

Instruction Manual

7" Digital Color Monitor With MirrorLink

RVS-ML7



Before operating the Monitor, please read this manual thoroughly and retain it for future reference



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NOTE!

Please read all of the installation instructions carefully before installing the product. Improper installation will void manufacturer's warranty.

Congratulations on purchasing a Rear View Backup Camera System!

With this manual you will be able to properly install and operate the unit.

The monitor is intended to be installed as a supplement aid to your standard rear view mirror that already exists in your vehicle. The monitor should not be used as a substitute for the standard rear view mirror or for any other mirror that exists in your vehicle.

In some jurisdictions, it is unlawful for a person to drive a motor vehicle equipped with a TV viewer or screen located forward of the back of the driver's seat or in any location that is visible, directly or indirectly, to the driver while operating the vehicle.

Please read the entire manual and follow the instructions and warnings carefully. Failure to do so can cause serious damage and/or injury, including loss of life. Be sure to obey all applicable local traffic and motor vehicle regulations as it pertains to this product. Improper installation will void manufacturer's warranty.

USAGE:

- The Rear View Camera System is designed to help the driver safely detect people and/or objects helping to avoid damage or injury. However, you the driver, must use it properly. Use of this system is not a substitute for safe, proper or legal driving.
- Never back up while looking at the monitor alone. You should always check behind and around the vehicle when backing up, in the same way as you would if the vehicle did not have the Rear View Camera System. If you back up while looking only at the monitor, you may cause damage or injury. Always back up slowly.
- The Rear View Camera System is not intended for use during extensive back-up maneuvers or backing into cross traffic or pedestrian walkways.
- Please, always remember, the area displayed by the Rear View Camera System is limited. It does not display the entire panorama that is behind you.

INSTALLATION:

- Electric shock or product malfunction may occur if this product is installed incorrectly.
- Use this product within the voltage range specified. Failure to do so can cause electronic shock or product malfunction.
- Take special care when cleaning the monitor.
- Make sure to firmly affix the product before use.
- If smoke or a burning smell is detected, disconnect the system immediately.
- Where the power cable may touch a metal case, cover the cable with friction tape. A short circuit or disconnected wire may cause a fire.
- While installing the Rear View System be careful with the wire positioning in order to avoid wire damage.
- The Rear View System should only be used when the vehicle is in reverse.
- Do not watch movies or operate the monitor while driving; as it may cause an accident.
- Do not install the monitor where it may obstruct driver's view or obstruct an air bag device.
- Dropping the unit may cause mechanical failure.

If you have questions about this product, contact:

***Rear View Safety
1797 Atlantic Avenue
Brooklyn, NY 11233
Tel: 1.888.881.2601***

IN NO EVENT SHALL SELLER OR MANUFACTURER BE
LIABLE FOR ANY DIRECT OR CONSEQUENTIAL DAMAGES OF
ANY NATURE, OR LOSSES OR EXPENSES RESULTING FROM
ANY DEFECTIVE PRODUCT OR THE USE OF ANY PRODUCT.



A Safe Fleet Brand

Before drilling please check that no cable or wiring is on the other side of the wall. Please clamp all wires securely to reduce the possibility of them being damaged while vehicle is in use. Keep all cables away from hot or moving parts and electrical noisy components.

We recommend doing a benchmark test before installation to insure that all components are working properly.

Step 1: Choose the monitor location.

Step 2: Install all cables in vehicle.

Step 3: Once all cables and wiring have been properly routed, perform a system function test by temporarily connecting the system.

1. Do not expose the monitor to excessive heat/cold. The storage temperature of this device is $-30^{\circ}\text{C} \sim +80^{\circ}\text{C}$, and the operating temperature is $-20^{\circ}\text{C} \sim +70^{\circ}\text{C}$. The battery operating temperature is $0^{\circ}\text{C} - 70^{\circ}\text{C}$. Humidity is Rh 90%.
2. Never use this monitor near water or in damp locations.
3. Never use this monitor in environments with excessive moisture, dust or smoke.
4. Avoid dropping or hitting monitor.
5. Avoid using this monitor in enclosed spaces, areas with excessive vibration or areas subject to severe impacts.
6. Never puncture, scratch or use abrasive cleaning materials on this monitor.
7. Do not place cables where they may be pinched or stepped on.
8. Leave at least a 2" space between the monitor and walls, cabinets or other objects to allow adequate air circulation.
9. The monitor is not designed to be waterproof.

Operating Precautions

1. The monitor can be powered by a 12/24 volt battery, or the vehicle's electrical system.
2. Make sure all cables are connected properly. Improper cable connections may damage the monitor. Remove the power cable connections when not using the device.
3. The back-up battery can be recharged when the power is on.
4. When battery is fully charged, recharging will stop automatically.
5. If batteries are not used for a while, they may take longer to charge.

Warning!

1. *This monitor is high voltage. Only professionals should open the monitor's case.*
2. *Do not watch the video while driving unless you are monitoring the rear view camera display.*





Special Note

Occasionally, a few highlights or dark spots may appear on the LCD screen. This doesn't necessarily indicate any monitor defects. Never try to repair this device yourself. If any problems occur, immediately turn the display off and notify our company or an authorized dealer. Any disassembly/modification may lead to damage and will also void the warranty.

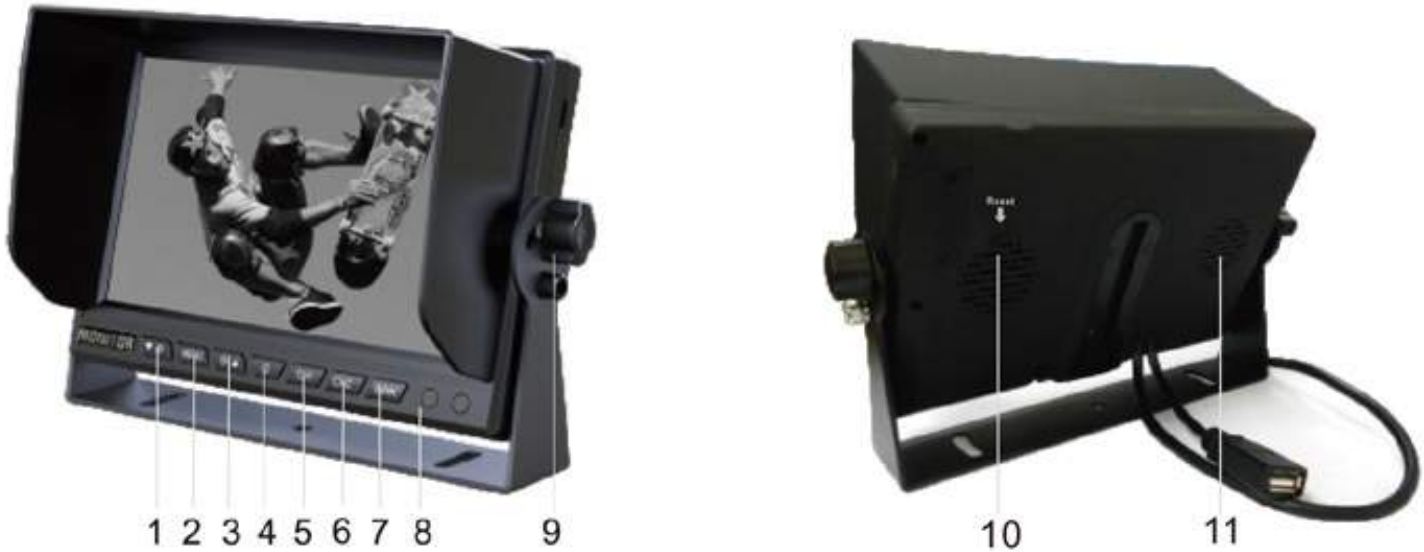
Specifications

1. Size: 7" Digital Color Monitor
2. Screen Ratio: 16:9
3. Resolution: 1024 X RGB X 600
4. Two AV inputs
5. Built-in Miracast
6. Built-in Speaker (Can Be Muted)
7. Auto Reverse Trigger Wire W/Adjustable Delay (0-10 Sec)
8. USB 2.0 Input
9. System: NTSC/PAL Auto Switch
10. OSD Menu/Remote Control
11. Automatic Shut Off After 15 Minutes Of Inactivity
12. Power Supply: DC12V
13. U-shaped Metal Bracket
14. Removable Sunshade

Accessories

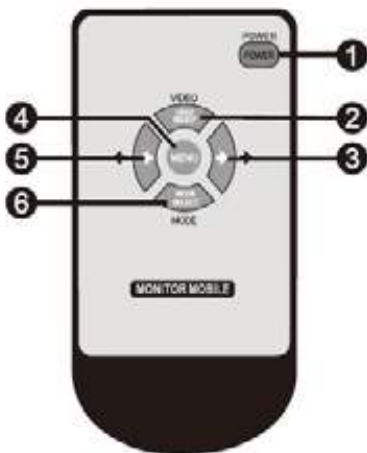
| | |
|---|--|
| Remote control*1 PCS | User manual*1PCS |
|  |  |
| Power cable * 1 PCS(optional) | Hex wrench*1 PCS |
|  |  |

Monitor



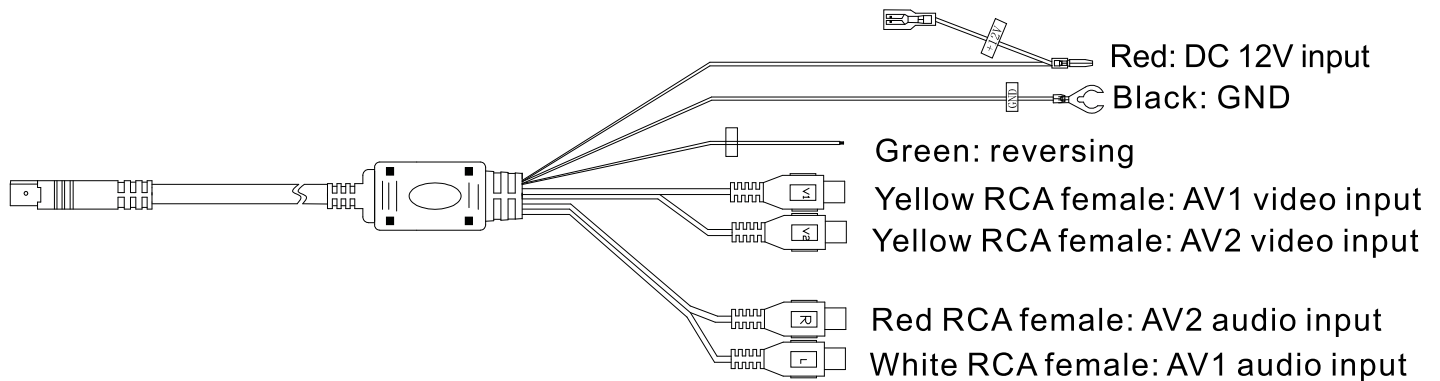
1. Volume Decrease/Setting Quantity Decrease/LEFT
2. Menu
3. Volume Increase/Setting Quantity Increase/RIGHT
4. Power
5. CH 1/UP
6. CH 2/DOWN
7. LINK/Confirm Menu
8. Remote Control Sensor
9. Bracket Knob
10. Reset Button
11. Speaker

Remote



1. Power
2. Select Source/UP
3. Increase Volume/Right
4. Menu
5. Decrease Volume/Left
6. Change Ratio/Down

Connection



Menu

Display options for each mode (AV1/AV2/LINK) can be individually set. After turning the system on, press "MENU" to enter menu and use "UP/DOWN" to toggle menu options. Press "LEFT/RIGHT" on the remote control/monitor or "LINK" on the monitor to enter into current submenu. Then press "LEFT" and "RIGHT" to adjust setting. Press "MENU" to exit current menu.

Volume: Press "LEFT" or "RIGHT" on the monitor/remote control to enter volume menu and also to adjust volume. Press "MENU" to exit the volume setting.

Auto Picture: Select option in the image menu, use "LEFT/RIGHT" to toggle between five options (Standard/Movie/Eco/Personal/Vivid). Press "UP/DOWN" to select next menu option.

Brightness: Select option in the image menu, use "LEFT/RIGHT" to adjust brightness, and press "MENU" to confirm desired choice. Press "UP/DOWN" to select next menu option.

Contrast: Select option in the image menu, use "LEFT/RIGHT" to adjust contrast, and press "MENU" to confirm desired choice. Press "UP/DOWN" to select next menu option.

Color: Select option in the image menu, use "LEFT/RIGHT" to adjust color, and press "MENU" to confirm desired choice. Press "UP/DOWN" to select next menu option.

Sharpness: Select option in the image menu, use "LEFT/RIGHT" to adjust sharpness, and press "MENU" to confirm desired choice. Press "UP/DOWN" to select next menu option.

Color Temperature: Select option in the image menu, use "LEFT/RIGHT" to toggle between four options (Normal/Warm/User/Cool). Press "UP/DOWN" to select next menu option.

Panel Rotate: Select option in the image menu, use "LEFT/RIGHT" to toggle between four options: Normal, RLUD (Rotate 180°), LR, UD. Press "UP/DOWN" to select next menu option.

Sound Mode: Select option in the sound menu, use "LEFT/RIGHT" to toggle between four options (Standard/Music/Speech/Personal). Press "UP/DOWN" to select next menu option.

Balance: Select option in sound menu, use "LEFT/RIGHT" to adjust channel balance and press "MENU" to confirm desired choice. Press "UP/DOWN" to select next menu option.

Virtual Surround: Select option in the sound menu, and use "LEFT/RIGHT" to toggle virtual surround on/off. Press "UP/DOWN" to select next menu option.

Auto Volume: Select option in the sound menu, and use "LEFT/RIGHT" to toggle auto volume on/off. Press "UP/DOWN" to select next menu option.

Speaker Mute: Select option in the sound menu, and use "LEFT/RIGHT" to toggle speaker mute on/off. Press "UP/DOWN" to select next menu option. (Note: this function will only mute the speaker, and cannot control the audio output).

Menu Language: Select option in the settings menu, and use "LEFT/RIGHT" to toggle between three languages (Simplified Chinese/English/Japanese). Press "UP/DOWN" to select next menu option.

Picture Format: Select option in the settings menu, and use "LEFT/RIGHT" to toggle between five options (16:9/4:3/Zoom 1/Zoom 2/Just Scan). Press "UP/DOWN" to select next menu option.

Menu Timeout: Select option in the settings menu, and use "LEFT/RIGHT" to toggle menu timeout length. There are seven options: 10 Sec/20 Sec/30 Sec/40 Sec/50 Sec/60 Sec/close. Press "UP/DOWN" to select next menu option.

Menu Transparency: Select option in the settings menu, and use "LEFT/RIGHT" to toggle between four options (Close/Low/Middle/High). Press "UP/DOWN" to select next menu option.

Power On Status: Select option in settings menu, and use "LEFT/RIGHT" to toggle between three options (Last Memory/Standby/Power On). Press "UP/DOWN" to select next menu option.

Blue Screen: Select option in settings menu, and use "LEFT/RIGHT" to turn blue screen on/off when there is no signal. Press "UP/DOWN" to select next menu option.

ACC Line: Select option in settings menu, and use "LEFT/RIGHT" to open or close the ACC Line. Press "UP/DOWN" to select next menu option.

ACC Delay (Sec): Select option in settings menu, and use "LEFT/RIGHT" to toggle between two options (Close/1-10 sec). Press "UP/DOWN" to select next menu option.

Reset Default: Select option in settings menu, and use "LEFT/RIGHT" to reset current channel image setting to default. Press "UP/DOWN" to enter select next menu option.

Input Source: Press "VIDEO SELECT" on the remote control to enter input source menu, and use "LEFT/RIGHT" to choose desired display channel and press "MENU" to confirm.

Miracast

1. Compatible with Airplay mirroring/latest iOS system. Compatible with iPad/iPhone/Mac notebook.
2. Supports Miracast Screen Mirroring, supports Android 4.2 (and above) Windows 8.1 system (computer should support HDCP).
3. Supports DLNA pushing.
4. Supports Tablet PC or notebook with WiDi function.
5. All windows devices can use Screen Share by installing AirParrot software.
6. Supports online movies, online TV channels, online radio and online webpage browsing.
7. Automatically detects variety of operating systems.

Miracast Basic Operating Introduction

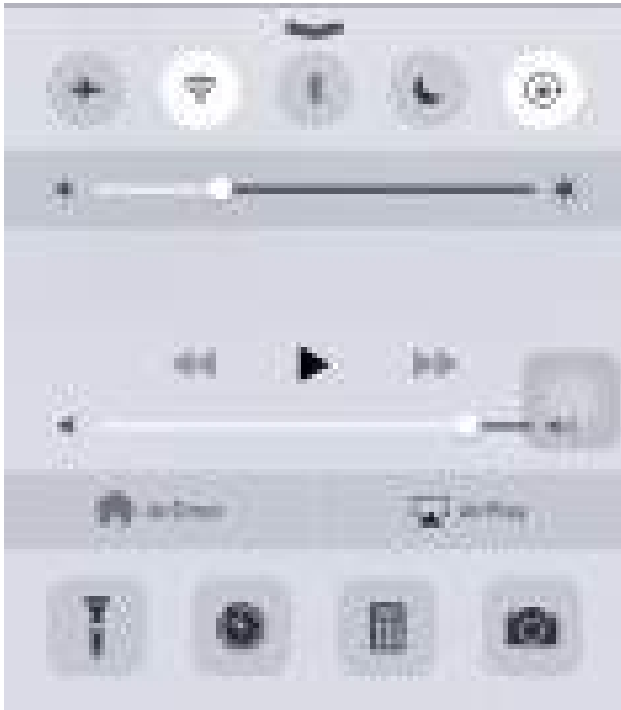
1. Airplay Mirroring (for iPhone, iPad, Mac notebook)
Find monitor's hot spot (ex: DONGLE-ACA213068A04)
from "Settings" of Apple devices and connect. Default
password: 12345678



(Tips: the hot spot name has been displayed on the top of the screen and the password is behind the PIN)

1-2. Open the Airplay interface of Apple device, choose the monitor's

hot spot name, then start Airplay. The Apple device will share screen with the monitor.



Open Apple device control center

(Note: At this time, the Apple device is connected with the monitor, without WiFi connection, so it can only mirror local data, or mirror on-line data by using 2G/3G/4G from mobile network)



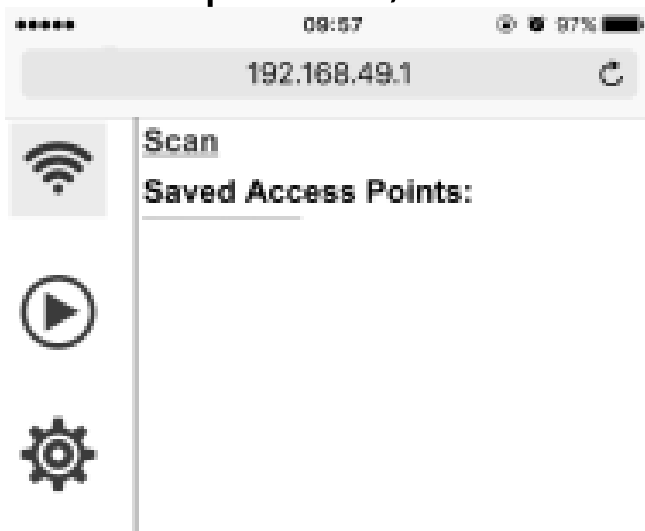
Enter into Airplay interface, choose the device name and then start airplay

iOS 6: Double-click the HOME key or at the bottom of the main screen, you will see "Airplay".

iOS 7 (or above): From main screen slide screen up, Click "Airplay" and select the monitor's hot spot name. Exit mirror by swiping the "Mirroring" icon to the left.



Open internet browser and input web site IP "192.168.49.1" to enter into the setting page. Click the WiFi symbol, click "Scan" and find out available WiFi network (include hot spot from mobile device, such as smartphone, tablet PC and PC). For example: Click "QC" and enter password, then click "connect".



Open browser, input website IP: 192.168.49.1 to enter setting interface



Click Scan, search the available wireless network



Choose the available wireless network, then input the password to connect

Tips: IP is shown on the top of main interface. The monitor will be restarted and refresh automatically when connected to the WIFI network. If NO SIGNAL appears on the screen, wait for a few minutes. If NO SIGNAL still shows after a few minutes switch the signal channel on the monitor or remote.

PIN 12345678

PIN 192.168.49.1

PIN DONGLE-ACA213068A04

Version:3.11.0

Try to connect route!Dongle will reboot!

After successfully connecting to the internet, the connected WIFI name after the WIFI icon and refresh the monitor's IP address. At this time, the apple device have connected the WIFI network (QC), and can share the screen with "Mirroring".

PIN 12345678

PIN 192.168.49.1

PIN DONGLE-ACA213068A04

Version:3.11.0

Try to connect route!Dongle will reboot!

Tip: After initial WIFI setup, any Apple device can Airplay Mirroring directly after connected this WIFI network, no need setup again. If you want to exit the network, please input the new IP on the top of screen in the browser, and choose "forget".

2. Miracast Mirroring (for Android and Win 8.1)

2-1. Miracast Mirroring (for Android 4.2 (and up) device and with Miracast function) Open cell phone's screen mirroring function, choose monitor hot spot to connect. Example: DONGLE-ACA213068A04. Share screen after successfully connected. If cell phone connected to WiFi or 2G/3G/4G network, it could mirror local data and network video, no need any other setup.

Note: For different cell phones, the method to open screen mirroring function may vary. Please refer to your cell phone user manual for more detailed information.

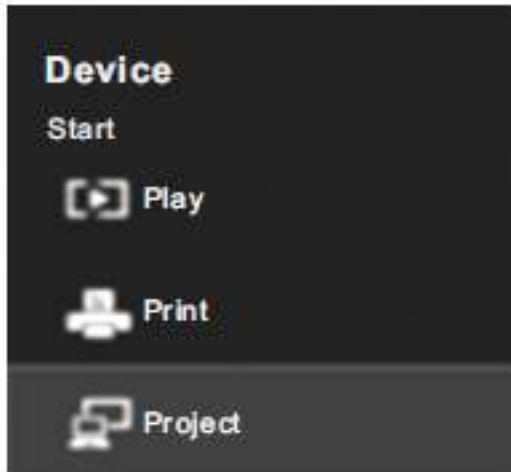


2-2. Miracast Mirroring (for Windows 8.1 tablet)

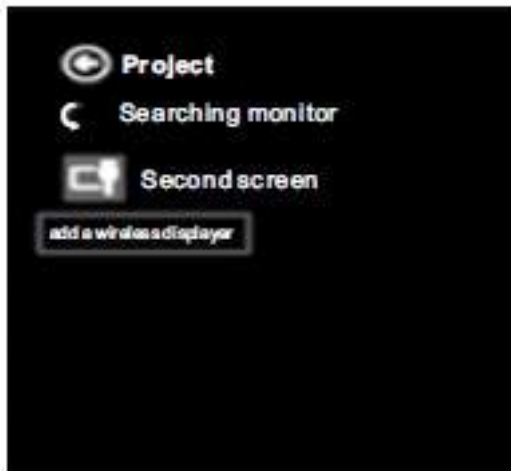
2-2-1. Move mouse to the right corner, pop up list, select "Device"



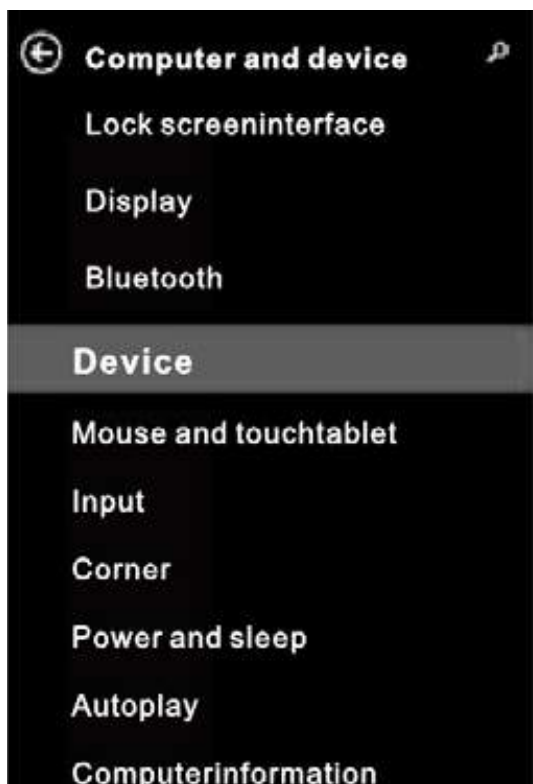
2-2-2. From device list, select “Project”



2-2-3. The first time to use project function, you need to add a wireless display.



2-2-4. After adding the monitor, the computer will automatically find the monitor hotspot. After this occurs click add.



Add device



Tip 1: The device DONGLE-ACA213068A04 in this manual is an example device. Different monitors will have different names. Please refer to the displayed name on the top of main interface.

Tip 2: When adding a device, “press the button on your DONGLE-ACA213068A04” will appear. Ignore this warning.

2-2-5. After successfully connecting you may start mirroring.

Tip 3: After initial connection, just click Device—Project to find DONGLE-ACA213068A04. Press to connect and start mirroring, no need add device again.

Note: Laptops with Win 8.1 need combined Intel graphics card/network with WIDI function to use miracast. If your laptop doesn't have a combined Intel graphics card/network card, it cannot use miracast even if upgraded to Win 8.1.

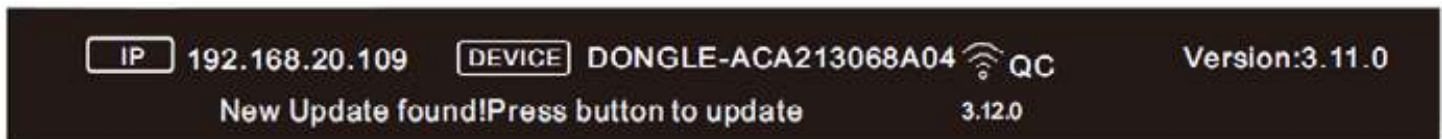
3. DLNA Video Pushing (Apple and Android devices)

Some devices have a built-in DLNA function, allowing you to push video from your wireless devices (Apple or Android) onto the monitor. You can also download third party DLNA software in the app store. If you have DLNA function, push video by selecting device.

Note: If device is not connected to WiFi, you may only push local video.

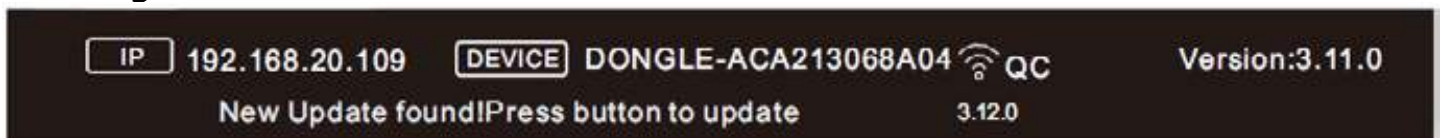
4. OTA Upgrade

4-1. On connection with WiFi screen "New update found, press the button to update." message will appear if upgrade exists.



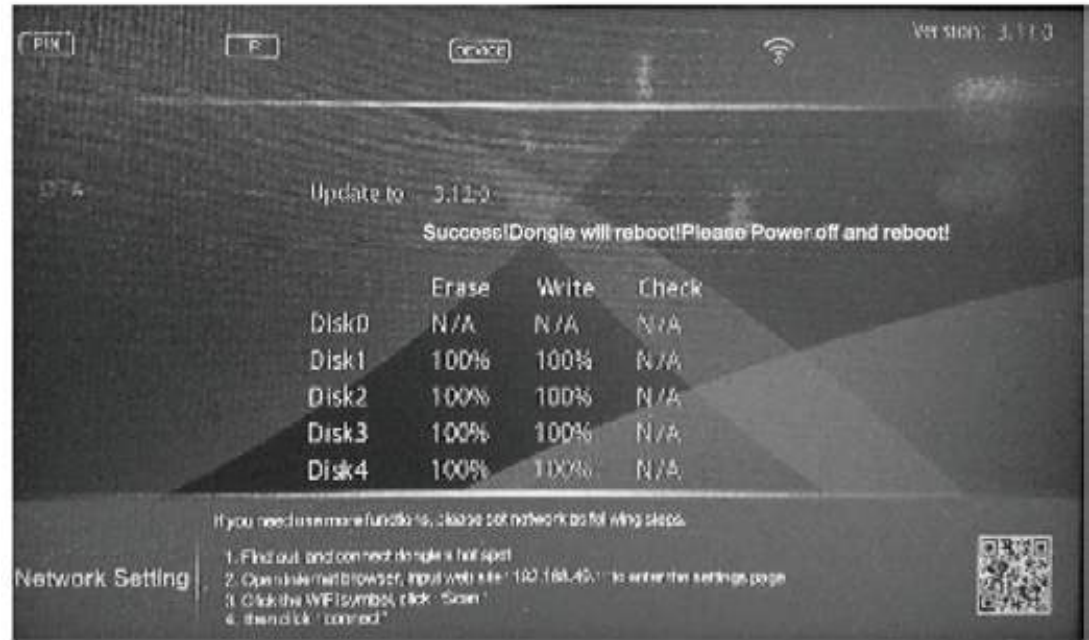
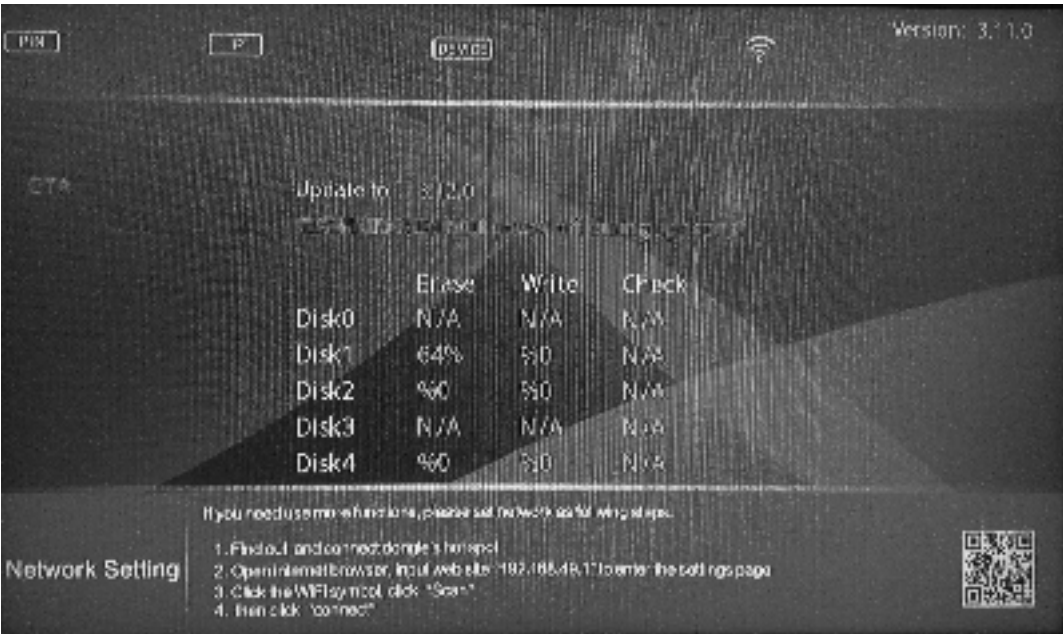
4-2. Short press reset button on the back of the monitor to automatically download the latest software version.

Tip: The update may take longer depending on internet connection and WiFi signal.



4-3. The monitor will start OTA upgrade mode automatically after downloading the software. It will restart after upgrading. Latest soft-

ware version will display on the top right corner of the screen.



Pic 2 Update finished and device will restart

Miracast Restore

Press reset button on the back of the monitor for 10 seconds to delete Miracast Link user data and restore to factory settings. Tip: The monitor will be restarted and refresh screen automatically after restoring to factory settings. If NO SIGNAL appears on the screen, wait for a few minutes. If NO SIGNAL is still on screen after a few minutes, switch the signal channel on the monitor or remote.

Miracast FAQ

1. Video is not smooth

- a. The quality of video playing depends on many factors, including network environment, WiFi signal intensity, and video bit rate. If local video is not smooth, the video bit rate may be too high.
- b. If online video is not smooth, it could indicate weak WiFi signal. Place the monitor close to the WiFi router.

2. How to display Miracast pictures or videos on unsupported devices (including Android systems lower than version 4.2)

- a. Use DLNA pushing function. Some players have a built-in DLNA function, or you can download third party DLNA software in APP STORE.

3. Use screen monitoring with systems lower than Windows 8.1.

- a. Download and install AirParrot. Website: <http://airparrot.com/>





If you have any questions
about this product, contact:

***Rear View Safety, Inc.
1797 Atlantic Avenue
Brooklyn, NY 11233
800.764.1028***

***Better Cameras. Better Service.
IT'S OUR GUARANTEE.***