SKYWATCH® PRO

SWISS ✛ MADE

INSTRUCTIONS FOR USE

GETTING STARTED

Thank you for purchasing this multifunction measuring instrument, designed and manufactured in Switzerland. For accurate measurements, please read the instructions and follow the precautions for use.

This instrument is designed to help users who find themselves outdoors, it informs you about the conditions in your environment in real time. However, it does not make weather forecasts and cannot replace the advice and warnings of the local weather station. Weather conditions outside can sometimes change very quickly. Sunny weather, for example, can turn into a thunderstorm in half an hour or less. So, you should always observe basic safety rules when undertaking any outdoor activity.

MAIN FEATURES

- Sapphire bearing propeller
- Temperature/humidity sensor
- Battery indicator
- Page number indicator
- Beaufort scale
- Central ON/OFF button
- 3 selectable functions
- Left side button
- Right side button

SWITCHING ON

To switch on the instrument, briefly press the central button. It displays the software version, then the last page read before switching off (or the first page when using the SKYWATCH® Pro for the first time). THE PAGES ARE ORGANISED BY DEFAULT, BUT CAN BE CUSTOMISED.

FUNCTIONS OF THE CENTRAL BUTTON

The central button allows different actions to be taken on the instrument depending on how long it is pressed.

Press briefly	→	Switch the instrument on and off
Press for 1 second	→	Modify a value
Press for 2 seconds	→	Modify page content
Press for 3 seconds	→	Deactivate automatic switch off
Press for 4 seconds	→	Shut down the instrument
More than 4 seconds	→	Exit the menu

CUSTOMISE YOUR SKYWATCH EXPERIENCE

The SKYWATCH® Pro gives users the option of choosing the functions they wish to display. They can choose between different units for a type of measurement, as well as which type of measurement they want to appear on which page, and modify certain values.

Set a value
(Press the central button for 1 second)
When this function is selected from the central button, a cursor appears on the first modifiable value on the page. This selection frame can be moved using the buttons to the left and right of the central button.
Press the central button to select the function whose value you want to change, then use the side buttons to increase or decrease the value you want to set. If there is no adjustable value on this page, the "set value" function will be ignored.

Modifying the content of a setup page
(Press the central button for 2 seconds)
The user can modify each of the 3 areas of the screen. Each value and each unit of measurement can be selected for each section of the screen.
When the "setup" function is selected, a cursor appears on the first section visible on the screen. The cursor can be moved using the side buttons and the central button is used to select the chosen value.
The right-hand button is used to change the unit of measurement, while the left-hand button is used to change the type of measurement.
Pressing the central button confirms the new setting.

SWITCHING OFF

Auto-off

The SKYWATCH® Pro automatically switches off one minute after the last button has been pressed or after the last wind measurement has been taken.

Manual switch-off

To manually deactivate the SKYWATCH® Pro, simply press the central button briefly to turn off the device.

Deactivate automatic switch-off

Pressing the central button for 3 seconds deactivates the automatic switch-off of the instrument.

Deactivating the automatic switch-off of the instrument means that the instrument will remain switched on until the central button is pressed or until the battery is empty.

SHUTDOWN MODE

If the device will be not used for a long period of time, battery depletion can be minimized by switching the unit off completely.

Please note that this function also turns off the clock, which will need to be reset when the instrument is switched on.

To maximize the life expectancy of the battery during a long storage period, it is more efficient for the unit to be fully charged before it is switched off. A fully charged battery before the unit is shut down gives a storage time of around 2 years in this mode.

DEFAULT DISPLAY

A short press on one of the side buttons allows you to move from one page to another.

Functions on default pages

8 pages are accessible on the instrument. The default contents when the SKYWATCH ® Pro is switched on are as follows: (See details in default page content)

Page 1: Real-time, maximum and average wind speed.

Page 2: Wind speed, wind direction angle (compass degrees and graph).

Page 3: Wind speed, temperature, perceived temperature.

Page 4: Temperature, humidity, dew point.

Page 5: Local pressure, sea level pressure, altitude above sea level.

Page 6: Local pressure, pressure at reference level, height above reference level.

Page 7: Altitude above sea level, variometer (altitude variation).
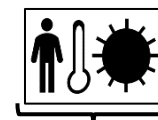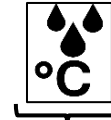
Page 8: Time, date, year.
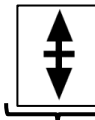
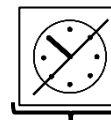## Key symbols

Temperature felt	Windchill	Heat index	Dew point

Variometer	Beaufort scale	Auto Off activated	Auto Off deactivated

BATTERY

Your SKYWATCH® Pro is powered by a 230 mAh lithium battery. This battery can be recharged using a QI induction charger. It takes an estimated 1.5 hours to fully recharge the SKYWATCH® Pro.

PLEASE RECYCLE the instrument correctly, in accordance with current regulations, when it reaches the end of its life.

MAINTENANCE

- Great care has been taken in the design and manufacture of this instrument. To make the most of the functions offered, we recommend that you use the instrument in accordance with the following instructions:
- Avoid at all costs the intrusion of objects such as hair, threads, sand and other dust inside the propeller, as this will cause the propeller to rotate incorrectly and thus result in a loss of precision. If a hair or thread does manage to get inside the propeller, remove it carefully with tweezers; if it is dust or sand, you can run the propeller under clear water.
- Avoid touching the temperature/humidity sensor.
- The instrument does not float and is not designed to be immersed in water.
- If the instrument has been immersed in water or subjected to excessive humidity, the humidity sensor may need time in a dry place before working properly again.
- Avoid exposing the instrument to extreme weather conditions for too long. Although it uses components that are resistant to these temperatures, we recommend that you do not expose your instrument to strong sources of heat, such as under the windscreen of a car, for example.
- Avoid rough handling or shocks.
  DO NOT expose the instrument to strong chemicals. These products could damage the instrument.

NON-LIABILITY NOTICE

JDC ELECTRONIC SA cannot be held responsible for any consequences, direct or indirect, and for any damage that may result from the use of this equipment.

TECHNICAL DETAILS

Measurement units

Wind speed	km/h – m/s – knots – mph – fps – Beaufort
Temperature	°C –°F
Humidity	%Hr
Barometric pressure	hPa – inch Hg – mmHg
Altitude	m – ft – Flight Level
Variometer	m/s – ft/s

Measurement range

Wind speed	0 to 185 km/h
Temperature	-40°C to +70°C
Humidity	10 to 100% Hr
Barometric pressure	260 hPa – 1260 hPa
Altitude	-500 to 9999m

Precision

Wind speed	± 2%
Temperature	± 0.3°C at 25°C
Humidity	± 2% at 50% rH
Barometric pressure	± 0.02% at 25°C ± 0.2 hPa at 25°C
Clock	Drift of ±1 s per day at 20°C

Display resolution

Wind speed	0.1 unit < 99.9 then 1 unit > 100
Temperature	0.1° < 99.9°, then 1° > 100°.
Humidity	0.1% rH
Altitude	0.1m from -999.9m to 3 000m 0.5m from 3000m to 10 000m
Barometric pressure	0.1 hPa – 0.01 in Hg – 0.075 mmHg
Variometer	0.1 units

Temperature of use

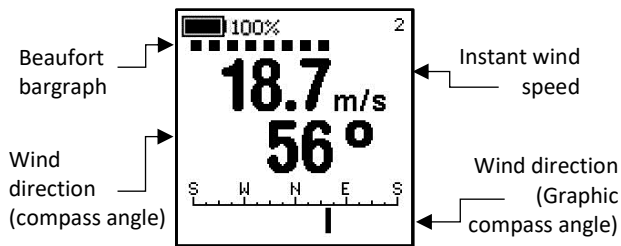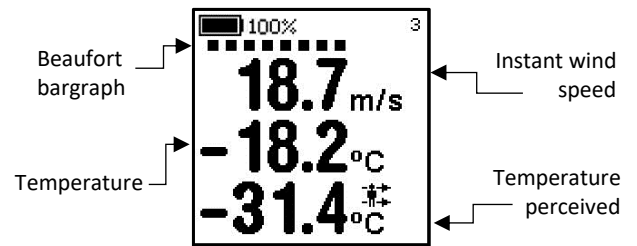|	
Easy-to-read	+70°C to -10°C
Possible reading	-10°C to -20°C
Display very slow but instrument functional (Sensors working correctly)	-20°C to -40°C

DEFAULT PAGES CONTENT

Home page :

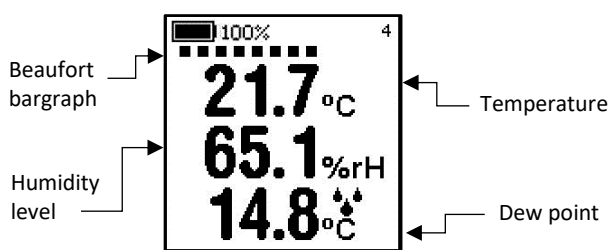JDC Instruments logo

Version of the product

Latest software update

Software version

Skywatch Pro
Software V1 01.Nov.2023

Page 1 : (default)

Beaufort bargraph

Speed max wind

Instant wind speed

Average wind speed

100% 1
18.7 m/s
29.1 max m/s
16.8 avg m/s

Page 2 : (default)

Beaufort bargraph

Wind direction (compass angle)

Instant wind speed

Wind direction (Graphic compass angle)

100% 2
18.7 m/s
56 °
S W N E S

Page 3 : (default)

Beaufort bargraph

Temperature

Instant wind speed

Temperature perceived

100% 3
18.7 m/s
-18.2 °C
-31.4 °C

Page 4 : (default)

Beaufort bargraph

Humidity level

Temperature

Dew point

100% 4
21.7 °C
65.1 %rH
14.8 °C

Page 5 : (default)

Beaufort bargraph

Pressure at sea level

Atmospheric pressure

Altitude above sea level

100% 5
964.3 hPa
1023 QNH hPa
503.1 m

Page 6 : (default)

Beaufort bargraph

Pressure at reference level

Atmospheric pressure

Altitude above the reference

100% 6
964.3 hPa
980.1 QFE hPa
133.2 QFE m

Page 7 : (default)

Beaufort bargraph

Digital altitude change rate

Altitude above sea level

Speed of change altitude change

100% 7
503.1 m
8.3 m/s
-20 -10 0 10 20

Page 8 : (default)

Beaufort bargraph

Date

Clock

Year

100% 8
18:30:20
07.NOV.
2023

NON-ADJUSTABLE MODES :

Non-adjustable default pages for Set mode Value (modify values) :
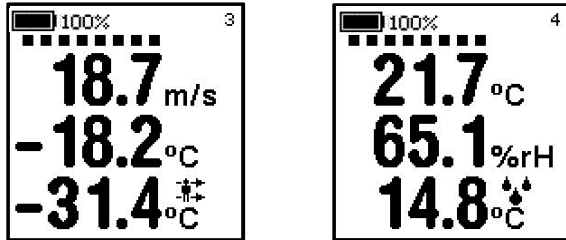
List of non-adjustable values:

- Wind speed (instantaneous, average)
- Temperature (average, felt)
- Dew point
- Variometer
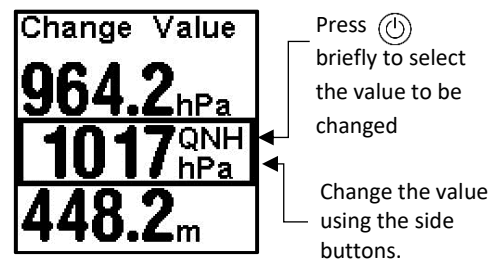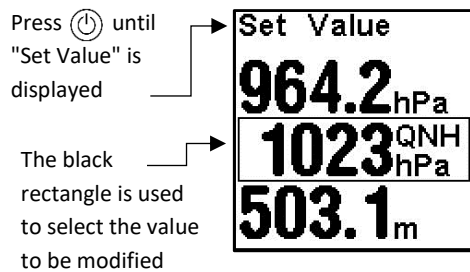- Humidity
- Local pressure

LATERAL CONTROL BUTTONS :

- The (▣) button allows you to go down
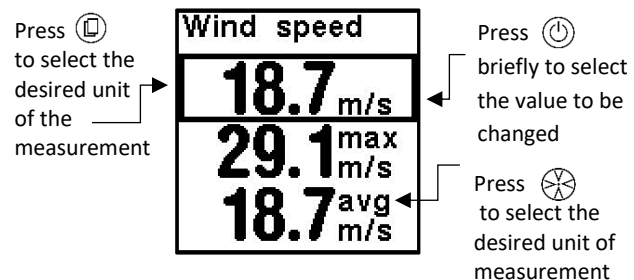- The (✳) buton moves up

MODE SETTINGS:

Modify a value (Set Value):

1. Press the central button until "Set Value" appears at the top of the screen to change the value of a function.
2. Use the side buttons (▣)(✳) to move the cursor to select the function to be modified, then press the central button (⏻) to confirm your choice.
3. Use these side buttons to adjust the selected value, then press (⏻) to confirm the changes you have made.

Press (⏻) until "Set Value" is displayed

The black rectangle is used to select the value to be modified

Press (⏻) briefly to select the value to be changed

Change the value using the side buttons.

Modifying the organization of the page (Setup):

1. Press the central button until "Setup" appears at the top of the screen to change the type of measurement displayed at a location.
2. Move the cursor using the side buttons (▣)(✳) to select the location of the function to be modified, press the central button (⏻) to confirm your choice
3. Use the left-hand button (▣) to change the type of function to be displayed, and the right-hand button to change the unit displayed.
4. Press (⏻) to confirm your changes.

Press (⏻) until "Setup" is displayed

The black rectangle is used to select the value to be modified

Press (▣) to select the desired unit of the measurement

Press (⏻) briefly to select the value to be changed

Press (✳) to select the desired unit of measurement
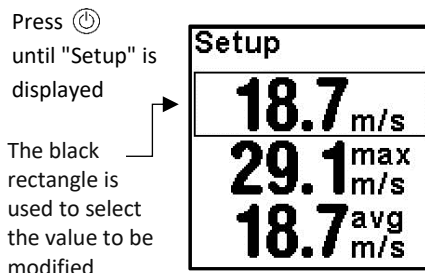
CLOCK SETTINGS

1. Go to page 8 of your SKYWATCH® Pro if the functions have not been moved. If you have already personalized the functions of your SKYWATCH® Pro, go to the location where you have placed the time, date and year functions.
2. Press the central button until "Set Value" appears at the top of the screen to change the date, time or year.
3. Move the cursor using the side buttons to select the line to be modified, then press the central button to confirm your choice.
4. Use the side buttons to adjust the selected value, then press to confirm the changes you have made.

Change the time

Change the date

Change the year

TEMPERATURE SPECIFICITY:

The SKYWATCH® Pro provides a precise measurement of the temperature felt in different weather conditions:

1. Cold environment: Wind chill display (see illustration 1 below).
2. Temperate environment: Displays the perceived temperature (see illustration no. 2 below).
3. Hot environment: Heat stress is displayed (see illustration n°3 below).
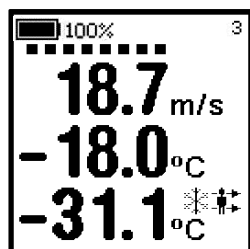
1) Low temperatures
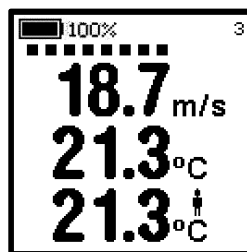

2) Standard temperatures
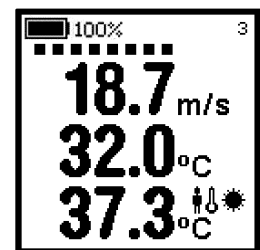

3) High temperatures

COMPASS
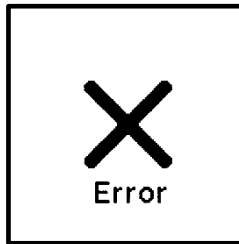**Calibration:**

The compass can be used in two ways:
- Horizontal calibration: Use the compass as you would a conventional compass.
- Vertical calibration: Position the propeller axis parallel to the ground.
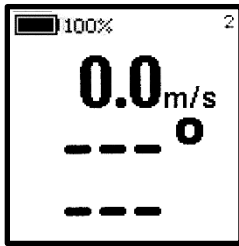
To calibrate the instrument, follow these steps:
Switch on the instrument > Go to page 2 > press ⏻ and hold until "Set Value" is displayed, then choose one of the functions shown with `--- °` or `---` > the screen will display the type of calibration required (vertical or horizontal).
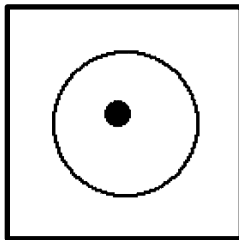
To calibrate the vertical compass of the anemometer, hold the SKYWATCH® Pro with the axis of the propeller parallel to the ground. Rotate the instrument a few times, taking care to avoid moving the point outside the circle, then press the central button to record the calibration measurement.

To calibrate the horizontal compass of the anemometer, hold the SKYWATCH® Pro with the axis of the propeller perpendicular to the ground. Rotate the instrument a few times, taking care to avoid moving the point outside the circle, then press the central button to record the calibration measurement.

If your calibration measurement is insufficient or incorrect, the screen may display the image shown on the left. This indicates that your measurement contained too many errors and that you need to repeat the procedure.

How to use it:
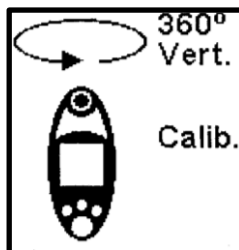
1. Vertical use:
Place the SKYWATCH® Pro facing into the wind, ensuring that the axis of the propeller is parallel to the ground. Once calibrated, a value will be displayed correctly when you hold the anemometer correctly.

Optimum use is when the inclination of the propeller axis is straight to within ± 10°. Although measurements up to ±20° are possible, the accuracy decreases. For best results, keep the axis parallel to the ground.
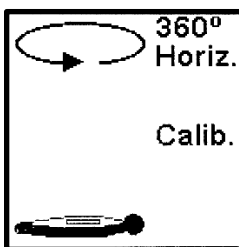
2. Horizontal use :
Position your SKYWATCH® Pro horizontally, like a conventional compass. If the screen displays three dashes `---` or `--- °` , the anemometer is not in the correct position. In this case, orientate it so that the axis of the propeller is perpendicular to the ground; once correctly oriented, the angle will be displayed.

If you regularly use the compass function in a vertical position, we strongly recommend that you use the carbon vane wind vane sold with this product to give the anemometer greater stability and more accurate measurements. The wind vane can be fixed to a tripod to refine your measurements.
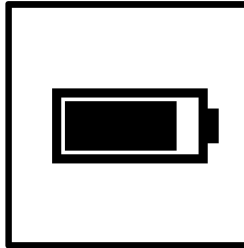
BATTERY DISPLAY

Flat battery
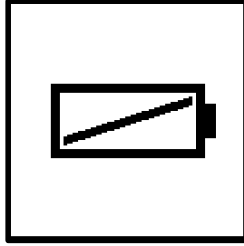
When the battery of your SKYWATCH® Pro is empty, the following icon is displayed. You should recharge it as soon as possible.

Battery on charge

When your SKYWATCH® Pro is recharging, it displays the following icon. If it is not displayed, it is not correctly positioned on the charger.

JDC ELECTRONIC SA
Avenue des Sports 42
1400 Yverdon-Les-Bains
Switzerland
info@jdc.ch www.jdc.ch

IMPORTANT INFORMATION ABOUT RECYCLING THE PRODUCT

The product, its packaging and the battery supplied are made from valuable materials that can be recycled. Recycling reduces the amount of waste and helps to preserve the environment
Take the packaging to a recycling point that sorts materials by type. Use local facilities for collecting paper, cardboard and light packaging by type.

**Appliances marked with this symbol must not be disposed of with household waste! You are legally obliged to dispose of old appliances separately from household waste.
Information on collection points where old appliances can be disposed of free of charge is available from your local authority.**