# Wireless weather station Airbi DUO COLOR

### Before use

- Read the following information very carefully.
- This manual will help you to get familiar with your new device, all its functions and parts, and advise you in case of problems with the device.
- By carefully reading and following the instructions contained in this manual, you will prevent damage or destruction of the instrument.
- We are not responsible for any damage to the instrument caused by failure to follow or misunderstanding the instructions contained in this manual.
- Pay attention to the safety instructions!
- Keep the manual for future reference.

### Contents of the package

- Wireless weather station (base station).
- 2 outdoor temperature/humidity transmitters.
- Power adapter.

#### **Functions and features**

- Temperature and humidity measurement with 2 wireless external sensors with a range of max. 100 m, trend indicators.
- Individual marking of sensors on the display.
- Measurement of indoor temperature and humidity.
- Symbolic weather forecast with atmospheric pressure trend indicator, pressure history for the last 12 hours.
- Moon phase display.
- Thermal comfort indicator.
- Radio-controlled clock with date and day of the week abbreviation (7 languages).
- Alarm clock with two alarm times and snooze function.
- Colour display with 3 brightness levels or backlight off.
- For hanging or standing.

#### Safety instructions

• This product is intended exclusively for the range of applications described above.

## Attention! Risk of electric shock!

- Only plug the base station into a mains socket installed in accordance with the electrical safety regulations in your country and with the correct mains voltage (see rating plate).
- The power outlet must be located close to the device and must be easily accessible.
- If any malfunction occurs, disconnect the device from the mains immediately.
- The base station and power adapter must not come into contact with water or moisture. Suitable for indoor use only.
- Do not use the device if the cover or power adapter is damaged.
- Operate the base station away from persons (including children) who may not be fully aware of the possible risks associated with handling electrical equipment.
- Use only the adapter supplied with the device.
- First connect the cable to the base station and then plug the power adapter into a power outlet.
- Do not pull the plug out of the socket by the cable.
- Route the mains cable so that it does not come into contact with sharp or hot objects.
- Keep instruments and batteries out of the reach of children.
- Small parts can be swallowed by children (under three years of age).
- Batteries contain harmful acids and can be dangerous if swallowed. Serious internal burns and death can occur within two hours if a battery is swallowed. If you suspect that a battery may have been swallowed or otherwise entered the body, seek medical attention immediately.
- Batteries must not be thrown into fire, short-circuited, disassembled or recharged. There is a risk of explosion!
- Drained batteries should be replaced as soon as possible to avoid damage due to leakage. Make sure the polarities are correct. Never use a combination of old and new batteries together, or batteries of different types.
- Remove the batteries if you will not be using the device for an extended period of time. Avoid contact with skin, eyes and mucous membranes when handling drained batteries.
- In case of contact, rinse the affected areas immediately with water and seek medical attention.

## Important information regarding the safe use of the product!

- Do not place the device near sources of high temperature, vibration or shock.
- Protect from moisture.
- The base is intended for indoor use only. Protect it from moisture.
- Outdoor sensors are waterproof, not waterproof.

### **DESCRIPTION OF THE INSTRUMENT**

#### Display:



- 1. External sensor channel
- 2. History of atmospheric pressure
- 3. Frost alarm symbol
- 4. Weather forecast
- 5. Pressure trend
- 6. Unit and pressure value
- 7. External sensor signal reception symbol
- 8. Minimum and maximum values of the external sensor
- 9. External sensor temperature trend
- 10. External sensor battery symbol
- 11. Minimum and maximum values of the indoor unit
- 12. Thermal comfort indicator
- 13. Temperature and humidity of the indoor unit
- Back cover and buttons:



- 1. SET/ALARM button
- 2. UP button
- 3. LIGHT/SNOOZE button
- 4. DOWN/MEM/RCC button
- 5. PRESSURE button
- 6. **ROOM** button
- 7. Hanging hole
- 8. Battery compartment
- 9. Tilt stand
- 10. Power connector

- 14. Indoor unit battery symbol
- 15. Phases of the Moon
- 16. DCF signal reception symbol, Daylight Saving Time (DST) symbol
- 17. In short, the day of the week
- 18. Date
- 19. Time
- 20. PM marking in 12-hour time format
- 21. Alarm clock symbols
- 22. Snooze symbol
- 23. Marking of the measuring point
- 24. External sensor humidity
- 25. External sensor temperature

#### Wireless temperature and humidity sensor:



- 1. Transmitted signal diode
- 2. Display
- 3. Hanging hole
- 4. Battery compartment
- 5. TX button
- 6. °C/°F button
- 7. Channel switch 1, 2, 3
- 8. Stand

## **GETTING STARTED**

- Place the device on a table with at least 1.5 m between the transmitters and the base. Avoid placing near potential sources of interference such as other electronic or wireless devices.
- Open the battery compartment of each transmitter.
- Set the switches inside the sensor battery compartment to channel 1 and channel 2.
- Insert 2 new 1.5V AAA batteries with the correct polarity into the battery compartment of both sensors.
- Carefully close the battery compartment.
- Connect the base to the mains using the supplied power adapter. All display segments will briefly light up and the base will beep.
- The weather symbol will flash on the base. Use the **UP** and **DOWN/MEM/RCC** buttons to set the symbol that most closely matches the current condition. The weather symbol will stop flashing if no button is pressed for 20 seconds.
- You can also insert 3 1.5 V AAA batteries into the base as a backup in case of power failure. Please observe the marked polarity.

### WIRELESS SIGNAL RECEPTION

- After the base station starts up and the weather symbol is finished setting, the search for the signal from the wireless sensors starts automatically. The wireless sensor signal search symbols flash on the display. It takes 3 minutes to receive the signal.
- If the signal from the external sensor is successful, the temperature and humidity data is displayed in sensor segment 1 or 2. The signal search symbol is permanently displayed (not flashing).
- If reception fails, then "----" will appear on the display. Check the batteries and repeat the procedure again if necessary. Also check for any nearby sources of interference.
- Wireless transmission can be triggered manually. Press the **ROOM** button to select the sensor on channel 1 or press the **ROOM** button again to select the sensor on channel 2. The currently selected sensor will flash a label indicating the location. Press and hold the **ROOM** button for a long time, the signal reception symbol of the selected sensor will flash and the station will try to pick up the signal from the sensor.
- The station will try to pick up a signal from a sensor it has already been paired with on the same channel since the last reset. To capture a signal from a different sensor on the same transmit channel, press and hold the **ROOM** button again while receiving a signal (the receive symbol flashes) the pairing of the original sensor will be cancelled.
- If the base station does not receive a signal from the transmitter for 60 minutes, "----" will appear on the display. The base will then try to receive a signal from the sensor again every hour. The data will reappear on the display when the connection between the base and the transmitter is re-established.

## **RADIO CONTROLLED TIME (DCF) RECEPTION**

- Once the base station has finished searching for transmitters, it will start looking for a DCF signal. The DCF icon will flash. (First the satellite tower symbol, and if a DCF signal is detected, the radio wave symbol will start flashing.)
- To reduce interference, the display backlight is switched off during DCF signal reception. The base also does not respond to buttons, except for SNOOZE/LIGHT and the DOWN/MEM/RCC button.
- If the DCF signal is successfully received within 2-7 minutes, the display will light up again and show the current time, date, moon phase and day of the week abbreviation. The display permanently shows the tower symbol with the satellite and radio waves.
- If signal reception fails, the current time is not set on the display and the DCF signal reception symbol disappears completely.
- To manually start a new DCF signal search, press and hold the **DOWN/MEM/RCC** button.
- If you are receiving a DCF signal but want to turn it off, press and hold the **DOWN/MEM/RCC** button. This will interrupt the current signal search, and the station will try again to search for a DCF signal at night.
- If you want to switch off the signal completely so that only the manually set time is permanently displayed, press and hold the UP and DOWN/MEM/RCC buttons. The radio wave symbol will appear on the display. You can switch the DCF reception function back on by pressing and holding UP and DOWN/MEM/RCC.
- The following DCF signal reception symbol states may appear on the display:

Icon	Icon status	Meaning of
	The satellite's flashing.	The unit is trying to pick up a DCF signal.
Su	Radio waves flash, satellite displayed constantly (or flashes about 1x per minute).	The unit has picked up the DCF signal, now receives it and sets the time information.
En	Satellite still, radio waves still.	I managed to catch the DCF signal and set the time accordingly.
Nothing	No icon is displayed (neither satellite nor radio waves).	DCF signal reception failed or did not take place. The unit will display the manually set time and retry to pick up the signal at
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1.00, 2.00 etc (see below).

Nonly radio waves still.

The reception of the radio-controlled DCF time **is completely switched off! The** manually set time will be displayed and no automatic attempts will be made to capture the DCF signal at 1.00, 2.00 etc.

- If signal reception is not disabled, the unit attempts to receive a DCF signal at 1:00, 2:00 and 3:00 each night. If reception fails, the indoor unit will try to receive the signal again at 4:00 and 5:00. (The time set on the indoor unit is critical for triggering the automatic DCF signal capture attempt.)
- If you are in a country where a DCF signal can be received but the time zone is different from the DCF time (Germany), you can set a different time zone on the station.
- The DCF signal also includes daylight saving time information. If the signal is successfully received and it is daylight saving time, the "DST" icon (daylight saving time symbol) will appear on the display.

## Note on DCF reception

The radio-controlled clocks are set according to the time signal of the cesium atomic clock from the Institute of Physics and Technology in Braunschweig. The deviation of this precise atomic time is less than 1 second in 1 million years. The time is encoded and transmitted from Mainflingen near Frankfurt in the long-wave band (77.5 kHz) and has a range of about 1 500 km. Your radio-controlled clock receives this signal and decodes it into the exact time. The signal automatically takes into account astronomical time corrections (summer and winter or normal time), leap years and any date changes. The quality of the signal reception depends mainly on the geographical location. Normally, it is not a problem to receive the signal within 1500 km of Frankfurt.

## However, pay attention to the following:

- The recommended distance from sources of interference (e.g. TV sets, computer monitors) is at least 1.5-2 m.
- In reinforced concrete rooms (e.g. basements) the received signal is naturally weaker. In extreme cases, place the unit close to a window.
- At night, reception is possible in most cases due to less frequent atmospheric disturbances.

### CONTROL

- Press and hold the UP or DOWN/MEM/RCC button for faster setting.
- You can also exit the time setting or alarm setting modes by not pressing any buttons for a few seconds.

## Backlight

- Battery powered: to switch on the short-term backlight for 5 seconds, press the **SNOOZE/LIGHT** button.
- Adapter power: press the button to set the backlight level (high, medium, low, off).

## Time, language, °C/°F unit, key sound settings

- To start the setup mode, press and hold the SET/ALARM button for 3 seconds.
- The first set value (ON or OFF key sound) will flash.
- Use the UP or DOWN/MEM/RCC buttons to set the desired value. Press the SET/ALARM button to confirm the setting and move on to the next setting.
- The order of the set values is as follows:
  - Key sound (ON/OFF)
  - $\circ$  Temperature unit (°C/°F)
  - $\circ$  Time zone (-12/+12)
  - Time format (24 hours/12 hours)
  - Year
  - Moon
  - Day
  - Hours
  - Minutes
  - Language
- If you set a 12-hour time format, from noon to midnight, "PM" will be displayed next to the time.
- In the settings you can choose from the following languages: English (EN), German (DE), Czech (CZ), Slovak (SK), Polish (PL), Hungarian (HU), Dutch (NL).

Depending on the language you choose, the following abbreviations of the day of the week will appear on the display:

	EN	DE	CZ	SK	PL	HU	NL
Monday	MON	MON	PON	PON	PON	HET	MAA
Tuesday	TUE	DIE	UTE	UTO	WTO	KED	DIN
Wednesday	WED	MIT	STR	STR	SRO	SZE	WOE
Thursday	THU	DON	CTV	STV	CZW	CSU	DON

Friday	FRI	FRE	PAT	PIA	PIA	PEN	VRI
Saturday	SAT	SAM	SOB	SOB	SOB	SZO	ZAT
Sunday	SUN	SON	NED	NED	NDZ	VAS	ZON

EN

## Alarm settings

- The weather station also has an alarm function with two alarm times.
- To display the alarm, briefly press the **SET/ALARM** button. The order of display is as follows: 1st alarm time (A1), 2nd alarm time (A2), current time.
- With this display of alarm time, you can switch alarms on or off by pressing the **UP** or **DOWN/MEM/RCC** buttons. If the alarm is on, the set alarm time and the bell symbol are displayed. If the alarm is off, "OFF" will be displayed.
- To reset the alarm time, you need to turn on and display the alarm as described above. You will see the alarm time and the bell symbol next to it, with the abbreviation A1 or A2 below the alarm time. Then long press and hold the **SET/ALARM** button. The alarm time clock will flash, use the **UP** and **DOWN/MEM/RCC** buttons to set it. Confirm the selection by pressing the **SET/ALARM** button. Then set the minutes of the alarm time in the same way.

## Alarm ringing and snooze function

- If the alarm is on, the base unit will beep at the set alarm time.
- To turn off the alarm, press any button except **SNOOZE/LIGHT**.
- The alarm will also switch itself off if no button is pressed for 2 minutes during the ringing.
- Press the **SNOOZE/LIGHT** button to interrupt the alarm tone for 5 minutes. The "ZZ" icon and the bell symbol will flash next to the time.
- The snooze function can be used up to 7 times, after which the alarm rings off.

### Maximum and minimum values

- Press the DOWN/MEM/RCC button to display the maximum measured values since the last reset.
- Press the DOWN/MEM/RCC button again to display the minimum measured values since the last reset.
- Minimum and maximum values are displayed for temperature and humidity from the internal built-in sensor and external sensors.
- Reset: if you press and hold the **DOWN/MEM/RCC** button for 2 seconds while viewing the minimum and maximum values, all these records will be reset. During reset, the temperature and humidity segments will display "- . -" and "- -" for 3 seconds, then the values will be overwritten with the current temperature and humidity value, then the display will return to normal mode.

#### Individual marking of sensors

- In normal mode, press the **ROOM** button. The sensor label 1 will flash. Press the **UP** or **DOWN/MEM/RCC** buttons to change the value to a different location name. Press the **ROOM** button again to switch to sensor 2, and you can reset the value in the same way again. Press the **ROOM** button a third time to return to normal mode.
- The displayed names of the sensor locations depend on the set language, just like the day of the week abbreviations. You can choose from the following options:

EN	DE	CZ	SK	PL	HU	NL
BATH	BAD	KOUPE	KUPEL	LAZNK	FURDO	BAD
BEDRM	SCHLF	LOZNI	SPALN	SYPLN	HALO	SLAAP
KID1	KIND1	DITE1	DIET1	DZEC1	GYER1	KIND1
KID2	KIND2	DITE2	DIET2	DZEC2	GYER2	KIND2
YARD	GARTN	ZAHRA	ZAHRA	OGROD	KERT	TUIN

- You can also set your own location names. You can use a maximum of 5 characters A to Z, 0 to 9 and various symbols (e.g. <, >, +, -, \*).
- Press the **ROOM** button. When the room label flashes, press and hold the **SET/ALARM** button.
- The first letter will flash. Use the UP or DOWN/MEM/RCC buttons to select the desired character. Press the SET/ALARM button to confirm the selection and move on to setting the next character. Once you have typed the location name, press the SET/ALARM button (1 time if you have used all 5 characters, 2 times if you have used fewer characters).
- You can have up to 5 different custom measurement point names in memory. If you store additional names, the older names of the measuring points will be overwritten (chronologically from the oldest).

#### Weather forecast and pressure settings

• The station displays an indicative weather forecast for 12 hours based on changes in atmospheric pressure. Please note that the weather station only shows the general weather trend. If, for example, the station shows a rain symbol but it is not raining, this does not mean that the station is faulty. It only means that the air pressure has dropped and a worsening of the weather is expected, but not necessarily rain. The success rate of weather forecasts is around 70%.

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• The forecast is displayed with 6 symbols: clear, partly cloudy, cloudy, rain, storm, snow.

- The snowfall symbol will appear if the station is forecasting precipitation and the temperature on the external sensor of channel 1 is 0 °C or lower (rain will be displayed at higher temperatures).
- When the station is initially started, the current cloud status is set so that the station knows what the initial weather condition is (see the Getting Started section above). You can change the displayed forecast symbol at any time.
- To start the pressure setting mode, press and hold the **PRESSURE** button for a long time.
- The first setpoint (weather symbol) flashes. Set the desired value using the UP and DOWN/MEM/RCC buttons. Then confirm the set value by pressing the SET/ALARM button.
- In the next setting you can choose the pressure unit (hPa or inHg). Use the UP and DOWN/MEM/RCC buttons again to make the setting, press the SET/ALARM button to confirm and move on to the next value.
- The relative pressure value is also set, which is related to the altitude and must therefore be set individually. Find out the pressure value in your area (on the internet, from a nearby weather station, airport...). Use the **UP** and **DOWN/MEM/RCC** buttons to set the pressure value, press the **SET/ALARM** button to confirm and exit the pressure setting and weather forecast mode.

## History of pressure

• Short presses of the **PRESSURE** button allow you to view the history of the pressure value over the last 12 hours.

### **Room climate indication**

• The climate level at the measuring point is shown on the display with a smiley icon:

icon	temperature	condition	relative humidity
$\vdots$	19 - 25 °C	and at the same time	40 - 60 %
$\vdots$	15-18,9 °C, 25,1-30 °C	or	30-39 %, 61-70 %
Ē	<15 °C, >30 °C	or	<30 %, > 70 %

### Phases of the moon

• The weather station also displays the moon phase with 12 symbols:



### Frost alarm

• Frost alarm symbol - appears on the display if the temperature of the external sensor on channel 1 is 0 °C or lower.

## **Trend indicators**

- The arrows indicate whether the measured temperature, humidity or pressure is decreasing, increasing or unchanged.
- The weather station evaluates the measurements for the last hour. The arrow for a given sensor and value will point up or down if the change in the last hour is at least 1 °C, 5% RH or 1 hPa.

## LOCATION

- The indoor unit and wireless sensors can be placed on a pad using the flip-up stand or hung using the hanging holes.
- Avoid proximity to sources of interference such as PC monitor, TV, various metal objects, etc. The indoor unit is designed to be placed indoors. Place the outdoor sensor in a dry and shady place (direct sunlight affects the measurement and constant exposure to moisture puts unnecessary strain on the electrical components).
- Check that the signal from the sensor reaches the indoor unit from the intended location (max. 100 m in an open area without obstacles). In concrete buildings, the received signal is naturally weaker. If necessary, select another location for the transmitter or indoor unit.

## CARE AND MAINTENANCE

- Clean the device with a soft, damp cloth. Do not use cleaning agents.
- Remove the batteries if you will not be using the device for a long period of time.
- Keep the indoor unit in a dry place.

## **BATTERY CHANGE**

- Replace the batteries in the wireless sensor if the battery symbol appears on the display next to the transmitter readings.
- Replace the batteries in the indoor unit if the battery symbol appears on the indoor display.
- **Please note**: after replacing the batteries, contact between the outdoor transmitters and the station must be re-established so proceed as when you first start the unit or start a manual search for a transmitter.

### **PROBLEM SOLVING**

The display shows no or incomplete data:

- Make sure the batteries are positioned correctly.
- Replace the batteries.
- Restart the base and transmitter(s).

No reception from the transmitter. "-.--" is displayed:

- Transmitter(s) not installed.
- Replace the batteries.
- Start a manual search for the transmitter.
- Select a different location for the transmitter/base.
- Reduce the distance required for data transmission between the transmitter and the base station.
- Check for any nearby sources of interference.

#### No DCF reception:

- Start a new DCF signal reception: press the **DOWN/MEM/RCC** button for 5 seconds.
- Check that the radio signal reception is not switched off (if reception is switched off, the radio icon without the satellite tower symbol is permanently displayed next to the time information).
- Wait for DCF reception at night.
- Choose a different location for the base.
- Check for any nearby sources of interference.
- Restarts the device.
- Set the time manually.

#### WASTE PROCESSING

The product was made from premium materials and components that can be recycled and reused.

Never dispose of empty batteries and rechargeable batteries in household waste.

As a consumer, you are responsible for taking them to an electrical store or local waste collection point, according to your current legislation, and thereby protecting the environment.

The symbols of the heavy metals contained are as follows: Cd = Cadmium, Hg = Mercury, Pb = LeadThis device is marked with the European Waste Electrical and Electronic Equipment (WEEE) label. Please do not dispose of this device in household waste. The user is obliged to take the end-of-life device to the appropriate collection point for electrical waste to ensure that it is processed in accordance with the environment.



## SPECIFICATIONS

#### Base

Power adapter (5V DC 1A 5W) or 3 pcs of 1.5 V AAA batteries (only as a backup)
-9,9 +50 °C
±1 °C
20 95 % RV
± 5 %
849 1 050 hPa
140 x 103 x 25 mm
176 g

#### Wireless temperature and humidity sensor

Wireless transmission range:	max. 100 m in open space
Transmitting frequencies:	433 MHz
Power supply:	2 x 1.5 V AAA batteries
Temperature measurement range:	-40°C+60°C
Accuracy of temperature measurement:	$\pm 1^{\circ}$ C in the range 0-50°C, otherwise $\pm 1.5^{\circ}$ C
Moisture measurement range:	2095 % rH
Moisture measurement accuracy:	$\pm$ 5%
Dimensions:	50 x 105 x 26 mm
Weight:	56 g

Manufacturer: Bibetus, s.r.o., Loosova 1, Brno 638 00, Czech Republic

Hereby, Bibetus s.r.o. declares that the radio equipment typ Airbi DUO COLOR (model YJ5087VA) is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the internet address: www.airbi.eu

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