

# Service Manual

**ViewSonic M1\_V**

**M1+\_V**

**M1\_G2**

**M1+\_G2**

**Model No. VS18241**

**VS18242**

**Portable LED Projector**

(M1\_V\_M1+\_V\_M1\_G2\_M1+\_G2\_SM Rev. 1c. JUN. 2021)

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## Revision History

| Revision | SM Editing Date | ECR Number | Description of Changes            | Editor     |
|----------|-----------------|------------|-----------------------------------|------------|
| 1a       | 09/25/20        |            | Initial Release. (PE: James Chen) | Sophia Kao |
| 1b       | 05/29/21        |            | Update contents.                  | Sophia Kao |
| 1c       | 06/05/21        |            | Update contents.                  | Sophia kao |
|          |                 |            |                                   |            |
|          |                 |            |                                   |            |
|          |                 |            |                                   |            |
|          |                 |            |                                   |            |

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## Introduction

This section contains general service information, please read through carefully. It should be stored for easy access place.

## Important Service Information

### Safety Notice

- 1 Make sure your working environment is dry and clean, and meets all government safety requirements.
- 2 Ensure that other persons are safe while you are servicing the product.
- 3 DO NOT perform any action that may cause a hazard to the customer or make the product unsafe.
- 4 Use proper safety devices to ensure your personal safety.
- 5 Always use approved tools and test equipment for servicing.
- 6 Never assume the product's power is disconnected from the mains power supply. Check that it is disconnected before opening the product's cabinet.
- 7 Modules containing electrical components are sensitive to electrostatic discharge (ESD). Follow ESD safety procedures while handling these parts.
- 8 Some products contain more than one battery. Do not disassemble any battery, or expose it to high temperatures such as throwing into fire, or it may explode.
- 9 Refer to government requirements for battery recycling or disposal.

## Product Specifications

The Projector consists of the DLP projector controller, Lamp controller, Power supply system, and the system cooling controller. The DLP controller captures the digital PC data and video data and converts them into the DMD display device. The lamp controller controls the lamp's power and synchronizes its frequency with color display sequence. Power supply unit controls the AC line power factor and converts primary voltage to secondary low voltage for digital board. The system cooling controller drives the airflow to cool the lamp's heat and electrical component's heat.

### 1.0 Specifications

| Item                 | Category                  | Specifications  |
|----------------------|---------------------------|---|
| Projector            | Type                      | 0.2" WVGA, LED  |
|                      | Display Size              | 24"~100"  |
|                      | Brightness                | Typ. 130 AL   |
|                      | Throw Distance            | 0.64-2.66 m (38"@1 m)   |
|                      | Lens                      | F=1.7, f=12.5 mm  |
|                      | Optical Zoom              | Fixed   |
|                      | Light Source Type         | RGB LED   |
|                      | Light Source Life(Normal) | up to 30,000 hours  |
|                      | Display Color             | 1.07 Billion Colors   |
|                      | Keystone                  | -/+ 40 (Vertical)   |
|                      | Battery Capacity          | 3940 mAh, 11.1V   |
| Input Signal         | HDMI                      | fh: 15h~135KHz, fv:23~120Hz,  |
| Resolution           | Native                    | 854 x 480   |
|                      | Support                   | VGA (640 x 480) to FullHD (1920 x 1080)   |
| Input                | HDMI                      | 1 (HDMI 1.4, HDCP 1.4)  |
|                      | USB Type-A                | 1 (USB 2.0 Reader; share with power)  |
|                      | Type_C USB                | 1   |
| Output               | Speaker                   | 6W Cube x 1   |
|                      | USB Type A (Power)        | 1 (USB 2.0, 5V/1A; share with USB reader)   |
| Power Adapter        | Input Voltage             | +19V AC Adapter(100~240V)   |
| Operating Conditions | Temperature               | 0°C to 40°C (32°F to 104°F)   |
|                      | Humidity                  | 0% to 90% (non-condensing)  |
| Dimensions           | Physical (W x H x D)      | 146.9 x 126.1 x 40 mm (5.78" x 4.96" x 1.57")   |
| Weight               | Physical                  | 0.8 kg (1.78 lbs)   |
| Power Saving Modes   | On                        | Normal Typical:<br>25W @Battery mode<br>37W@DC mode with charger<br>ECO Typical:<br>20W @Battery mode<br>30W@DC mode with charger |
|                      | Off                       | < 0.5W (Bat Standby)<br>< 0.05W (Power Off)   |

## 2.0 CONTROLS and indicators

|                             |  |                          |
|-----------------------------|--|--------------------------|
| 2.1 Panel Hardware Controls |  |                          |
| Main Power Switch           | Power On/Off   |                          |
| Panel LED                   | <b>LED:</b>  |                          |
|                             | Light  | Description              |
|                             | Green  | Power On                 |
|                             | Red  | Stand-by Mode            |
|                             | Twinkle White  | Projector Charging       |
|                             | All White  | Battery is Fully Charged |
| 2.2 Video Controls          |  |                          |
| Control Type                | Digital with an OSD.   |                          |
| Saving Settings             | The OSD shall save new settings when it times out or when the user exits the OSD, there shall be saving at same memory.  |                          |
| Other Features              | <p>Image Settings :</p> <p>Aspect ratio :(Auto) / 4:3 / 16:9</p> <p>Picture mode:Bright, TV, Movie, User</p> <p>Color Temp: 6500K / 7500K / 9300K</p> <p>Brightness, Contrast, Sharpness, Saturation, Tint</p> <p>Basic Settings:</p> <p>Language , Projector Projection ,</p> <p>Keystone , Auto Keystone</p> <p>Light Source Level : Full / Eco</p> <p>Information</p> |                          |

## 3.0 ELECTRICAL REQUIREMENTS

|                                     |                |                           |                        |                          |
|-------------------------------------|----------------|---------------------------|------------------------|--------------------------|
| 3.1 Hardware                        |                |                           |                        |                          |
| Projector                           |                |                           |                        |                          |
| Scaler Chip                         | MSTAR MSD6A358 |                           |                        |                          |
| De-interlacer Chip                  | MSTAR MSD6A358 |                           |                        |                          |
| Video Decoder Chip                  | NA             |                           |                        |                          |
| ADC Chip                            | NA             |                           |                        |                          |
| Network Chip                        | SKI.WB821CU.2  |                           |                        |                          |
| 3.2 Horizontal / Vertical Frequency |                |                           |                        |                          |
| HDMI                                |                |                           |                        |                          |
| Timing                              | Resoluton      | Horizontal Frequency(kHz) | Vertcal Frequency (Hz) | Dot Clock Frequency(MHz) |
| 480i                                | 720(1440) x    | 15.73                     | 59.94                  | 27                       |
| 480p                                | 720 x 480      | 31.47                     | 59.94                  | 27                       |
| 576i                                | 720(1440) x    | 15.63                     | 50                     | 27                       |
| 576p                                | 720 x 576      | 31.25                     | 50                     | 27                       |
| 720/50p                             | 1280 x 720     | 37.5                      | 50                     | 74.25                    |
| 720/60p                             | 1280 x 720     | 45                        | 60                     | 74.25                    |

|          |             |       |    |       |
|----------|-------------|-------|----|-------|
| 1080/24P | 1920 x 1080 | 27    | 24 | 74.25 |
| 1080/25P | 1920 x 1080 | 28.13 | 25 | 74.25 |
| 1080/30P | 1920 x 1080 | 33.75 | 30 | 74.25 |
| 1080/50i | 1920 x 1080 | 28.13 | 50 | 74.25 |
| 1080/60i | 1920 x 1080 | 33.75 | 60 | 74.25 |
| 1080/50P | 1920 x 1080 | 56.25 | 50 | 148.5 |
| 1080/60P | 1920 x 1080 | 67.5  | 60 | 148.5 |

### 3.3HDMI Support PC Timing

| Timing      | Resoluton | Horizontal Frequency(kHz) | Vertcal Frequency (Hz) | Dot Clock Frequency(MHz) |
|-------------|-----------|---------------------------|------------------------|--------------------------|
| 640 x 480   | 59.94     | 31.469                    | 25.175                 | 59.94                    |
|             | 72.809    | 37.861                    | 31.5                   | 72.809                   |
|             | 75        | 37.5                      | 31.5                   | 75                       |
|             | 85.008    | 43.269                    | 36                     | 85.008                   |
|             | 119.518   | 61.91                     | 52.5                   | 119.518                  |
| 720 x 400   | 70.087    | 31.469                    | 28.3221                | 70.087                   |
| 800 x 600   | 56.25     | 35.156                    | 36                     | 56.25                    |
|             | 60.317    | 37.879                    | 40                     | 60.317                   |
|             | 72.188    | 48.077                    | 50                     | 72.188                   |
|             | 75        | 46.875                    | 49.5                   | 75                       |
|             | 85.061    | 53.674                    | 56.25                  | 85.061                   |
|             | 119.854   | 77.425                    | 83                     | 119.854                  |
| 1024 x 768  | 60.004    | 48.363                    | 65                     | 60.004                   |
|             | 70.069    | 56.476                    | 75                     | 70.069                   |
|             | 75.029    | 60.023                    | 78.75                  | 75.029                   |
|             | 84.997    | 68.667                    | 94.5                   | 84.997                   |
|             | 119.989   | 97.441                    | 115.5                  | 119.989                  |
| 1152 x 864  | 75        | 67.5                      | 108                    | 75                       |
| 1280 x 768  | 59.87     | 47.776                    | 79.5                   | 59.87                    |
|             | 74.893    | 60.289                    | 102.25                 | 74.893                   |
|             | 84.837    | 68.633                    | 117.5                  | 84.837                   |
| 1280 x 800  | 59.81     | 49.702                    | 83.5                   | 59.81                    |
|             | 74.934    | 62.795                    | 106.5                  | 74.934                   |
|             | 84.88     | 71.554                    | 122.5                  | 84.88                    |
| 1280x 960   | 60        | 60                        | 108                    | 60                       |
|             | 85.002    | 85.938                    | 148.5                  | 85.002                   |
| 1280 x1024  | 60.02     | 63.981                    | 108                    | 60.02                    |
|             | 75.025    | 79.976                    | 135                    | 75.025                   |
|             | 85.024    | 91.146                    | 157.5                  | 85.024                   |
| 1360 x 768  | 60.015    | 47.712                    | 85.5                   | 60.015                   |
| 1400 x 1050 | 59.978    | 65.317                    | 121.75                 | 59.978                   |

|             |        |        |        |        |
|-------------|--------|--------|--------|--------|
| 1400 x 900  | 59.887 | 55.935 | 106.5  | 59.887 |
|             | 60     | 55.469 | 88.75  | 60     |
|             | 74.984 | 70.635 | 136.75 | 74.984 |
|             | 84.842 | 80.43  | 157    | 84.842 |
| 1600 x 1200 | 60     | 75     | 162    | 60     |
| 1680 x 1050 | 59.883 | 64.674 | 119    | 59.883 |
|             | 59.954 | 65.29  | 146.25 | 59.954 |

## 4.0 DMD Chip

|                                 |                                    |
|---------------------------------|------------------------------------|
| 4.1 Panel Specifications        |                                    |
| System Controller / Driver Type | MSTAR MSD6A358 / DLPC3545+DLPA3000 |
| Aspect Ratio (Native)           | 854x480 (16x9)                     |
| Pixels                          | 854(H) x 480(V)                    |

## 5.0 IMAGE PERFORMANCE

|                                    |   |
|------------------------------------|---|
| 5.1 Luminance                      |   |
| ANSI Luminance Output Normal       | 130 lm (typical) ref.   |
|                                    | 70% of Normal Mode  |
| Measurement Device                 | Minolta CL200 or equivalent device with accredited tracability  |
| 5.2 Contrast Ratio                 |   |
| Contrast Ratio(ANSI)               | 200:1 Minimum by ANSI Standard Checkerboard Method  |
| Contrast Ratio(FOFO) w/o DCR       | 500:1 Minimum by Full on/Full off   |
| Contrast Ratio w/ Dynamic Eco(DCR) | N/A<br>When RGB value of content input is smaller than 20%, system will automatically switch to Eco mode, if RGB value is greater than 60%, the projector will back to Normal mode. |
| Measurement Device                 | Minolta CL200 or equivalent device with accredited traceability   |

## 6.0 MECHANICAL

|                |  |
|----------------|--|
| 6.1 Dimensions |  |
| Width          | 146.9 mm                                 |
| Height         | 40 mm                                    |
| Depth          | 126.1 mm                                 |
| 6.2 Net Weight |  |
| Net Weight     | 0.8 +/-0.05 (kgs)<br>1.78 +/-0.11 (lbs ) |

## 7.0 ENVIRONMENTAL

|   |   |
|---|---|
| 7.1 Environmental Conditions (Follow TI Dew point specification)    |   |
| Operating Temperature Range   | 0°C to +40°C / 32°F to +104°F   |
| Storage Temperature   | -20°C to +60°C / -4°F to +140°F   |
| Operating Relative Humidity   | 10% to 90% Non-Condensing   |
| Storage Relative Humidity   | 10% to 90% Non-Condensing   |
| Operating Altitude  | 0~6000ft, 5°C~35°C<br>6000ft ~10000ft, 5°C~25°C must be operational and the reliability decrease is |
| Storage Altitude  | 0 to +40,000 ft sea level   |
| 7.2 Noise Level   |   |
| Noise Level   | Normal mode: 26dBA(TYP) @ 25°C(table center)<br>ECO mode: 24dBA(TYP) @ 25°C(table center)           |
| 7.3 Cabinet Temperatures  |   |
| Surface Metal   | <70°C except screws & terminals.  |
| Surface Plastic   | <65°C except around ventilation   |
| Exhaust Air   | <95°C around ventilation holes.   |
| Screws and Terminals  | 55°C max.   |
| Accessory Cables  | All the accessory cables that will accompany the unit are rated up to at                            |
| 7.4 Shock (Handling)  |   |
| Unpackaged Drop Tests (all tests to be performed on a wooden table) | None (Packed drop test)   |
| 7.5 Gas   |   |
| Exhaust from ventilation holes                                      | No noxious, corrosive or combustible gasses exhausted.  |
| 7.6 Electrostatic Discharge   |   |
| Electrostatic Discharge   | 1. Operating and contact discharge applies voltage +/- 8KV (20 times,                               |

## 8.0 RELIABILITY

|               |   |
|---------------|---|
| 8.1 MTBF      |   |
| Required MTBF | Demonstration MTBF: >40K hours.<br>Calculated MTBF:> 100K hours.. |

## 9.0 AUDIO

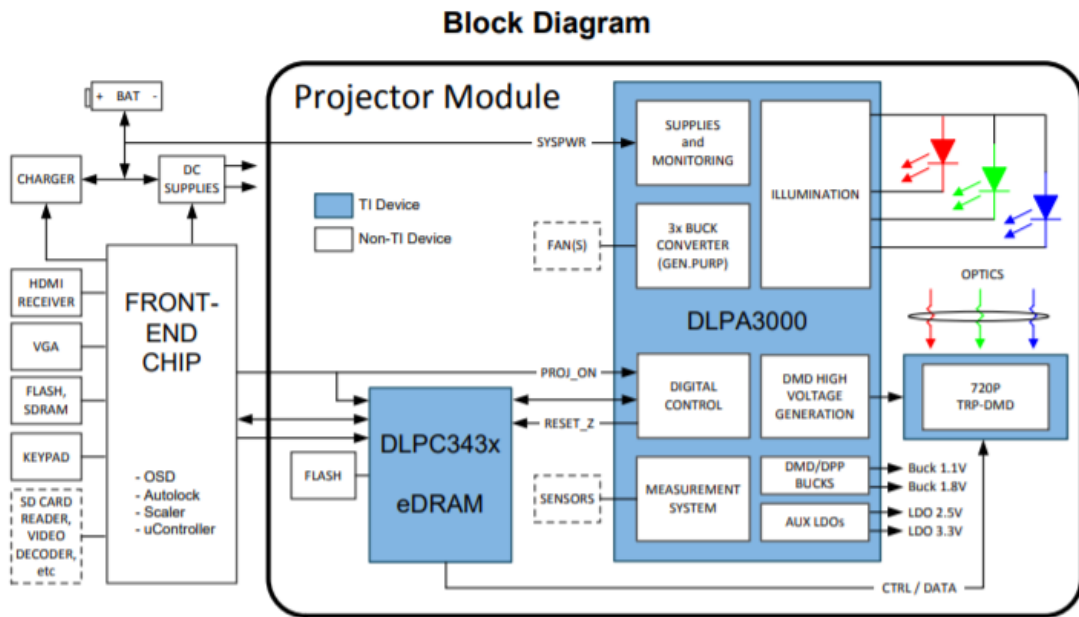
|                    |                                     |
|--------------------|-------------------------------------|
| 9.1 Speaker System |                                     |
| Sound System       | STEREO                              |
| Speaker            | 6W*1 cube Impedance: 2Ω             |
| Amplifier          | Limited @ 6W(Max 20W)               |
| Audio Signal Input | Amplitude: 500mVrms Impedance: 10Kw |
| Frequency Response | 300 – 20KHz                         |

|            |  |
|------------|--|
| Distortion | 20% Max 150Hz- 250Hz<br>7% Max 300Hz-400Hz<br>5% Max 400Hz-10kHz |
|------------|--|

## 10.0 REMOTE control

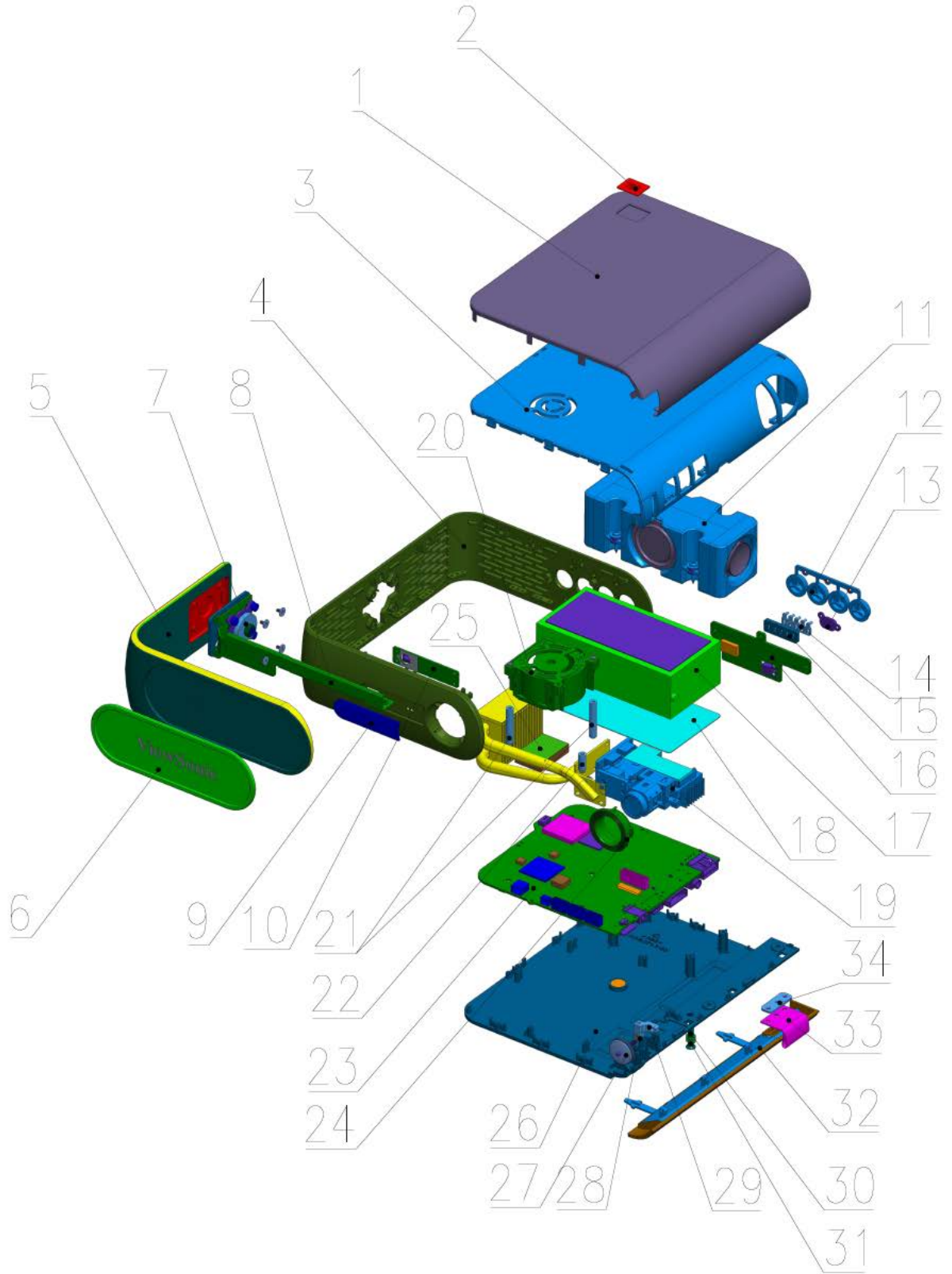
|                        |  |
|------------------------|--|
| 10.1 IR Remote         |  |
| Projector Transceivers | The projector shall have IR Transceivers on the front of the unit.   |
| Distance               | The IR Remote shall function within the distance in a 300 LUX ambient light environment at the following angles:<br>Front: At 7m minimum.<br>Horizontal: 15° (degrees)<br>Vertical: 15° (degrees)<br>Top: At 7m minimum.<br>Horizontal: 15° (degrees)<br>Vertical: 15° (degrees) |
| Key Function Operation | Each individual key function when selected provides positive selection of its prescribed operation. Pressing a selected key should not cause over scroll or jump to the next key function.   |
| Working Frequency      | Sub-carrier frequency: 38kHz.  |

## Block Diagram



# Disassembly and Assembly Procedure

## Exploded Views



| Item | Part name                       | Supplier P/N | Remarks       |
|------|---------------------------------|--------------|---------------|
| 1    | 金属窗网 Metal mesh window          | 811144053    | VSCN          |
|      | 金属窗网 Metal mesh window          | 811144054    | WW            |
| 2    | 铭牌 LOGO                         | 811144051    | JBL           |
|      | 铭牌 LOGO                         | 811144052    | Harman/Kardon |
| 3    | 上盖组件 Top cover                  | 811167096    | VSCN          |
|      | 上盖组件 Top cover                  | 811167097    | WW            |
| 4    | 中框组件 Frame                      | 811167095    |               |
| 5    | 支撑架 Bracket                     | 811144049    |               |
| 6    | 硅胶垫 silicone pad                | 811144044    |               |
| 7    | 金属转轴 Hinge                      | 811144048    |               |
| 8    | 支架 Bracket                      | 811144050    |               |
| 9    | 前 IR 透镜组件 Front IR Lens         | 811167093    |               |
| 10   | 优派 M1+IR 印制板组件 IR Board         | 811149165    |               |
| 11   | 音箱 E060-0317-001Speaker         | 811144224    |               |
| 12   | 按键组件                            | 811167094    |               |
| 13   | 后 IR 透镜 Back IR lens            | 811144062    |               |
| 14   | 指示灯透镜 Pilot light lens          | 811144063    |               |
| 15   | 遮光垫                             | 811144043    |               |
| 16   | 优派 M1+KB 印制板组件 Keypad Board     | 811149167    |               |
| 17   | 电池 814278-11.1V-3930mAh-1.25-5P | 811150266    |               |
| 18   | 绝缘片 insulation sheet            | 811144033    |               |
| 19   | 光机 H15L Optical Engine          | 811144222    |               |
| 20   | 风扇 YB3517HS05 FAN               | 811144223    |               |
| 21   | 螺柱 Stud                         | 811144037    |               |
| 22   | 螺柱 Stud                         | 811144036    |               |
| 23   | 优派 M1+印制板组件 Main Board          | 811229610    | VSCN          |
|      | 优派 M1 印制板组件 Main Board          | 811152653    | WW            |
| 24   | 镜头盖 Lens cap                    | 811144060    |               |
| 25   | 型材散热器                           | 811144045    |               |
| 26   | 下盖组件 Lower Cover                | 811167092    |               |
| 27   | 调焦旋钮组件 focus ring               | 811167090    |               |
| 28   | 挡圈 GB896-84-1.5                 | 811150273    |               |
| 29   | 调焦传动扣 Focus drive buckle        | 811144047    |               |
| 30   | 专用机制螺钉                          | 811144042    |               |
| 31   | 调焦弹簧 A spring                   | 811144041    |               |
| 32   | 门组件 The door components         | 811167091    |               |
| 33   | 拉带 Drawstring                   | 811189186    |               |
| 34   | 压板 pressing plate               | 811144057    |               |

## Disassembly Procedure

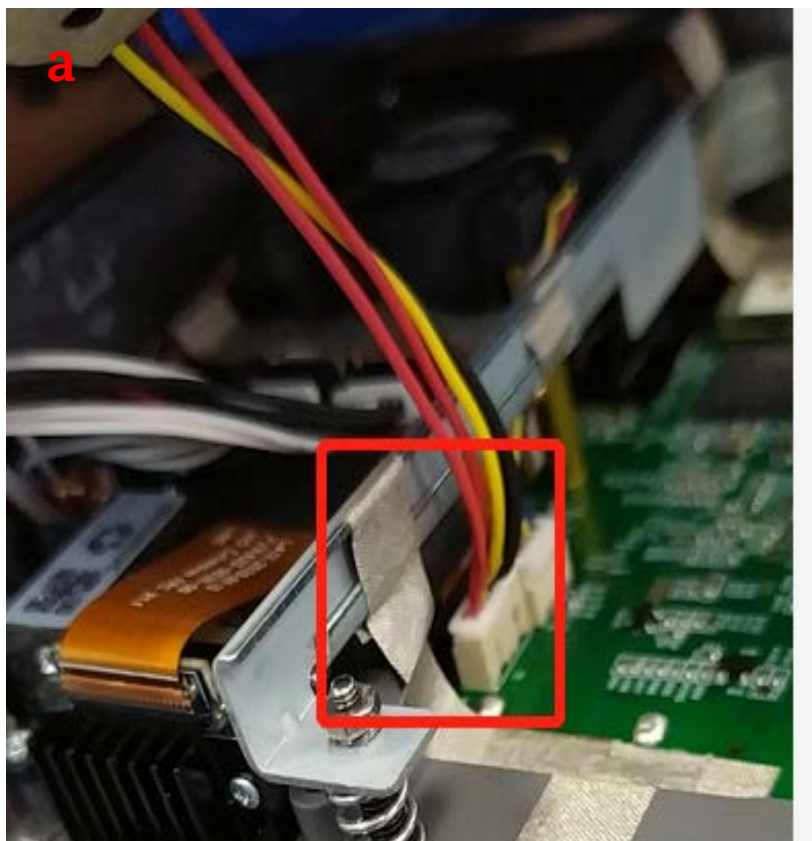
### 1. Disassemble the Rear Case:

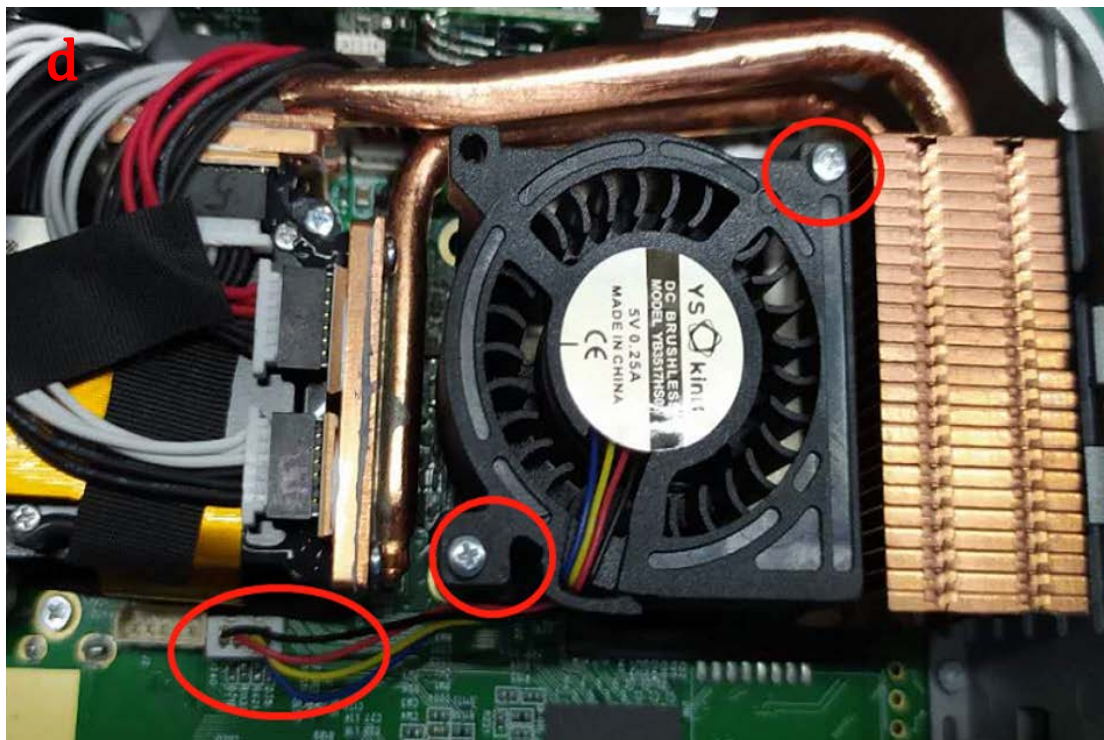
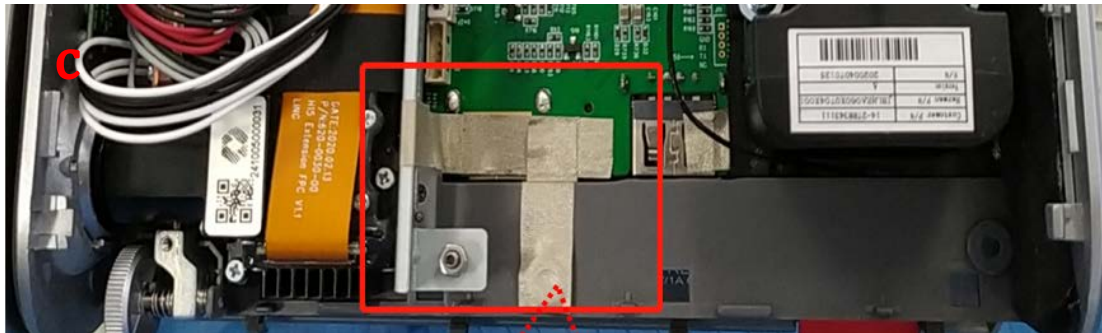
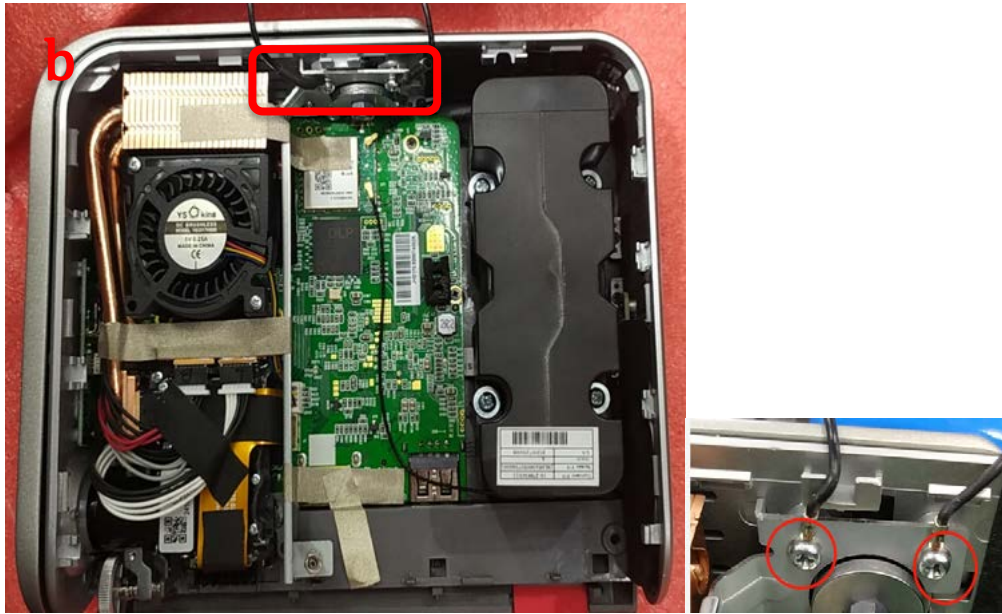
Dismantle the cover and Dismantle the screw\*3 on rear case. Take off the rear case.

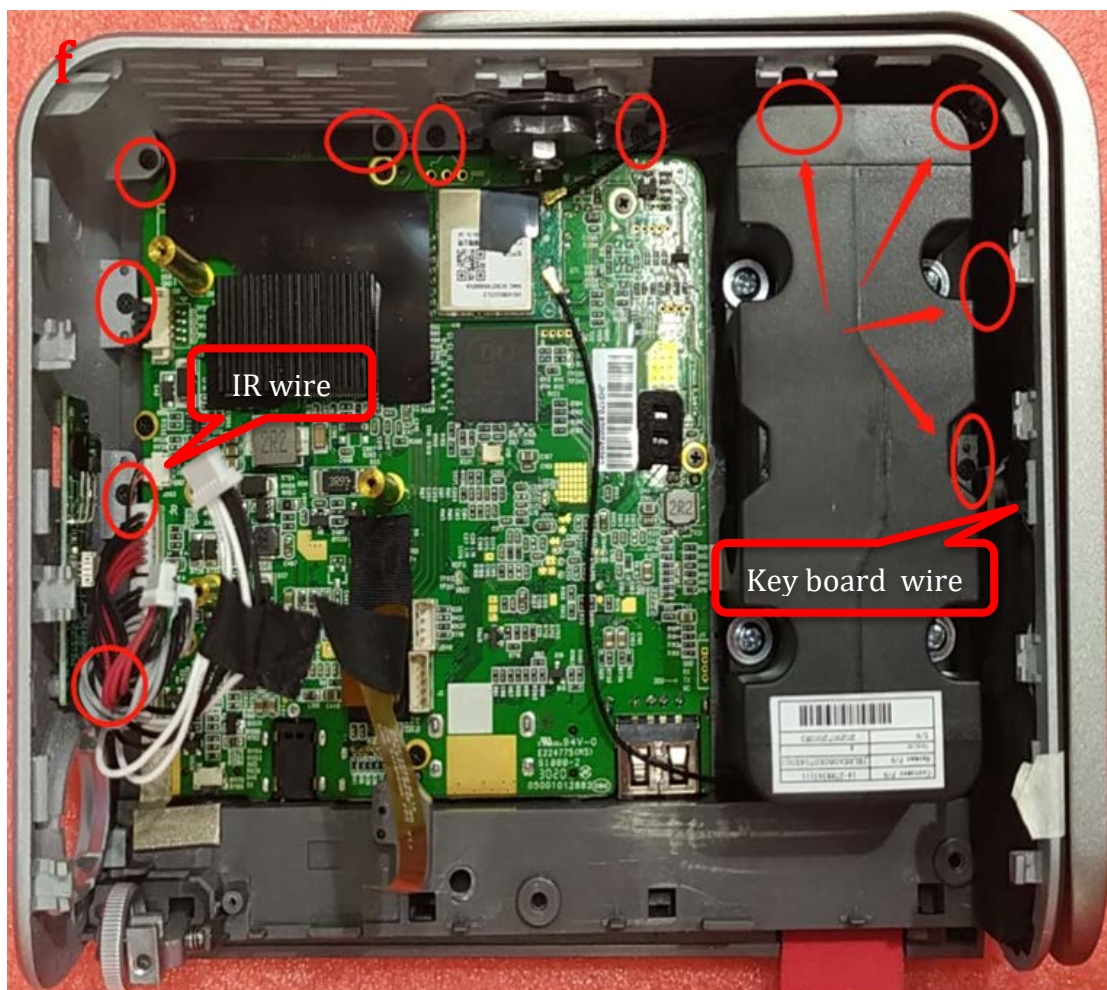
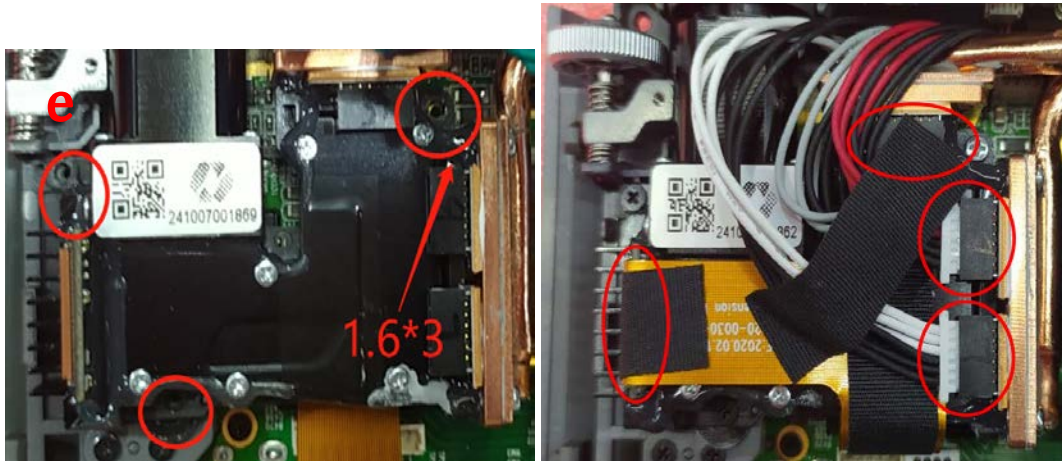


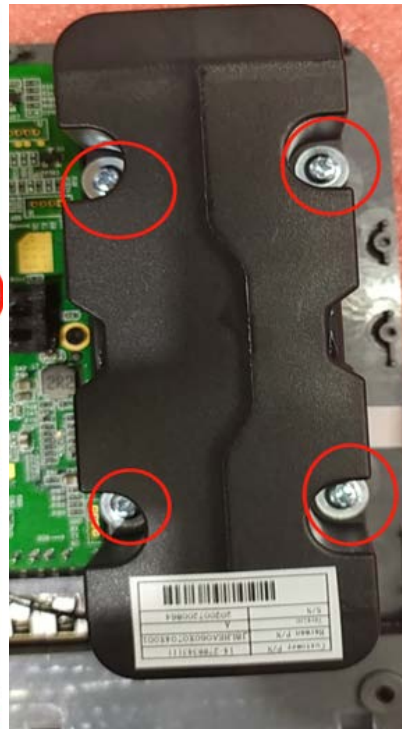
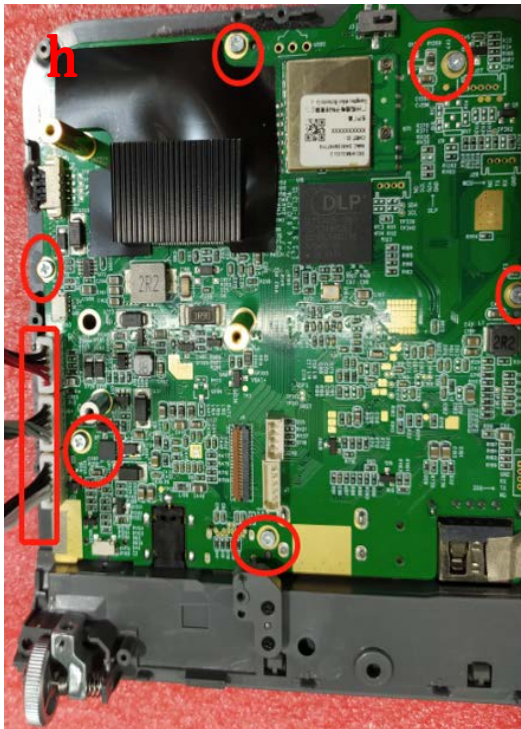
### 2. Disassemble the Main Board:

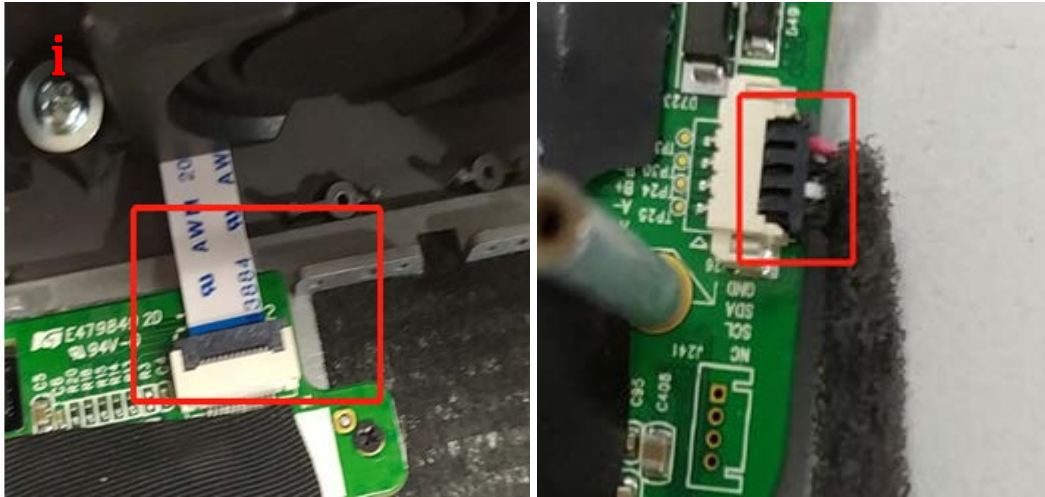
- a. Disassemble the battery wire on Main board.
- b. Disassemble the top cover wires.
- c. Dismantle the screw on bottom board and take off the metal holder.
- d. Dismantle the screw\*2 and Disassemble the wire, Take off the fan.
- e. Dismantle the screw\*3 and Disassemble the wires, Take off the Optical Engine.
- f. Dismantle the screw\*11 and Disassemble the IR wire and the key board wire, Take off the frame.
- g. Dismantle the antennas\*2(M1 have no antenna)
- h. Dismantle the screw\*10, Take off the main board and speaker together.
- i. Disassemble the speaker wire.





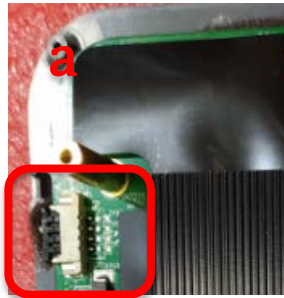




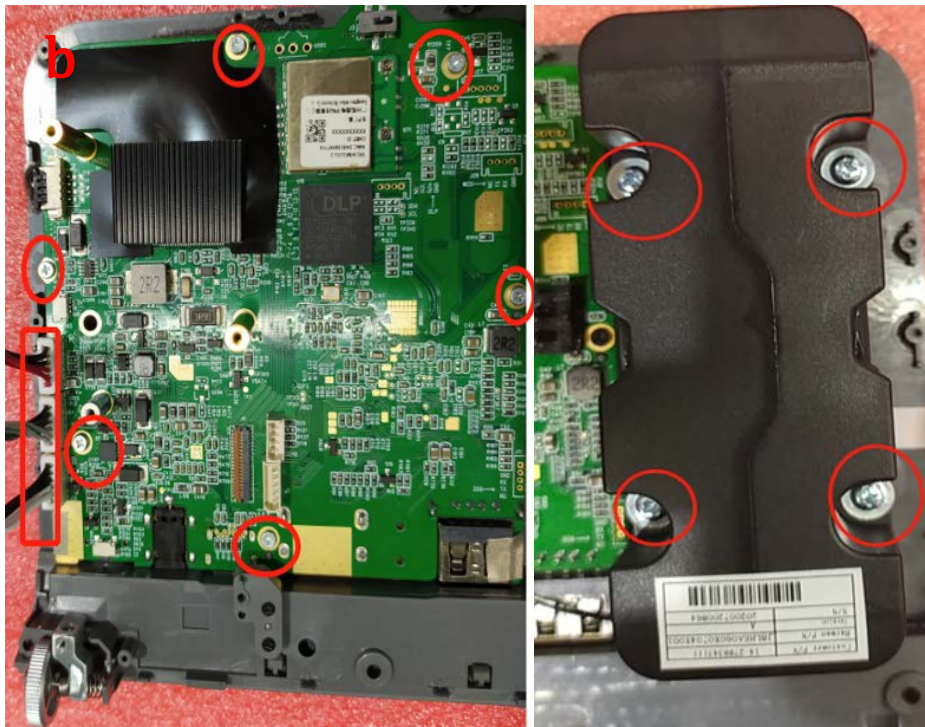


## Assembly Procedure

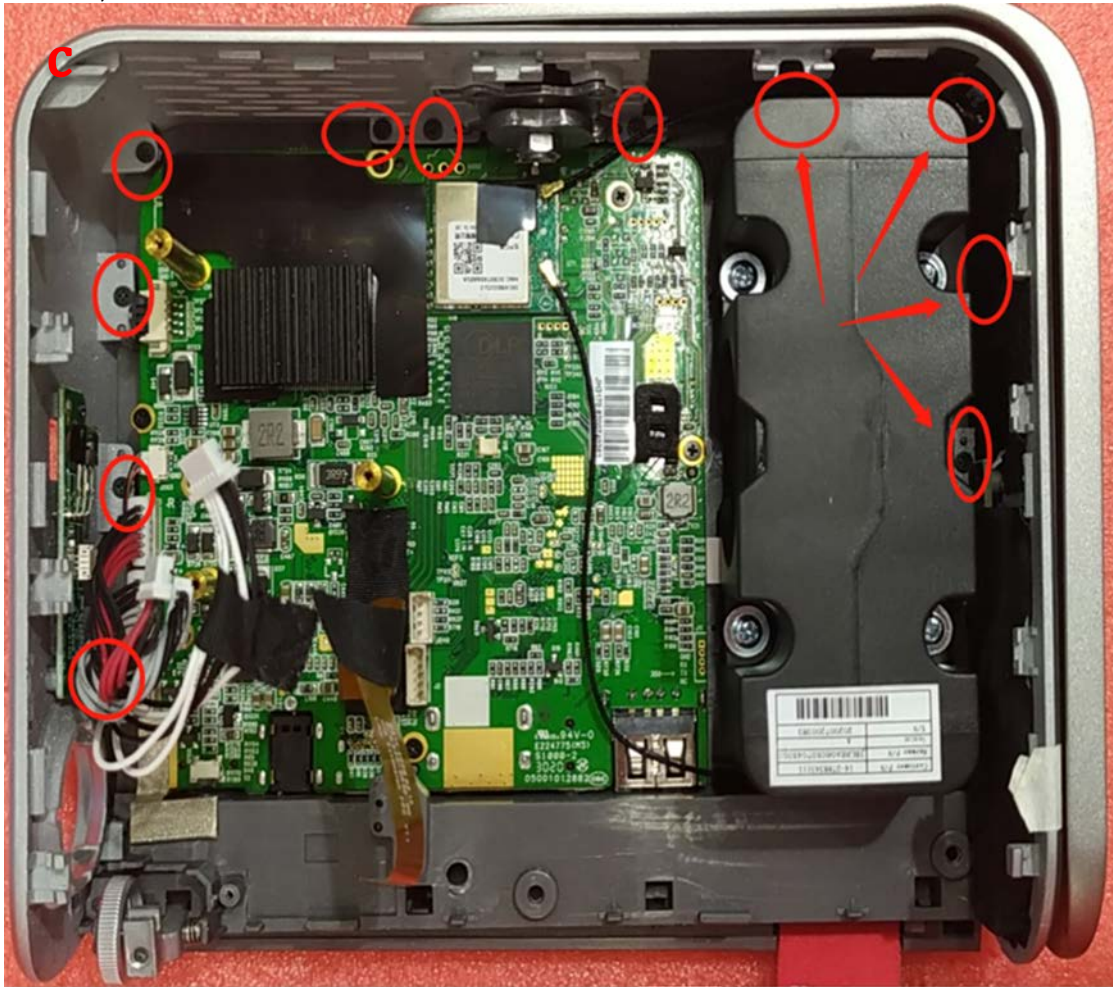
1. **Assemble** the main board and speaker on the Case Lower
  - a. connect the speaker wire with main board.



- b. put the main board and speaker on the Case Lower and assemble the screws.



c. Assemble the IR wire and the key board wire, Take on the frame, assemble the screws.

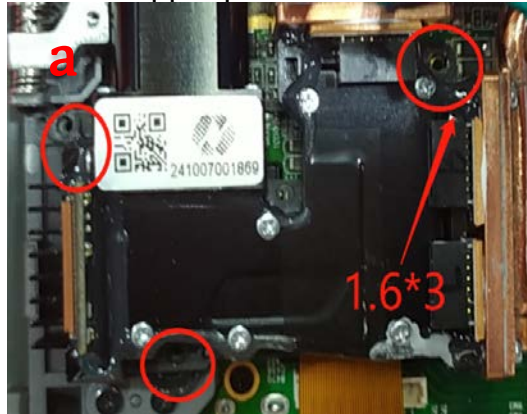


d. Assemble the antennas. (M1 have no antenna)

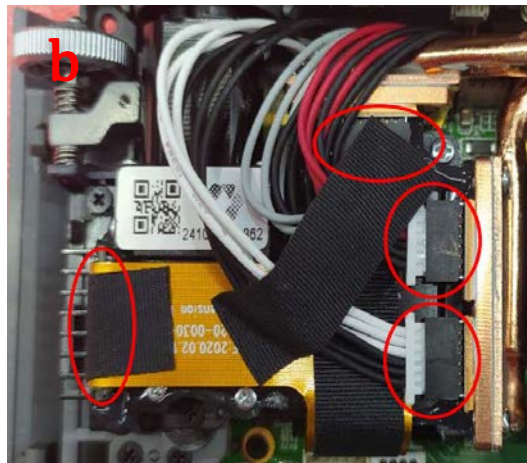


2. Assemble the optical Engine.

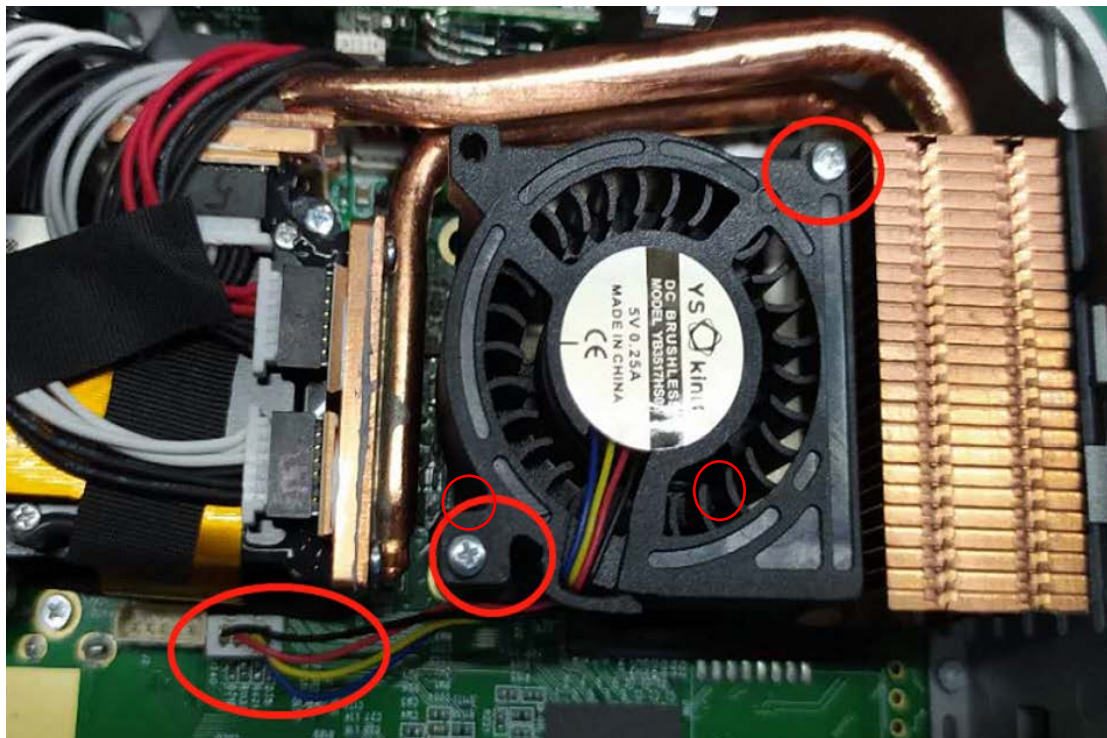
- a. Put the Engine on the copper pillars and assemble the screws.



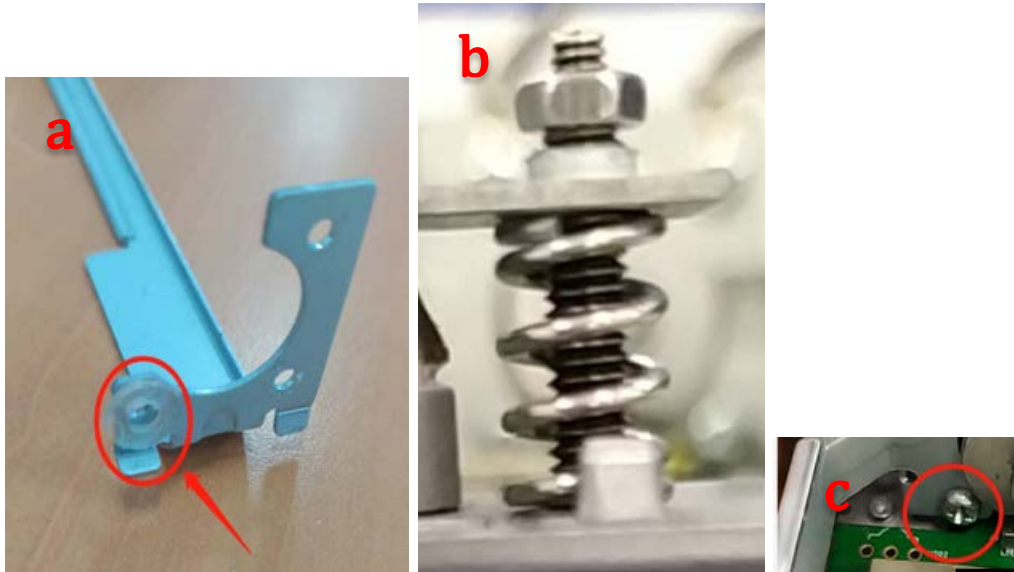
- b. Assemble the wires



3. Assemble the fan on the main board.

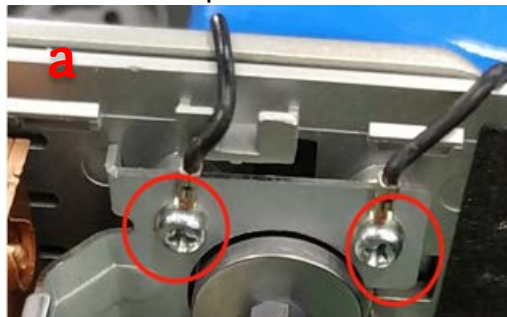


#### 4.Assemble the metal holder

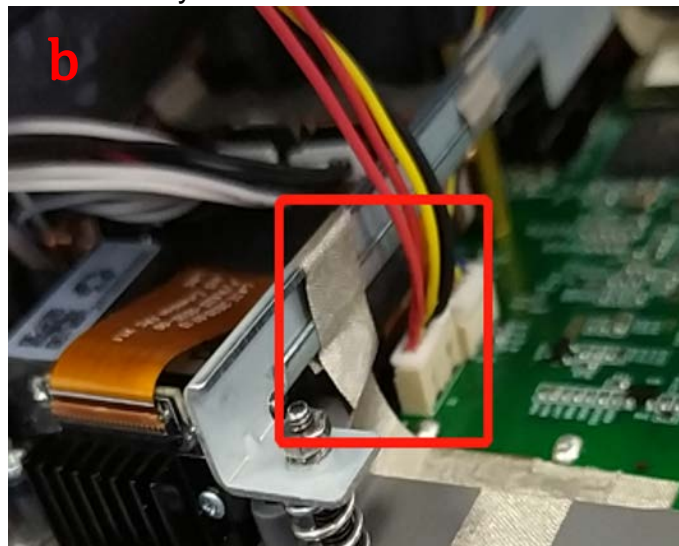


#### 5.Assemble the the top cover

a. Assemble the wires of the top cover.



b. Assemble the battery wire on Main Board.



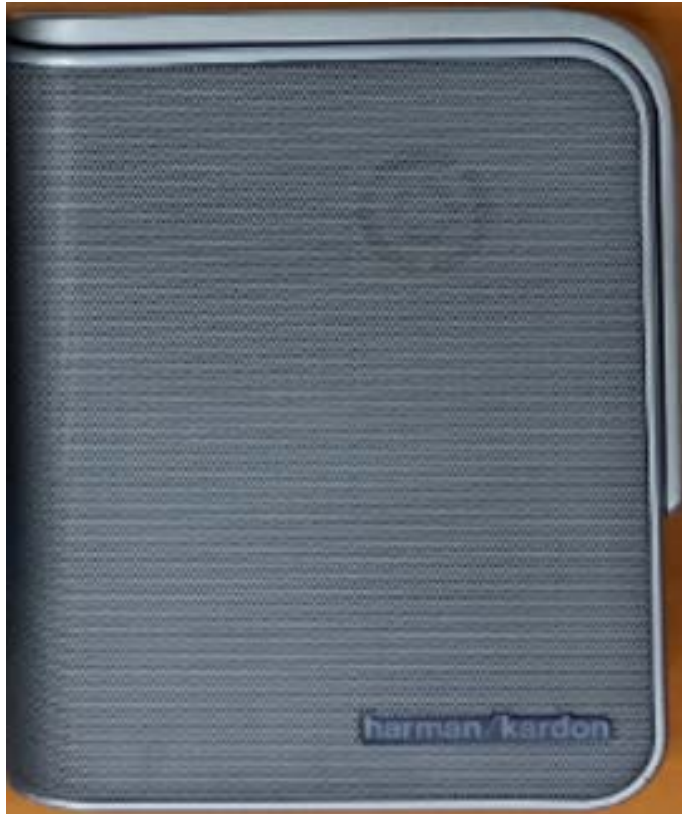


**2. Open the top cover of the box**



**3. Take out the M1/M1+ and remove the Packing bag around the product**





**4.Remove the top partition and take out accessories**



# Troubleshooting Guide

## 1. System Analysis

### 1.1 The Projector Does Not Turn On.

| Item | Cause  | Remedy  |
|------|--|---|
| 1    | There is no power from the battery                 | Make sure the battery is OK and charged.  |
| 2    | Main board and the battery are not connected well. | Check the main board and the battery connection. Make sure the wire is not damaged and been connected well. |
| 3    | Main board is not working                          | Replace main board.   |

### 1.2 Unable to charge the battery

| Item | Cause                                 | Remedy  |
|------|---------------------------------------|---|
| 1    | There is no power from the power cord | Make sure the switch is on if there's one on projector outlet.  |
| 2    | Unable to charge the battery          | (1) Check the connection between the main board and the battery<br>(2) Replace the battery<br>(3) Replace the main board. |

### 1.3 Lamp Cannot Be Lit On

| Item | Cause                 | Remedy  |
|------|-----------------------|---|
| 1    | Lamp cannot be lit on | (1) Check the connection between the main board and lamp module (lamp module wire and lamp module FPC).<br>(2) Replace lamp module<br>(3) Replace the main board. |

### 1.4 No Display

| Item | Cause  | Remedy  |
|------|--|---|
| 1    | The signal input device is not turned on or connected        | Turn the video source device on and check that the signal cable is connected correctly. |
| 2    | The projector is not correctly connected to the signal input | Check the connection.   |
| 3    | The input signal has not been correctly selected.            | Select the correct input with the Source key on the projector or remote control.        |

## 2. Trouble Shooting by Defect Symptoms

### 2.1 Operating Shut Down

After operating shut down, if the projector cannot be turned on again or lamp cannot be lit on or no picture, please go back to section 1: System Analysis. If the projector can operate again after operating shut down, please refer to the references table in section 3 for the LED indicator /error count table in factory mode and follow the remedy listed below for each causes.

| Item  | Cause  | Remedy   |
|---|--|--|
| 1   | <b>Fan speed error:</b> The actual fan speed is faster or slower than designed speed for 25%.                        | (1) Check the connection between Fan and main board.<br>(2) Replace the Fan.<br>Note: Please refer to Fan Location in section  |
| 2   | <b>Temperature Error:</b> The Projector temperature exceeds the maximum limitation of the system's normal operation. | (1) Check if the projector operates well at normal temperature.<br>(2) Make sure the inlet/outlet flow of projector is without obstruction.<br>(3) Make sure that the fan is working   |
| 3   | <b>Temperature sensor is not working.</b>  | For models with Temperature sensor:<br>(1) Check the connection between lamp module and main board.<br>(2) Replace the amp module<br>(3) Replace the main board  |
| The errors above all indicate thermal error. In such cases, the projector will perform auto cooling for 30 seconds first. If the problem remains, please follow the remedies on the right side. |  |  |
| 4   | <b>Lamp abnormal (Lamp fail)</b>   | Change Lamp module first, when lamp module can't work please follow below steps to check again.<br>(1) Check the connection between the main board and lamp module (lamp module wire and lamp module FPC).<br>(2) Replace lamp module<br>(3) Replace the main board. |

### 2.2 Remote Control Does Not Work

| Item | Cause  | Remedy  |
|------|--|---|
| 1    | The battery is out of power.                                       | Replace the battery with a new one.                 |
| 2    | There is an obstacle between the remote control and the projector. | Remove the obstacle.                                |
| 3    | You are too far away from the projector.                           | Stand within 8 meters (26 feet) from the projector. |
| 4    | Remote Control on main board Does Not Work                         | Replace main board.                                 |

### 3 Reference Tables

#### 3.1 Key Part Defect Summary

| Item          | Possible Defect Symptoms  |
|---------------|---|
| PCBA          |   |
| Main Board    | Projector cannot be turned on. Operating shut down.<br>Remote control does not work.  |
| battery       | Projector cannot be turned on.  |
| Optical Parts |   |
| Lamp Module   | Lamp cannot be lit on.<br>Operating shut down.<br>Color Distortion<br>Pixel fail (Abnormal dot)<br>Horizontal/Vertical strips<br>Blue edge or blue/purple boarder |
| Others        |   |
| Fan           | Operating shut down.  |

## Software Upgrade(upgraded from USB)

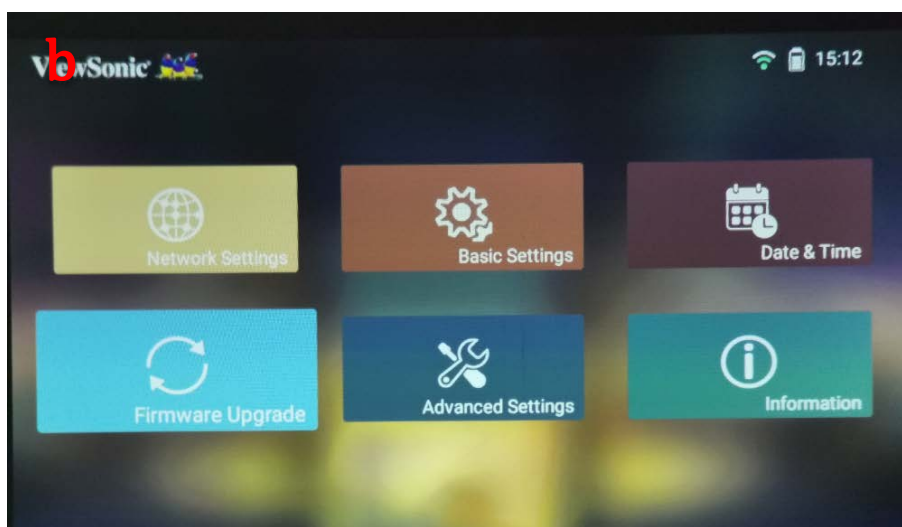
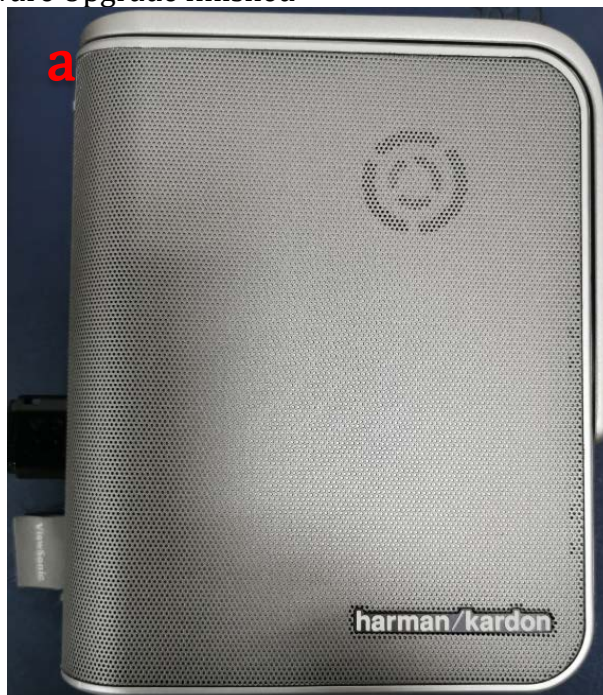
USB format:FAT32

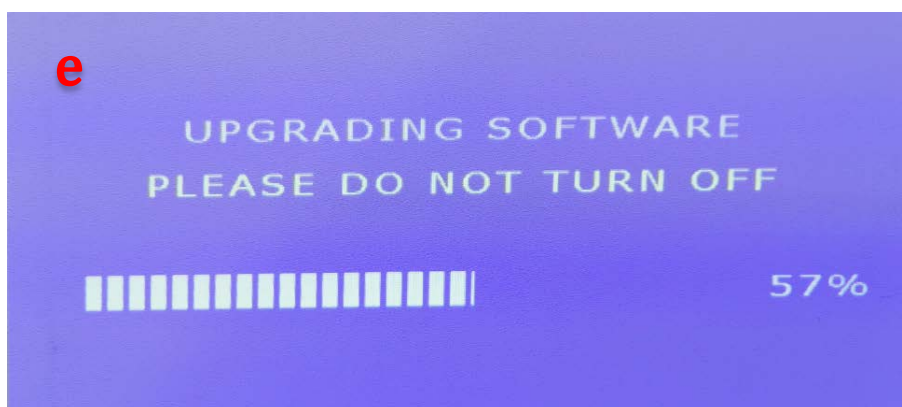
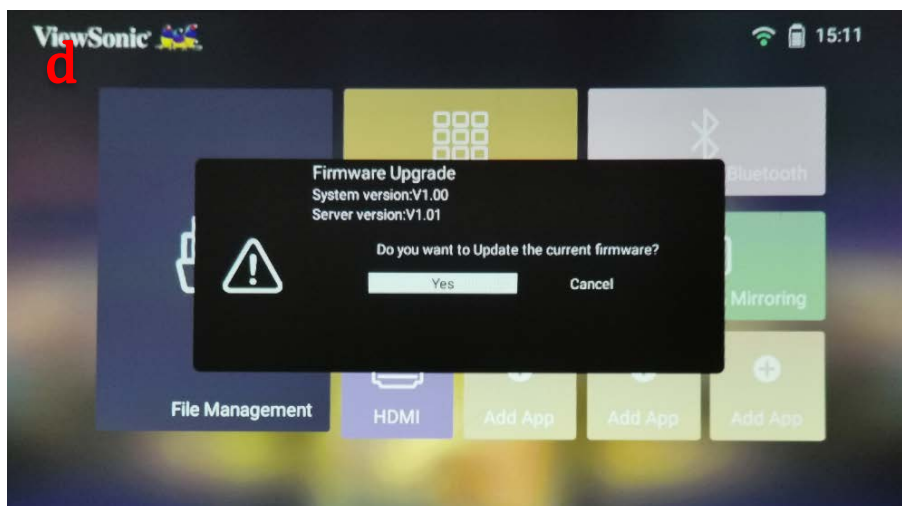
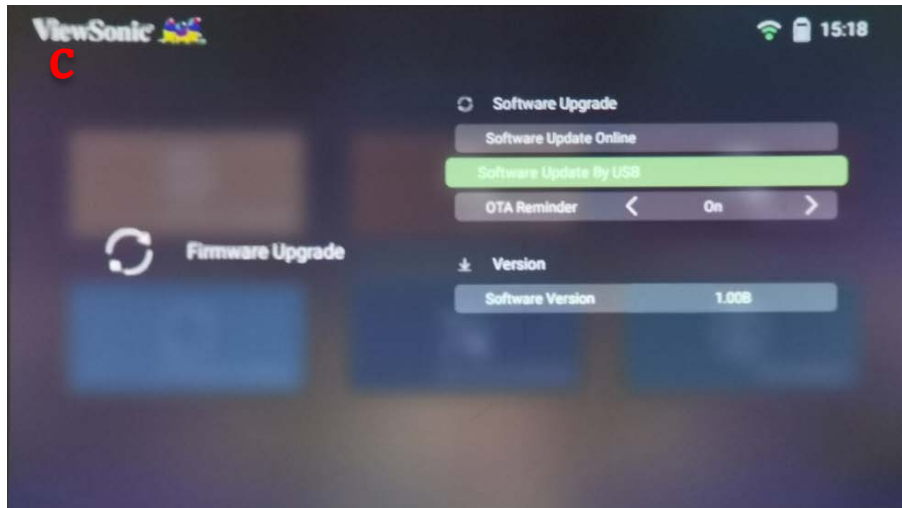
File name: M1+.bin(M1:M1.bin)

File position:root directory

M1+ Process:

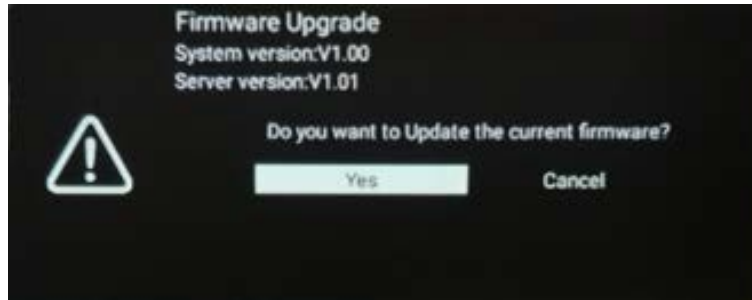
1. Projector power/off
2. Pull in USB
3. Projector power/on
4. Select Menu"setting" and press "OK"
5. In Firmware Upgrade menu,Option"Yes" and "Cancel",Select "Yes"
6. Almost 8 minutes later Upgrade finished
7. Projector power/off and pull out USB
8. Software Upgrade finished





M1 Process:

1. Projector power on
2. Pull in USB
3. Option "Yes" and "Cancel", Select "Yes"
4. Almost 8 minutes later Upgrade finished and restart
5. Projector power off
6. Pull out USB
7. software Upgrade finished



**Notice1:**Auto V keystone calibration should be repeated when software upgrade finished every time.

**Notice2:**If battery volume is too low the project will shut down.So be sure that the battery volume is enough when upgrading.

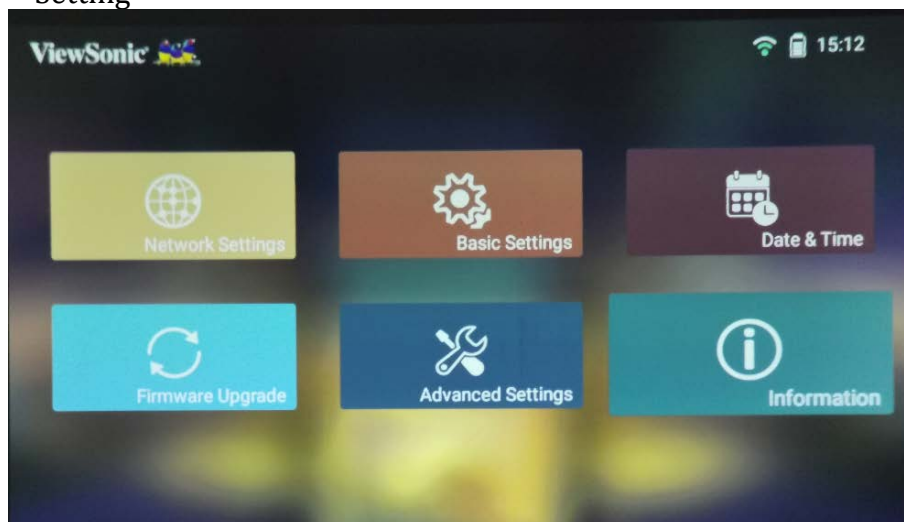
### **Mandatory Upgrade:**

- 1. Projector power/off.**
- 2. Pull in USB.( Upgrade FW)**
- 3. Turn on the projector and press the power button at the same time, and then release the power button until the upgrade screen appears.**

## **Auto V keystone calibration**

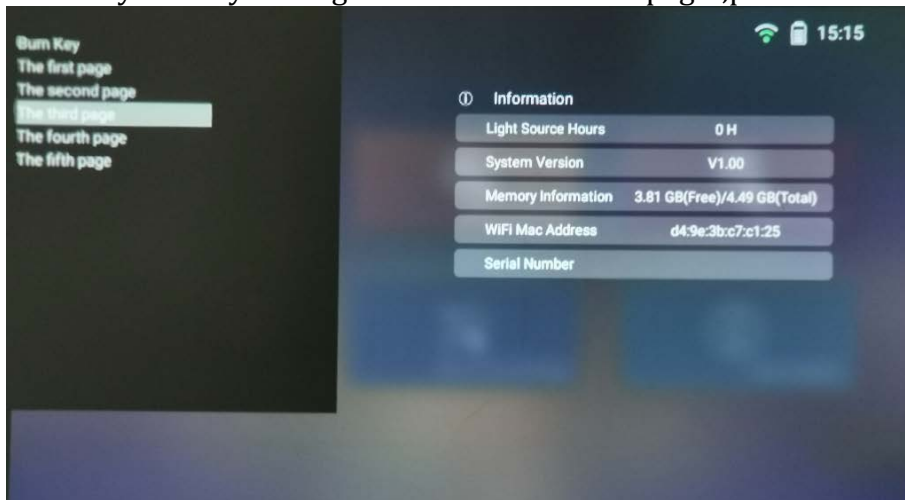
1. Select Menu"setting" and press "OK"  
Entry Menu" information"

2. press left...right...left...right...left...right and OK to entry "Factory Setting"

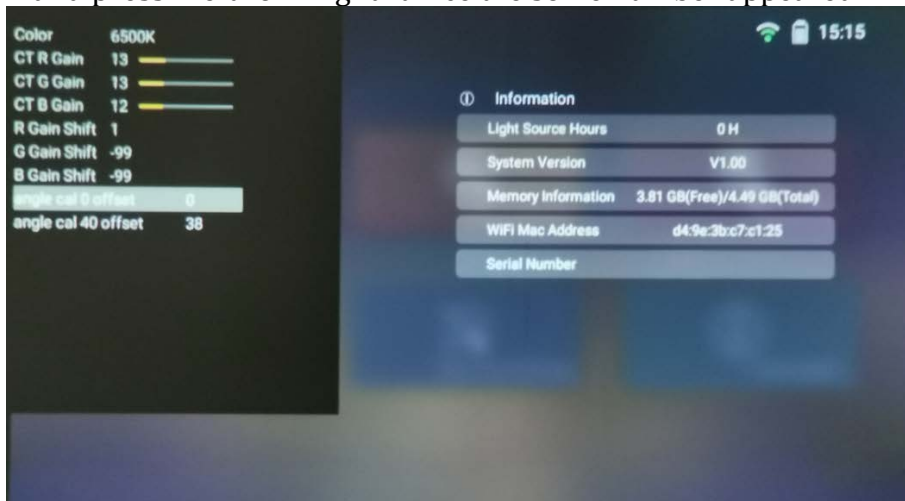




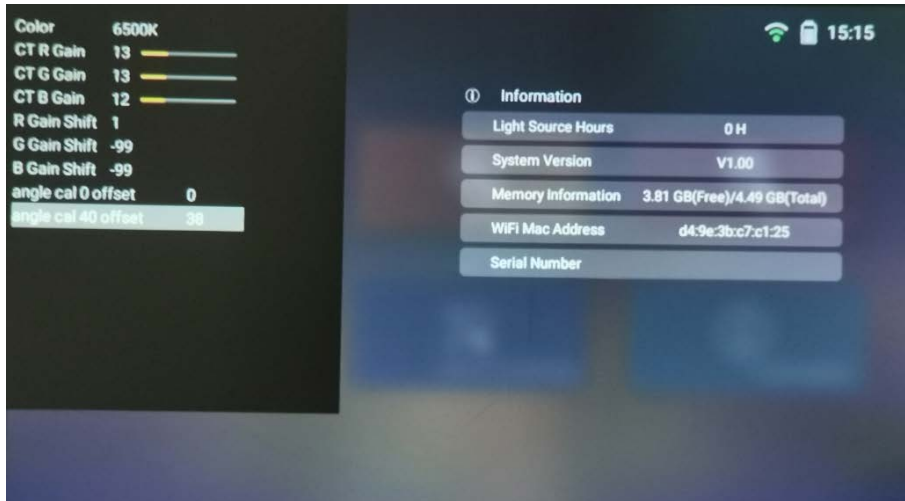
3. Entry Factory Setting and select “The third page”,press “OK”



4. Set projector 0 degree and select “Auto Keystone 0 Offset” and press “Left” or “Right” twice till some number appeared





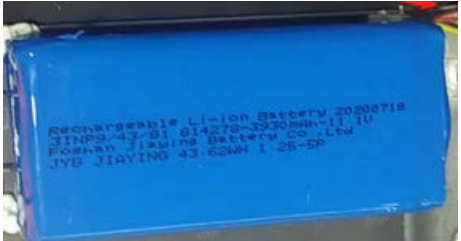
5 Set projector 40 degree and select “Auto Keystone 40 Offset” and press “Left” or “Right” twice till some number appeared







**Auto V keystone calibration finished.**

**Notice: Auto V keystone calibration with mainboard replaced every time.**

## RECOMMENDED SPARE PARTS LIST (M1/M1+)

| Item | ViewSonic P/N | Supplier P/N | Description                              | Physical photograph  |
|------|---------------|--------------|--|--|
| 1    |               | 811144222    | Optical Engine H15L                      |  |
|      |               | 811145926    | Optical Engine Heatsink                  |  |
| 2    |               | 811150266    | Battery module JYB-814278- 3930mAh-11.1V |  |

|   |  |                        |   |  |
|---|--|------------------------|---|--|
| 3 |  | 811144223              | Fan YB3517HS05  |    |
| 4 |  | 811137235<br>811152653 | PCBA<br>JUN6.672.3170(M1+PCBA)<br>JUN6.672.3247(M1PCBA) |    |
| 5 |  | 811144224              | Speaker E060-0317-001                                   |   |
| 6 |  | 811144220              | Remote controller FCRC-18A007                           |  |

RECOMMENDED SPARE PARTS LIST (M1\_G2 & M1\_V)

ViewSonic Model Number: VS18241  
Serial No. Prefix: W7S(M1\_G2) / W5(M1\_V)  
Rev: 1m

| Item | Category  | Part Name  | Description   | Region   | ECR/ECN   | ViewSonic P/N          | Supplier P/N         | Compatibility | B- and E- Cat-In SKN   | Remark                     |
|------|---|--|---|--|---|------------------------|----------------------|---------------|--|----------------------------|
| 1    | Accessories: [Adaptor, Remote Controller, Power Cord, External Cables]  | AC Adaptor   | Power adaptor DA-65C19-CAAR   | WW   |   | A-00010457             | 811148271            | Main Source   |  |                            |
| 2    |   | AC Adaptor   | Power adaptor DA-65C19-CAAR   | VSA/VSE  | VS-E200662 Added on   | A-00010511             | 811235346            | 2nd Source    |  |                            |
| 3    |   | Power Cord   | Power cord Europe + plug tail 1.0M 5-GPG0006-EU Used with DA-65C19-CAAR AC adaptor, cable 1M, three-core, IEC320-C5 port-EU   | VSE  |   | A-00010458             | 811150271            | Main Source   |  | for model M1_V, M1+_V      |
| 4    |   | Power Cord   | Power cord Large British type (Forming) + end of cable 1.0m (excluding head and tail) 5-GPG0008-UK Used with DA-65C19-CAAR AC adaptor, cable 1M, three-core, IEC320-C5 port-UK  | UK   |   | A-00010459             | 811150285            | Main Source   |  |                            |
| 5    |   | Power Cord   | Power cord American three plug + plug tail 1.0M 5-GPG0009 Used with DA-65C19-CAAR AC adaptor, cable 1M, three-core, IEC320-C5 port-US   | VSA  |   | A-00010460             | 811150269            | Main Source   |  |                            |
| 6    |   | Power Cord   | Power cord minimal standard three insertion + plug tail 1.0M 5-GPG0007 Used with DA-65C19-CAAR AC adaptor, cable 1M, three-core, IEC320-C5 port-CN  | VSCN   |   | A-00010461             | 811150270            | Main Source   |  |                            |
| 7    |   | Power Cord   | Power cord Japan 2PIN + Plug tail 1m KJ20020103-PU Used with DA-65C19-CAAR AC adaptor, cable 1M, three-core, IEC320-C5 port-JP  | VSI  |   | A-00010462             | 811167087            | Main Source   |  |                            |
| 8    |   | Power Cord   | Power cord Europe Korea + plug tail 1m KJ20010063-KR Used with DA-65C19-CAAR AC adaptor, cable 1M, three-core, IEC320-C5 port-KR  | VSI  |   | A-00010463             | 811167088            | Main Source   |  |                            |
| 9    |   | Power Cord   | Power cord Taiwan + plug blossom tail 1m KJ20010061-TW  | VSI  |   | A-00010464             | 811167089            | Main Source   |  |                            |
| 10   |   | Power Cord   | Australian type 19P6 plug + plug blossom tail 1.0m (excluding head and tail) 5-GPG0015-AU Used with DA-65C19-CAAR AC adaptor, cable 1M, three-core, IEC320-C5 port-TW   | VSI  |   | A-00010465             | 811150268            | Main Source   |  |                            |
| 11   |   | Power Cord   | Power cord 10A India triple plug + end of cable 1.0m (excluding head and tail) 5-GPG0016-IN Used with DA-65C19-CAAR AC adaptor, cable 1M, three-core, IEC320-C5 port-IN   | VSI  |   | A-00010466             | 811150267            | Main Source   |  |                            |
| 12   |   | Remote Controller                                    | Remote Control FCRC-18A007 IR controller Size: 160*40mm balck 2*AAA battery, Valid emission (range): 40', effective distance: 3M, battery lifetime: 50,000 times  | WW   |   | A-00010467             | 811206249            | Main Source   |  |                            |
| 13   |   | Battery  | Battery 11.1V 3930mAh Terminal line length 0mm  | WW   |   | A-00010468             | 811229756            | Main Source   |  |                            |
| 14   |   | USB Cable  | TYPE-C cable, CUSC0001-0005 USB3.1 TYPE-C TO C port, 2AWG core of cable, length:1M black. The entire cable should be shielded.  | WW   |   | CB-00013433            | 811145925            | Main Source   |  |                            |
| 15   | PC Board Assembly: [All PCB A]  | Main Board   | Viewsonic PCB assembly_LING_3U203_V1.00E  | WW   | VS-ECN-CHH-200667 Added Cut-in S/N on 02/01/2021, VS-ECN-CHH-200128 Added in Cut-in S/N on 03/04/2021     | B-00015379             | 811228138            | Main Source   | VS-ECN-CHH-200667<br>M1_G2: W878205101001 -<br>M1_V: W5X5205201001 |                            |
| 16   |   | Main Board   | Viewsonic PCB assembly_LING_3U203_V1.00E  | VSCN   |   | B-00015380             | 811229608            | Main Source   | VS-ECN-CHH-200128<br>M1_G2: W521051001001 -                        |                            |
| 17   |   | Key Pad  | Viewsonic MI-1&B Printed board assembly_LNG_3U203_KB_V05 key pad board  | WW   |   | B-00015378             | 811149167            | Main Source   |  |                            |
| 18   |   | IR Board   | Remote panel assembly   | WW   |   | B-00015379             | 811149165            | Main Source   |  |                            |
| 19   |   | IR Board   | Cover component Top cover, around main, metal window mesh, LOGO, copper foil  | VSCN   |   | C-00014308             | 811224019            | Main Source   |  |                            |
| 20   |   | IR Board   | Cover component Bottom cover, around main, metal window mesh, LOGO, copper foil   | VSCN   |   | C-00014301             | 811234018            | Main Source   |  |                            |
| 21   |   | IR Board   | In the box component Center frame, buttons, indicator light lens, rear IR lens, non-woven cloth, focusing component Rear cover, focusing knob, transmission button, insulation sheet, restraint ring, focusing spring | WW   |   | C-00014303             | 811234017            | Main Source   |  |                            |
| 22   |   | IR Board   | Bottom Cover  | WW   |   | C-00014303             | 811234016            | Main Source   |  |                            |
| 23   |   | IR Board   | Lens Cover  | lens cap, AS, partly empty, IR lens  | WW  |                        | C-00014298           | 811144060     | Main Source  |                            |
| 24   |   | IR Board   | IRD Cover   | The dust component Board, pad belt, press plate, screw, Bracket                    | WW  |                        | C-00014304           | 811234015     | Main Source  |                            |
| 25   | Cables: [Front Bezel, All Covers, Base Assembly]                        | Take line plug                                       | Take line plug. Press the button to the motherboard.FFC line  | WW   |   | CB-00013434            | 811148276            | Main Source   |  |                            |
| 26   |   | Take line plug                                       | Take line plug. Front IR board to motherboard   | WW   |   | CB-00013435            | 811148275            | Main Source   |  |                            |
| 27   |   | Wire   | Take line plug Window net shield grounding wire   | WW   |   | CB-00013436            | 811205549            | Main Source   |  |                            |
| 28   |   | Wire   | LED light line (LED-B)  | WW   |   | CB-00013437            | 811148279            | Main Source   |  |                            |
| 29   |   | Wire   | LED light line (LED-G)  | WW   |   | CB-00013438            | 811148278            | Main Source   |  |                            |
| 30   |   | Wire   | LED light line (LED-B)  | WW   |   | CB-00013439            | 811148277            | Main Source   |  |                            |
| 31   |   | Flat Cable   | Flat cables 2400*60*0.40 mm, 0.15 dp, v1.1, 13-212-52LVDS cable   | WW   |   | CB-00013442            | 811127274            | Main Source   |  |                            |
| 32   |   | Guarantee / Warranty Card                            | Chinese red paper, double-sided color printing  | VSCN   |   | DC-00015827            | 811098396            | Main Source   |  |                            |
| 33   |   | Guarantee / Warranty Card                            | Warranty Card   | JP   |   | DC-00015833            | 811107647            | Main Source   |  |                            |
| 34   |   | Quick Start Guide                                    | qsg   | VS-E300603 Removed on 11/9/2020  |   | <del>DC-00016120</del> | <del>811203548</del> |               |  |                            |
| 35   | Quick Start Guide   | QSG  | VS-E200603 Added on 11/19/2020, VS-ECN-CHH-210096 Removed on 02/03/2021   | WW   | VS-E200603 Added on 11/19/2020, VS-ECN-CHH-210096 Removed on 02/03/2021                                   | DC-00016120            | 811203548            | Main Source   |  |                            |
| 36   | Quick Start Guide   | QSG  | WW  |  | DC-00016132   | 811297122              | Main Source          |               |  |                            |
| 37   | Label Sticker   | The whole machine stickers                           | WW  |  | DC-00016127   | 811182126              | Main Source          |               |  |                            |
| 38   | Label Sticker   | Color box address information label(N.S. 817-3530)   | VSE   |  | DC-00016128   | 811182127              | Main Source          |               |  |                            |
| 39   | Label Sticker   | Color box address information label(N.S. 817-3519)   | VSA   |  | DC-00016129   | 811182118              | Main Source          |               |  |                            |
| 40   | Label Sticker   | Color box address information label(N.S. 817-3518)   | VSCN  |  | DC-00016130   | 811182119              | Main Source          |               |  |                            |
| 41   | Label Sticker   | Color box address information label(N.S. 817-3521)   | VSI   |  | DC-00016131   | 811182116              | Main Source          |               |  |                            |
| 42   | Electronic Components: [LCD Panel, Speaker, and all Electronic Modules] | Speaker  | RHMAN BOX speaker 38*34*13mm 4R, 3W, length:150mm with terminal 4pin ph1.25 + silicone pad  | WW   |   | E-00013892             | 811148274            | Main Source   |  |                            |
| 43   |   | Thermal PAD  | The mounting sheet is pasted to the lamp  | WW   |   | E-00013893             | 811148073            | Main Source   |  |                            |
| 44   |   | Light cover  | light machine H.S., Auhua H.S, WYGA light engine module RGB SLED 120LM 50*41*14.4mm   | WW   |   | E-00013894             | 811148272            | Main Source   |  |                            |
| 45   |   | Heat Sink  | Heat Sink   | WW   |   | HW-00011928            | 811148926            | Main Source   |  |                            |
| 46   |   | Screw  | Stud screw (long*1) (double-screw)  | WW   |   | HW-00011929            | 811148075            | Main Source   |  |                            |
| 47   |   | Screw  | Stud screw (short*1) (double-screw)   | WW   |   | HW-00011930            | 811148076            | Main Source   |  |                            |
| 48   |   | Screw  | 1.0# stainless steel C1819 + Anti-Loosening Glue  | WW   | VS-E200540 Added on   | HW-00011989            | 811238545            | Main Source   |  |                            |
| 49   |   | Screw  | Self-tapping screws 2.5*7PH1H/2.5-3   | WW   | VS-E200558 Added on   | HW-00011990            | 811237748            | Main Source   |  |                            |
| 50   |   | Screw  | Self-tapping screws 2.5*6PH1H/2.5-1   | WW   | VS-E200558 Added on   | HW-00011991            | 850059862            | Main Source   |  |                            |
| 51   |   | Bracket  | Bracket Support, metal restraint shell, silicone pad, gasket, screw   | WW   |   | HW-00011993            | 811234014            | Main Source   |  |                            |
| 52   | Bracket   | 0.8 thickness galvanized plate M10*7                 | WW  | VS-ECN-CHH-200096 Update Type on 12/30/2020  | HW-00011912   | 811148050              | Main Source          |               |  |                            |
| 53   | Bracket   | Stainless Steel GB-T97-1.85-Q2                       | WW  | VS-E200540 Added on  | M-00010281  | 810969969              | Main Source          |               |  |                            |
| 54   | Washer  | Stainless Steel GB-T97-1.85-Q2                       | WW  |  | M-00010281  | 811148223              | Main Source          |               |  |                            |
| 55   | Miscellaneous: [Switch, Fan, Rubber Feet, Lens]                         | Fan  | Fans 35*35*17mm Rated voltage:DC 5V, Rated current:0.25A, Speed:6000r/min (10P/RPM)   | WW   |   | M-00010251             | 811148223            | Main Source   |  |                            |
| 56   |   | Carton   | Package of accessories (packing for cartons*1, main frame*1 and accessories*1, human keyboard LOGO)   | WW   | VS-ECN-CHH-210015 Removed on 01/25/2021   | <del>P-00014548</del>  | <del>811234013</del> |               |  | pin: 811234013 = 811232565 |
| 57   |   | Carton   | Gift Box, Packaged assembly (Packing for cartons*1, main frame*1 and accessories*1, human keyboard LOGO)  | WW   | VS-ECN-CHH-210015 Added on 01/25/2021, Updated Description on 05/14/2021, VS-ECN-CHH-210018 on 01/25/2021 | P-00015545             | 811232565            | Main Source   |  |                            |
| 58   |   | Carton   | Outer Carton, Aggregate package kit (Corrugated upper and lower liner*2, Corrugated front and back liner*2, Corrugated left and right liner*2, Assembly box*1)  | VSA/VSI/VSE  | VS-ECN-CHH-210015 Added on 01/25/2021   | P-00015756             | 811288704            | Main Source   |  |                            |
| 59   |   | Plastic Bag  | Grey nonwoven fabric  | WW   | Updated Description on 05/14/2021, VS-ECN-CHH-310298 on 05/27/2021  | P-00015546             | 811189182            | Main Source   |  |                            |
| 60   |   | Carton   | Package assembly (Packing for cartons*1, main frame*1 and accessories*1, The collection box*1, Upper and lower liner*2, left and right liner*2, front and back liner*2, human keyboard LOGO)                          | VSCN   |   | P-00015549             | 811234012            | Main Source   |  |                            |
| 61   |   | Plastic: [Pedestal, stand-neck, Plate, Button, etc.] | IR Lens   | Front IR lens assembly (ABS+steel axis) (PH.4) intramode injection+ painting P187C | WW  |                        | PL-00009674          | 811167093     | Main Source  |                            |

Remark 1: Above listed items are examples, supplier can expand the rows to add more necessary items.  
Remark 2: All revised RFPs with newly added items or any change made should be highlighted and correlated with the ECN/ECR approved by ViewSonic Corporation. This is to eliminate repeated cross checks of each item between this version and prior versions.  
Notice: 1. For some special parts, some photos for identification purpose may be asked by request  
2. For all internal cables, there must be some markings in the "Description" column about where the cable is used (connecting to which two parts)  
3. All internal cables/wires should be put in the "Cables" category  
4. All external cables should be put in the "Accessories" category  
5. Parts relationship (Main/Second source or 1/2/3/4) should be added in the "Compatibility" column  
6. If any part for certain product isn't listed in the form, supplier/PE can add it themselves and keep the part name unified.

RECOMMENDED SPARE PARTS LIST (M1+\_G2 & M1+\_V)

ViewSonic Model Number: VS18242  
 Serial No. Prefix: W7(M1+\_G2) / W5Y(M1+\_V)  
 Rev.: 1n

| Item | Category  | Part Name                                      | Description  | Region          | ECR/ECN  | ViewSonic P/N         | Supplier P/N         | Compatibility | B- and E- Cut-in SN Cut-in SN | Remark   |
|------|---|--|--|-----------------|--|-----------------------|----------------------|---------------|-------------------------------|--|
| 1    | Accessories: [Adapter, Remote Controller, Power Cord, External Cables]  | AC Adapter                                     | Power adapter DA-65C19-CAAR  | WW              |  | A-00010457            | 811144221            | Main Source   |                               |  |
| 2    |   | AC Adapter                                     | PE653-1904300D   | VSA/VSE         | VS-E200602 Added on 11/11/2020   | A-00010514            | 811243346            | 2nd Source    |                               | for model M1_V, M1+_V  |
| 3    |   | Power Cord                                     | Power cord Europe + plum tail 1.0M 5-GPG0006-EU Used with DA-65C19-CAAR AC adaptor, cable 1M, three-core, IEC320-C5 port-UK  | VSE             |  | A-00010458            | 811150271            | 1             |                               |  |
| 4    |   | Power Cord                                     | Power cord Large British style (forming) + end of class 1.0m (excluding head and tail) 5-GPG0008-UK Used with DA-65C19-CAAR AC adaptor, cable 1M, three-core, IEC320-C5 port-UK                  | UK              |  | A-00010459            | 811150285            | 1             |                               |  |
| 5    |   | Power Cord                                     | Power cord American three plug + plum tail 1.0M 5-GPG0009 Used with DA-65C19-CAAR AC adaptor, cable 1M, three-core, IEC320-C5 port-US  | VSA             |  | A-00010460            | 811150269            | 1             |                               |  |
| 6    |   | Power Cord                                     | Power cord national standard three insertion + plum tail 1.0M 5-GPG0007 Used with DA-65C19-CAAR AC adaptor, cable 1M, three-core, IEC320-C5 port-CN  | VSCN            |  | A-00010461            | 811150270            | 1             |                               |  |
| 7    |   | Power Cord                                     | Power cord Japan 2PIN + Plum tail 1m KJ20020103-JPU Used with DA-65C19-CAAR AC adaptor, cable 1M, three-core, IEC320-C3 port-JP  | VSI             |  | A-00010462            | 811167087            | 1             |                               |  |
| 8    |   | Power Cord                                     | Power cord Europe Korea + plum tail 1m KJ20010063-KR Used with DA-65C19-CAAR AC adaptor, cable 1M, three-core, IEC320-C5 port-KB   | VSI             |  | A-00010463            | 811167088            | 1             |                               |  |
| 9    |   | Power Cord                                     | Power cord Taiwan + plum blossom tail 1m KJ20010061-TW   | VSI             |  | A-00010464            | 811167089            | 1             |                               |  |
| 10   |   | Power Cord                                     | Australian type triple plug + plum blossom tail 1.0m (excluding head and tail) 5-GPG0015-AU Use with DA-65C19-CAAR AC adaptor, cable 1M, three-core, IEC320-C5 port-TW, Bracket Galvanized sheet | VSI             |  | A-00010465            | 811150268            | 1             |                               |  |
| 11   |   | Power Cord                                     | Power cord 10A India triple plug + end of class 1.0m (excluding head and tail) 5-GPG0016-IN  | VSI             |  | A-00010466            | 811150267            | 1             |                               |  |
| 12   |   | Remote Controller                              | Remote Control FCRC-18A007 IR controller Size: 160*40mm black, 2*AAA battery, Valid emission angle: 30°, effective distance: 8M, button lifetime: 50,000 time                                    | WW              |  | A-00010467            | 811206249            | 1             |                               |  |
| 13   |   | Battery  | Battery 11.1V 900mAh Terminal line length 8mm  | WW              |  | A-00010468            | 811220756            | 1             |                               |  |
| 14   |   | USB Cable                                      | TYPE-C cable, CUSC0001-0005 USB3.1 TYPE C TO C port, 32AWG core of cable, length: 1M Black. The entire cable should be shielded  | WW              |  | CB-00013433           | 811145925            | 1             |                               |  |
| 15   | PC Board Assembly: [All PCBs]   | Main Board                                     | Viewsonic PCB assembly, I3U203_V07   | WW              | VS-ECN-CHH-200067 Added Cut-in S/N on 02/01/2021, VS-ECN-CHH-210062 Added in Cut-in S/N on 03/01/2021, VS-ECN-CHH-200128 Added in Cut-in S/N on 03/04/2021 | B-00015375            | 811226139            | 1             |                               | VS-ECN-CHH-200067: M1+_G2: W7205201001 ~ / M1+_V: W5Y205101001 ~ VS-ECN-CHH-210062: M1+_G2: W7210501001 ~ / M1+_V: W5Y210401119 ~ VS-ECN-CHH-200128: M1+_G2: W7205203001 ~ / M1+_V: W5Y205201001 ~ |
| 16   |   | Main Board                                     | Viewsonic PCB assembly, I3U203_V07   | VSCN            |  | B-00015376            | 811229610            | 1             |                               |  |
| 17   |   | Main Board                                     | <del>Viewsonic PCB assembly, I3U203_V07</del>  | <del>VSCN</del> | <del>VS-E200510 Added on 10/28/2020 Update Type on 01/20/2021</del>  | <del>B-00015376</del> | <del>811229610</del> |               |                               |  |
| 18   |   | Key Pad  | Viewsonic M1+KB Printed board assembly, I3U203_KB_V05 key pad bear   | WW              |  | B-00015377            | 811149167            | 1             |                               |  |
| 19   |   | IR Board                                       | Remote panel assembly  | WW              |  | B-00015378            | 811149165            | 1             |                               |  |
| 20   | Cabinets: [Front Bezel, All Covers, Base Assembly]                      | Top cover                                      | Cover components ( Top cover, ground wire, metal window mesh, burman/kardon LOGO, copper foil )  | WW              |  | C-00014294            | 811232569            | 1             |                               |  |
| 21   |   | Top cover                                      | Cover components ( Top cover, ground wire, metal window mesh, JBL LOGO, copper foil )  | VSCN            |  | C-00014295            | 811232592            | 1             |                               |  |
| 22   |   | Frame  | In the box component ( Center frame, buttons, indicator light lens, rear IR lens, non-woven cloth masking tape )   | WW              |  | C-00014296            | 811232567            | 1             |                               |  |
| 23   |   | Bottom Cover                                   | Focusing components ( Rear cover, focusing knob, transmission button, insulation sheet, retaine ring, focusing spring )  | WW              |  | C-00014297            | 811232655            | 1             |                               |  |
| 24   |   | Lens Cover                                     | lens cap, AS, partly empty, IR lens  | WW              |  | C-00014298            | 811144060            | 1             |                               |  |
| 25   |   | (U) Cover                                      | The door components ( Door, pull belt, press plate, screw, Bracket )   | WW              |  | C-00014299            | 811232568            | 1             |                               |  |
| 26   | Cables: [All Internal Cables/Wires]                                     | Wire   | Take line plug Press the button to the motherboard/FPC line  | WW              |  | CB-00013434           | 811144276            | 1             |                               |  |
| 27   |   | Wire   | Take line plug Front IR board to motherboard   | WW              |  | CB-00013435           | 811144275            | 1             |                               |  |
| 28   |   | Wire   | Take line plug Window net shaft grounding wire   | WW              |  | CB-00013436           | 811203549            | 1             |                               |  |
| 29   |   | Wire   | LED light line (LED-B)   | WW              |  | CB-00013437           | 811144278            | 1             |                               |  |
| 30   |   | Wire   | LED light line (LED-G)   | WW              |  | CB-00013438           | 811144278            | 1             |                               |  |
| 31   |   | Wire   | LED light line (LED-B)   | WW              |  | CB-00013439           | 811144277            | 1             |                               |  |
| 32   |   | Antenna  | WiFi antenna 2.4G/5G ( Antenna cable )   | WW              |  | CB-00013440           | 811172940            | 1             |                               |  |
| 33   |   | Antenna  | BT antenna 5G/3G ( Antenna cable )   | WW              |  | CB-00013441           | 811172939            | 1             |                               |  |
| 34   |   | Flat Cable                                     | Flat cable 20-0030-00 long h15 f15 v1.1 13.2*12.521 VDS cable  | WW              |  | CB-00013442           | 811172774            | 1             |                               |  |
| 35   | Documentation: [Quick Start Guide, CD Rom, Label/Sticker]               | Chinese set paper, double-sided color printing |  | VSCN            |  | DC-00015827           | 811094390            | 1             |                               |  |
| 36   |   | Guarantee / Warranty Card                      | Warranty Card  | JP              |  | DC-00015833           | 81107647             | 1             |                               |  |
| 37   |   | Quick Start Guide                              | QSG  | WW              | VS-ECN-CHH-210086 Removed on 02/03/2021  | DC-00016120           | 811203548            | 1             |                               |  |
| 38   |   | Quick Start Guide                              | QSG  | WW              | VS-ECN-CHH-210086 Added on 02/03/2021  | DC-00016121           | 811297122            | 1             |                               |  |
| 39   |   | Label / Sticker                                | The whole machine sticker  | WW              |  | DC-00016121           | 811182125            | 1             |                               |  |
| 40   |   | Label / Sticker                                | Color box address information label/JUNR.817.3517  | VSE             |  | DC-00016122           | 811182120            | 1             |                               |  |
| 41   |   | Label / Sticker                                | Color box address information label/JUNR.817.3515  | VSA             |  | DC-00016123           | 811182122            | 1             |                               |  |
| 42   |   | Label / Sticker                                | Color box address information label/JUNR.817.3514  | VSCN            |  | DC-00016124           | 811182123            | 1             |                               |  |
| 43   |   | Label / Sticker                                | Color box address information label/JUNR.817.3516  | VSI             |  | DC-00016125           | 811182121            | 1             |                               |  |
| 44   | Electronic Components: [LCD Panel, Speaker, and all Electronic Modules] | Speaker  | RIHAMAN BOX speaker 88*34*11mm 4R-3W, length: 150mm with terminal 4pin ph1.25+ silicon   | WW              |  | E-00013892            | 811144224            | 1             |                               |  |
| 45   |   | Thermal PAD                                    | The moulding sheet is pasted to the battery  | VSE             |  | E-00013893            | 811144013            | 1             |                               |  |
| 46   |   | Optical Engine                                 | light machine/H15L Anhua H15 VVGA light engine module RGB 3LED 120LM 50*41*14.4mm  | WW              |  | E-00013894            | 811144222            | 1             |                               |  |
| 47   | Hardware: [Screw, Bracket, Hinge]                                       | Heat Sink                                      | Heat Sink  | WW              |  | HW-00011928           | 811145926            | 1             |                               |  |
| 48   |   | Screw  | Stud screw/long*2H lock the fan On the MB (double screw)   | WW              |  | HW-00011929           | 811144017            | 1             |                               |  |
| 49   |   | Screw  | Stud screw/short*1H lock the light machine (On the MB) (double-screw)  | WW              |  | HW-00011930           | 811144036            | 1             |                               |  |
| 50   |   | Screw  | 1.6*3 stainless Steel GB819 - Anti-Loosening Glass   | WW              | VS-E200540 Added on 10/28/2020   | HW-00011989           | 811238345            | 1             |                               |  |
| 51   |   | Screw  | Self-tapping screws 2.5*7PHHfz x 3   | WW              | VS-E200558 Added on 10/28/2020   | HW-00011990           | 811237748            | 1             |                               |  |
| 52   |   | Screw  | Self-tapping screws 2.5X0.7THB x 1   | WW              | VS-E200558 Added on 10/28/2020   | HW-00011991           | 850059862            | 1             |                               |  |
| 53   |   | Bracket  | Bracket ( Support, metal rotating shaft, silicone pad, gasket, screw )   | WW              |  | HW-00011991           | 811232564            | 1             |                               |  |
| 54   |   | Bracket  | 0.8 thickness galvanized plate M10.7   | WW              | VS-ECN-CHH-200096 Update Type on 12/30/2020  | HW-00011992           | 811144050            | 1             |                               |  |
| 55   |   | Bracket  | L Bracket  | WW              | VS-ECN-CHH-210008 Added on 01/26/2021  | HW-00012057           | 811144049            | 1             |                               |  |
| 56   |   | Fan  | Fan 55*55*17mm Rated voltage: DC 5V, Rated current: 0.25A, Speed: 6000r, 10%RPM  | WW              |  | M-00010251            | 811144223            | 1             |                               |  |
| 57   | Miscellaneous: [Switch, Fan, Rubber Foot, Lens]                         | Washer   | Stainless Steel GB1797-1.85-02   | WW              | VS-E200540 Added on 10/28/2020   | M-00010281            | 810964069            | 1             |                               |  |
| 59   | Packing Material: [Carton, Box, Foam, Bags]                             | Carton   | Gift Box, Packaged assembly (Packing for cartons*1, mainframe*1 and accessories*1, burman/kardon LOGO)   | WW              | VS-ECN-CHH-210015 Updated description on 01/25/2021, Updated Description on 05/14/2021, VS-ECN-CHH-210298 on 05/27/2021                                    | P-00015545            | 811232565            | 1             |                               |  |
| 60   |   | Carton   | Outer Carton, Aggregate package kit (Corrugated upper and lower liner*2, Corrugated front and back liner*2, Corrugated left and right liner*2, Assembly box*1)                                   | VSA/VSI/VSE     | VS-ECN-CHH-210015 Added on 01/25/2021  | P-00015756            | 811288704            | 1             |                               |  |
| 61   |   | Plastic Bag                                    | Gray nonwoven fabric   | WW              | Updated Description on 05/14/2021, VS-ECN-CHH-210298 on 05/27/2021   | P-00015546            | 811189182            | 1             |                               |  |
| 62   |   | Carton   | Packaged assembly ( Packing for cartons*1, mainframe*1 and accessories*1 The collection box*1 - Upper and lower liner*2, left and right liner*2, front and back liner*2/JBL LOGO )               | VSCN            |  | P-00015547            | 811234020            | 1             |                               |  |
| 63   | Plastics: [Pedestal, stand/neck, Plug, Button, etc.]                    | IR Lens  | Front IR lens assembly/ABS+steel axis ( PH0.4) intramode injection/ painting PT877C  | WW              |  | PL-00009674           | 811167093            | 1             |                               |  |

- Remark 1: Above listed items are examples, supplier can expand the rows to add more necessary item  
 Remark 2: All revised RSPs with newly added items or any change made should be highlighted and correlated with the ECN/ECR approved by ViewSonic Corporation. This is to eliminate repeated cross checks of each item between this version and prior version.  
 Notice: 1. For some special parts, some photos for identification purpose may be asked by request  
 2. For all internal cables, there must be some wordings on the "Description" column about where the cable is used (connecting to which two part)  
 3. All internal cables/wires should be put in the "Cables" category  
 4. All external cables should be put in the "Accessories" category  
 5. Parts relationship (Main/Second source or 1/2/3/4) should be added in the "Compatibility" column  
 6. If any part for certain product isn't listed in the form, supplier/PE can add it themselves and keep the part name unified

# \* Reader's Response\*

Dear Readers:

Thank you in advance for your feedback on our Service Manual, which allows continuous improvement of our products. We would appreciate your completion of the Assessment Matrix below, for return to ViewSonic Corporation.

## Assessment

**A.** What do you think about the content of this Service Manual?

| <i>Unit</i>                                | <i>Excellent</i> | <i>Good</i> | <i>Fair</i> | <i>Bad</i> |
|--|------------------|-------------|-------------|------------|
| <b>Safety Notice</b>                       |                  |             |             |            |
| <b>Product Specifications</b>              |                  |             |             |            |
| <b>Block Diagram</b>                       |                  |             |             |            |
| <b>Disassembly and Assembly Procedure</b>  |                  |             |             |            |
| <b>Unboxing Guide</b>                      |                  |             |             |            |
| <b>Troubleshooting Guide</b>               |                  |             |             |            |
| <b>Software Upgrade(upgraded from USB)</b> |                  |             |             |            |
| <b>Auto V keystone calibration</b>         |                  |             |             |            |
| <b>Recommended Spare Parts List</b>        |                  |             |             |            |

**B.** Are you satisfied with this Service Manual?

| <i>Item</i>                      | <i>Excellent</i> | <i>Good</i> | <i>Fair</i> | <i>Bad</i> |
|----------------------------------|------------------|-------------|-------------|------------|
| <b>1. Service Manual Content</b> |                  |             |             |            |
| <b>2. Service Manual Layout</b>  |                  |             |             |            |
| <b>3. The form and listing</b>   |                  |             |             |            |

**C.** Do you have any other opinions or suggestions regarding this service manual?

### Reader's basic data:

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