



MN360 User's Guide

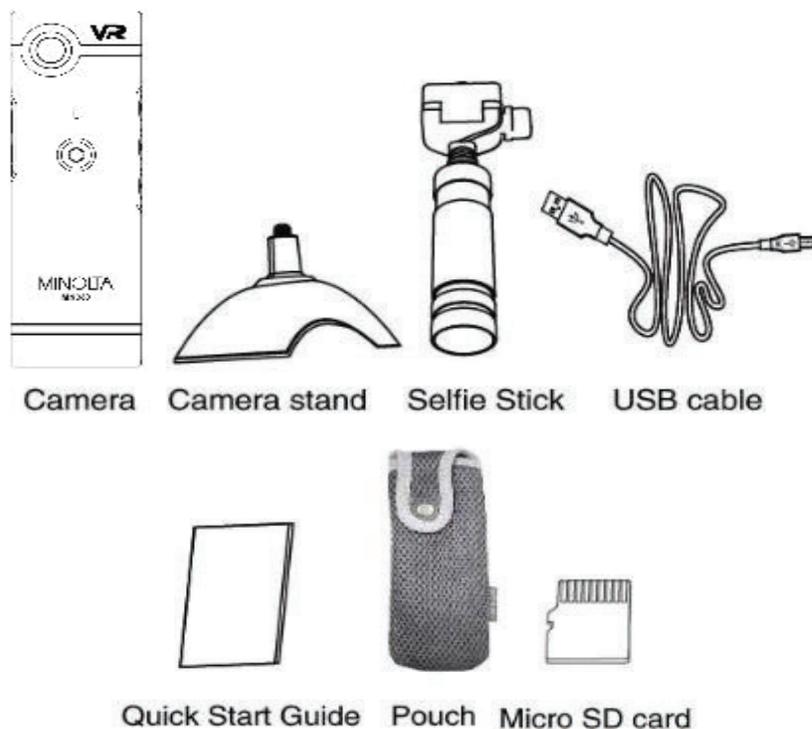
1.1 Introduction

Congratulations on the purchase of your Minolta MN360 Dual Lens VR Camera! Capturing high-quality full 360-degree images and videos is made fast, easy and simply utilizing advanced technology. Record every life experience without missing a single view. Ideal for reliving an immersive 360-degree virtual reality experience or shooting panoramic views, the MN360 features dual 210-degree fisheye lenses that capture your entire surroundings in vivid QHD 30-fps (2048x1024) detail. Utilizing robust hardware stitching, just grab your camera and begin shooting without the need to sync to your smartphone. With a lightweight design, simple shape and weighing only 3 ounces, the MN360 comfortably fits in the palm of your hand. A free iOS and Android app (OTCam360) creates a virtual reality experience that allows you to pan or zoom in any direction as if standing directly in the scene. You can also effortlessly share your full 360-degree footage to social media, or live-stream on popular social media platforms.

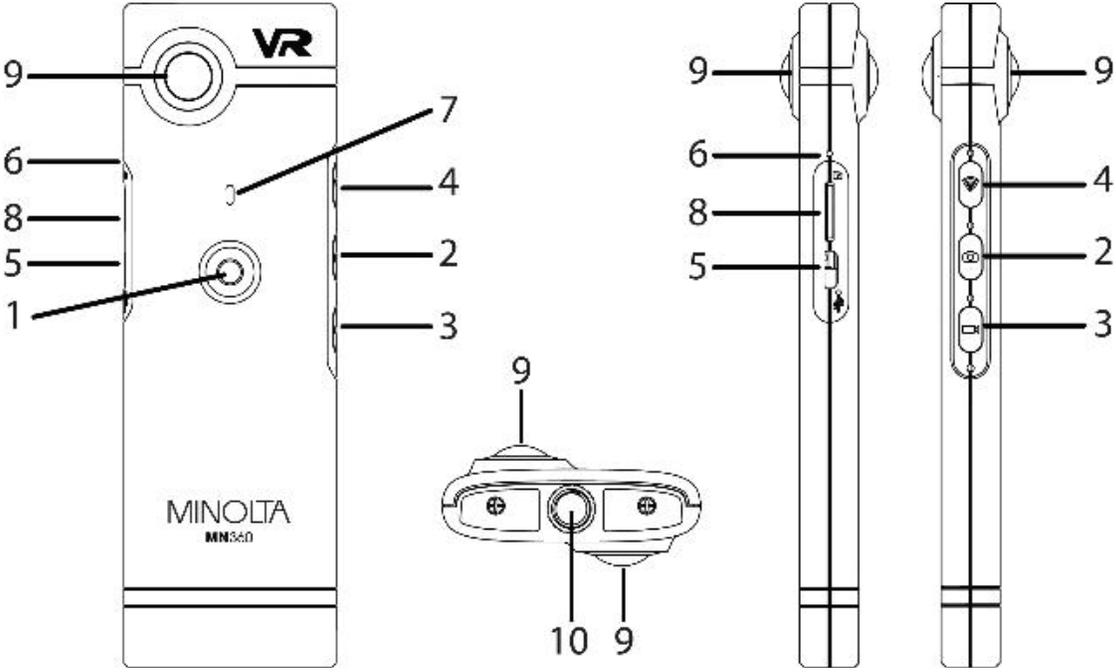
Visit our website at www.minoltadigital.com for the latest news and updates on our products.

1.2 Included in This Package

All of the items included in this package are shown and described below. The only accessory required for use is the MicroSD card. All of the other included accessories are optional and are not required for use.

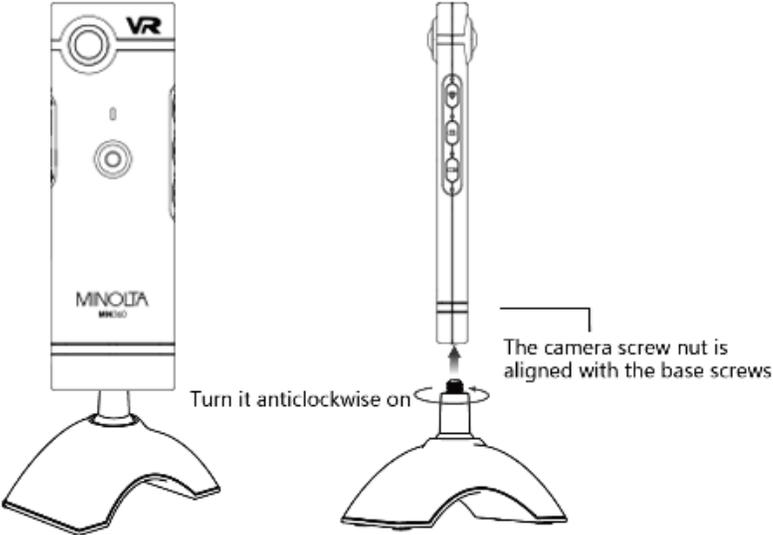


1.3 MN360 Body Interface



1) Power/Record Button	4) Wi-Fi Button	7) Main Status LED
2) Photo Mode	5) MicroUSB / Charging Port	8) MicroSD Slot
3) Video Mode	6) Reset Button	9) Lenses
	10) Accessory Socket	

1.3.1 Accessory Installation Diagram

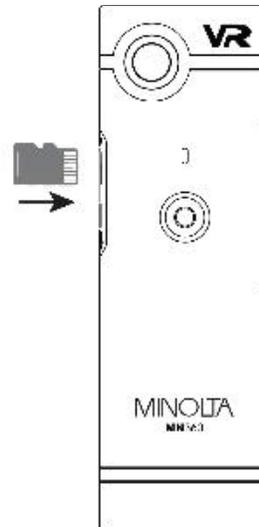


2. First Use

2.1 Inserting the MicroSD Memory Card

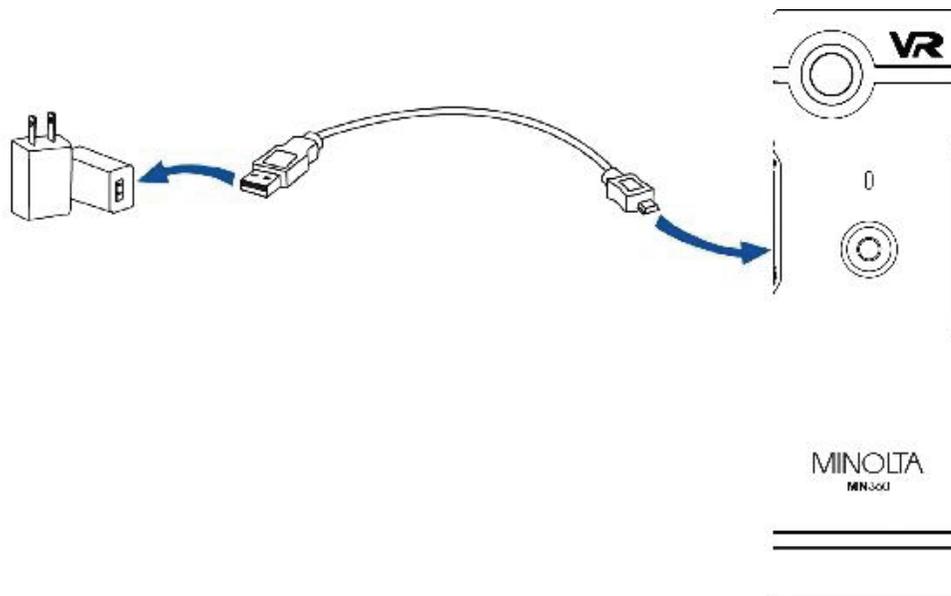
A MicroSD card is required for recording videos and capturing photo. Follow the diagram below for proper insertion of the MicroSD memory card. Please be sure to use a MicroSD card with a minimum class rating of Class 10 to ensure high quality and processing of your files.

To remove the MicroSD card, simply push the card further into the memory card slot and it will automatically pop back out. Do not insert or remove the MicroSD card while the camera is powering on or off.



2.2 Charging the Battery

Connect your camera to the included AC adaptor with the USB cable provided for charging. When your camera connects with the USB cable, the red LED will stay solidly lit. When fully charged, the red LED turn off.



2.3 Powering On and Off + Main Status LED

To power your camera on, press the power button for 4 seconds. The camera will begin to initialize and power on. The total initialization time is 9 seconds. Once the camera emits 2 sets of audible beeps, the camera is ready for use. To power your camera off, press the power button for 4 seconds until the camera emit 3 beeps. You can then release the power button.

The powering on/off sequence was designed this way to prevent accidental recording and battery drain while the camera is packed away in your bag or pocket.

The camera's main status LED is located on the front of the camera, above the power button. This LED is for displaying the camera's overall state. Below is a chart describing each of the LED's colors and state.

LED COLOR	FUNCTION
No Color	Camera is powered off
GREEN solidly illuminated	Camera is ready to capture; standby
GREEN fast flashing	Insert MicroSD card
GREEN slow flashing	Video is being recorded
GREEN single flash	Photo was captured
GREEN & ORANGE flash	Battery charge is running low

2.3.1 Enabling Wi-Fi and Wi-Fi Status LED

Enabling Wi-Fi will allow you to connect your camera to your smartphone. To enable the Wi-Fi function on your camera, ensure your camera is powered on and press the Wi-Fi button located on the side of your camera for 2 seconds. The Wi-Fi's status LED will begin illuminating BLUE. To disable the Wi-Fi function, press the Wi-Fi button for 3 seconds until the camera emits an audible beep.

The Wi-Fi status LED is located on the side of the camera body, above the Wi-Fi button. This LED is for displaying the Wi-Fi's overall state. Below is a chart describing each of the LED's colors and state.

LED COLOR	FUNCTION
No Color	Wi-Fi is disabled
BLUE fast flashing	Wi-Fi is enabled
BLUE slow flashing	Wi-Fi is waiting to be connected
BLUE solidly illuminated	Wi-Fi is connected to smartphone app
BLUE double flash loop	Camera is entering Live Streaming
RED flashing	Live Streaming mode is enabled

2.3.2 Video Mode and Video Status LED

To begin recording video, first ensure that you are in Video mode. To enter Video mode, simply press the Video button located on the side of your camera. Once Video mode is enabled, the Video status LED will remain solidly illuminated in RED and the camera will emit an audible beep.

NOTE: Your camera enters Video mode automatically each time you power your camera on or off.

Once your camera is in Video mode, tap the power/record button once to begin recording. The camera will emit an audible beep, and the main status LED will slowly flash in GREEN.

To stop recording, tap the power/record button again and the camera will return to standby. The main status LED will return to solidly illuminated, and the camera will emit an audible beep. Your video files will be stored on your MicroSD memory card.

The Video status LED will stay solidly illuminated when Video mode is enabled.

2.3.3 Photo Mode and Photo Status LED

To capture a photo, first ensure that you are in Photo mode. To enter Photo mode, simply press the Photo button located on the side of your camera. Once Photo mode is enabled, the Photo status LED will remain solidly illuminated in RED and the camera will emit an audible beep.

NOTE: Your camera reverts back to Video mode automatically each time you power your camera on or off.

Once your camera is in Photo mode, tap the power/record button once to capture a photo. The camera will emit an audible beep, and the main status LED flash once per photo captured. Your photo files will be stored on your MicroSD memory card.

The Photo status LED will stay solidly illuminated when Photo mode is enabled.

3. Connecting Your Camera to Smartphone App

Your camera is designed to be used with or without connecting to your smartphone. Connecting your camera to your smartphone adds many extra features and conveniences.

The app offers you the following features when connected:

- (1) Enables as a remote viewfinder in real time
- (2) Remote control all of your camera's functions
- (3) Download your videos and photo directly to your smartphone
- (4) Live Streaming on YouTube and Facebook
- (5) Enable Photo Timer, Photo Burst Mode, WDR and Loop Record
- (6) Adjust Video and Photo resolutions, quality and exposure
- (7) Cycle display modes of Normal, VR, 4in1, Round and Asteroid Views
- (8) Adjust camera orientation and stitch preferences
- (9) Adjust VR control of touch, motion and motion + touch
- (10) Adjust date & time, microphone, light frequency, auto-power, memory card formatting, resetting to default, camera Wi-Fi settings

To integrate your camera with your smartphone, follow the directions below.

App to install: OTCam360 (Available on iTunes and Google Play Store)

Camera's SSID: MN360-xxxxxxx (represents the camera's ID number)

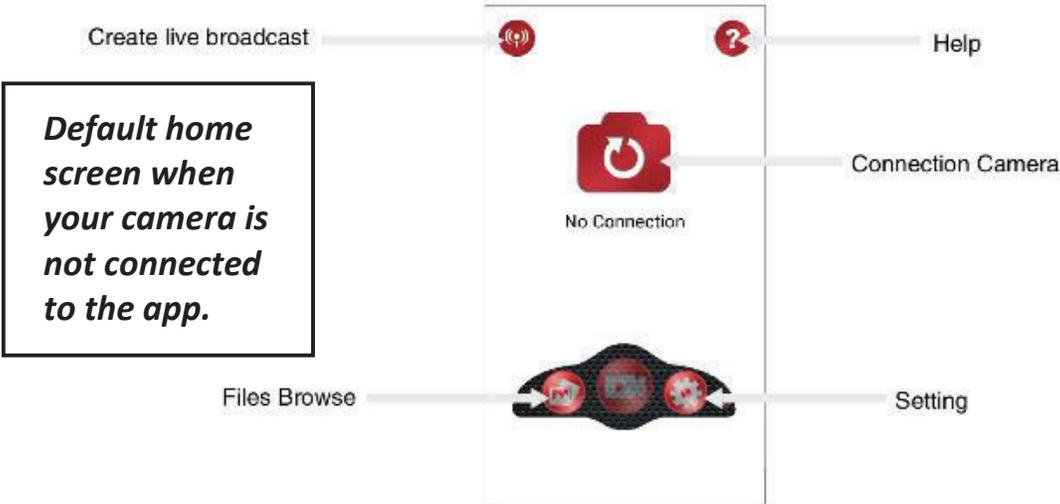
Wi-Fi Password: 87654321



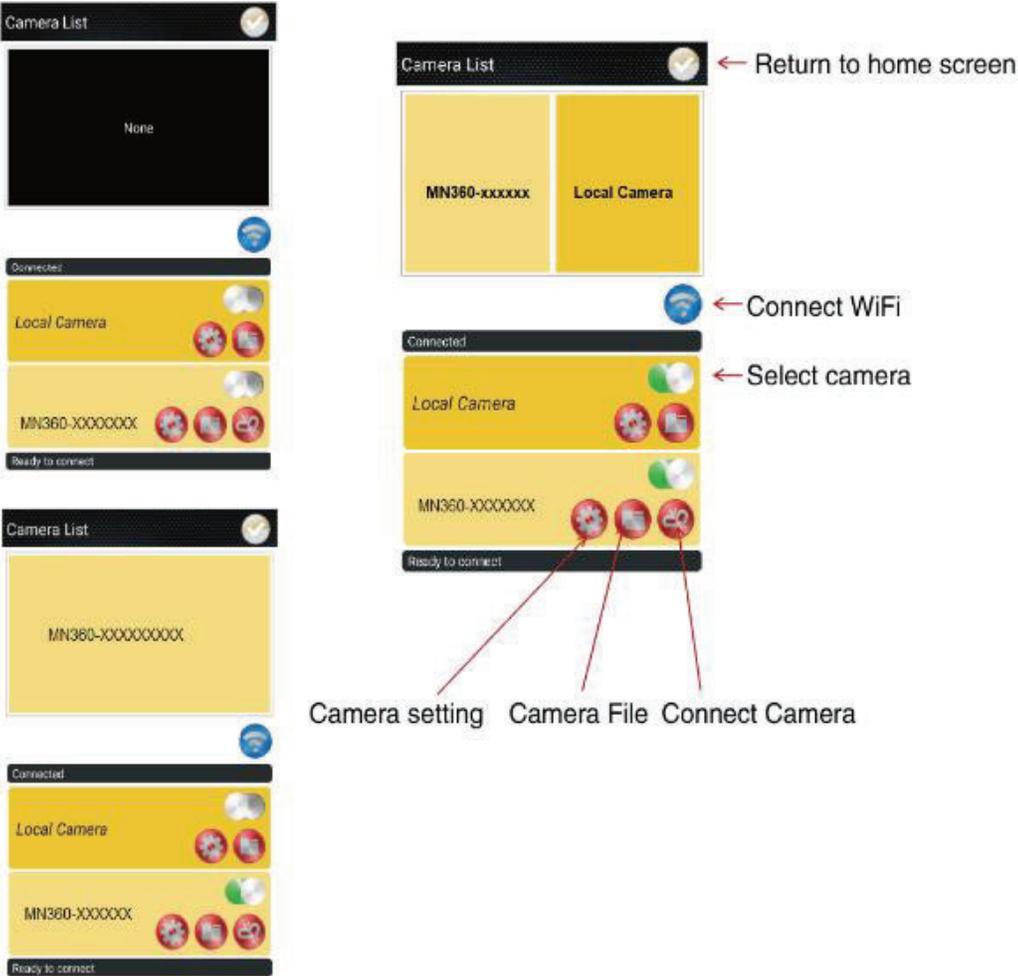
- (1) After successfully installing the OTCam360 smartphone app, enable your camera's Wi-Fi (refer to 2.3.1 in previous instructions).
- (2) Once your camera's Wi-Fi is enabled, go to your smartphone's Wi-Fi settings and connect to "MN360-XXXXXXX" from the available Wi-Fi networks list.
- (3) You will be prompted for the camera's password. Enter 87654321.
- (4) Once your smartphone shows that your camera is successfully connected, launch the OTCam360 app. After a few seconds of loading, the app should show that you are connected. Your camera will also emit an audible beep, and the BLUE Wi-Fi status LED will change to solidly illuminated.

NOTE: If your camera's Wi-Fi feature is enabled and dormant for over 3 minutes, the camera will disable the Wi-Fi feature and you will need to enable Wi-Fi again by pressing the Wi-Fi button once more. Please refer to instructions 2.3.1.

3.1 App Functions and Settings



3.1.1 Camera List



3.1.2 App Main Interface

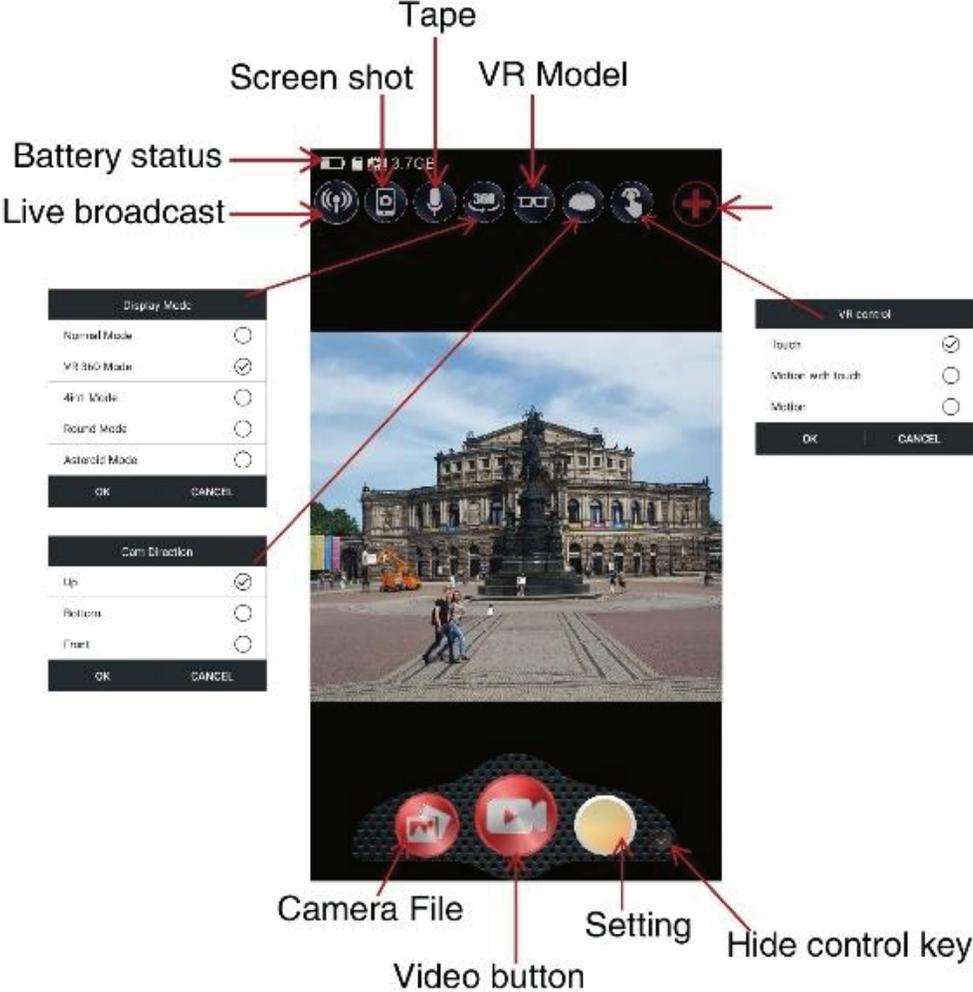


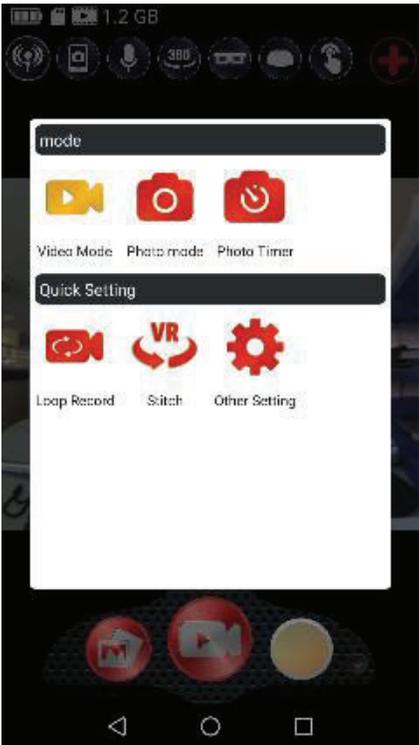
Photo mode

OTCam360 App displayed in landscape mode on smartphone



Click and drag the control button to adjust the position

3.1.3 App Setting Menu and Quick Settings



Video Mode

Loop Record, Stitch, Settings

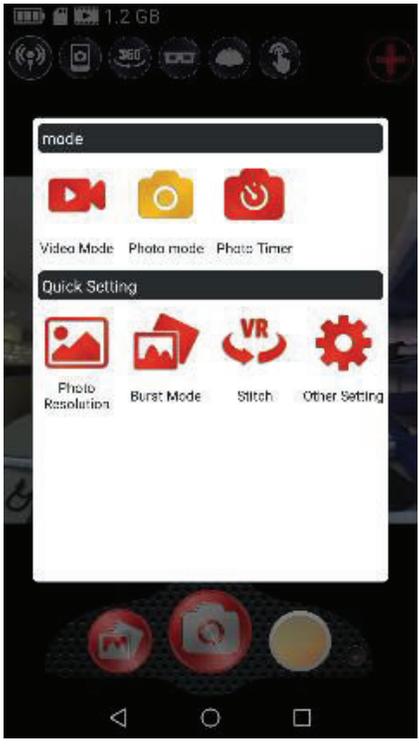
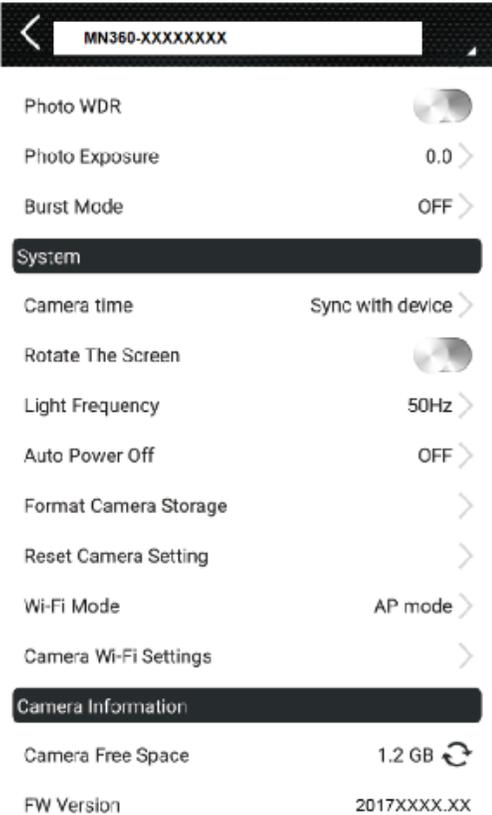


Photo Mode

Photo Resolution, Burst Mode, Stitch and Settings

Settings Screen
NOTE: The options change depending on whether you are in PHOTO or VIDEO mode



3.1.4 App VR Display Modes

The app allows you to view your live feed or recorded clips in 4 different display modes. See below for a description and view of each mode.

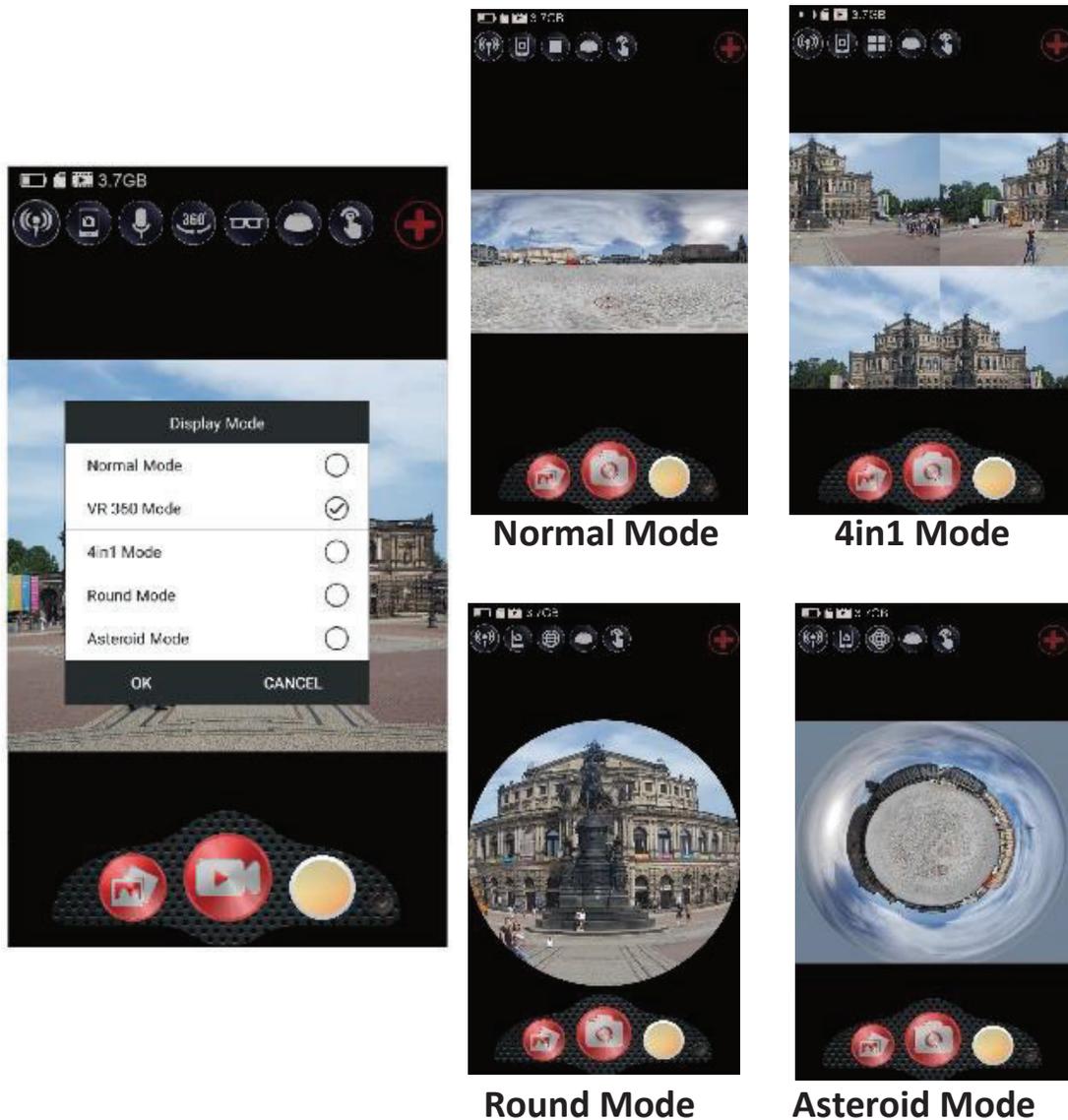
Normal Mode: Standard view

VR Mode: Most *native Virtual Reality* experience for viewing your clips. When this mode is enabled, you can maneuver your record clip with the movement of your smartphone.

4in1 Mode: Divides the dual-lens stitched image into 4 equal parts

Round Mode: Native mode showing the true view of a single lens.

Asteroid Mode: This mode is similar to round mode. It combines the dual lens stitched image and displays it in complete circular view.



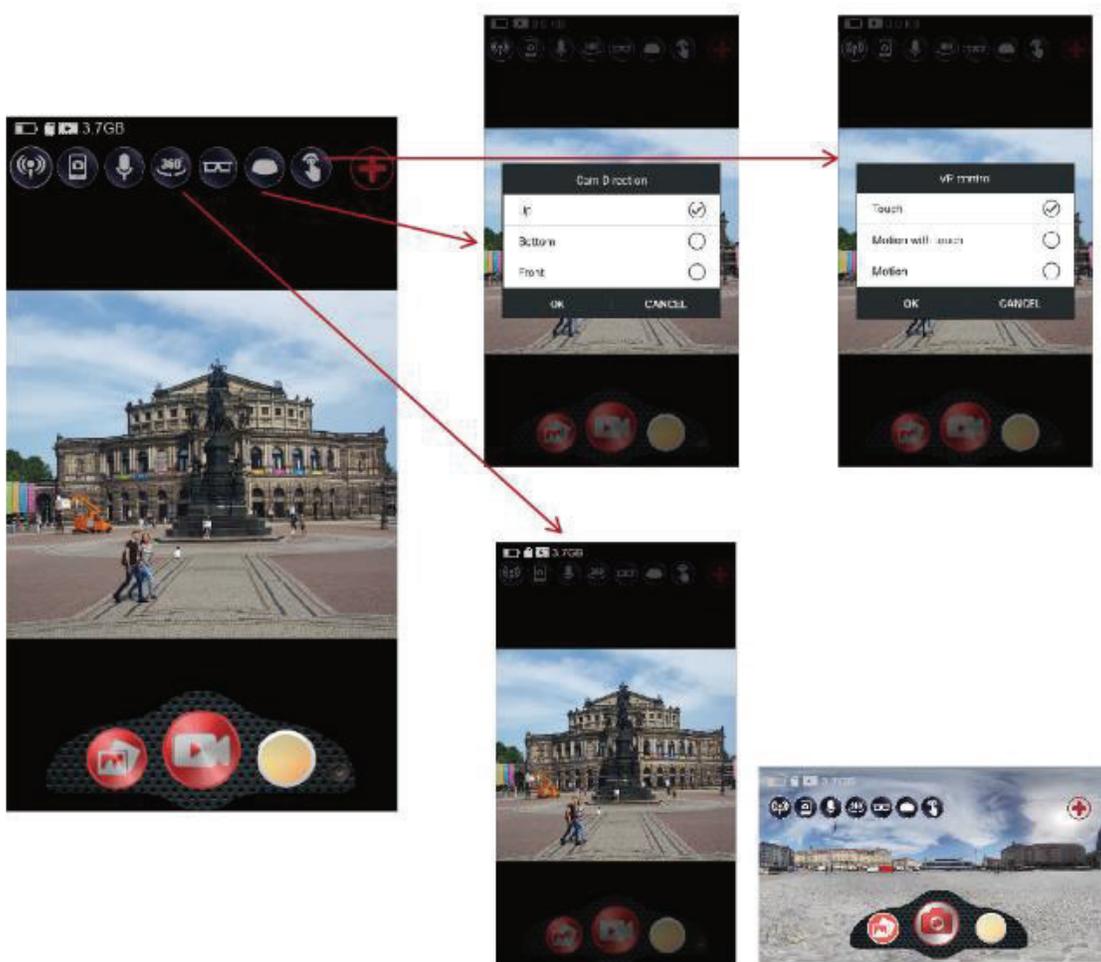
3.1.5 App VR Control Modes

The app allows you to control your live feed or recorded clips in 4 different control modes. See below for a description and view of each mode.

Touch: This control mode allows you to maneuver your record clip with the touch and drag of your finger on your smartphone screen. You can move the image in any direction to view that recorded perspective.

Motion: This control mode allows you to maneuver your record clip with the movement of your smartphone. It is the most *native Virtual Reality* experience for viewing your clips. You can move the image in any direction to view that recorded perspective with the movement of your smartphone.

Motion with Touch: This control mode combines both the Touch and Motion modes into a single mode.



4. Appendix

4.1 Reset To Factory Default Settings

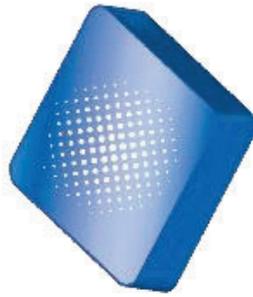
To reset your camera back to factory default settings, press the reset button located above the MicroSD memory card slot. Insert a thin, pointy object and press the button for 5 seconds. Your camera will power off.

Follow the instructions below to reset your camera's Wi-Fi SSID and password:

- (1) Power your camera off. If your camera is frozen, reset your camera by pressing the reset button.
- (2) Press the Wi-Fi button and Power buttons together for 10 seconds, until the main status LED remains solidly lit. Your Wi-Fi password will be reset back to "87654321".

4.2 Technical Specification

Model Number	MN360
Lens	Dual 1/3" Fisheye Lens • 210 Degrees FOV • Fixed Focus • f=20mm • F2.0
Image Sensor	Dual 1/3" Sony CMOS; 1920x1080 pixels
Shutter	Electrical
Pixels	JPEG: 8 MP • 5 MP • 3 MP
	H.264: 2k30fps (2048x1024)
Stitching Technology	Hardware stitch (smartphone app not required for recording)
App Name	OTCam360
Stitching Options	Normal: 1m ~ infinity • Near: 0.4m ~ 4m
Live View & Playback	Normal • VR • 4in1 (tiled) • Round (fisheye) • Asteroid (spherical zoomed)
VR Control	Motion • Touch • Motion with Touch
Live Broadcast	Facebook • YouTube (apps required)
Continuous Shooting	Burst (3, 5, 10 seconds) • Loop Recording (1, 2, 3 minutes)
Special Features	Panorama Shooting • Loop Recording • Auto Recording • Wide Dynamic Range (WDR)
ISO Sensitivity	Auto
White Balance Control	Auto
Recording Media	microSD • microSDHC • microSDXC; Maximum: 128GB
I/O Ports	Micro USB (type-B), USB 2.0 (high speed) • Microphone • Stereo Speakers
I/O Radio	Wi-Fi 802.11 b/g/n
Power	Built-in Lithium-Ion; 3.7v, 1300mAh; 130 minutes recording time
Dimensions	1.77 x 5.39 x 0.55 in. • 2.92 oz.
Included Accessories	USB Cable • AC Adaptor • Pouch • Camera Stand • Selfie-Stick • Quick Start Guide
Compatible Devices	iOS 11.0 • Android 8.0 • Windows 10 • MacOS 10.13



MINOLTA®

*Minolta is a registered trademark of JMM Lee Properties, LLC
and is used in the United States by Elite Brands Inc. under
license.*

40 Wall Street, 61st Floor, New York, NY 10005 USA

Tel: 800-441-1100

www.minoltadigital.com • www.elitebrands.com

Copyright © 2019 Elite Brands Inc.

***If you're having difficulties with your camera, or
would like further assistance, please call our toll-free
technical support hotline at 800-441-1100. Please be
sure to have your camera handy when calling.***



