

# **Accue Company Limited**



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For version D clocks ONLY Rev.2 - 20210808



# **Safety Precautions**



# This symbol is used to indicate information that can result in personal injury or material damage if ignored.

# Batteries:

- After removing the battery from the clock, put it in a safe place where it will not get into the hands of small children and accidentally swallowed.
- Keep batteries out of the reach of small children. If accidentally swallowed, consult with a physician immediately
- Never charge batteries, try to take batteries apart, or allow batteries to become shorted. Never expose batteries to direct heat or dispose of them by incineration
- Misuse of batteries can cause them to leak and damage nearby items, and can create the risk of fire and personal injury.
- Always make sure that the battery's positive + and negative ends are facing correctly when you load it into the clock.
- Remove the battery if you do not plan to use the clock for a long time
- Use only the type of battery specified for this clock in this user guide.

#### Disposing of the clock:

 Never dispose of the clock by burning it. Doing so can cause certain components to suddenly burst, creating the risk of fire and personal injury.

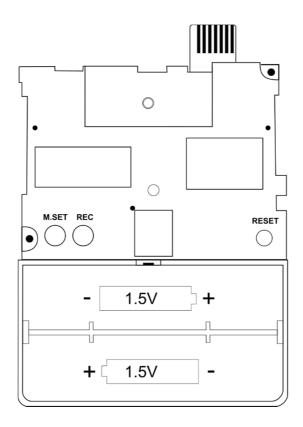
# **Handling Precautions**

- Use only the Lithium batteries as recommended. Do not use other type of batteries or otherwise reduce the clock's life.
- Avoid use and storage in areas subjected to temperature extremes.
   Very low temperatures can shorten of battery life. Also avoid leaving the clock in direct sunlight, near a window, near a heater or anywhere else it might be exposed to very high temperatures. Heat can cause discoloration or deformation of the clock's case, and damage to internal circuitry.
- Avoid use and storage in areas subjected to large amounts of humidity and dust.
   Take care never to leave the clock where it might be splashed by water or
   exposed to large amounts of humidity or dust. Such conditions can damage
   internal circuitry.
- Never drop the clock or otherwise subject it to strong impact
- Use a soft, dry cloth to clean the exterior of the clock.
   If the clock becomes very dirty, wipe it off with a cloth moistened in a weak solution of water and a mild neutral household detergent. Wring out all excess moisture before wiping the clock. Never use thinner, benzene or other volatile agents to clean the clock. Doing so can remove painting and can damage the case.

# Introduction

Thank you for purchasing ACCUE WiFi clock. This device is shipped fully tested and calibrated and, with proper use, will provide years of reliable service.

This WiFi Clock connects to internet via WiFi router / Access Point (AP) to get the time code from internet/intranet time server. Then, the clock's hands will automatically move to corresponding positions to show you the correct time. It will periodically collect the time code in order to calibrate itself and shows you the right time as accurate as an atomic clock.



There are 3 buttons provided to control the clock:-

[M.SET]	Press once to enable setup using configuration dongle.	
	<ul> <li>Hold (at least 3 seconds) to enable setup using browser.</li> </ul>	
[REC]	Press once to turn on the WiFi communication.	
[RESET]	Restart the clock.	

Please read thoroughly of this user manual before use for correct usage and, please keep it for future reference.

# **Product Specification:**

Size:	28, 36, 46 or 60 cm in diameter, round in shape.
Material:	Plastic case, glass cover.
Colour:	Clock face : white background/black characters
	Frame: Silver/blue/green/black painting frame.
Movements:	3 hands (Hour, minute and second hands.)
Power source:	Primary lithium battery 1.5V x 2 (included)
Battery life:	Approx. 2 years.
Accuracy:	Maximum +/- 1 sec per day.
	If WiFi connection succeeded, the error does not accumulate.
	If WiFi connection failed, the error accumulates until the WiFi
	connection resumed.
Operating temperature	0~40 °C (32 ~104 °F)
Warranty:	2 years.

# WiFi specification:

Standard:	IEEE 802.11b/g/n
Certification:	FCC SDoC
	FCC STATEMENT:
	This Product contains the WiFi module with FCC ID: 2AHMR-ESP12S
	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.
Frequency range:	2.412GHz-2.484GHz
	802.11b: +16 +/-2dBm (@11Mbps)
Transmitting power:	802.11g: +14 +/-2dBm (@54Mbps)
	802.11n: +13 +/-2dBm (@HT20, MCS7)
	802.11b: -85 dBm (@11Mbps ,CCK)
Receiving sensitivity:	802.11g: -70dBm (@54Mbps, OFDM)
	802.11n: -67dBm (@HT20, MCS7)
Security:	WEP/WPA-PSK/WPA2-PSK
Antenna:	On board PCB antenna

# **Setup Guide:**

#### 1. System Setting

#### (A) Power on the WiFi clock



Please insert the 2 batteries included.

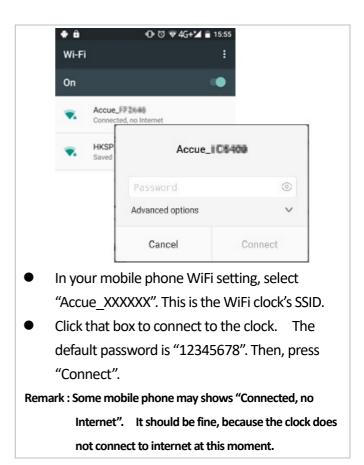


 The LED blinks, and the 3 hands are moving to 12 o'clock position.

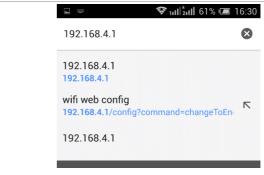
# (B) Connect the WiFi clock with your mobile phone



- Press and hold the M.SET button for 3 sec, no matter the hands are moving or not.
- The LED stops blink and stays on, showing that the clock is ready to be connected to the phone.



# (C) Enter the web page of the clock to begin setup



 Open the web browser, type "192.168.4.1" in the URL address bar. (Any browser should do.)

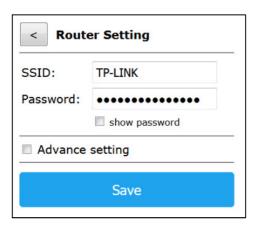


This is the home screen of setting mode.

#### (D) Router Setting

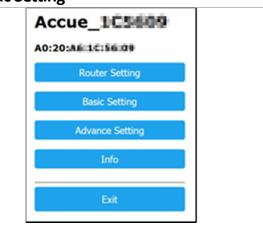


Press the "Router Setting" button.

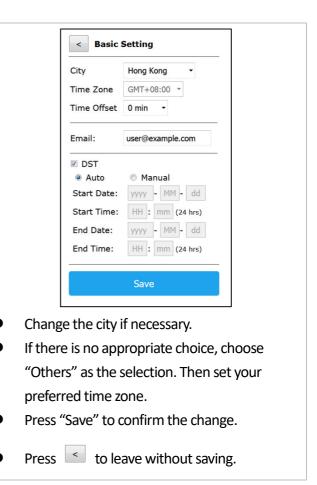


- Enter the SSID and the password of your WiFi router.
- Press "Save" to confirm the change.
- Press to leave without saving.

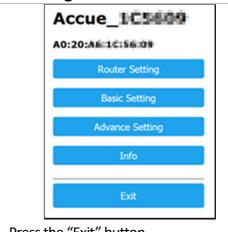
#### (E) Basic Setting



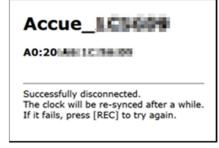
Press the "Basic Setting" button.



#### (F) Exit Setting Mode



• Press the "Exit" button.



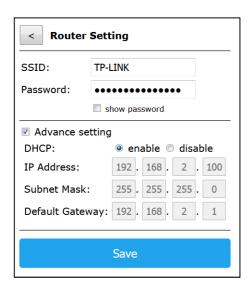
 The clock is then disconnected from the phone. The time will be synchronized after a while.

# 2. Optional Setting

#### (A) Router Setting



Press the "Router Setting" button.



- Tick the checkbox "Advance setting".
- Enable/Disable DHCP (Dynamic Host Configuration Protocol) by select corresponding radio button.
- Enable: The WiFi Clock obtains IP address and networking parameters automatically.
- Disable: IP Address / Subnet Mask / Default Gateway are assigned manually.
- Press "Save" to confirm the change.
- Press to leave without saving.

#### (B) Basic Setting



• Press the "Basic Setting" button.

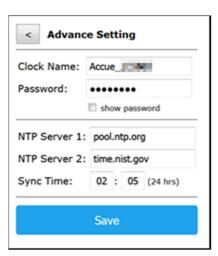


- Set the Time Offset (-45 min to +45 min) if necessary.
- Enable/Disable the DST (daylight saving time) and set "Auto" or "Manual" mode.
- Auto: The clock will get the DST information from database and handle the DST automatically.
- Manual: Custom set the DST Start date/time and End date/time.
- Press "Save" to confirm the change.
- Press to leave without saving.

#### (C) Advance Setting

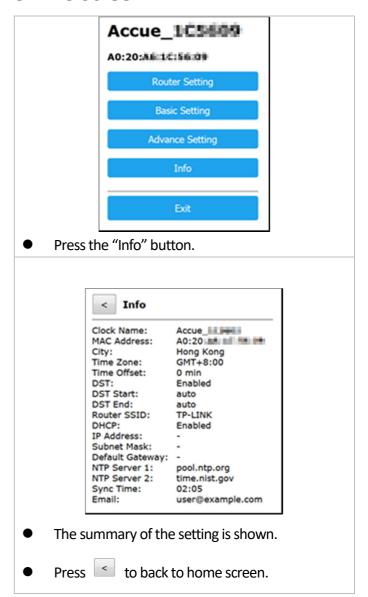


Press the "Advance Setting" button.



- Change the Clock Name and the password of your WiFi clock.
- Change the NTP Server if necessary.
- Both NTP servers must be provided. If you have only 1 NTP server, fill both fields with the same server name.
- Change the Sync Time if necessary. The clock will automatically synchronize the time daily according to this.
- Press "Save" to confirm the change.
- Press to leave without saving.

#### 3. Info Screen



# 4. Reset to Factory Default Setting

Press and hold [M.SET] and [REC] buttons at the same time for 3 seconds.

You will see the LED turns on. After about 5-10 seconds, the LED will blink 5 times and all settings will be reset to factory default values. All clock hands will also go to 12 o'clock position and then stop.

# 5. Large Quantity Setup

A configuration dongle (sold separately) is available for doing large quantity setup process.

Please read the "WiFi Clock Configuration Dongle User Guide" for details.

# **FAQ**

#### Q: Why the second hand stops at 12 o'clock position?

A: This is the battery low indication. Please replace the batteries.

#### Q: Why the second hand clicks twice every 2 seconds?

A: This indicates that the clock cannot connect to the time server **OR** it was not able to get the time code from time server for 5 days. Please check:

- If the wiring of the router is intact or not.
- If the ISP is providing function normally or not.
- If the SSID and password of the router matches the setting in the WiFi clock or not
- If the WiFi clock is too far away from the router or not.

#### Q: Which kind of battery should be used?

A: The AA size Energizer "Ultimate lithium" cells are recommended.

Alkaline batteries can be used, but with shorter battery life.

#### Q: How long is the battery life?

A: For the Energizer "Ultimate lithium" cells, it should be approximately 2 years.

#### Q: After I replaced new batteries, do I need to re-configure the clock.

A: No, configuration data is saved into the non-volatile memory in the clock. It will be kept forever even no power is supplied to the clock.

#### Q: After the batteries are replaced, do I need to wait for the clock re-sync?

A: The time data will be kept within one minute. So, if the replace process is done within this duration, the clock will resume to normal at once. Otherwise, the clock is reset and re-sync automatically.

#### Q: How often the WiFi clock synchronized to the time server?

A: Once per day.

#### Q: When does the WiFi clock synchronize to the time server?

A: Normally, the synchronize time is a random value that generated by the clock. The clock will synchronize each day at the same time. But, you can change that in Advanced Setting configuration page.

#### Q: Why the second hands of 2 clocks are about 1 or 2 seconds different?

A: It is due to the tolerance of the real time clock crystal in the clock. Normally, the crystal is produced at 10ppm tolerance. That means, the crystal oscillates one million times with maximum 10 counts more or less in deviation. By converting to the time standard, it is equivalent to about 0.9 second error per day. So, in worst case, if one clock is running 0.9 second faster, and another is 0.9 second slower, you can see that there is a 1.8 second difference between 2 clocks.

#### Q: For security issue, I want to know the MAC address. Where can I find it?

A: The MAC address will be shown in following places:

- In the clock configuration web page.
- Labelled at the back of the clock.
- Labelled on the inner box.

#### Q: Where can I found the clock's version code?

A: The version code is written next to the model number.

(for example, WF14SV8 Ver.D, it shows the clock is version D)

#### **Limited Warranty**

Accue Co. Ltd. warrants the original consumer purchaser of this product that it shall be free of defects in materials and workmanship for two years from the purchase date of this product. Defects caused by tampering, improper use, unauthorized modifications or repairs, leakage of batteries, immersion in water or abuse are not covered by this warranty. If a defect covered by this warranty occurs during the warranty period, wrap your clock carefully and send it the local distributor or directly to the following address;

Room 607A, 6/F, Block B, Hong Kong Industrial Centre 489-491 Castle Peak Road Kowloon, Hong Kong SAR

Tel: (852) 27637739 Fax: (852) 27552991

You must include a proof of purchase, either the original receipt or a photocopy. Also include your return address inside the package. Local distributor or Accue Co. Ltd. will arrange to repair or replace the clock and return it to you. Expenses incurred for shipping the products to and from Accue Co. Ltd. (including international customs fees) shall be paid for by the customer, with the following exception. For customers located within Hong Kong, any product repaired by Accue Co. Ltd. under a "warranty repair" will be shipped back to the customer at Accue Co. Ltd.'s expense unless special/faster delivery is requested by customer.

Accue Co. Ltd. will not be liable for any loss or damage, including incidental or consequential damages of any kind; from any breach of warranty either expressed or implied relating to the product. Since some countries do not allow the exclusion or limitation of incidental or consequential damages, this limitation may not apply to you. This warranty gives you specific rights, and you may have other rights that vary from countries to countries.

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