C to +70°C

III. Appearance of the weather station







Part A - Positive LCD

A1: Channel number and reception icon	A11: Tide level
A2: Outdoor temperature	A12: Histogram of historical pressure development
A3: Weather forecast	A13: Moon phase
A4: Outdoor temperature alarm	A14: Air pressure
A5: Outdoor humidity	A15: Time
A6: Time of sunrise	A16: Indoor mould risk
A7: Selected city	A17: Indoor humidity
A8: Time of sunset	A18: Indoor comfort level
A9: Month and date	A19: Indoor temperature
A10: Weekday	

Part B - Function keys and connections

B1: ['\tilde{\tilde{\tilde{L}}} / \mathbb{Z}^Z] touch field	B7: [😎] key
B2: [[[]] key	B8: Power supply socket - type C
B3: [♥ ※] key	B9: Hanging hole
B4: [Û ▮] key	B10: Battery compartment
B5: [+] key	B11: Table stand
B6: [] key	

Part C - Wireless remote sensor

C1: LCD display of outdoor temperature
C2: LCD display of outdoor humidity
C3: LED signal light
C4: [°C/°F]-selection boutton
C5: [TX] key for immediate signal transmission
C6: Switch of channel 1/2/3 (CH1/2/3)
C7: Battery compartment

IV. Installation instructions

1. Install the base station

- ▶ Firstly, connect the base station to the power supply using the power adapter supplied.
- It is recommended to equip the base station with 2 AAA batteries together with the power adapter to ensure that the base station can save its settings and function properly even in the event of a power failure.

2. Install outdoor sensor

- ▶ Secondly, please open the battery compartment of the outdoor sensor and set it as channel 1. Then place 2 AA batteries in the battery compartment. Make sure that all batteries are inserted according to the polarity indications on the back of the outdoor sensor. Close the battery compartment.
- After inserting the batteries into the outdoor sensor, all icons on the LCD display of the sensor light up briefly for 3 seconds and the sensor measures outdoor temperature and humidity. At the same time the LED signal light flickers once, the wireless sensor automatically transmits wireless signals.
- If the signal transmission is interrupted (the signal light of the sensor always does not flash red), you can press the [TX] key (for immediate signal transmission) in the battery compartment of the outdoor sensor to send the RF signal to the base station manually. The signal transmission takes about 3 minutes and after completion the icon """ is displayed over the channel data in the area of "OUT".

Note:

- ▶ The base station can connect up to 3 sensors (But the order contains only ONE).
- ▶ The wireless sensor normally displayed by the base station is set to channel 1. If the wireless sensor is set to channel 2 or 3, you need to press the [] key to switch to channel 2 or 3, and then please observe whether the temperature and humidity are displayed in the data area of "OUT" on the base station. If so, the outdoor signal has been successfully received.

V. Default setting

1. The base station switches on all segments of the LCD for 3 seconds after switching on the power supply. After the beep "BI", the unit switches to standard mode and starts measuring the indoor temperature and humidity and air pressure.

- 2. At the same time, the weather station starts receiving the RF signal from the outdoor sensor. If the signal transmission is interrupted (the signal light of the sensor always does not flash red), you can press the [TX] key (for immediate signal transmission) in the battery compartment of the outdoor sensor to send the RF signal to the base station manually. The signal transmission takes about 3 minutes and after completion the icon "...) " is displayed above the channel data on the base station.
- 3. After receiving the signal from the outdoor sensor, the base station displays the outdoor temperature and humidity.

4. Standard display when switching on:

① Time and date: 00:00, 24-hour format, 1 January 2023

② Standard unit for temperature: °C

③ Weather forecast: partly cloudy

4 Language: German

⑤ Time zone: 00

6 City: BER (Berlin)

② AUTO RCC: ON

AUTO DST: ON

Standard unit for air pressure: hPa/mb

Alarm 1: 6:00 for M-F; Alarm 2: 8:00 for S-S; Default setting is OFF.

VI. Operating instructions

- Manual time setting ==== the corresponding setting content flashes when you make the setting, other irrelevant display contents are hidden.
- lacktriangledown In normal display mode, press and hold the lacktriangledown 1 key for 3 seconds to access the manual time setting.
- ▶ The setting item flashes at 1Hz, while pressing the [♣️ | ★] key briefly to select the setting content, the order is as follows:

Beeper (ON/ OFF) \rightarrow Temperature unit (°C/ °F) \rightarrow Air pressure unit (hpa/ inHg) \rightarrow RCC (ON/ OFF) \rightarrow DST (ON/ OFF) \rightarrow Time zone (-02/ -01/ 00/ 01/ 02) \rightarrow (12/ 24)-hour format \rightarrow Hours \rightarrow Minutes \rightarrow Year \rightarrow Month \rightarrow Day \rightarrow Language \rightarrow Air pressure (reference value) \rightarrow Weather (reference value) \rightarrow Exit

▶ The year is set in the range 2000 to 2099 (default: 1 January 2023).

Display language of the day of the week:

Language	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
DEUTSCH	SONNTAG	MONTAG	DIENSTAG	MITTWOCH	DONNERSTAG	FREITAG	SAMSTAG
ITALIANO	DOMENICA	LUNEDI	MARTEDI	MERCOLEDI	GIOVEDI	VENERDI	SABATO
FRANÇAIS	DIMANCHE	LUNDI	MARDI	MERCREDI	JEUDI	VENDREDI	SAMEDI
ESPAÑOL	DOMINGO	LUNES	MARTES	MIERCOLES	JUEVES	VIRNES	SABADO
NEDERLANDS	ZONDAG	MAANDAG	DINSDAG	WOENSDAG	DONDERDAG	VRIJDAG	ZATERDAG
DANSK	SONDAG	MANDAG	TIRSDAG	ONSDAG	TORSDAG	FREDAG	LORDAG
ENGLISH	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY

▶ Display language of the month:

Language	January	February	March	April	May	June	July	August	September	October	November	December
DEUTSCH	JAN	FEB	MAR	APR	MAI	JUN	JUL	AUG	SEP	OKT	NOV	DEZ
ITALIANO	GEN	FEB	MAR	APR	MAG	GIU	LUG	AGO	SET	OTT	NOV	DIC
FRANÇAIS	JAN	FEV	MAR	AVR	MAI	JUI	JUL	AOU	SEP	OCT	NOV	DEC
ESPAÑOL	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SEP	OCT	NOV	DIC
NEDERLANDS	JAN	FEB	MAA	APR	MEI	JUN	JUL	AUG	SEP	OKT	NOV	DEC
DANSK	JAN	FEB	MAR	APR	MAJ	JUN	JUL	AUG	SEP	OKT	NOV	DEC
ENGLISH	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

- ▶ When the setting value flashes at 1 Hz, press the [+] key briefly to add the value by 1, press and hold the [+] key to add the value rapidly.
- ▶ When the setting value flashes at 1 Hz, press the [] key briefly to decrease the value by 1, press and hold the [] key to decrease the value rapidly.
- Quickly touch the touch button [$\dot{\mathbb{Q}}$:/ $\mathbb{Z}^{\mathbb{Z}}$] twice during or after setting to exit the manual setting mode.
- ▶ If no operation is performed within 20 seconds, the unit saves the current setting status and automatically exits the setting mode.
- ▶ If the weather station is in the same time zone as Germany, set the time zone to 00; if it runs one hour slower than German time, set the time zone to -01; if it runs one hour faster than German time, set the time zone to 01; if it runs 2 hours slower, set it to -02; if it runs 2 hours faster, set it to 02.
- ▶ Outside the 1500 km diameter range of the German DCF signal tower, the unit will receive poor radio clock signals, so it is recommended to set the setting item RCC to OFF.
- ▶ When the setting proceeds to the setting item DST, please select ON or OFF depending on whether daylight savings time is in effect in your city. The sunrise and sunset times are also determined according to daylight saving time.

▶ About setting reference value of air pressure and weather forecast:

After switching on for the first time, you need to enter a reference value for the weather forecast based on the local weather and the weather station will calibrate itself to this reference value. Weather forecasts are calculated based on changes in air pressure and can be up to 75% accurate one week after switching on the weather station.

The initial air pressure value is supplied from the factory and is set to absolute pressure (ABS PRESSURE). The weather station displays the absolute pressure by default when it is first switched on (that's the pressure value measured by the weather station's built-in air pressure sensor). If you live in an area with relatively low altitude, you can rely on the absolute air pressure values and do not set the air pressure value manually (you do not need to

But if you live in an area with relatively high altitude, you can use relative air pressure by entering barometric reference values. As the air pressure usually decreases with increasing altitude, the public weather services always publish the so-called relative air pressure (REL PRESSURE). If you want to match the air pressure to your location, you can ask your local weather service for the air pressure at sea level or get the current value from the Internet.

2. Alarm clock and outdoor temperature alarm settings

enter a barometric reference value).

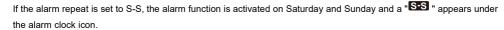
- ▶ In normal display mode, press and hold the [Q] key for 3 seconds to enter the setting mode for the alarm time and the outdoor temperature alarm.
- ▶ The setting items flash at 1Hz, while briefly pressing the [Q] key to select the setting content, the order is as follows: Hours of alarm 1 → Minutes of alarm 1 → Repetition (M-F/M-S/S-S) of alarm 1 → Snooze time (05-60 adjustable/OFF) of alarm 1 → Hours of alarm 2 → Minutes of alarm 2 → Repetition (M-F/M-S/S-S) of alarm 2 → Snooze time (05-60 adjustable/OFF) of alarm 2 → Upper alarm limit for outdoor temperature (CH1) → Lower alarm limit for outdoor temperature (CH1) → Exit
- ▶ Snooze time is 5 to 60 minutes. Or you can also switch off the snooze mode permanently by setting the snooze time to OFF.
- ▶ There are 3 alarm repetitions to choose from:

M-F: from Monday to Friday

S-S: from Saturday to Sunday

M-S: from Monday to Sunday

If the alarm repeat is set to M-F, the alarm function is activated from Monday to Friday and a "M-F" appears under the alarm clock icon



If the alarm repeat is set to M-S, the alarm function is activated for a whole week, a "M-F" and a "S-S" appear simultaneously under the alarm clock icon.

- ▶ The upper and lower temperature alarm limits of the three channels are independent of each other. If you need to set the alarm limit of the three channels, please set them independently. While setting the outdoor temperature upper and lower alarm limits, you can press the [] key to switch the alarm settings between 3 channels (CH1→CH2→CH3).
- ▶ When the setting value flashes at 1 Hz, press the [+] key briefly to add the value by 1, press and hold the [+] key to add the value rapidly.
- ▶ When the setting value flashes at 1 Hz, press the [] key briefly to decrease the value by 1, press and hold the [] key to decrease the value rapidly.
- Quickly touch the touch button $\Gamma^{\dot{\square}} / Z^Z$ twice during or after setting to exit the manual setting mode.
- ▶ If no operation is performed within 20 seconds, the unit saves the current setting status and automatically exits the setting mode.

3. Switching the alarm clock and outdoor temperature alarm on/ off

▶ In normal display mode, briefly press the [Q] [A] key to switch to switch the display of the alarm time and the outdoor temperature alarm, the order is as follows:

Alarm1 o Alarm2 o Outdoor temperature upper limit alarm o Outdoor temperature lower limit alarm o Exit

- ▶ In display mode, the alarm and temperature alarm can be switched on or off by pressing the [+] key.
- ▶ When the alarm 1 or 2 is switched on, the icon "♣" or "♣" appears accordingly and the alarm 1 or 2 is activated. In addition, the icon of alarm repeatition is also displayed.
- ▶ When the alarm 1 or 2 is switched off, the icon "♣" or "♣" disappears and the alarm 1 or 2 is deactivated.
- ▶ When the outdoor temperature upper limit alarm is switched on, the "⚠" icon appears accordingly; when the outdoor temperature lower limit alarm is switched on, the "Ψ" icon appears accordingly.
- ▶ When the outdoor temperature upper or lower limit alarm is turned off, the "♣ " icon or the "♥ " icon disappears.

4. Deactivate the wake-up call

- ▶ When the alarm sounds, press any key except the $[\mathring{\mathbb{Q}}^{\cdot}/Z^{\mathbf{Z}}]$ key or press and hold the $[\mathring{\mathbb{Q}}^{\cdot}/Z^{\mathbf{Z}}]$ key for more than 2 seconds or do nothing within 2 minutes toturn off the alarm.
- ▶ When the alarm sounds, the volume of the gradually increasing alarm tone (crescendo, duration: 2 minutes) changes four times.
- If the alarm is deactivated, the alarm is repeated automatically after 24 hours, depending on the setting.

5. Snooze function

- ▶ When the alarm sounds, briefly press the $\lceil \overset{\cdot}{Q^c} / Z^Z \rceil$ key to interrupt the alarm signal and activate the snooze mode, the snooze icon " z^Z " flashes. After the set snooze time has elapsed, the alarm sounds again.
- ▶ In snooze mode, press any key except the $\lceil \overset{.}{\bigcirc} \cdot / Z^{Z} \rceil$ key or press and hold the $\lceil \overset{.}{\bigcirc} \cdot / Z^{Z} \rceil$ key for more than 2 seconds or do nothing within 1 minute to exit snooze mode.
- ▶ If the snooze function is deactivated, pressing the [☼ / z²] key will not switch to snooze mode.

6. Alarm activation status of outdoor temperature

- When the outdoor temperature alarm is switched on, if the outdoor temperature exceeds the set threshold, the alarm will sound (three times "BI BI BI") and the alarm icon "\$\infty\$" will flash. The outdoor temperature in the channel data area will also flash simultaneously with the corresponding Hi icon "\$\overline{A}\$" or Lo icon "\$\overline{Y}\$".
- In this alarm mode, press any button to stop the alarm sound, but the alarm icon and Hi/ Lo icon will continue to flash.
- ▶ In addition, the weather station sounds an alarm tone (once "BI") each time the temperature alarm is triggered after the outdoor temperature has been updated. The alarm will only stop sounding if the outdoor temperature is outside the alarm range or if you switch off the alarm mode.

7. Frost point alarm

- ▶ When the outdoor temperature is within the range of -1°C (+30°F) to +3°C (+37°F), the "�ice" icon flashes in the channel data area (but the alarm does not sound).
- The frost alarm does not need to be switched on, but also does not give an alarm tone, but is displayed as soon as the outdoor temperature is reached. The frost point of the three channels is assessed independently of each other and the "Oce" icon only flashes when the temperature of the currently displayed channel triggers the frost alarm.

8. Moon phases and tide display

▶ The weather station displays the corresponding 12 moon phases according to the calendar:

‡ ‡ ‡ ‡	÷);	÷ ••		,		***	÷ ; ; ;
New	Waxing	First	Waxing	Full	Waning	Last	Waning
moon	moon crescent Quarter		gibbous	moon	gibbous	Quarter	crescent

▶ In addition, the corresponding 3 tide levels are displayed:

HIGH MEDIUM LOW

9. City selection mode (selection of the city of your location)

- ▶ Press the [□] key once briefly to enter the city selection mode. In city selection mode, use the [+] or [-] key to select the correct city using the number and the three-letter city code corresponding to the table below.
- In city selection mode, press and hold the [+] or [-] key for 3 seconds, you can change the value of cities faster.
- ▶ After selecting, press the [☐] key to return to normal display mode.

No.	Country	City	Code	No.	Country	City	Code
1	Germany(DE)	Berlin	BER	126		Cordoba	COR
2		Bremen	BRE	127		Eivissa Ibiza	IBZ
3		Köln	KOE	128		La Coruña	LCO
4		Dortmund	DOR	129		Las Palmas	LPA
5		Dresden	DRE	130		Leon	LEO
6		Düsseldorf	DUS	131		Madrid	MAD
7		Erfurt	ERF	132		Malaga	MAL
8		Frankfurt	FRA	133		Palma de Mallorca	PDM
9		Freiburg	FRE	134		Salamanca	SAL
10		Hamburg	HAM	135		Sevilla	SEV
11		Hannover	HAN	136		Valencia	VAL
12		Hof	HOF	137		Zaragoza	ZAR
13		Kaiserslautern	KAI	138	Sweden(SE)	Gothenburg	GOT
14		Kassel	KAS	139		Karlstad	KAR
15		Kiel	KIE	140		Stockholm	STO
16		Leipzig	LEI	141	Switzerland(CH)	Basel	BAS
17		Magdeburg	MAG	142		Berne	ESD
18		München	MUN	143		Chur	CHU
19		Nürnberg	ONLY	144		Geneva	GNV

No.	Country	City	Code	No.	Country	City	Code
20		Osnabrück	OSN	145		Lucerne	LUC
21		Passau	PAS	146		Lugano	LUG
22		Regensburg	REG	147		Sion	SIO
23		Rostock	ROS	148		St. Gallen	SGL
24		Saarbrücken	SAA	149		Zurich	TO
25		Stuttgart	STU	150	United Kingdom(GB)	Aberdeen	ABD
26		Ulm	ULM	151		Belfast	BEL
27		Würzburg	WUR	152		Birmingham	BIR
28	Austria(AT)	Bregenz	BRZ	153		Cardiff	CAR
29		Graz	GRZ	154		Glasgow	GLW
30		Innsbruck	INN	155		London	LON
31		Linz	LNZ	156		Manchester	MAN
32		Salzburg	SLZ	157		Newcastle upon Tyne	NEC
33		Vienna	HOW	158		Plymouth	PLY
34		Villach	VIL	159	Lithuania(LT)	Vilnius	VNO
35		Wels	WEL	160	Bulgaria(BG)	Sofia	SOF
36	Belgium(BE)	Antwerp	ANT	161	Romania(RO)	Bucharest	BUH
37		Bruges	BRG	162	Cyprus(CY)	Nicosia	NIC
38		Brussels	BRU	163	Northern Ireland(NI)	Belfast	FSO
39		Libramont	LIB	164	United States(US)	Washington DC	WDC
40		Liege	LIE	165		New York	NYC
41	Bosnia & Herzegovina (BA)	Sarajevo	SAR	166		Los Angeles	LAS
42	Croatia(HR)	Split	SPL	167		Chicago	CHI
43		Zagreb	ZAG	168		Houston	HOU
44	Czech Republic(CZ)	Brno	BRN	169		Phoenix	PHO
45		Prague	PRG	170		San Antonio	SAO
46	Denmark(DK)	Aalborg	ALB	171		San Diego	SDO
47		Copenhagen	KOB	172		Dallas	DAL
48		Odense	ODE	173		San Francisco	SFO
49	Finland(FI)	Helsinki	HEL	174		Philadelphia	PHL
50	France(FR)	Ajaccio	AJA	175		Charlotte	CHA
51		Biarritz	BIA	176		Seattle	SEA
52		Bordeaux	BOR	177		Denver	THE
53		Brest	BRT	178		Boston	BOS
54		Cherbourg- Octeville	CHE	179		Detroit	DET
55		Clermont- Ferrand	CMF	180		Nashville	NAS
56		Dijon	DIJ	181		Memphis	MEM

No.	Country	City	Code	No.	Country	City	Code
57		Lille	LIL	182	•	Portland	PTL
58		Lyon	LYO	183		Oklahoma city	OKC
59		Marseille	MRS	184		Las Vegas	LVG
60		Metz	MET	185		Milwaukee	MWK
61		Nantes	NAN	186		Kansas City	KAN
62		Nice	NCE	187		Atlanta	ATL
63		Orleans	ORL	188		Miami	MIA
64		Paris	PAR	189		Virginia beach	VAB
65		Perpignan	PER	190		Oakland	OAK
66		Rouen	ROU	191	_	Minneapolis	MIN
67		Strasbourg	STR	192		New Orleans	NOL
68		Toulouse	TOU	193		Cleveland	CLE
69	Greece(GR)	Athens	AHN	194		Tampa	TAM
70	Hungary(HU)	Budapest	BUD	195		Honolulu	HON
71	Ireland(IE)	Dublin	DUB	196		St.Louis	SLS
72	Italy(IT)	Ancona	ANC	197		Pittsburgh	PIT
73	,()	Bari	BAR	198		Cincinnati	CIN
74		Bolzano	BOZ	199		Lincoln	LIN
75		Cagliari	CAG	200		Orlando	ORD
76		Florence	FIR	201		Buffalo	BUF
77		Foggia	FOG	202		Richmond	RMD
78		Genoa	GEN	203		Columbia	COL
79		Lecce	LEC	204		Little Rock	LRC
80		Messina	MES	205		Columbus	CLS
81		Milan	MIL	206		Grand Rapids	GRS
82		Naples	NAP	207		Salt Lake City	SLC
83		Palermo	PAL	208		Providence	PVD
84		Parma	PRM	209		Manchester (NH)	MNH
85		Perugia	PEG	210		San Diego	SDG
86		Rome	ROM	211		Santa Fe	SFE
87		San Remo	SRE	212		Bismarck	BIS
88		Triest	TRI	213		Reno	REN
89		Turin	TUR	214		New Haven	NHV
90		Venice	VEN	215		Baltimore	BAL
91		Verona	VER	216		South Carolina (SC)	SCR
92	Liechtenstein(LI)	Vaduz	VDZ	217		Savannah	SAV
93	Luxembourg(LU)	Luxembourg	LUX	218	Canada(CA)	Ottawa	OTT
94	Monaco(MC)	Monte Carlo	MCM	219	` ′	Quebec City	QUC
95	Netherlands(NL)	Amsterdam	AMS	220		Edmonton	EDM
96		Arnhem	ARN	221		Calgary	CLY
97		Eindhoven	ONE	222		Vancouver	VAN
98		Groningen	GRO	223		Montreal	MON
99		Rotterdam	RED	224		Toronto	TOR

No.	Country	City	Code	No.	Country	City	Code
100		The Hague	DHA	225	Mexico(MX)	Mexico City	MEX
101	Norway(NO)	Bergen	BGN	226	Panama(PA)	Panama City	PAN
102		Lillehammer	LLH	227	Brazil(BR)	Brasília	BRA
103		Oslo	OSL	228		Belo Horizonte	BHZ
104	Poland(PL)	Cracow	KRA	229		Recife	REC
105		Gdansk	GDA	230		Rio de Janeiro	RIO
106		Poznan	POZ	231		São Paulo	SPA
107		Warsaw	WAR	232		Salvador	SLV
108	Portugal(PT)	Faro	FAR	233	Argentina(AR)	Buenos Aires	BUE
109		Lisbon	LIS	234		Cordoba	CDB
110		Porto	POR	235		La Plata	LPL
111	Russian Federation(RU)	St. Petersburg	PET	236		Mardel Plata	MAR
112		Moscow	MOS	237		Mendoza	MEN
113		Novosibirsk	NOV	238		Rosario	ROO
114		Kazan	KAZ	239	Chile(CL)	Santiago de Chile	SAN
115		Volgograd	VOL	240	Colombia(CO)	Bogotá	BOG
116		Yekaterinburg	YEK	241	Australia(AU) and New Zealand(NZ)	Canberra	CBR
117	Serbia(RS)	Belgrade	BEO	242		Melbourne	MEL
118	Slovakia(SK)	Bratislava	BRV	243		Sydney	SYD
119		Kosice	KOS	244		Wellington	WLG
120	Slovenia(SI)	Ljubliana	LUB	245		Adelaide	ADE
121	Spain(ES)	Alicante	ALI	246		Brisbane	BRI
122		Andorra	AND	247	_	Darwin	DRW
123		Badajoz	BAD	248		Hobart	HBA
124		Barcelona	BRC	249		Perth	PEH
125		Bilbao	BIL	250		Auckland	AKL
				251		Christchurch	CHC

- Quickly touch the touch button [$\dot{\mathbb{Q}}$ -/ $\mathbb{Z}^{\mathbb{Z}}$] twice during or after setting to exit the manual setting mode.
- ▶ If no operation is performed within 20 seconds, the unit saves the current setting status and automatically exits the setting mode.

10. Manual setting of the city

- If your location is not in a city in the table, you can set the city manually. However, before you make this setting, you need to check the ZONE, LONGITUDE and LATITUDE of your city.
- ▶ Press and hold the [☐] key for more than 2 seconds to enter the custom city setting mode.
- ▶ In setting mode, the setting item flashes at 1Hz, then briefly press the [□] key to select the setting content, the order is as follows:

the first letter of the custom city code \rightarrow the second letter of the custom city code \rightarrow the third letter of the custom city code \rightarrow time zone \rightarrow longitude \rightarrow latitude \rightarrow exit

Note: Please set the custom city code first. There are 3 codes in total, you can choose any combination of 26 letters.

- ▶ Quickly touch the touch button [☆/z²] twice during or after adjustment to exit manual adjustment mode.
- ▶ After you select a city differently or set it manually, the sunrise time and sunset time are automatically calculated according to the location, time zone and current time of the selected or manually set city and displayed in the corresponding area.

11. Wireless sensor transmission

- If the base station successfully receives the signal from the outdoor sensor, the outdoor temperature and humidity are displayed in the data area of "OUT" on the base station.
- ▶ The base station can be connected with up to 3 wireless sensors. If you use multiple wireless sensors, different sensors cannot be registered on the same channel at the same time.
- If the base station does not receive the transmission signal from a channel, ("---") is displayed on the area of corresponding channel data, briefly press the [] key to select the corresponding channel number. After selection, the corresponding channel number is displayed. At this time, press and hold the [] key for 3 seconds to receive the transmission signal again. If the signal transmission is interrupted, you can also press the [TX] key (for immediate signal transmission) in the battery compartment of the corresponding outdoor sensor to send the RF signal to the base station manually.
- In normal mode, if you want to delete the current data and receive the outdoor signal again, you can also select the corresponding channel and press the [] 1 key for 3 seconds to update the outdoor data.
- ▶ When deleting the outdoor data, the original minimum and maximum of the outdoor temperature and humidity are also deleted together.
- After completion, the base station receives the radio signal from the outdoor sensor again and displays the icon "...)"."

12. Temperature and humidity measurement

▶ Indoor temperature measuring range: -9.9°C (+14°F) to +50°C (+122°F), division value 0.1°C/°F;

LL.L °C/°F is displayed when the value is below -9.9 °C (+14°F);

HH.H °C/ °F is displayed when the value is above +50°C (+122°F).

▶ Outdoor temperature measuring range: -40°C (-40°F) to +70°C (+158°F), division value 0.1°C/°F;

LL.L °C/ °F is displayed when the value is below -40°C (-40°F);

HH.H °C/ °F is displayed when the value is above +70°C (+158°F).

▶ Humidity measuring range: 20% to 95% RH, division value 1%RH;

	19%RH is displayed when the value is below 20% RH; 96%RH is displayed when the value is above 95% RH.
	Note:
	The indoor temperature and humidity are measured every 60 seconds. But during the 3-minute RF long reception
	mode, 7-minute RCC long reception mode and the wake-up alarm mode, the measurement of the indoor temperatur
	and humidity is not performed, which is why the measurement values are not updated.
	13. Display of temperature/ humidity with trends
ı	Temperature trend:
	: If the temperature has increased by 1°C (1.8°F) in each measurement compared to the previous data or if the
	temperature has increased by 1°C (1.8°F) in total within 1 hour, the trend arrow points upwards;
	: when switching on or when the temperature remains constant;
	: If the temperature has decreased by 1°C (1.8°F) in each measurement compared to the previous data or if the
	temperature has decreased by 1°C (1.8°F) in total within 1 hour, the trend arrow points downwards.
ı	Humidity trend:
	: If the humidity has increased by 5%RH in each measurement compared to the previous data, or if the total
	humidity has increased by 5%RH within 1 hour, the trend arrow points upwards;
	: when switching on or when the humidity remains constant;
	: If the humidity has decreased by 5%RH in each measurement compared to the previous data or if the total
	humidity has decreased by 5%RH within 1 hour, the trend arrow points downwards.
•	14. Max/ Min display for temperature and humidity
I	In normal display mode, press the [] key briefly to switch between the maximum and minimum indoor/ outdoor
t	emperature/ humidity data, the "MAX" and "MIN" symbol will be displayed on the LCD, the order is as follows:
	$ extit{Max display} ightarrow extit{Min display} ightarrow extit{Exit}$

▶ To reset the maximum and minimum temperature and humidity values, press and hold the [___] key for 3 seconds in Max/ Min display mode. This will reset all recorded minimum and maximum data to the currently displayed values.

Note:

LL.L is displayed, if the temperature is below the measuring range:

HH.H is displayed, if the temperature is above the measuring range;

19%RH is displayed, if the humidity is below the measuring range:

96%RH is displayed, if the humidity is above the measuring range.

15. Comfort level and mold risk

▶ There are 5 display modes for the comfort level, as follows:



▶ The weather station determines the mould risk level by intelligently evaluating the indoor temperature and humidity and there are 4 levels:

High risk: with the symbol "HI"

Medium risk: with the symbol "ME"

Low risk: with the symbol "LO"

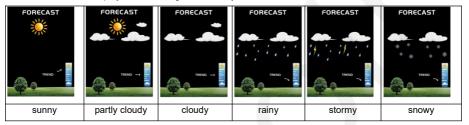
No risk: without symbol

16. Display of air pressure with trends and histogram of historical pressure development

- ▶ Air pressure measuring range: 600 hPa/mb (17.72 inHg) to 1100 hPa/mb (32.48 inHg), division value 1 hPa/mb or 0.01 inHq.
- ▶ The air pressure is updated hourly, at the same time the trend histogram is updated in the area from the weather forecast:
 - If the air pressure has increased by 1 hPa in each measurement compared to the previous data or if the air pressure has increased by 1 hPa in total within 1 hour, the trend arrow points upwards;
 - If in each measurement the air pressure shows no change in air pressure compared to the previous data or if there is no change in air pressure within 1 hour, the trend arrow points to the right.
 - If the air pressure has decreased by 1 hPa in each measurement compared to the previous data or if the air pressure has decreased by 1 hPa in total within 1 hour, the trend arrow points downwards.

17. Weather forecast

- ▶ The weather station calculates a weather forecast for the next 12 hours based on the change in air pressure. Of course, this forecast cannot be compared with that of professional weather services supported by satellites and high-performance computers. This forecast only provides an approximate indication of the current weather development in a small local area. Please consider the weather forecast of your local weather service as well as the forecast of your weather station at the same time. In case of discrepancies between the indications of your device and the local weather forecast service, please accept the indications of the latter as authoritative.
- ▶ The weather station displays the following 6 weather symbol:



Note:

- ▶ The "snowy" icon is only displayed if the outdoor temperature is below -4°C (+5°F) and the forecast would be rainy or stormy. The outdoor temperature mentioned here is set to the temperature of CH1 by default. (If there is no signal in CH1, the base station sets the temperature of CH2 to the outdoor temperature by default. If there is no signal in CH2, the base station sets the temperature of CH3 to the outdoor temperature by default).
- It takes 7 to 10 days for the weather station to complete the air pressure calibration. After the air pressure calibration, the weather forecast stabilises with an accuracy rate of 70 to 75%.
- ▶ The weather station can give weather forecast for a radius of 12-20 kilometres.

18. Reception of the radio clock signal

- The weather station starts the DCF signal search automatically after 7 minutes after each restart or change of new fresh batteries. If the DCF signal search is interrupted and you need to receive the DCF signal manually, please press and hold the [+] key for 3 seconds to enter the DCF signal reception mode manually. The icon "Å" flashes.
- ▶ Note that in DCF signal reception mode, the backlight is automatically switched off and all button functions except the [+] and [☆/Z²] keys are temporarily disabled. After the radio clock time signal reception is completed, the backlight is automatically switched on and the button functions are also reactivated.
- ▶ The signal reception takes about 7 minutes. The icon "♠" flashes when the base station successfully receives the

valid DCF signal, and after the 7-minute signal reception is completed, the radio mast icon "\mathbb{Q}" is permanently shown on the display.

- If you want to forcibly stop the DCF signal search, you can press and hold the [+] key for 3 seconds.
- ▶ Every day at 1:00/ 2:00/ 3:00 the radio-controlled clock automatically synchronises with the DCF signal to compensate for any deviations from the exact time. If this synchronisation attempt fails (the radio mast icon "♥" disappears from the display), the system automatically attempts another synchronisation at the next full hour. This process is automatically repeated up to a total of 5 times.
- As long as the summer time function is switched on, the symbol "DST" is displayed when the base station receives the time signal from summer time. (But during winter time this symbol disappears).

Note:

It is definitely recommended that the weather station be kept at least 2.5 metres away from all sources of interference such as televisions, computer monitors, etc.

Radio reception is weaker in rooms with concrete walls (e.g. basements) and in offices. In such extreme circumstances, place the weather station near the window.

19. Low battery status

- If the icon "appears on the display in the indoor area (IN), you need to replace the base station battery as soon as possible.
- If the icon " appears on the display in the area of channels (OUT), you need to replace the battery of the corresponding outdoor sensor as soon as possible.

20. Backlight with adjustable night mode

1) Adjustable brightness of the backlight

- \blacktriangleright If the base station is powered by batteries only, touch the [$^{\dot{\bigcirc}}$ / Z^Z] key to light the display for 15 seconds.
- ▶ When the base station is operated with the mains adapter, the backlight can always remain bright. When doing so, you can press the [♣️ | ♣️] key to change the brightness levels of the backlight:

$$LV4 \rightarrow LV3 \rightarrow LV2 \rightarrow LV1 \rightarrow off$$

• If the backlight brightness is not set to the highest level, press the $\Gamma^{(i)}/Z^{Z}$ key, the backlight will switch to the highest brightness level for 15 seconds.

2) Settings for night mode

- ▶ The backlight can also be set to dim automatically at night. Press the [♣, ZZ] key for 3 seconds to enter the night mode setting. Then press the [♣] or [—] key, you can switch the night mode on or off (the display shows the symbol "ON/OFF").
- If the night mode is set to OFF, pressing the [key exits the setting mode and does not change to the next setting value.
- ▶ When the night mode is set to ON, in the setting mode, press the [♣] key to set the night mode. While pressing the [♣] or [♣] key, you can add or decrease the setting value. The order of setting is as follows:

the brightness at night (LV1 to LV3) \rightarrow start hour of night mode \rightarrow start minute of night mode \rightarrow end hour of night mode \rightarrow end minute of night mode \rightarrow exit

- \blacktriangleright Quickly touch the touch button [$^{\dot{\square}}$:/ Z^Z] twice during or after setting to exit the manual setting mode.
- ▶ If no operation is performed within 20 seconds, the unit saves the current setting status and automatically exits the setting mode.
- ▶ When the night mode is activated, the icon "O" is shown on the display. When the time to enter night mode is reached, the backlight automatically switches to the set night mode brightness and when the time to exit night mode is reached, the backlight returns to the original brightness.
- ▶ In night mode, the backlight can be switched to the highest brightness level (level 4) by pressing the $\lceil \frac{|z|}{|z|} / z^z \rceil$ key for 15 seconds.
- ▶ Night mode is automatically terminated when the backlight is switched off.
- ▶ During reception of the DCF signal, the backlight is automatically closed to avoid interference with the radio waves.