



**miroir** SMART TILT MINI PROJECTOR M200A



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## CAUTION

- TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. THERE ARE NO SERVICEABLE PARTS INSIDE
- TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.



The lightning flash with arrow-head symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated “dangerous voltage” within the unit’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the unit.

## IMPORTANT SAFETY INSTRUCTIONS

All of the safety and operating instructions should be read, adhered to and followed before the unit is operated.

## SAVE THESE INSTRUCTIONS!

## **DANGER**

To reduce the risk of electric shock, burns, fire or injury:

1. Do not use while bathing or in a shower.
2. Do not place or store unit where it can fall or be pulled into a tub or sink.
3. Do not place in, drop or submerge in water or other liquid.
4. Do not reach for unit that has fallen into water. Unplug it immediately.
5. Care should be taken so that objects do not fall and liquids are not spilled onto the unit.

## **WARNING**

1. Close supervision is necessary when this appliance/product is used by or near children or mentally disabled individuals.
2. Use this unit only for its intended use as described in this manual.
3. Unplug this unit during lightning storms or when unused for long periods of time.
4. Never drop or insert an object into any opening.
5. Protect the adapter cord from being walked on or pinched, particularly at plug outlets, convenience receptacles and the point where it exits the unit.
6. Do not allow adapter cord to touch hot surfaces. Wrap cord loosely around the unit when storing.

7. The unit should be situated away from direct sunlight or heat sources such as radiators, electric heaters, heat registers, stoves, or other units (including amplifiers) that produce heat. Avoid placing on top of stereo equipment that radiates heat.
8. Never block the air openings of the unit with materials such as clothing, plastic bags or papers, or place it on a soft surface such as a bed or couch, where the air openings may be blocked.
9. Do not overload electrical outlet. Use only the power source as indicated.
10. Do not carry this unit by cord or use cord as handle.
11. Never operate this unit if it has a damaged cord or plug, if it is not working properly, or if it has been dropped or damaged, or dropped into water. If the unit's power supply cord or plug is damaged, do not attempt to fix it yourself.
12. To avoid the risk of electric shock, do not disassemble or attempt to repair the unit. Incorrect repair can cause risk of electric shock or injury to persons when unit is used.
13. Do not operate in the presence of explosive and/or flammable fumes.
14. Never remove the plug from the socket by pulling the power cord.

# **WARNING!**

## **THIS PRODUCT CONTAINS A RECHARGEABLE BATTERY**

- Do not store this product in high temperatures, damp areas, or in direct sunlight.
- Never disassemble the product.
- Never dispose of the product in fire or water, which may result in explosion and/or injury.
- Keep product out of reach of children.
- Do not touch product with damp hands.
- Dispose of the product properly.
- The product must not be discarded with ordinary household waste.
- Contact your local recycling center for proper disposal.

## FCC INFORMATION

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

- 1) This device may not cause harmful interference, and
- 2) This device must accept any interference received including interference that may cause undesired operation.

**WARNING:** Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**CAUTION:** To maintain compliance with the FCC's RF exposure guidelines, place the product at least 8 inches from nearby persons.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This unit generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which



can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

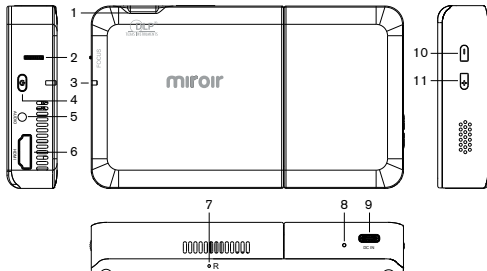
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Shielded cables must be used with this unit to ensure compliance with the Class B FCC limits.

**CAUTION:** The radiated output power of the Wi-Fi technology is below the FCC radio frequency exposure limits. Nevertheless, it is advised to use the wireless equipment in such a manner that the potential for human contact during normal operation is minimized.

# PARTS AND CONTROLS

1. Lens
2. Focus wheel
3. Device status light
4. Power button
5. 3.5mm audio out
6. HDMI Input
7. Reset button
8. Power indicator light
9. DC input
10. Volume up button
11. Volume down button



## SPECIFICATIONS

Product Dimensions	5.4" x 3.2" x 0.9"
Brightness	Up to 200 Lumens*
Lamp Life	LED lamp with up to 20,000 hours
Image Size	Up to 80"
Throw Ratio	1.3
Contrast Ratio	400:1*
Native Resolution	854 x 480 (480p)
Aspect Ratio	16:9
Built-in Speaker	1 1-watt speakers
Power	DC 5V/3A
Auto Keystone	+/- 40 degrees auto vertical keystone correction
Battery	Li-polymer, 5,000 mAh

## CHARGING THE BATTERY

The built-in battery is charged using the included USB 2.0 Type C cable. The power indicator light on the projector will illuminate red to indicate the battery is charging. Once fully charged, the power indicator light will turn green. When powered on, the projector will also display the ⚡ charging icon on the home screen status bar when plugged into power.

The USB 2.0 Type C cable can be plugged into a wall outlet to charge using the included power adapter or a USB power port (such as a USB port on a computer or a battery bank).

**IMPORTANT:** Fully charge the battery before first use (approx. 4-5 hours).

## CHECKING THE BATTERY LIFE

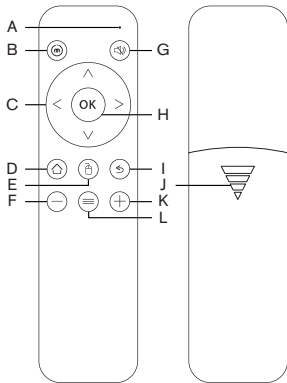
The battery icon, in the upper right hand area of the projected home screen, displays the remaining battery life of the projector. The 🔴 icon indicates the battery power on the projector is depleted or extremely low. The 🔋 icon indicates the battery is fully charged. The battery indicator light on the projector changes colors to indicate the projector's battery status:

- **[Green]** Power
- **[Solid Red]** Low power
- **[Red Flash]** Battery power depleted

# OPERATING THE REMOTE CONTROL

## CONTROLS AND BUTTONS

- A. **[Status light]** Displays remote usage information
- B. **[ECO Power]** Turn ECO power mode on/off
- C. **[Up]** or **[Down]**, Move up or down; **[Left]** or **[Right]** Move left or right
- D. **[Home]** Return to the Miroir home screen
- E. **[Mouse]** Use the remote as a mouse
- F. **[Volume down]** Decrease volume
- G. **[Mute]** Mute audio
- H. **[OK]** Select a menu option
- I. **[Back]** Return to the previous screen
- J. **[Battery door]**
- K. **[Volume up]** Increase volume
- L. **[Input]** Launches the input selection pop up menu



# OPERATING THE PROJECTOR

## SETUP

1. Install included (2) AAA batteries in the remote control.
  - Turn the remote control over and locate the battery door on the rear of the unit.
  - Press on the remote door arrow and slide in the direction indicated by the arrow.
  - Insert batteries as pictured on the inside of the battery compartment.

**IMPORTANT:** Insert batteries negative (-) side first into the slots , pushing it into the coil and then into the compartment. Do not insert batteries positive (+) side first.

- Place battery door over compartment, lining up the door tab with the opening on the remote. Slide the door until it securely snaps into place.
2. The projector can be powered using the internal battery or while plugged into power with the USB 2.0 Type C charging cable.
    - To power the projector with AC power, connect the power adapter to the USB 2.0 Type C charging cable. Connect the USB 2.0 Type C end of the cable to the


projector's DC in port and the power adapter into an outlet. Once connected, the power indicator light will illuminate on the projector.




- To power the projector with the built-in battery, simply turn the projector on.
- To power the projector with a battery bank or computer, connect the USB 2.0 Type C charging cable to the projector's DC port and the other end to the USB power source.

**IMPORTANT:** Fully charge the battery before first use (approx. 4-5 hours).

3. Power on the projector by pressing and holding the power button for 3 seconds. Allow the projector 15 to 30 seconds to fully start up and make image adjustments.

## CONNECTING THE PROJECTOR TO A WIRELESS NETWORK

1. Select  "Settings" from the projector's home screen.
2. Scroll to "Wi-Fi" on the settings menu.
3. Select "Scan" to search for nearby available networks.
4. Select the desired network from the listed options.
5. Enter the required network credentials, then select "Connect." Allow the projector and the network a few seconds to sync.

6. Press the “Home” button on the remote to return to the projector’s home screen. The wireless icon will be displayed in the projector’s home screen status bar if the connection setup was successful. The number of blue shaded bars on the icon depicts the strength of the wireless signal.
  -  Not connected
  -  Weak wireless signal
  -  Strong wireless signal

## PROJECTING CONTENT

The projector can be used as a standalone streaming device with many popular streaming applications, or to share content from a variety of devices with a wired HDMI connection or wireless connection.

### STANDALONE STREAMING

Visit [miroirusa.com/smart-apps/](http://miroirusa.com/smart-apps/) for a list of available streaming apps, or select the App Center icon from the projector’s home screen.



**IMPORTANT:** Some apps require payment or a subscription to access content. App availability can change. Streaming speeds will vary based on your internet connection.

1. Connect the projector to a wireless network (see the “Connecting the Projector to a Wireless Network” on page 13 of this manual).

## Downloading apps

2. Select the App Center icon from the projector’s home screen.
3. Select the desired app.
4. Select install and follow the app on screen prompts as needed.
5. Enter any required app access credentials.

## Stream

6. From the projector’s home screen, select the streaming app desired.
7. Select the content to view and play as you normally would.

**TIP:** For simpler navigation with the remote, enable the remote’s mouse mode. Mouse mode will allow the remote to show an on screen cursor, similar to a typical computer mouse. Press the “Mouse” button on the remote to turn mouse mode on or off on the remote.

## HDMI CONNECTION

The projector can be connected to a variety of devices such as smart phones, tablets, laptops, media streamers, and digital cameras via HDMI.

**IMPORTANT:** Devices that do not have an HDMI port will require an adapter to connect or may need to be connected wirelessly. To determine what type of adapter you need to use, please reference the “What do I need to connect?” on page 17 section in this manual or visit our website [miroirusa.com/support](http://miroirusa.com/support).

1. Connect an HDMI cable to the HDMI port on the projector and the other end to the source device.

**IMPORTANT:** Some devices will automatically mirror the display from the source device in the projected image, other devices may not have this ability. Devices that are not able to mirror can still be used with the projector to project videos and photo slideshows.

**NOTE:** When connecting a laptop or computer, a multiple display option must be enabled in your display settings.

## What do I need to connect?

Source Device	Needed to Connect
Apple iPad®, iPhone® and iPod touch® devices	Apple® digital AV adapter (not included) and HDMI cable (included)
Android™ devices with SlimPort®	SlimPort® to HDMI adapter (not included) and HDMI cable (included)
Android devices with MHL®	MHL® to HDMI adapter (not included) and HDMI cable (included)
Other Android devices	Wireless HDMI adapter (not included), such as a Chromecast™
Laptop or gaming console with HDMI port, Apple TV®, ROKU®, Amazon Fire TV or other HDMI streaming devices	HDMI cable (included)
HDMI streaming stick or Chromecast device	None, plugs directly into the projector's HDMI port
GoPro devices, digital cameras, and digital camcorders	Micro HDMI adapter (included) or Mini HDMI adapter (not included) and HDMI cable (included)

**NOTE:** If you do not see your source device listed here, contact your device manufacturer to confirm your device supports HDMI video out and what, if any, adapter is required to make the connection.

## WIRELESS CONNECTION

The projector can be connected to some smart phones and tablets via a wireless connection.

### **Android Devices**

**IMPORTANT:** Android devices require Android OS 4.4 or later and the wireless screen mirroring capability to connect wirelessly with the projector.

1. Press the "Input" button on the remote.
2. Select "Screen Mirroring" on the pop up menu. The projector will display a connecting screen.
3. On your Android device, swipe down from the top of the screen to display the notification panel.
4. Select the "Quick Connect" button or the "Smart View" option.
5. Select the Miroir projector from the list of available screen mirroring devices.

### **iOS Devices**

**IMPORTANT:** AirPlay and wireless screen mirroring are not supported on iOS devices. Wireless iOS viewing is limited to certain files types such as native video, photos, .PPTX files, .KEY files, and .PDF files through the Miroir Wireless app.

1. Connect the projector to a wireless network (see the “Connecting the Projector to a Wireless Network” on page 13 of this manual).
2. On the iOS device download and install the Miroir Wireless App.
3. Once installed, launch the Miroir Wireless App.
4. While on the projector’s home screen, press the “Input” button on the remote.
5. Select DLNA on the pop up menu. The projector will automatically connect to the iOS device.

**IMPORTANT:** The iOS device and your projector must be on the same wireless network to establish a wireless connection with the Miroir Wireless App.

6. Select the content to project from the folders inside the Miroir Wireless app on the iOS device.

## CHANGING CONNECTION INPUT

Press the “Input” button on the remote to launch the connection pop up menu to swap between the wireless input and HDMI input.

## IMAGE ADJUSTMENTS

### ADJUSTING IMAGE ELEVATION

Place the projector on a hard flat surface. Stabilize the battery side of the projector with one hand and gently lift the lens side of the projector with your other hand.

### ADJUSTING IMAGE FOCUS

Simply roll the focus wheel control upwards and downwards to fine-tune the image.

### ADJUSTING VERTICAL KEYSTONE

After powering on, or adjusting the image elevation, the projector will automatically adjust the display screen to the best condition (vertical keystone correction up to +/- 40 degrees). On startup, allow the projector 15 to 30 seconds to fully start up and make this adjustment.

## AUDIO

The projector has a built-in speaker that will be automatically used for sound when the projector is powered on. Optionally, connect an external speaker for bigger sound.


## ADJUSTING THE VOLUME

The volume level of the projector can be adjusted using the volume controls on the projector, or the volume controls on the included remote control. Press the “Volume up” button or the “Volume down” button to adjust to the preferred volume level.

## CONNECTING AN EXTERNAL SPEAKER

External speakers can be connected to the projector through the 3.5mm audio port on the projector or wirelessly with a Bluetooth speaker.

To connect an external Bluetooth speaker:


1. Set the Bluetooth speaker to discoverable mode.
2. Select  “Settings” from the projector’s home screen.
3. Scroll down to “Bluetooth” on the settings menu page.
4. Select “Search for devices.”
5. Select your Bluetooth speaker from the list of available devices.

## ECO POWER MODE

ECO power mode will decrease the projector's brightness to maximize the projector's battery life. Turn ECO power mode on or off by pressing the ECO power mode button on the remote.

## VIVID MODE

Vivid mode enhances image contrast and brightness, ideal for movie watching. Turn vivid mode on or off:

1. Select the  settings icon from the projector's home screen.
2. Scroll down to the vivid mode option in the settings menu.
3. Select on or off.

## POWERING OFF

To power the projector off, press and hold the power button for 6 seconds. Allow the projector a few seconds to power off completely before storing the device.





## CLEANING THE LENS

An optical lens cleaning solution can be used to clean the projector's optical lens. Apply a small amount of the cleaning solution to a clean soft cleaning cloth and gently wipe the lens in a circular motion.

**IMPORTANT:** Do not apply cleaning solution directly to the lens. Do not use abrasive cleaners, solvents or cleaning cloths. Do not apply the cleaning solution to the projector's case.

## UPDATING THE PROJECTOR

When firmware updates are available for your projector a  red numeric indicator will appear on the home screen  system update icon. To update the firmware on your projector, select the system update icon from your projector's home screen.

# TROUBLESHOOTING

## **The projected image is blurry.**

- Adjust the focus wheel on the projector to fine-tune the picture.
- Check that the surface you are projecting on is smooth.
- Check that the projector's lens is free of dust and debris.

## **The projected image is too small.**

- Move the projector farther away from the projection surface.

## **The projected image is smaller on one side and larger on the other.**

- Adjust the projector so the lens is facing your projection surface at a 90° angle.

## **The projector is not powering on.**

- Check the battery power on the projector. If the battery is depleted, plug the projector into power.
- Check that the charging indicator light is illuminating when the projector is plugged into power.

## **The projector is not connecting to your wireless network.**

- Check that you have selected the correct wireless router name in the setup menu.
- Check that you are inputting the correct password if your network is security enabled (passwords are case sensitive).
- Check that there are no obstructions, like cement walls, between the projector and your wireless router.
- Try relocating the projector to minimize wireless interference from other household appliances and/or other wireless networks.

## **You can't hear any sound.**

- Check that the volume on the projector is turned up and is not muted.
- If an external speaker is connected with an audio cable, check that the connection from the speaker to the projector is securely plugged in on both ends. Also check that any volume controls on the external speaker are turned up and not muted.
- If an external Bluetooth speaker is connected, check the audio settings on the projector to ensure the device is connected properly. Also check that the Bluetooth speaker is not muted.

## **The projector's remote control isn't functioning.**

- If the status light on the remote flashes each time you press a button on the remote, the problem is not with your remote.
- Try moving closer to the projector with the remote.
- Check that the batteries are functioning and inserted properly.

## **The projector is not projecting.**

- Check that there are no obstructions between the projector and the projection surface.
- Check the battery charge on the projector. If depleted, try powering the projector on while the unit is plugged into power.
- If plugged into power, check that the charging indicator light on the unit is illuminated.
- Power the unit off, press the restart button, and power the unit back on.
- If connected to the projector with a cabled HDMI connection:
  - Check that the HDMI cable is securely plugged into the HDMI port on your device and the HDMI port on the projector.
  - Check that you are using any necessary adapters or cables to connect your device. Also check with your device manufacturer to ensure your device supports HDMI video out and you are using any required cables and/or adapters to make the connection. If an adapter is required, power down the projector, add the adapter, and then turn the projector back on.

- If connected to a laptop or computer, check your display settings to ensure a multiple display option is selected.
- If connected to a gaming console, power down the console and the projector. Check that the HDMI cable is securely connected to the HDMI port on the projector and to the HDMI port on the gaming console. Power the projector on, then power on the gaming console.
- If connected to the projector with a wireless connection to an **iOS device**:
  - Check that you have downloaded, installed and launched the Miroir Wireless app on your device.
  - Check that your projector and your iOS device are connected to the same wireless network.
  - Check that you have selected compatible content for viewing from inside the app's folders.
  - Check that the DLNA input is selected on the projector.
- If connected to the projector with a wireless connection to an **Android device**:
  - Check that your device supports screen mirroring.
  - Check that the Screen Mirroring input is selected on the projector.

## Can't find what you need here?

Visit [miroirusa.com/support](https://miroirusa.com/support) for more help, FAQs, tutorials and instructional videos.

# ONE (1) YEAR LIMITED WARRANTY

Miroir ("Miroir") warrants to you, the original retail purchaser ("Consumer"), that this product ("Product") will under normal use operate substantially in accordance with the accompanying documentation for a period of one (1) year from date of original purchase. Consumer's sole and exclusive remedy, and Miroir's sole and exclusive responsibility under this warranty will be, at Miroir's option, either to repair or replace the defective Product during the one (1) year limited warranty period so that it performs substantially in accordance with the accompanying documentation on the date of your initial purchase.

The forgoing warranty is limited and is not applicable to: (i) normal wear and tear; (ii) defects or damage caused by misuse, accident (including without limitation collision, fire and the spillage of food or liquid), neglect, abuse, alteration, unusual stress, modification, improper or unauthorized repair, installation, wiring, or testing, improper storage, use in an unapproved device or if the serial number has been removed; (iii) use not in accordance with the documentation; and (iv) damage caused by the equipment with which the Product is used.

To obtain warranty service for any Product that is subject to the foregoing warranty, Consumer must contact Miroir at [info@miroirusa.com](mailto:info@miroirusa.com), providing proof of purchase from an authorized dealer and a description of the issue. Consumer shall bear the cost of returning the Product for repair or replacement under this limited warranty. Any Product returned without proof of purchase will not be honored under this limited warranty.

The limited warranty extends only to Consumer and is not assignable or transferable to any subsequent purchaser or user. THE LIMITED WARRANTY SET FORTH ABOVE IS PROVIDED IN LIEU OF ALL OTHER WARRANTIES AND MIROIR HEREBY DISCLAIMS ALL OTHER WARRANTIES OF ANY

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# **miroir**

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