



7.3 Inch Car Rear View Mirror Monitor with Built-In Miracast



User's Manual

Welcome to use our 7.3 inch car rear view mirror monitor with built-in miracast

- We reserve the final explanation right on this User's Manual.
- Specifications are subjected to change without notice. Sorry for any inconvenience caused!
- Please make a copy of important data. We assume no responsibility for the data loss.
- This manual has been carefully revised. Please contact our service center when any type mistake is found.
- Please read the operating instruction carefully and use the accessories only provided by the original factory to avoid any unexpected damage. No warranty will be executed if you are not following the instruction or connecting with the incompatible accessories. We assume no responsibility for any loss and damage caused hereby.
- Any discrepancy between the pictures and real products hereinafter, the real one prevails.

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Chapter One: Product Introduction

1.1 Package

The packing box contains the following accessories. Please confirm:

- 7.3 inch car rear view mirror monitor with mirror link
- Wire harness
- User's manual
- Wire cover
- Remote control

Please check your package box for the items listed above. Please contact the distributor or the agent as soon as possible if there is any damage.

1.2 Features

- 7.3 inch wide LCD display screen
- 2-way video inputs
- Back-up camera display
- Automatic brightness adjustment
- 4.0 mm glass and $\phi 21$ mm car factory OEM bracket
- Adjustable guide line
- Mode switch between wide screen and dual screen LCD display separately

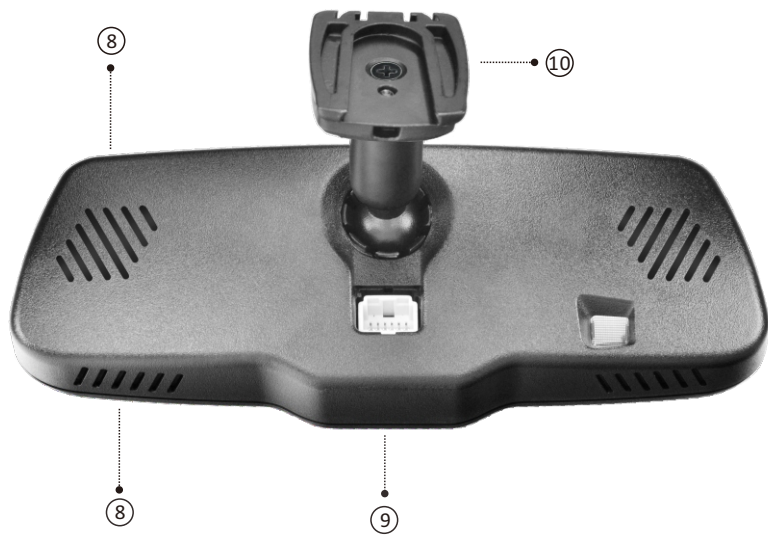
1.3 Specifications

- Screen size: 7.3 inch
- Display screen: TFT-LCD
- Aspect resolution: 1280(H)*390(V)
- Working voltage: 12V
- Working temperature: $-20^{\circ}\text{C}\sim+65^{\circ}\text{C}$
- Signal system: PAL/Auto/NSTC

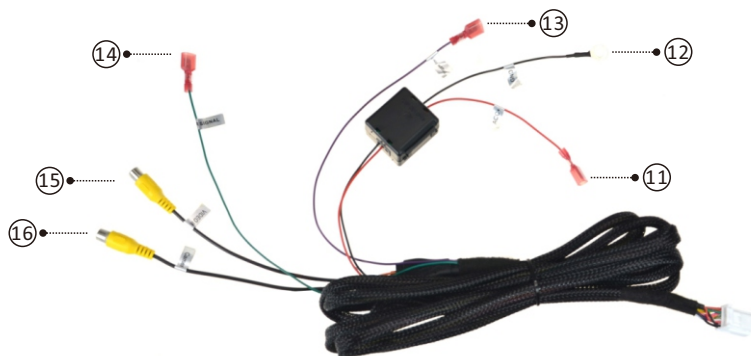
1.4 Front buttons operation



1	7.3 inch ultra high brightness display screen
2	Front light sensor
3	Turn on/off the display screen (reversing mode: short press to adjust the screen brightness)
4	Indicator
5	built-in miracast mode switch Press "M" button to switch back and forth between Android mode and iOS mode
6	Switch display mode Press "CH" button to switch back and forth among 7 display modes: miracast, Video+miracast, miracast+video, camera+miracast, miracast+camera, video full display, camera full display.
7	Color mode adjustment Pressing this button shortly can adjust the color mode of the image. Four modes are available-- standard, bright, beautiful, and soft.



8	Speaker
9	Connector
10	Special bracket
11	Red to ACC+
12	Black to GND
13	Trigger line 1
14	Back car signal
15	Video input
16	Camera
17	Connector cover
18	Cable cover



Chapter Two: Installation and Wiring

2.1 How to install

Remove the original mirror



Different cars have different brackets. It depends on your vehicle maker and manufacturer.

There are many methods to remove the original rear view mirror. However, please don't force the mirror off the bracket.

The manufacturer will not be responsible for any damage caused to your car by wrong installation of the mirror.

Install mirror monitor on the base



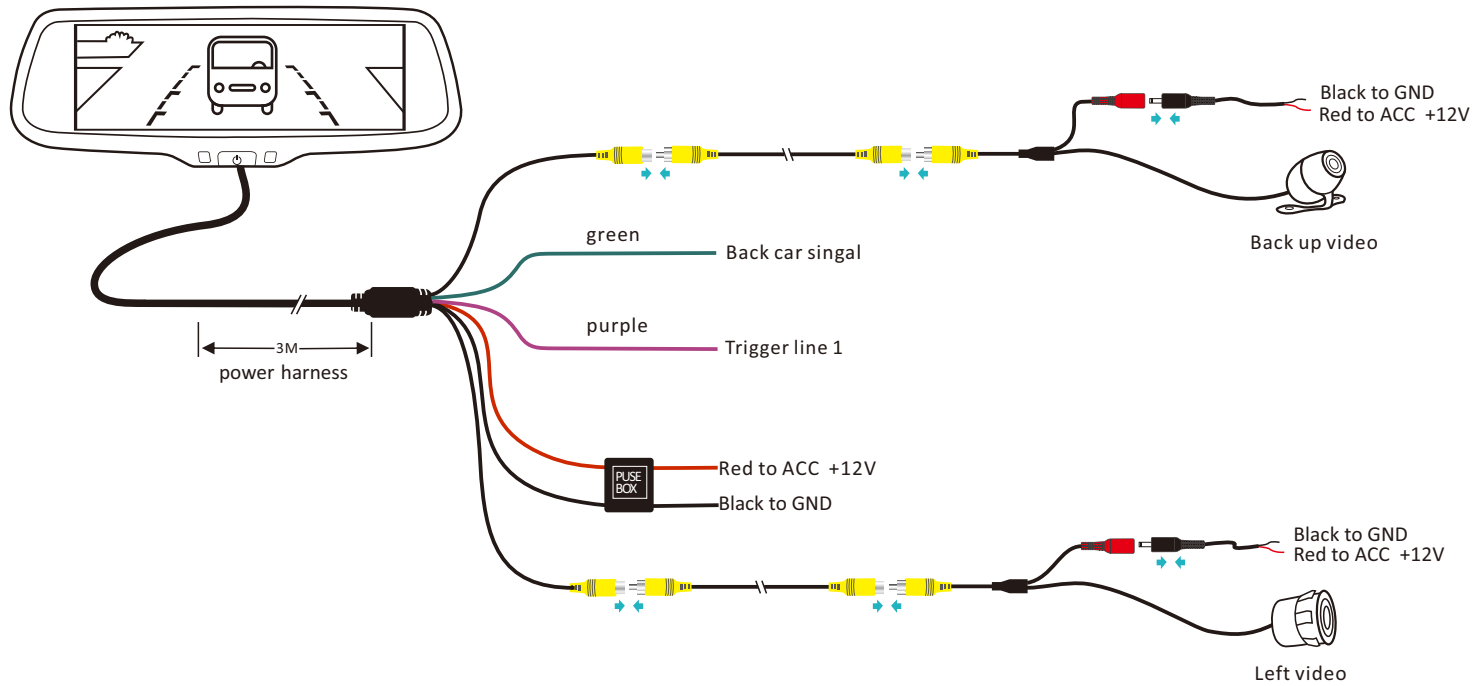
2.2 Special bracket



Many kinds of brackets are available. Please find the one that suits your vehicle. Please contact us if you could not find the bracket of your car here.

2.3 How to wire

The reversing signal is input to rear view mirror by connecting the green line. Therefore, reversing video can be displayed automatically on the wide 7.3 inch LCD monitor.



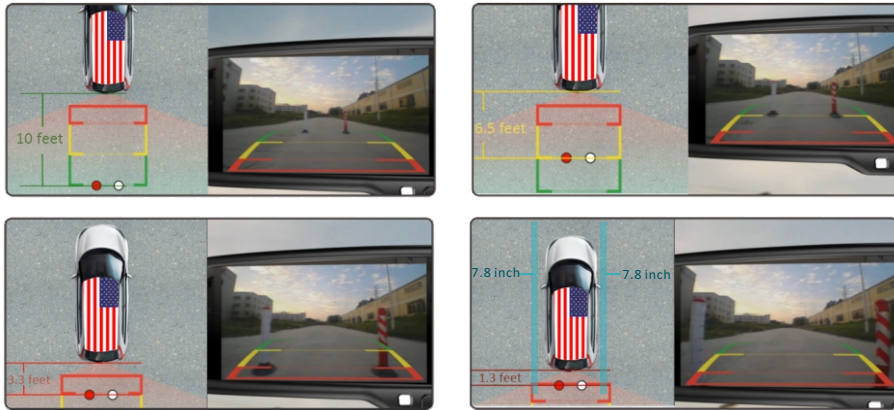
The advisable installation position for camera



Chapter Three: Adjustable Guide Line

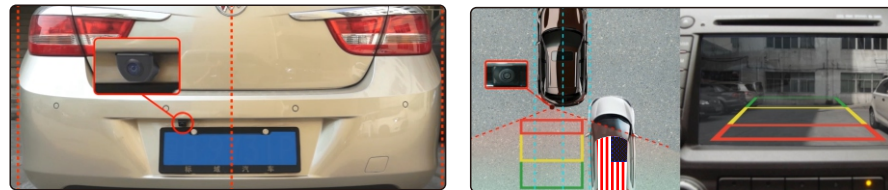
3.1 About guide line

There are three lines---red, yellow, and green, to help drivers estimate the distance from obstacles. Those three lines are displayed on the monitor when the car is reversing. The green line is 10 feet away from the back of the car, and the yellow line is 6.5 feet away. The distant red line is 3.3 feet away from the back of the car, while the closed red line is 1.3 feet away. Please note that there is 0.65 feet distance from the car for reference lines shown below.



3.2 What the regular guide line is

Regular guide lines are fixed although installation sites of camera and car size are different. The fixed guide line is not accurate enough for drivers. There is huge difference between the regular, fixed guide lines, and real guide lines of the car. It may cause accidents when camera is mounted on the left or right side on the back side of the car.

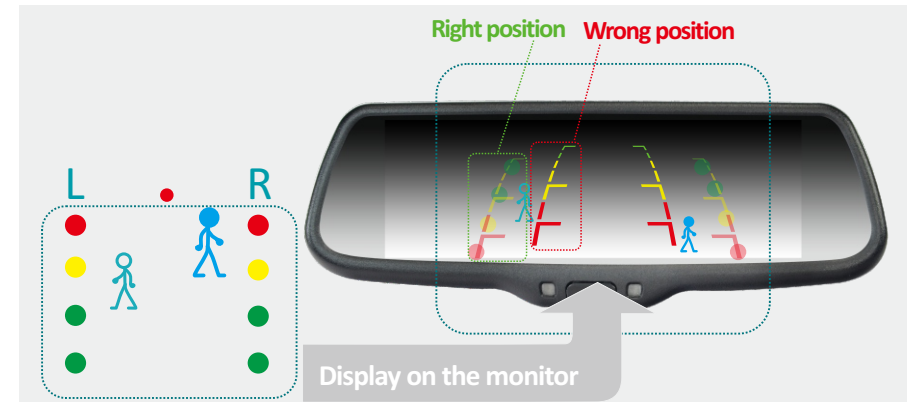


3.3 How to adjust the guide line

According to the site of standard reference line, we can put reference objects such as desks in the back side of the car. Compared with the marked reference objects, we can adjust the sites and angles of two guide lines are displayed on the monitor. You will get the accurate and safety guide lines once it coincide with the reference objects.

Press setting button to enter "guide line adjustment" mode. The system is defaulted to adjust left guide line firstly. Press the button again to switch to adjust the right guide line. The up , down , left and right buttons are to adjust the corresponding location of guide lines. The clockwise rotation and contra rotating buttons are to adjust the angles of guide lines. It is easy to operate and calibrate. After finishing calibration, switch the reverse gear to save the information.

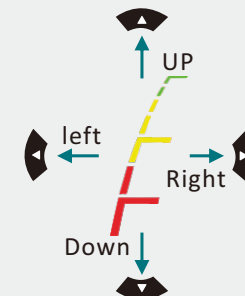
Caution: keep the remote control 0.5m-1.0m away from rear view mirror when you use the remote to adjust the parking lines.



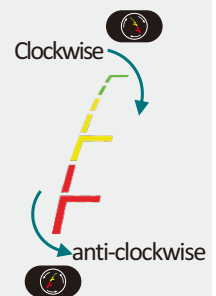
Press the button to choose L or R adjustable guide line.



Remote control



Move the guide line

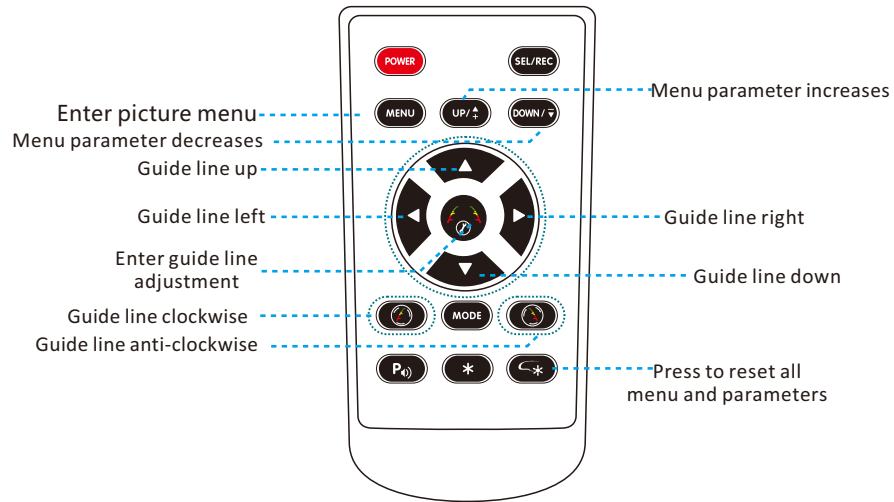


Rotate the guide line

Chapter Four: Menu Setting

4.1 Remote control

The menu only can be set by remote control, and kindly check its definition as below.



4.2 Menu setting guidance

Short press "MENU" to enter "PICTURE", then you can switch between "BRIGHTNESS", "COLOR", "CONTRAST", "SCALE", "START LOGO", "PRESET", or enter out. When it switches to "PRESET", re-press shortly the MENU, and you would close the menu. UP and DOWN are to change the figure of each setting.

4.2.1 BRIGHTNESS ADJUSTMENT

The defaulted setting is 50, ranging from 0 to 100, and only CVBS signal can work.



4.2.2 COLOR ADJUSTMENT

The defaulted setting is 50, ranging from 0 to 100, and only CVBS signal can work.



4.2.3 CONTRAST ADJUSTMENT

The defaulted setting is 50, ranging from 0 to 100, and only CVBS signal can work.



4.2.4 SCALE ADJUSTMENT

Turn on/off the adjustable guidelines.



4.2.5 START LOGO ADJUSTMENT

It is defaulted as "ON", you can set it to "OFF" manually.



4.2.6 PRESET ADJUSTMENT

It is defaulted as OFF, and ON is to pre-set the menu, then it switches to OFF automatically.



4.2.7 VOLUME ADJUSTMENT

The defaulted setting is 80, ranging from 0 to 100, and only CVBS signal can work.



Chapter Five: Built-In Miracast

This is a special device to project your mobile phone to rear view mirror monitor through Wi-Fi connection, and the popular standards like DLNA, Miracast and Air Play. The driver can set the navigation path on the phone before entering the car. The navigation audio and video can be displayed simultaneously on the rear view mirror as long as the Wi-Fi is connected to the rear view mirror. While driving you can also set navigation path by a passenger using a mobile phone, the image is displayed simultaneously on the rear view mirror.

Please note: Make sure to turn off the bluetooth when you use miracast function and connect your phone!

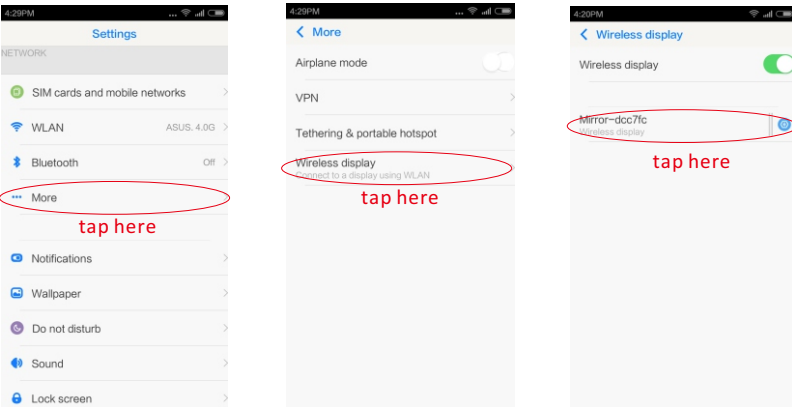
5.1 How to connect

5.1.1 How to connect with Android phone (Android version has more functions on how to use wireless projection. Please see your phone instructions for reference.)

1: Make sure android phone has wireless projection function (part of the phone can not support wireless projection, or part of the phone wireless display needs to root and could use after changing the system file).

2: Click the "M" button on the TP button, switch wireless mode to Android mode; open the Wi-Fi on your phone, then search equipment in the phone's wireless projection function, connect the device according to the wireless device names that are displayed on the screen. Please see the steps as below,





After finishing the connection, then the phone screen is projected to the rear view mirror, you can press "CH" on TP button to choose "double mobile dual mode" or "single-screen mode".

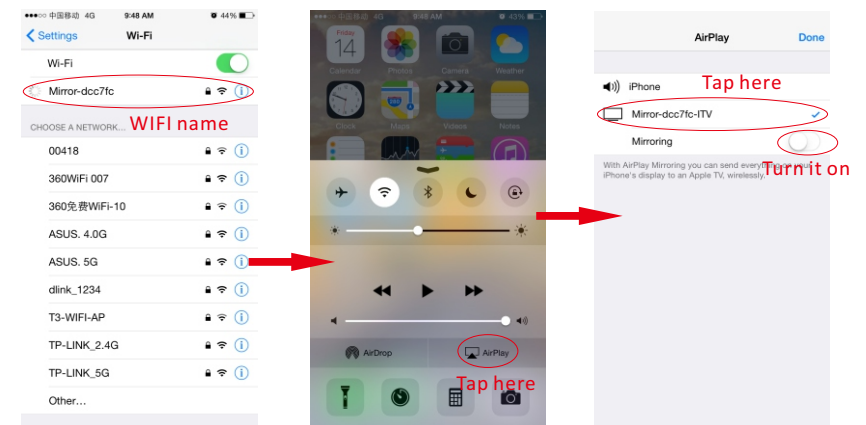


5.1.2 How to connect with iPhone

1: Click the "M" button on TP button, switch the wireless mode to iOS mode.



2: Using iPhone search Wi-Fi (Wi-Fi name is displayed on the screen and shown as below), then enter the default password: 12345678. After finishing WIFI connection, bring up the shortcut menu, click on the AirPlay function, select the device name, and open the mirroring.



After finishing the connection, then the phone screen is projected to the rear view mirror, you can press “CH” on TP button to choose “double mobile dual mode” or “single-screen mode”.



5.2 Channel switching

Press the “CH” button on the screen to switch display among CAMERA, VIDEO1, MOBILE, VIDEO1+MOBILE, MOBILE+VIDEO1, CAMERA+MOBILE, and MOBILE+CAMERA.

5.2.1 Full CAMERA screen display



5.2.2 Full VIDEO1 screen display



5.2.3 Full MOBILE screen display



5.2.4 VIDEO1 and MOBILE display simultaneously



5.2.5 CAMERA and MOBILE display simultaneously



Please note:

1. Both Reversing mode and non-reversing mode have seven states: built-in miracast, video+built-in miracast, built-in miracast+video, camera+built-in miracast, built-in miracast+camera, full video screen, and full camera screen.

2. Power on each time, the screen automatically keep the last status before the shut down. There are total eight states or styles---seven are listed as above, and off-screen state.


3. There are three modes of operation can trigger video:

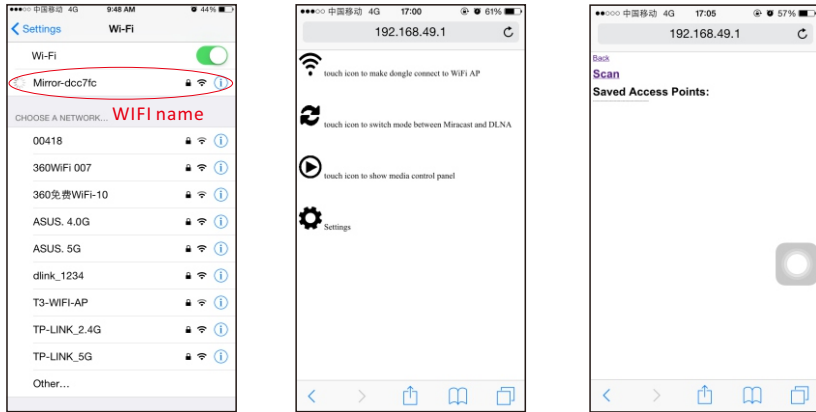
1) The first grade is +12V BACKUP LIGHT: You can adjust the seven states when there is signal of triggering reversing through touching CH button. The final state will be stored after powering off, and the final state will be shown automatically when there is trigger BACKUP LIGHT next time;

2) The second grade is +12V VIDEO CONTROL-- Video channel triggered line, which connects the turning light or brake light in a general way. Mirror will switch automatically to full screen mode of VIDEO when the trigger signal appears; while it will switch automatically to previous state when the trigger signal disappears after 3 seconds, in VIDEO trigger state: the only brightness button of TP buttons can work, while button of M and CH don't work.

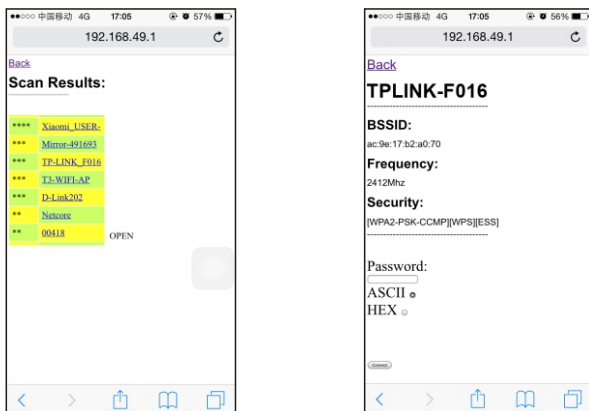
4. When the camera and mobile show at the same time, guide line can't be displayed.

Chapter Six: Firmware Update

1. click the “M” button on TP button, switch the wireless mode to iOS mode.
2. 1) using mobile/laptop/tablet search Wi-Fi (Wi-Fi name is displayed on the screen), then enter the default password: 12345678.
2) Upon the connection between mobile/laptop/tablet and dongle is completed, open web browser on the mobile phone/laptop/tablet and visit <http://192.168.49.1>.
3) Tap the icon  to make the web browser jump to another page.



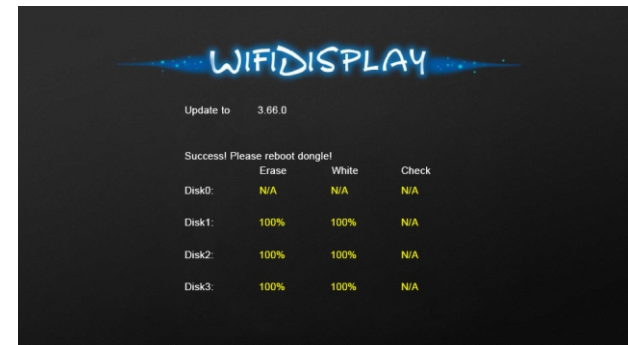
3. Tap “Scan” and follow the instructions to connect to Wi-Fi AP which allows to access Internet through WAN. Please note that when the connection between dongle and AP is established, the connection between dongle and mobile phone/laptop/tablet may be disconnected. The reason is that the connection channel between dongle and mobile phone is different from the channel between dongle and AP. In this case, mobile phone /laptop/tablet should be connected to dongle by using soft AP again.



4. Dongle is able to access Internet through AP. AP's SSID and dongle's IP address that are dispatched from AP (“Device IP1”) will be shown on the screen. The mobile phone/laptop/tablet that is connected to dongle allows to access the Internet because of AP bridge function of dongle.
Then long press “M” button to upgrade within 30 seconds.



5. After upgrade is completed, restart the mirror.



“If new iOS releases, VTW73M may require new firmware update for Miracast function. Availability of New firmware update may take awhile after Apple's released new iOS.”