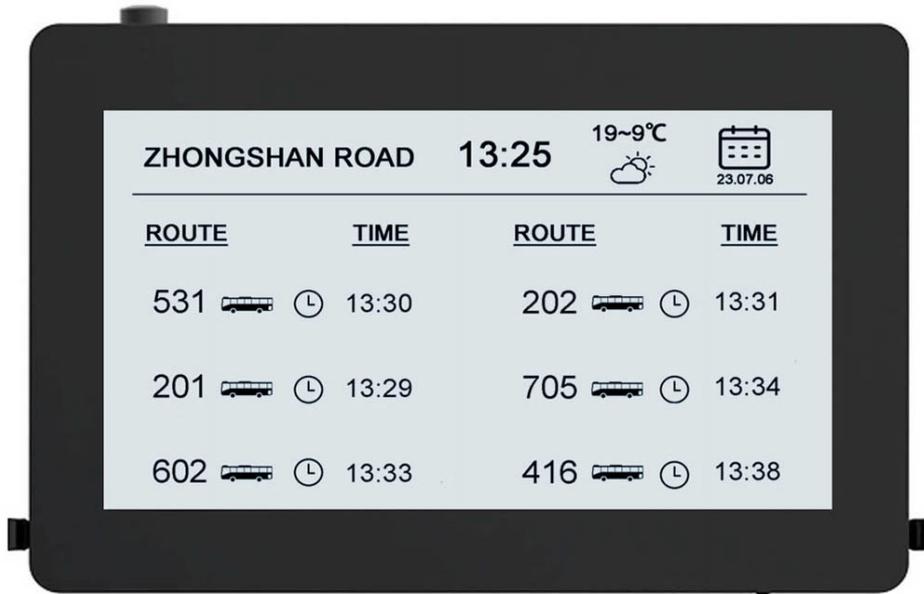


31.2 inch
B/W E-paper Display Signage
IC-33312W-BWQH1A

Product Specifications



Customer	Standard
Description	ePaper Display Signage
Model name	IC-33312W-BWQH1A
Date	2024/06/25
Revision	1.0

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1. Overview

The 31.2-inch black and white e-ink sign screen uses EInk's bistable display technology. The use of remote wireless transmission of updated content saves manpower deployment and printing costs, continuously displays no power consumption, increases operational efficiency, significantly reduces resource consumption, and has both intelligent and environmental benefits. Electronic ink screen signs do not need to lay additional floor-to-ceiling power supply system, is not limited by the power line, can move electronic ink screen signs at any time to the required location, with a high degree of mobility, in any communication space to achieve a better short-term touch publicity effect, is an ideal choice to replace traditional paper advertising posters, long-term use of electricity saving costs considerable, improve efficiency, Help the sustainable development of the industry.

2. Advantage

- Ultra-wide viewing Angle, ultra-low power consumption
- Bistable display (the last image is still displayed after power failure)
- The display can be updated via USB or WiFi
- Image format: BMP, PNG, JPG

3. Parameter

Model	IC-33312W-BWQH1A
Display	Size: 31.2 inch Type: Black/white e-ink display Resolution: 2560x1440 Grayscale: 16 gray

Port	<p>USB2.0: One way HOST, one way OTG</p> <p>HDMI-OUT: 1 channel (for internal debugging use.)</p> <p>RJ45: 1 channel 10M/100M adaptive</p> <p>TF: Reserved (maximum expansion: 128G)</p> <p>KEY: POWER、UP、DOWN、RESET</p>
Power consumption	<p>Power supply: 12-20V/2A power adapter</p> <p>Refresh power: ≤3.7W</p> <p>Standby power: ≤0.01W</p> <p>Battery: none</p>
Front light	<p>Contain front light: maximum: 15.36W</p>
Software	<p>Permit secondary development: provide SDK</p> <p>Refresh image time: 2s</p> <p>Refresh image tool: USB or WiFi</p> <p>language: the same as the language of your phone</p>
Mainboard	<p>WiFi channel: 2.4G</p> <p>Bluetooth: 4.0 (At present, the bluetooth doesn't have the function of updating images)</p> <p>System: Android 7.1</p> <p>CPU: Quad-core ARM Cortex A7</p> <p>DDR: 1G</p> <p>EMMC: 8G</p>

Specification	Weight: about 28kg Outline size: 843.2x560x80mm
Temperature/humidity	Operation temperature: -15°C~65°C Storage temperature: -25°C~70°C Operation humidity: 20%~90%
Protection level	Outdoor waterproof level/ protection level: IP65/IK08

4. Structure

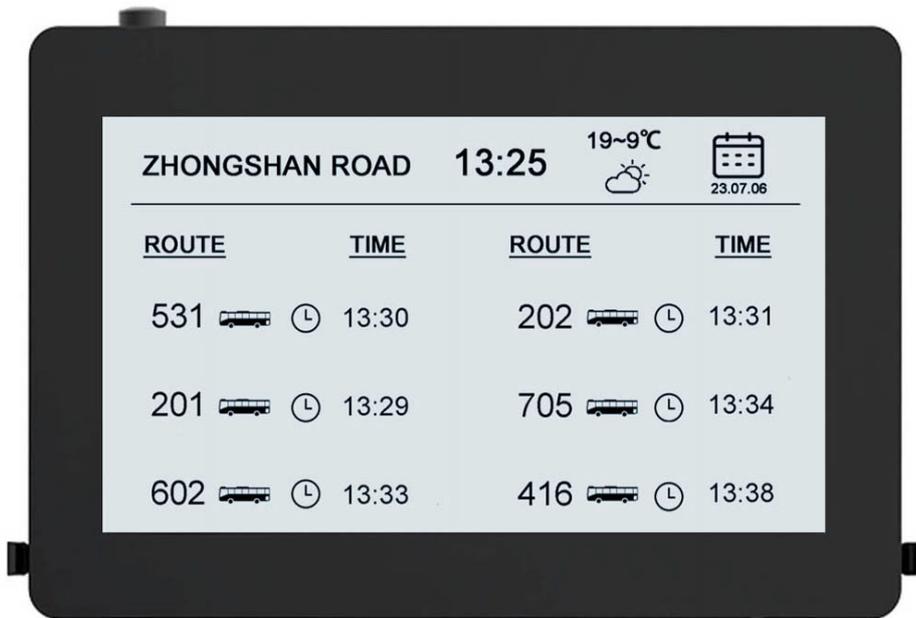


Figure 1: Front view of IC-33312W-BWQH1A

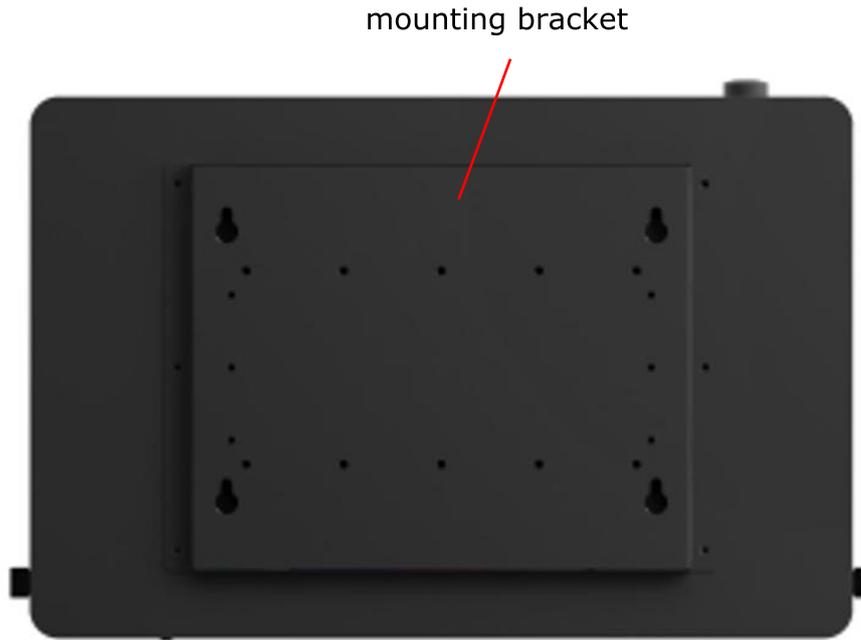


Figure 2: Back view of IC-33312W-BWQH1A

The following is the explanation about the "functions of the label"(mainboard, button, etc.):

1. POWER button

Turn on or off the main power supply. Press the power button to activate the sign, and the LED light will light up; Press the power button again to turn off the sign, and the LED light will go out.

① RESET button

Tap to reset the sign system.

② UP button

- In the process of updating the picture of the sign, tap once to switch to the next picture display, and at least 2 pictures should be saved in the system.
- Press and hold for 3 to 5 seconds and release to display the current distribution network guidance interface. The mobile phone can scan the two-dimensional code on the left to download the APP. After the APP is downloaded and installed, the QR code on the right can be scanned to realize the wireless router's network distribution.



Hold down for more than 10s and release to turn on or off the front light.

③ **LED light**

- After the sign is turned on, the indicator light will continue to display breathing at an interval of 2s.
- When the sign is powered off and charged, the indicator light will be on, and after the battery is fully charged, the indicator light will continue to breathe at 2s intervals.
- When the sign is powered on and charged, the indicator light will breathe every 2 seconds.
- When the sign is turned off, unplug the charger and the indicator light will go out.

④

- Tap to switch to the next picture display, you need to save at least 2 pictures in the system.
- Hold down for 3 to 5 seconds and release to view system status information.

⑤ **DOWN Button**

- Press lightly to switch to the next displayed image. The system must have at least two images saved.
- Press and hold for 3 to 10 seconds, then release to view system status information.

⑥ **Connect the WiFi antenna** (antenna installation is required manually, otherwise it will affect the WiFi signal).

⑦ **HDMI-OUT**

For internal debugging use.

⑧ **Storage card interface**

Insert Micro SD card

⑨ **Network Interface**

Insert wired network.

⑩ **USB2.0 and OTG Interface**

For USB functions and mainboard debugging, firmware upgrade use.

⑪ **Type-C Charging Interface**

Insert Type-C interface power adapter.

5. USB display update

5.1. Image requirement

1. Format: bmp, png, jpg.
2. Available resolution: 2560x1440.

5.2. Image processing

1. Install the image transfer tool xtacepSetup-V2.5.3.exe, which is generally installed on the D disk of the computer. After software installation, a folder of XT image processing tools will appear on the D disk. Enter this folder and you will see the following files.

 ACEP	2023/11/3 16:40
 jre1.8.0_161	2023/11/3 16:40
 Log	2023/9/1 18:14
 unins000.dat	2023/11/3 16:40
 unins000.exe	2023/11/3 16:39
 xtacep.exe	2023/10/25 16:04

2. Put the images to disk D, and save them to the new folder. Do not leave space between the picture path and picture name.



312T-1.bmp



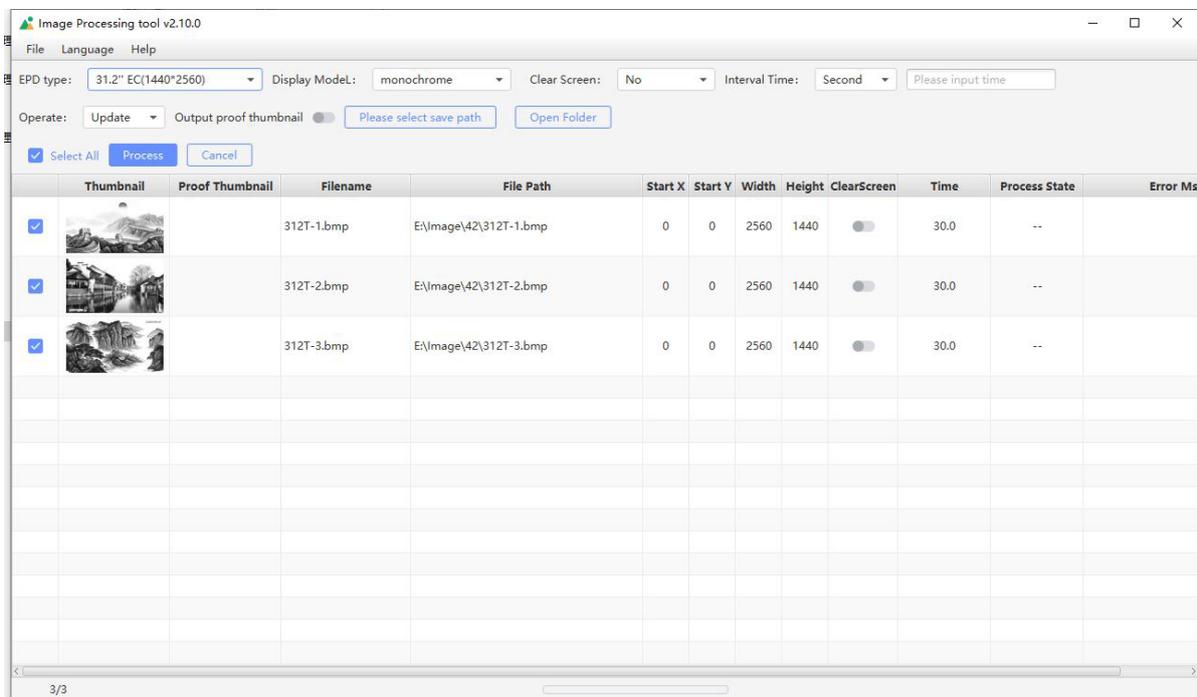
312T-2.bmp



312T-3.bmp

3. Open the xtacep.exe software that you have installed.

4. Click the file in the top left corner, load the image folder that you want to update based on the path.

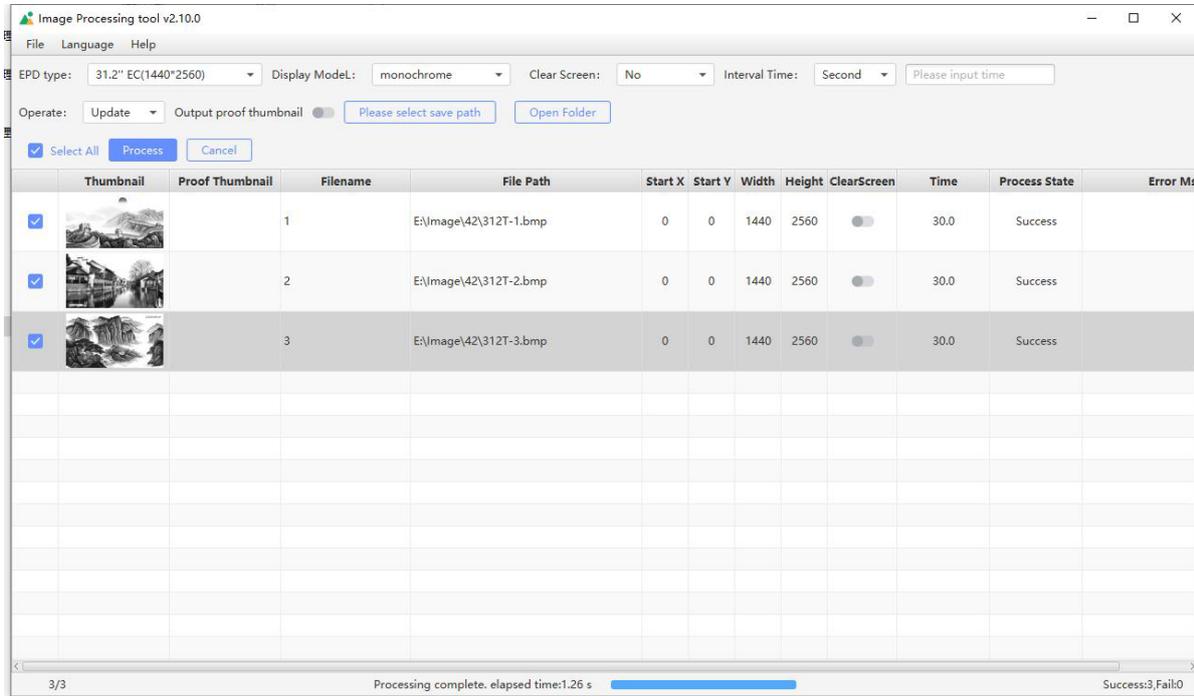


5. The settings of "image resource pack parameters":

Select the current product model in EPD type in the upper left corner, select "monochrome" among "Display mode", select "No" among "Clear screen", "Second" among "Interval Timeselect", Finally enter the brush time interval in the blank space, unit: second (default: 30s. No operation for 300s, the system goes to sleep) .

6. Select "Update" among "Operate", click "Please select save path" button, choose a "save path", click "Select All" to select all images.

7. Click "Process", the software will process images, The current processing progress is displayed below the software.



8. After all images are converted, you can click the "Open Folder" button of the software to view the produced images. The produced images will automatically generate an XT_Resources, and the converted images will be saved in the image folder.



5.3. Copy images

Copy the XT Resources folder to the root directory of your USB flash drive.

5.4. Image display

1. Insert the USB flash drive into the USB 2.0 port of the machine, and wait about 30 seconds for the sign to automatically refresh the picture on the USB flash drive.

2. When the sign shows the picture on the USB flash drive, you can unplug the USB flash drive and switch the picture display by pressing the UP and DOWN keys.

6. WiFi display update

6.1. Install application

Hold the UP key for 3 to 5 seconds and release it to display the current distribution network guidance interface. The mobile phone can scan the QR code on the left to download the APP. After the APP is downloaded and installed, the QR code on the right can be scanned to realize the wireless router's network distribution.



6.2. Network Configuration



1. Select **Device** in the application, click the "plus sign" on the top right side



enter to the interface of the "adding devices".

Select **Scan code to add**, then add the QR code on the right side, and enter corresponding information. begin configuring the device for network access.

During network configuration, you need to enable Bluetooth on your phone to send the WiFi password to the device.

2. Notice: The device needs to be restarted after network configuration is complete.

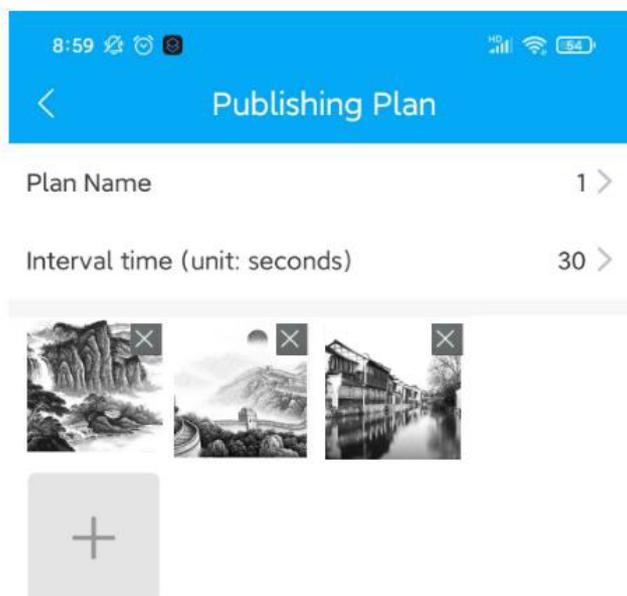
6.3. Image display

1. Check if the device is online in the app. If it's offline, manually pull down to update the device status.

2. Tap on the online electronic paper display, locate the publishing list **Publish List** , and enter the publishing list interface.

3. Click "add publication",  , and enter to the publishing schedule settings interface.

4. Set the schedule name, screen display duration (refresh interval between two images), and select the images to be displayed. After setting everything, click the "Confirm" button below for  . The software will then prompt a successful dispatch. After successful dispatch, the electronic paper display will sequentially play the images selected in the publishing list.

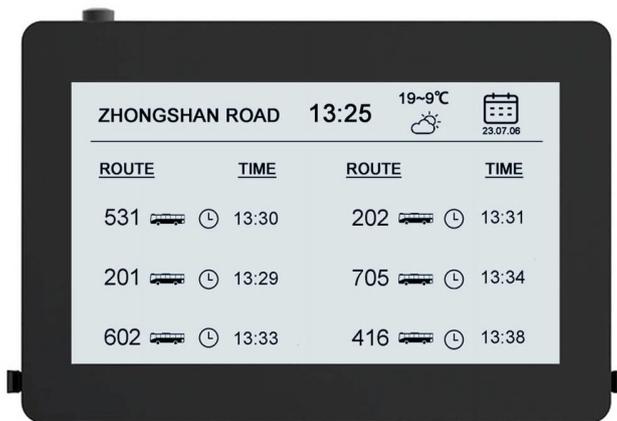


7. Packaging and installation

7.1 Please check if you have received the package which includes the following items:

ePaper display label x1

USB cable x1



ePaper display label



USB cable

7.2 Product installation

1. The product should be installed on a flat surface, otherwise the product may tip over. Allow space between the back of the product and the walls for proper ventilation. Do not install the product in the kitchen, bathroom or exposed to damp places, otherwise it may shorten the service life of the product.
2. Do not install the product at an altitude of 3000 meters or above, to avoid causing malfunctions.

8. Announcements

8.1 Announcements during the transportation

1. Pay attention to waterproof during transportation to avoid damage to the display sign;
2. Pay attention not to squeeze the display sign during transportation to prevent screen damage;
3. Pay attention to the ambient temperature not exceeding 65°C during transportation;

8.2 Using announcements

1. The ambient temperature of the display sign is controlled at -15°C-65°C;
2. Clean the screen regularly to ensure that the display sign is clean and tidy;
3. Please do not open the display sign;
4. Pay attention to waterproof during use, do not overwater;
5. Pay attention to collision avoidance during use

8.3 Storage announcements

The storage environment must be fireproof, moisture-proof (the humidity must not exceed 90%), and heat-proof (the temperature must not be high) At 70°C), anti-backlog, anti-dirt, anti-heavy extrusion, anti-damage.