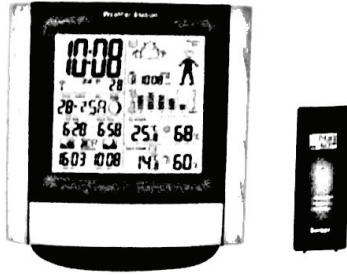


GAINEXPRESS.COM

WS-103-EU (DCF)

WEATHER STATION



I. Main Functions:

1. 12 Functions keys: "SNZ", "MODE", "SUN/MOON", "UP", "DOWN", "CH", "WEATHER", "ABSOLUTE", "C/F", "+", "-", "MEM"
2. Weather forecast for 5 states: sunny, semi-sunny, cloudy, rainy, cloudburst
3. Indoor temperature range: 0°C ~ +50°C; Indoor humidity range: 20% ~ 90%
4. Outdoor temperature range: -40°C ~ 70°C; Outdoor humidity range: 20%~90%
5. Indoor and outdoor temperature/humidity and max./min. record
6. Air pressure in mb/hPa/inHg/mmHg
7. Change in pressure indicated by arrow
8. Freezing alert function
9. Sunrise/sunset and moonrise/moonset indication function
10. Indication of indoor comfort index
11. Dressing index for outdoor display
12. Day display in 8 languages: English, Germany, French, Italian, Spanish, Dutch, Danish, Russian
13. Alarm Function
14. Timezone selection: offset - 12~12
15. DST(Daylight Saving Time) function (effective when RCC(Radio-controlled clock) is received)
16. Moon phase indication

7. **UP Key:** Under standard mode, click to switch 12/24 hour, no effect when holding. Under alarm setting, time setting or sunrise/sunset/moonrise/moonset setting, click to adjust one step forward, hold for 2 seconds to speedy adjusting forward. No effect under weather icon and air pressure setting mode and RCC reception.
8. **DOWN Key:** Under standard mode, hold for 2 seconds to enter RCC reception for 10 minutes, no effect when clicking. Under alarm mode, click to turn on/off the alarm, no effect when holding. Under alarm setting, time setting or sunrise/sunset/moonrise/moonset setting, click to adjust one step backward, hold for 2 seconds to speedy adjusting backward. No effect under weather icon and air pressure setting mode. Hold for 2 seconds to exit under RCC reception.
9. **SNZ Key** Under standard mode and setting mode, no effect when clicking. When the alarm is ringing, click "Snooze" key to pause the alarm, and enter 5 minutes of snooze function.

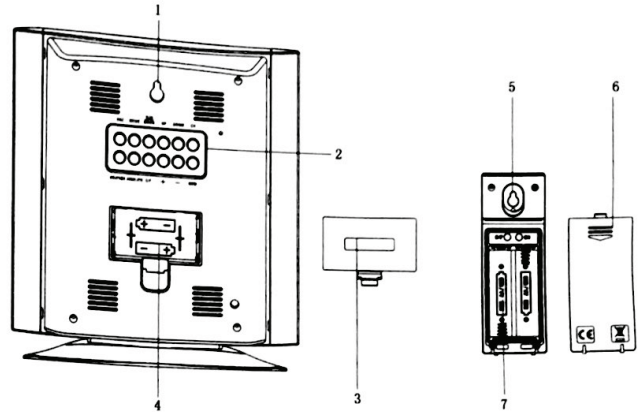
10. Time Setting

- Under time mode, hold "MODE" for 2 seconds to enter time setting mode.
- Setting sequence:
hour→minutes→second→year(2000-2099)→month→date→language→country→city→zone→exit
- Language setting sequence: Germany, French, Spanish, Italian, Dutch, Danish, Russian, English.
- The sections being set will flash in the frequency of 1Hz(1 flash per second).
- When setting the second, press "UP" or "DOWN" to clear second.
- Click "MODE" to confirm and go on next setting.
- Click "UP" to adjust one step forward, holding for 2 seconds to enter speedy adjusting mode(8 steps/second).
- Click "DOWN" to adjust one step backward, holding for 2 seconds to enter speedy adjusting mode(8 steps/second).
- Moon phase, day of the week, sunrise/sunset/moonrise/moonset change automatically depending of the setting of the date.
- The display will return to the standard mode after 20 seconds of inactivity.
- Timezone offset -12~12

17. Low voltage display

II. Power-On and Reset

1. Switch on the device and sensors by plugging in batteries (2A battery x2 each).
2. LCD full displays will be shown for 3 seconds when Power-ON/Reset.
3. After a "BiBiBi" sound, detection of air pressure, temperature and humidity begins. Select the weather icon by hand.
4. Reception of RF(Radio frequency) requires 3 mins while reception of RCC requires 10 mins.
5. Defaults:
 - i. Date in Jan. 1,2011 (DCF), 24 Hr
 - ii. Temperature in °C
 - iii. Alarm in 7:00 off



1. Main unit hanging hole
2. Function buttons
3. Main unit battery compartment cover
4. Main unit battery compartment
5. Sensor hanging hole
6. Sensor battery compartment cover
7. Sensor battery compartment

11. Alarm setting

- Under time display mode, click "MODE" to check the alarm. It will return to normal display if no key is operated within 20 seconds.
- Under alarm display mode, hold "MODE" for 2 seconds to enter alarm setting. Setting sequence: hour→minutes→exit.
- The sections being set will flash in the frequency of 1 Hz (1 flash per second).
- Click "MODE" to confirm and go on the next setting.
- Click "UP" to adjust one step (forward), holding for 2 seconds to enter speedy adjusting mode (8 steps/second).
- Click "DOWN" to adjust one step (backward), holding for 2 seconds to enter speedy adjusting mode (8 steps/second).
- The alarm function needs to be turned on by pressing "DOWN" after setting.

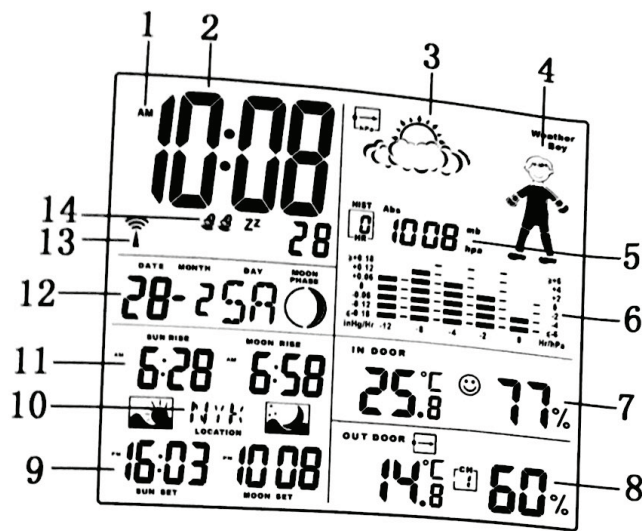
12. Weather icon setting

- It will enter weather icon setting mode after detecting air pressure when the power is on. It will enter RF receiving for 3 minutes.
- After normal time display mode, hold "WEATHER" for 2 seconds to enter weather icon setting mode.
- Under weather icon setting mode, select the icon by pressing "+" or "-", no effect for other keys except "+", "-" and "WEATHER".
- Under weather icon setting mode, it will confirm and exit setting if no key was operated within 20 seconds.
- If the alarm is ringing under setting, the ringing will stop.
- Setting and RCC reception can be done simultaneously.

13. Air pressure setting

- At normal time display, hold "ABSOLUTE" for 2 seconds to adjust REL air pressure.
- Under air pressure setting mode, press "+" or "-" to adjust one step, hold for 2 seconds to speedy adjustment.
- Under ABS mode, hold "ABSOLUTE" for 2 seconds to switch REL mode.
- Under air pressure setting status, no effect for WEATHER key.
- If the alarm is ringing under setting, the ringing will stop.

III. Instructions for operating the KEYS



1. AM/PM indicator
2. Time
3. Weather icon
4. Dressing index indicator
5. Air pressure
6. Air pressure barchart
7. Indoor temperature and humidity
8. Outdoor temperature and humidity
9. Sun set
10. Location
11. Sun rise
12. Date, month, day and moon phase
13. RCC indicator
14. Alarm indicator

- Setting and RCC reception can be done simultaneously.
- It will confirm and exit setting if no key was operated within 20 seconds.

14. Sunrise/sunset, Moonrise/moonset setting

- At normal time display, hold "SUN/MOON" for 2 seconds to enter sunrise/sunset, moonrise/moonset setting.
- The sections being set will flash in the frequency of 1 Hz (1 flash per second).
- Setting sequence: country→city→year→month→date→exit.
- Click "UP" to adjust one step (forward), holding for 2 seconds to enter speedy adjusting mode (8 steps/second).
- Click "DOWN" to adjust one step (backward), holding for 2 seconds to enter speedy adjusting mode (8 steps/second).
- Click "SUN/MOON" to confirm and go on the next setting.
- If the alarm is ringing under setting, the ringing will stop.
- If RCC is being received under setting, the reception will stop and go on setting.
- It will confirm and exit setting if no key was operated within 20 seconds.
- When setting sunrise/sunset, moonrise/moonset, no effect for "CH" and "MODE" key.

IV. Functions

The function of RCC

1. Conditions of entering RCC receiving mode
 - a. Power on or reset to enter RCC receiving mode.
 - b. Entering RCC receiving mode at 2:00, 3:00, 4:00, 5:00 and 6:00 automatically.
 - c. Press "DOWN" for 2 seconds to enter RCC receiving mode compulsively.
 - d. The time for RCC receiving is 10 minutes.

1. **MODE Key:** Under standard mode, click to display time/alarm. Alarm symbol will flash when alarm display. Under standard mode, hold for 2 seconds, it will change to time-setting mode.
2. **CH Key:** Under standard mode, click to switch RF channel, CH1→CH2→CH3→ will be displaying circularly. Under standard mode, hold for 2 seconds to enter RF receiving for 3 minutes, click again to exit. "CH" key has no effect under setting mode or RCC reception or sunset/sunrise/moonset/moonrise setting mode.
3. **WEATHER Key:** Under standard mode, click to check the air pressure record over the past 12 hours. Under standard mode, hold for 2 seconds to enter weather icon setting. Under weather icon setting mode, click "WEATHER" to confirm and exit setting. "WEATHER" key has not effect under air pressure setting mode.
4. **ABSOLUTE Key:** Under standard mode, click to display Abs.(absolute)/Rel.(relative) air pressure. Hold for 2 seconds to adjust Rel. air pressure. Under air pressure mode, click to confirm and exit setting. "ABSOLUTE" key has no effect when holding. Under time or alarm setting mode, hold for 2 seconds to enter air pressure setting.
5. **C/F and + Key:** Under standard mode, click "C/F" or "+" to switch °C/F, hold for 2 seconds to switch mb/hPa, inHg and mmHg. Under weather icon and air pressure setting mode, click "C/F" or "+" to adjust one step forward. Under air pressure setting mode, hold "C/F" or "+" for 2 seconds to enter speedy adjusting forward, no effect under weather icon selecting mode. Under alarm and time setting mode, click "C/F" or "+" to switch °C/F, no effect when holding.
6. **- and MEM Key:** Under weather icon and Rel. air pressure setting mode, click "-" to adjust one step backward. Under air pressure setting mode, hold "-" for 2 seconds to enter speedy adjusting backward, no effect under weather icon selecting mode. Under standard mode, click "MEM" to display max./min. temperature/humidity for indoor and outdoor. Hold for 2 seconds to clear memory of max./min. values. Under time and alarm setting mode, click "MEM" to switch max. and min. value.

2. The display of icons during the reception. When it enters RCC receiving mode, the tower-shaped part of RCC symbol on the LCD will flash in the frequency of 1 Hz. When it is receiving the signal, the tower-shaped part of RCC symbol will be still, while the symbol of RCC will flash in the frequency of 1 Hz.
3. When it receives the signal successfully, the whole RCC icons will be ON, an exit the receiving mode.
4. When it is receiving signals, hold "DOWN", it will exit RCC receiving mode.
5. During the 5 times of auto-reception everyday, if it received signal once, it will not enter the receiving mode automatically until 2:00 next day.
6. When it fails to receive the signals 5 times a day, it will receive the signal at 2:00 next day.
7. When the RCC symbols display fully, the relative RCC icon will be OFF if the time is reset.
8. When the alarm is up during the RCC signal reception, it will ring first and back to the reception after ringing.
9. When it received DST signal, the DST symbol will display.

RF Receiving function

1. After installing the battery and checking the temperature/humidity, it will enter RF receiving mode automatically for 3 minutes.
2. Under normal display mode, hold the "CH" key for 3 seconds to clear out the channel information.
3. If there is no effective signal with same ID code received for the current channel in one hour, the temperature of that CH will shows "--", the temperature display will resume back when the correct signal is received again.

Alarm function

*BUZZER Alarm format: 2 minutes in total:

1. 0~10seconds: one Bi/second;
 2. 11~20 seconds: two Bi/second;
 3. 21~30 seconds: four Bi/second;
 4. 31~120 seconds: Bi continuously.
- *When the alarm is ringing, click "SNZ" to pause the alarm, and enter 5 minutes of snooze function. Press other key to exit alarm.

*When RCC signal is received under the snooze and alert function, RCC will be paused until the alarm stop

Air pressure function

*Air pressure range 800MB-1100MB

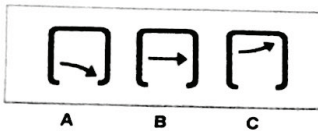
*Click "WEATHER" to check the air pressure record over the past 12 hours.

*Click "ABSOLUTE" to switch ABS and REL. mode

*Hold "C/F" or "+" for 2 seconds to switch mb/hPa/inHg and mmHg

*Air pressure trend indicator

1. The difference between current air pressure and the previous air pressure is more than +2mb, the trend will be shown as C.
2. The difference between current air pressure and the previous air pressure is less than -2mb, the trend will be shown as A.
3. When the change of air pressure is within +/-2mb, the trend will be shown as B.
4. The grand change of air pressure within 1 hour is more than +2mb, the trend will be shown as C.
5. The grand change of air pressure within 1 hour is more than -2mb, the trend will be shown as A.
6. The grand change of air pressure within 1 hour is more than +/-2mb, the trend will be shown as B.
7. The difference between current air pressure and air pressure of one hour ago is within +/-2mb, the trend will be shown as B.



The function of weather forecast

1. The weather icon shows the trend of the following 24 hours
2. There are 5 weather icons: sunny, semi-sunny, cloudy, rainy, cloudburst
3. Put the weather station under natural ventilation environment, the weather forecast will be more accurate. The tolerance will be greater when it is put indoor, especially in an air-conditioned room.

Freezing temperature alert function

*Snow symbol will flash when outdoor temperature is +4°C ~ -1°C and will display when the temperature is below -1°C

*Freezing temperature alert is based on the lowest of the channel. If no data in CH1, it will compare CH2 and CH3. If one channel is operated only, it will be based on that channel. If no RF is received, there will be no freezing temperature shown

The comfort - level icons:

1. Uncomfort: when the temperature range if of any values, humidity range is less than 40% or more than 70%, it will be ☹️
2. Comfort: when the temperature range is between 20°C to 25.9°C, humidity range is between 40% to 70%, it will be 😊
3. No indication: temperature range is less than 20°C and more than 25.9°C, humidity range is between 40% to 70%

V. Eight Languages for Your Reference:

Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
German (GE)	MO	DI	MI	DO	FR	SA	SO
English(EN)	MO	TU	WE	TH	FR	SA	SU
Italian (IT)	LU	MA	ME	GI	VE	SA	DO
French (FR)	LU	MA	ME	JE	VE	SA	DI

57			NANTES	NAN
58			Nice	NIC
59			Orleans	ORL
60			Paris	PAR
61			Perpignan	PER
62			Lille	LIL
63			Rouen	ROU
64			Strasbourg	STR
65			Toulouse	TOU
66	FINLAND	FIN	Helsinki	HEL
67	GREAT BRITAIN	GB	Aberdeen	ABD
68			Belfast	BEL
69			Birmingham	BIR
70			Bristol	BRI
71			Edinburgh	EDI
72			Glasgow	GLA
73			London	LON
74			Manchester	MAN
75			Plymouth	PLY
76	HUNGARY	HUN	Budapest	BUD
77	CROATIA	CRO	Zagreb	ZAG
78	ITALY	ITA	Ancona	ANC
79			Bari	BAI
80			Bologna	BOL
81			Cagliari	CAG
82			Catania	CAT
83			Firenze	FIR
84			Foggia	FOG
85			Genova	GEN
86			Lecce	LEC
87			Messina	MES
88			Milano	MIL
89				

90			Palermo	PAL		
91			Parma	PAR		
92			Perugia	PER		
93			Roma	ROM		
94			Torino	TOR		
95			Trieste	TRI		
96			Venezia	VEN		
97			Ventimiglia	VIG		
98			Verona	VER		
99	IRELAND	IRL	Dublin	DUB		
100	LUXEMBOURG	LUX	Luxembourg	LUX		
101	NORWAY	NOR	Bergen	BER		
102			Oslo	OSL		
103			Stavanger	STA		
104	NETHERLANDS	NET	Amsterdam	AMS		
105			Arnhem	ARN		
106			Eindhoven	EIN		
107			Enschede	ENS		
108			Groningen	GRO		
109			Den haag	DHA		
110					Rotterdam	ROT
111			PORTUGAL	POR	Evora	EVO
112	Coimbra	COI				
113	Faro	FAR				
114	Leiria	LEI				
115	Lisbon	LIS				
116	Porto	POR				
117	POLAND	POL	Gdansk	GDA		
118			Krakow	KRA		
119			Poznan	POZ		
120			Szczecin	SZC		
121					Warsaw	WAR

Dutch (NE)	MA	DI	WO	DO	VR	ZA	ZO
Spanish (ES)	LU	MA	MI	JU	VI	SA	DO
Danish (DA)	MA	TI	ON	TO	FR	LO	SO
Russian (RU)	NH	BT	CP	YT	NT	C6	BC

VI. 150 European Cities

Europe 150 City				
Item	Country	Logogram	City Name	Logogram
1	GERMANY	GER	Freiburg	FRE
2			Muenchen	MUE
3			Aachen	AAC
4			Erfurt	ERF
5			Frankfurt	FRA
6			Koeln	KOE
7			Duesseldorf	DUS
8			Dresden	DRE
9			Kassel	KAS
10			Leipzig	LEI
11			Hannover	HAN
12			Berlin	BER
13			Bremen	BRE
14			Hamburg	HAM
15			Flensburg	FLE
16			Rostock	ROS
17			Stralsund	STR
18			Kiel	KIE
19			Magdeburg	MAG
20			Nuernberg	NUE
21			Regensburg	REG
22			Stuttgart	STU
23			Saarbruecken	SAA
24			Schwerin	SCH
25	DENMARK	DAN	Alborg	ALB

26	SPAIN	ESP	Arhus	ARH
27			Copenhagen	COP
28			ODENSE	ODE
29			Alicante	ALI
30			Andorra	AND
31			Badajoz	BAD
32			Barcelona	BAR
33			Bilbao	BIL
34			Cadix	CAD
35			Cordoba	COR
36			Ibiza	IBI
37			La Coruna	LAC
38			Leon	LEO
39			Las palmas	LPA
40			Madrid	MAD
41			Malaga	MAL
42			Palma de mallorca	PDM
43	Salamanca	SAL		
44	Sevilla	SEV		
45	Valencia	VAL		
46	Zaragoza	ZAR		
47	FRANCE	FRA	besancon	BES
48			Biarritz	BIA
49			Bordeaux	BOR
50			Brest	BRE
51			Cherbourg	CHE
52			Clermont-ferrand	CMF
53			Lyon	LYO
54			Marseille	MAR
55			Monaco	MON
56			Metz	MET

122	RUSSIA	RUS	Sankt Petersburg	PET
123	SWEDEN	SWE	Gothenburg	GOT
124			Malmö	MLO
125			Stockholm	STO
126	SLOVAKIA	SLK	Bratislava	BRA
127	SLOVENIA	SLO	Ljubljana	LJU
128	JUGOSLAVIA	YUG	Belgrade	BER
129	AUSTRIA	AUS	Graz	GRA
130			Innsbruck	INN
131			Linz	LIN
132			Salzburg	SAL
133			Vienna	VIE
134	BELGIUM	BEL	Antwerpen	ANT
135			Brugges	BRU
136			Burxelles	BRL
137			Charleroi	CHA
138			Liege	LIE
139	SWITZERLAND	SWI	Basel	BAS
140			Bern	BER
141			Chur	CHU
142			Geneva	GEN
143			Locarno	LOC
144			Lucerne	LUC
145			St moritz	MOR
146			St gallen	GAL
147			Sion	SIO
148			Vaduz	VAD
149			Zuerich	ZUE
150	CZECH REPUBLIC	CZR	Prague	PRA

VII. Dressing index

OUTDOOR TEMP.	SUNNY	SEMI-SUNNY	CLOUDY	RAINY	CLOUDBURST
≥26.1°C					
20.1°C ~ 26.0°C					
15.0°C ~ 20.0°C					
10.1°C ~ 15.0°C					
5.1°C ~ 10.0°C					
0.1°C ~ 5.0°C					
≤0°C					