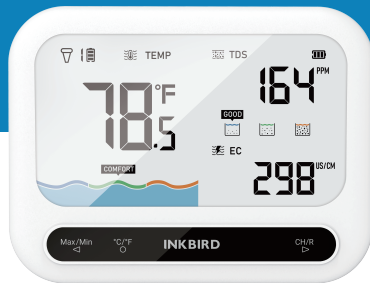


INKBIRD

ACCURATE DETECTION
**WIRELESS
POOL
MONITOR**

IBS P04R





Please keep this manual properly for reference. You can also scan the QR code to visit our official website for product usage videos. For any usage issues, please feel free to contact us at **support@inkbird.com**.

- Wenn Sie eine Bedienungsanleitung in deutscher Sprache benötigen, scannen Sie bitte den QR-Code und besuchen Sie unsere Website, um sie zu erhalten und ein Video über die Verwendung des Produkts zu sehen.
- Se avete bisogno di un manuale di istruzioni in italiano, scansionate il codice QR e visitate il nostro sito web per ottenerlo e vedere un video su come utilizzare il prodotto.
- Si vous avez besoin d'un mode d'emploi en français, veuillez scanner le code QR pour visiter notre site officiel afin d'obtenir et de visionner la vidéo d'utilisation du produit !
- Als je een Nederlandstalige handleiding nodig hebt, scan dan de QR-code om naar onze officiële website te gaan en bekijk de video over het gebruik van het product!
- Si necesita el manual de instrucciones en español, escanee el código QR para ir a nuestro sitio web oficial y ver el vídeo sobre cómo utilizar el producto.



Warm tips

- To quickly jump to a specific chapter page, click on the relevant text on the contents page.
- You can also use the thumbnail or document outline in the top left corner to quickly find a specific page.

CONTENTS

Overview	01
----------------	----

Preparation Before Using	01
--------------------------------	----

Product Introduction	02
----------------------------	----

Product Specifications	06
------------------------------	----

Add Sub-Devices	07
-----------------------	----

Precautions for Use	08
---------------------------	----

Troubleshooting	09
-----------------------	----

FCC Requirement	12
-----------------------	----

IC Warning	14
------------------	----

Customer Service	15
------------------------	----

01


Overview

The INKBIRD Solar Powered Wireless Pool Monitor is equipped with high precision sensors, is waterproof to IP68, the highest protection rating, and supports solar power charging, allowing the battery to be recharged wherever there is sunlight. There is no need to replace the battery or worry about water ingress, which is convenient and environmentally friendly. It comes with an indoor monitor that supports a long unobstructed transmission distance of up to 300 meters (982 feet), so you can easily monitor the pool water temperature and the TDS and EC detection levels indoors.

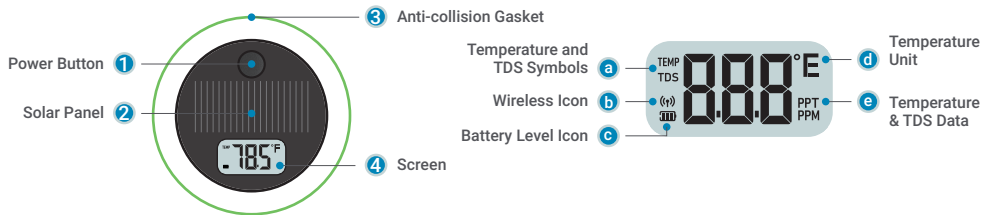
Note: ITDS and EC parameters are for reference only and are not intended as a professional guide.

02

Preparation Before Using

- 1 Make sure the batteries of the indoor monitor (receiver) are installed correctly and working properly.
- 2 Press the power button on the pool monitor to switch it on. After switching on, briefly press the power button to change the temperature unit to °C or °F. To switch off the pool monitor, press and hold the power button for 5 seconds.
- 3 We recommend that you place the pool monitor in a location exposed to strong sunlight and use it after the battery reaches three bars (). If you will use it in the sun for a long time, please ignore this step.

A.Pool Thermometer (Transmitter)




1 Power Button: When switched off, press to switch on; when switched on, press briefly to change the temperature unit; press and hold for 5 seconds to switch off.

2 Solar Panel: Do not block or cover the solar panel.

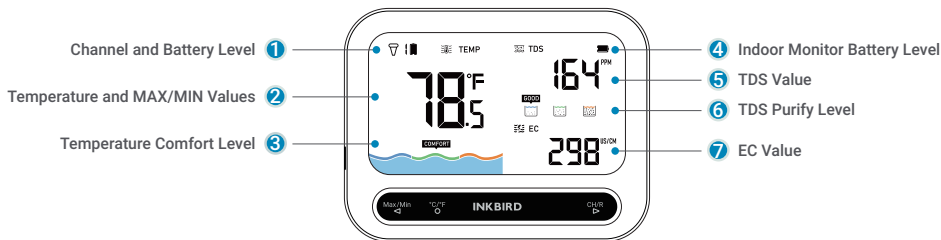
3 Anti-collision Gasket: Protects the product and reduces noise caused by the unit hitting the wall.



4 Screen:

a Temperature and TDS Symbols: TEMP on means that currently the water temperature is displayed; TDS on means that currently the detection value of water quality is displayed.

- b Wireless Icon:** Flashes once when transferring data.
- c Battery Level Icon:** Three bars means the battery capacity is full; when the  icon flashes, it means the battery is too low.
- d Temperature Unit:** Press the power button to switch between °C and °F.
- e Water Temperature & TDS Data:** Displays real-time water temperature or TDS water quality detection value (two values displayed in turn); water temperature display accuracy is 0.1°F (0.1°C), TDS display accuracy is 1 ppm (displayed in ppm) or 10 ppt (displayed in ppt). Please note that the device will automatically switch to ppm or ppt according to the current measurement range.

B. Indoor Monitor (Receiver)



- ① **Channel and Its Battery Level:** The current channel and its battery level are displayed. When the channel is switched to 0, all the linked channels will be displayed in turn every 2 seconds; when the  icon flashes, it means that the battery level of the pool monitor under the current channel is too low.
- ② **Water Temperature and MAX/MIN Values:** Displays the real-time water temperature (with display accuracy of 0.1°F/ 0.1°C), and displays the maximum and minimum data in all time in the Max/Min mode.
- ③ **Water Temperature Comfort Level:** Displays that the water temperature is currently in Cold/Comfort/Hot state. Comfort range is set to 78 ~ 86°F (25.5°C ~ 30°C) by default.
- ④ **Indoor Monitor Battery Level:** Shows the battery level of the indoor monitor. When the  icon flashes, it means the battery is too low.
- ⑤ **Real-time TDS Water Quality Detection Value:** Displays the TDS water quality value currently detected, with display accuracy of 1 ppm.
- ⑥ **TDS Water Purify Level:** Displays the current water purify level—Good/Fair/Poor; Fair range is set to 500-2000 ppm by default. The lower the TDS water quality detection value, the lower the amount of dissolved substances in the water and therefore the purer the water quality. Please note that it is recommended that the TDS water quality detection value in the pool does not exceed 2000ppm.
- ⑦ **Real-time EC Water Quality Detection Value:** Displays the EC water quality value currently detected, with display accuracy of 1us/cm. The EC value is the index used to measure the total amount of dissolved substances in water and reflects the water's ability to conduct electricity. The higher the EC value, the higher the amount of dissolved minerals and

ions in the water. Please note that it is recommended that the EC value does not exceed 3500 us/cm.

Indoor Monitor Operating Buttons

Max/Min ◀	°C/°F ○	CH/R ▶	Max/Min ◀ + CH/R ▶
<ul style="list-style-type: none">● Single Press: to display the max/min values of water temperature.● Long Press: to reset the max/min record.● In setting state: press to increase/decrease number; long pressing for quick adjustment.	<ul style="list-style-type: none">● Single Press: to change the temperature unit.● Long Press: to enter the setting mode.	<ul style="list-style-type: none">● Single Press: to change channels.● In setting state: press to increase/decrease number; long pressing for quick adjustment.	<ul style="list-style-type: none">● Press and hold both the Max/Min and CH/R buttons for 3 seconds to reset the channels.

After entering the setting mode:

1. " **COLD** " icon flashes, press the ◀ or ▶ button to adjust the number. If the water temperature is lower than this value, " **COLD** " will be displayed), then confirm and press " ○ " to proceed to step 2;
2. " **HOT** " icon flashes, press the ◀ or ▶ button to adjust the number. If the water temperature is higher than this value, " **HOT** " will be displayed), then confirm and press " ○ " to proceed to step 3;
3. " **GOOD** " icon flashes, press the ◀ or ▶ button to adjust the number. If the TDS water quality detection value is lower than this value, " **GOOD** " will be displayed), then confirm and press " ○ " to proceed to step 4;
4. " **POOR** " icon flashes, press the ◀ or ▶ button to adjust the number. If the TDS water quality detection value is higher than this value, " **POOR** " will be displayed), then confirm and complete the setting.

- **Battery:** 2*AAA 1.5V (included)
- **Transmission Distance:** up to 300 meters (980ft) in open space (if there is interference, the transmission distance will be limited.)

Indoor Monitor (Receiver)

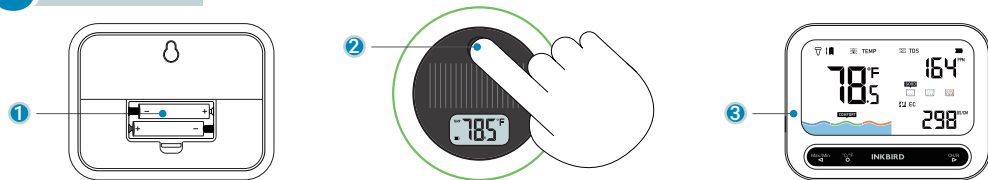
- **Temperature Display Range:** -40°C~70°C (-40°F~158°F)
- **Temperature Display Accuracy:** 0.1°C (0.1°F)
- **TDS Water Quality Detection's Display Range:** 0~9999ppm
- **TDS Water Quality Detection's Display Accuracy:** 1ppm
- **EC Water Quality Detection's Display Range:** 0~20000us/cm
- **EC Water Quality Detection's Display Accuracy:** 1us/cm
- **Maximum Number of Pool Monitor Channels Supported at The Same Time:** 9

Pool Monitor (Transmitter)

- **Temperature Measurement Range:** -40°C~70°C (-40°F~158°F)
- **Temperature Measurement Accuracy:** $\pm 1^{\circ}\text{C}$ ($\pm 1.8^{\circ}\text{F}$)
- **Temperature Display Accuracy:** 0.1°C (0.1°F)

- **TDS Water Quality Detection Range:** 0~9999ppm
- **TDS Water Quality Detection Accuracy:** $\pm 2\%$ F.S.
- **TDS Water Quality Detection's Display Accuracy:** 1ppm (ppm in unit) or 10ppm (ppt in unit); The device will automatically switch to ppm or ppt according to the current measurement range.
- **EC Water Quality Detection Range:** 0~20000us/cm
- **EC Water Quality Detection Accuracy:** $\pm 2\%$ F.S.
- **Sampling period:** 5 seconds
- **Waterproof grade:** IP68
- **Warranty:** 1 year

05 Add Sub-Devices



- 1 Firstly, make sure the batteries of the indoor monitor (receiver) are installed correctly and working properly.

- ② Secondly, make sure the pool monitor (transmitter) has been switched on, and then place the pool monitor as close to the indoor monitor (receiver) as possible. After that, press the power button on the pool monitor (transmitter) once.
- ③ Once the indoor monitor (receiver) receives the data sent from the pool monitor (transmitter), the connection between them is established automatically, and the indoor monitor (receiver) completes adding a sub-device and will display the channel number of the pool monitor (transmitter).

Note: If you fail to add sub-devices, please restart the pool monitor (transmitter), and repeat steps 1~3 to add the device. Alternatively, press the power button on the pool monitor (transmitter).

06

Precautions for Use


- a. Please do not disassemble the product if you are not a professional.
- b. Be sure that the sensor is not covered with dust, as dust may lead to inaccurate measurements.
- c. Do not use alcohol to clean the sensor.
- d. Do not dispose the product in a fire as it may explode. Please observe local regulations for proper disposal of discarded electronic products.
- e. Remove from pool when not in use or while cleaning the pool so unit is not damaged by skimmers or other devices.
- f. The temperature measurement range of the pool monitor (transmitter) is $-40^{\circ}\text{C}\sim 70^{\circ}\text{C}$ ($-40^{\circ}\text{F}\sim 158^{\circ}\text{F}$), so it is not suitable

for use in a harsh environment below -40°C/ -40°F or above 70°C/158°F.

- g. The TDS water quality measurement range of the pool monitor (transmitter) is 0~9999ppm, so it is not suitable for use in a harsh environment above 9999 ppm.
- h. The EC water quality measurement range of the pool monitor (transmitter) is 0~20000us/cm, so it is not suitable for use in a harsh environment above 20000 us/cm.

07

Troubleshooting

Malfunction Phenomenons	Possible Causes	Possible Reasons
The  icon flashing on the pool monitor's screen. No display on the pool monitor's screen.	The pool monitor hasn't been charged by solar power for a long time, so it's out of power.	Place it in a location exposed to strong sunlight for 10 hours. The stronger the sunlight the better. Then, restart the pool monitor. The pool monitor will automatically switch on after recharging if it is in operation when the power is cut.

Fault Phenomenon	Possible Cause	Possible Solution
No display on the indoor monitor's screen	Batteries are installed incorrectly.	Reinstall the batteries.
TDS water quality detection result of the pool monitor is incorrect	There is limescale or obstacle on the TDS water quality detection probe.	Remove the limescale or obstruction regularly.
"H" appears on the indoor monitor screen	The temperature is higher than 70°C/158°F.	Place the pool monitor in an environment with normal temperatures.
"L" appears on the indoor monitor screen	The temperature is lower than -40°C/40°F.	
Temperature displayed as " - - " on the indoor monitor screen	<p>The pool monitor (transmitter) has run out of battery power or is too far away to remain connected.</p> <p>The pool monitor (transmitter) has not been paired.</p>	Make sure the pool monitor (transmitter) has been switched on, and then place the pool monitor as close to the indoor monitor (receiver) as possible. After that, press the power button on the pool monitor (transmitter) once.

Fault Phenomenon	Possible Cause	Possible Solution
Temperature of the pool monitor is out of sync with the indoor monitor	The temperature fluctuation difference is less than 0.3°C.	<p>When the water temperature fluctuation difference is $<0.3^{\circ}\text{C}$, it syncs every 15 minutes;</p> <p>When the water temperature fluctuation difference is within 0.3 to 0.5°C, it syncs every 15 seconds;</p> <p>When the water temperature fluctuation difference is $\geq 0.5^{\circ}\text{C}$, it syncs every 5 seconds.</p>
TDS water quality detection value of the pool monitor is out of sync with the indoor monitor	The TDS fluctuation is too small.	<p>TDS >999 ppm:</p> <p>When the fluctuation difference is 50, it syncs every 5 seconds; when the fluctuation difference is 30, it syncs every 20 seconds.</p> <p>TDS >300 ppm:</p> <p>When the fluctuation difference is 20, it syncs every 5 seconds; when the fluctuation difference is 3, it syncs every 20 seconds.</p>

Fault Phenomenon	Possible Cause	Possible Solution
		<p>TDS >20 ppm: When the fluctuation difference is 4, it syncs every 5 seconds; when the fluctuation difference is 3, it syncs every 20 seconds.</p> <p>TDS >0 ppm: When the fluctuation difference is 1, it syncs every 5 seconds.</p>

08

FCC Requirement

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help. This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

- This device contains licence-exempt transmitter(s)/ receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s).
- Operation is subject to the following two conditions:
 - (1) This device may not cause interference.
 - (2) This device must accept any interference, including interference that may cause undesired operation of the device.
- The device meets the exemption from the routine evaluation limits in section 2.5 of RSS 102 and compliance with RSS-102 RF exposure, users can obtain Canadian information on RF exposure and compliance.
- This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
- This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

- *L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence.*
- *L'exploitation est autorisée aux deux conditions suivantes :*
 - (1) *L'appareil ne doit pas produire de brouillage;*

(2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

- *Le dispositif rencontre l'exemption des limites courantes d'évaluation dans la section 2.5 de RSS 102 et la conformité à l'exposition de RSS-102 rf, utilisateurs peut obtenir l'information canadienne sur l'exposition et la conformité de rf.*
- *Cet émetteur ne doit pas être Co-placé ou ne fonctionnant en même temps qu'aucune autre antenne ou émetteur.*
- *Cet équipement devrait être installé et actionné avec une distance minimum de 20 centimètres entre le radiateur et votre corps.*

10

Customer Service

This item carries a 1-year warranty against defects in either components or workmanship. During this period, products that prove to be defective will, at the discretion of INKBIRD, be either repaired or replaced without charge. For any problems in use, please feel free to contact us at **support@inkbird.com**. We will do our best to help you.

Shenzhen Inkbird Technology Co.,Ltd.

support@inkbird.com

Consignor: Shenzhen Inkbird Technology Co., Ltd.

Office Address: Room 1803, Guowei Building, No.68 Guowei Road, Xianhu Community, Liantang, Luohu District, Shenzhen, China

Manufacturer: Shenzhen Inkbird Technology Co., Ltd.

Factory Address: 6th Floor, Building 713, Pengji Liantang Industrial Area, No.2 Pengxing Road, Luohu District, Shenzhen, China



216-200029

V1.0

MADE IN CHINA
DESIGNED BY INKBIRD