

Capsule360 User Manual

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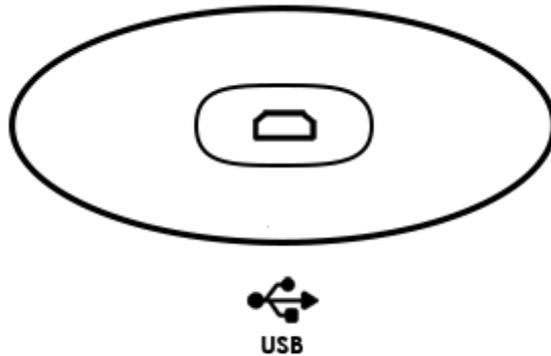
1. Content of the Package

When you purchase a Capsule360, it will be delivered with the following items.

- 1 x Capsule360
- 1 x USB Charge Cable
- 1 x Charger

2. Charging and Operation

Capsule360 comes with a USB charge cable and the battery which lasts up to 7 hours for video shooting and 24 hours for photo shooting with a single charge. The battery will be charged when you connect Capsule360 to a USB power source. Charging port is on the side of the Capsule360. You can use your computer USB port or your regular phone charger for this purpose.

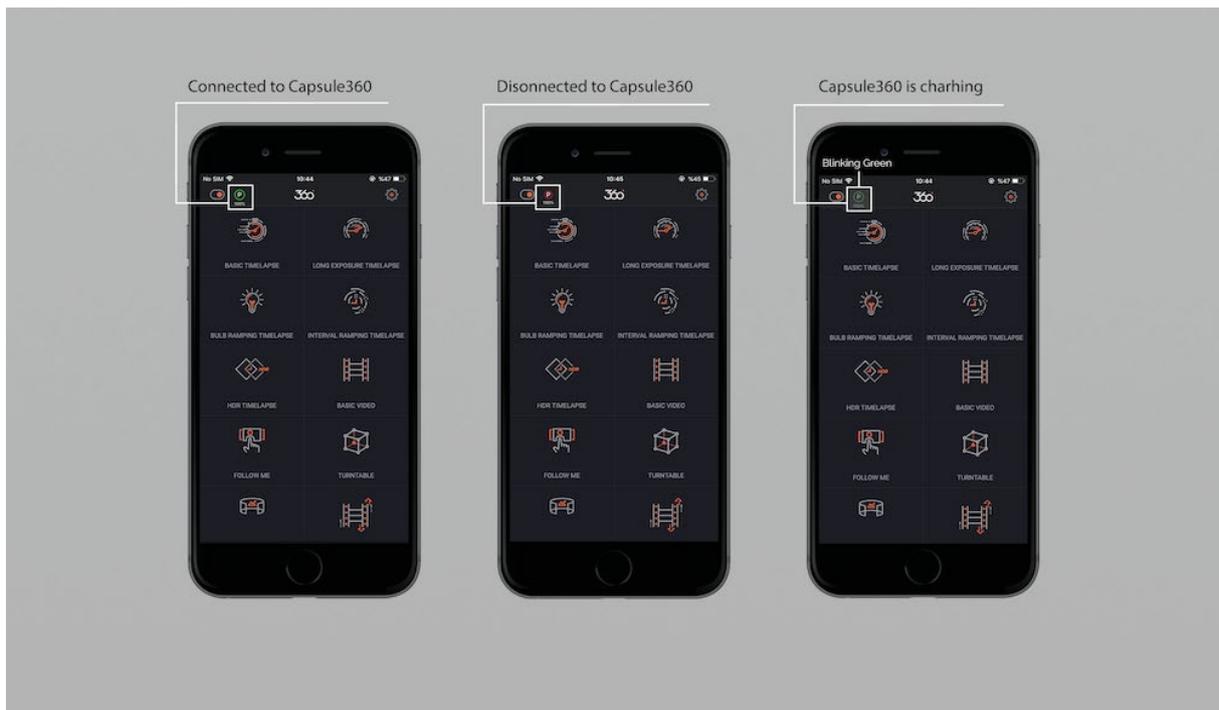


When you plug your Capsule360 in for charge, you will see the blinking green icon on the top left side of the app screen that shows the device is charging. Depending on the type of the device you are connected to, you will see a letter in the circle. Letter “P” is for the Capsule360 (PAN), letter “S” is for the SLIDER, letter “T” is for the TILT.

Stable green circle:Your device is connected.

Stable red circle: Your device lost connection.

Blinking green circle: Your device is charging.



P letter inside the circle: PAN

S letter inside the circle: SLIDER

T inside the circle: TILT

Warning: Using Capsule360 with other types of power sources may harm your device.

3. First Use

Your Capsule360 may not be delivered with the latest firmware. If a new firmware has been released, before you use it for the first time, you should update the firmware first. To get detailed information about the firmware upgrade, see the Firmware Upgrade Section.

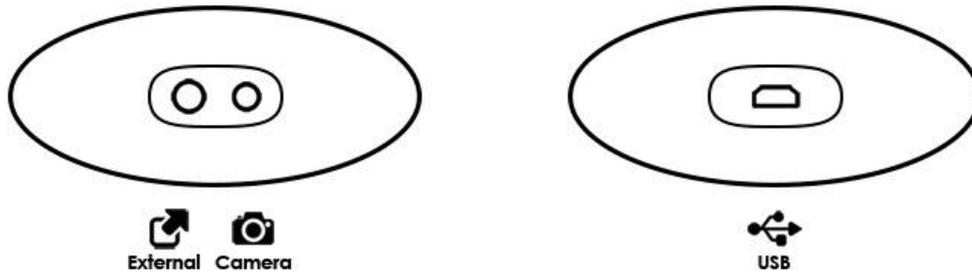
You can use it right out of the box but you may need to charge to get it fully loaded. You can charge the battery using any USB phone charger (1000 mA min.) or the USB port of your computer. Capsule360 will be delivered with a Micro-USB cable. You can use this cable to charge it. The micro end of the USB cable will be plugged into the USB port. It is located on the side of the device.

The on/off switch is a single button. You can simply turn it on by pressing the button once. Opening light of Capsule360 will vary on its colors everytime.

4. Camera Connection

The Capsule360 uses connection cables to trigger your camera. Your unit will be shipped with the proper camera connection cables. The Capsule360 is a motion timelapse device, which is compatible with many brands and camera models. You can use the same device with many different cameras by just changing the connection cable.

The Capsule360 has separate outputs for the camera. The output ports are located on the side the device.



The camera cable port is a 2.5 mm stereo female jack. The camera cables have the male 2.5 mm stereo jack on one end. This end is plugged into the camera connection port. The other end changes depending on the camera make and model. This end is plugged in the shutter release port of your camera.

The external port : This mode helps you to trigger your camera via a device that you connect externally. For instance, you can use an external microphone to send signal command above a specific decibel to trigger your camera to take a shot. You can use both of the outputs at the same time. They are electrically isolated from each other. They trigger the connected device synchronously.

The camera cables are designed to trigger the cameras only. Do not use it for any other purpose. Doing so may damage the cable or the device.

5. Mobile Application

We offer a Capsule360 mobile app which has been designed as an interface to configure and control your Capsule360 easily. The communication between the smartphone and Capsule360 is done over Bluetooth connection. So, your smartphone has to be compatible with Bluetooth 4.0.

Capsule360 mobile app is available on iOS and Android platforms. Search for Capsule360 in your app store, or use the following buttons to download the app.

6. Connecting to Capsule360

Warning: Please make sure that your Bluetooth is turned ON in the connection preferences of your smartphone or tablet.

After opening the mobile app, a list of available devices will appear. In case your device is not shown in the list, make sure that your Capsule360 is turned ON and click the renew button (at the top right-hand side of the screen) again.

You can connect to multiple Capsule360 devices at the same time. They will be shown in various colors.

6.1 Connection Lights of Capsule360

Connection Lights of Capsule | 360



Orange Light

It is opening light of Capsule360.
Connected to Capsule360 mobile app.



Blinking Blue Light

Ready to connect to Capsule360 mobile app.

Blue Light

Connected to Capsule360 mobile app.



Green Light

Connected to Capsule360 mobile app.
Capsule360 is fully charged.



Purple Light

Connected to Capsule360 mobile app.



Red Light

Waiting firmware upgrade.
Connected to Capsule360 mobile app.



Yellow Light

Re-connecting to the Capsule360 while
mobile app is running in the background .
(Only for iOS)



Semicircle Red Light

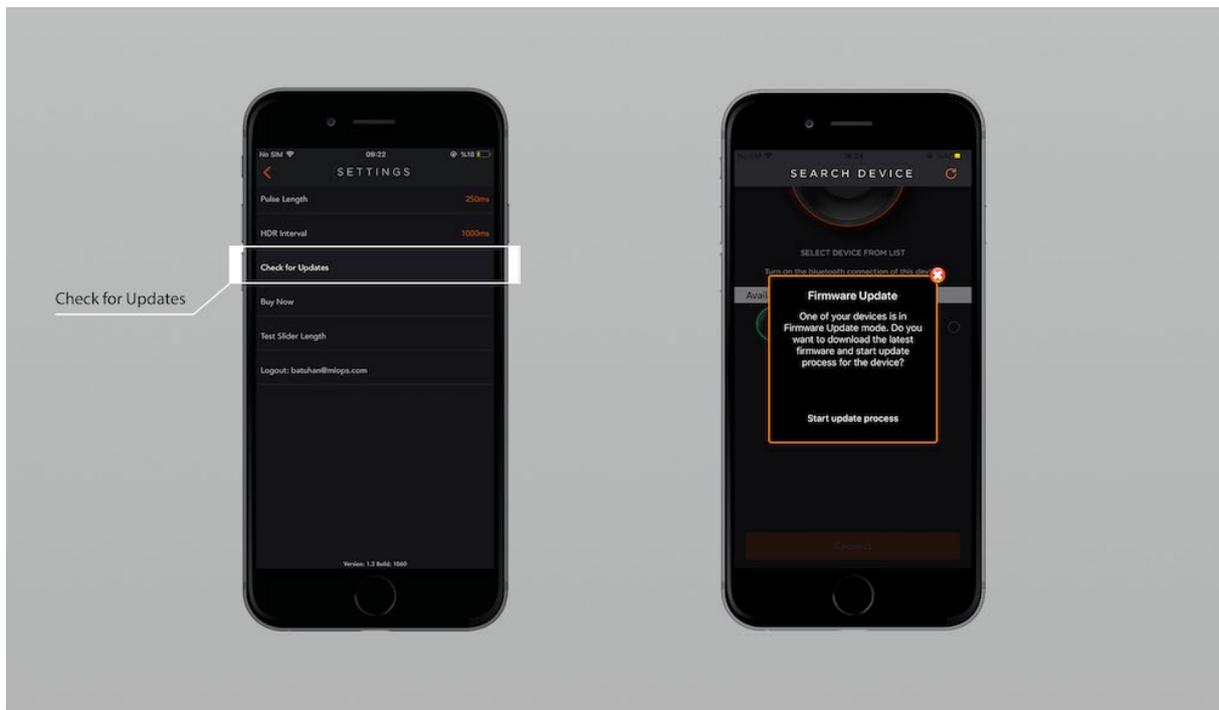
Capsule360 is charging.

7. Firmware Upgrade

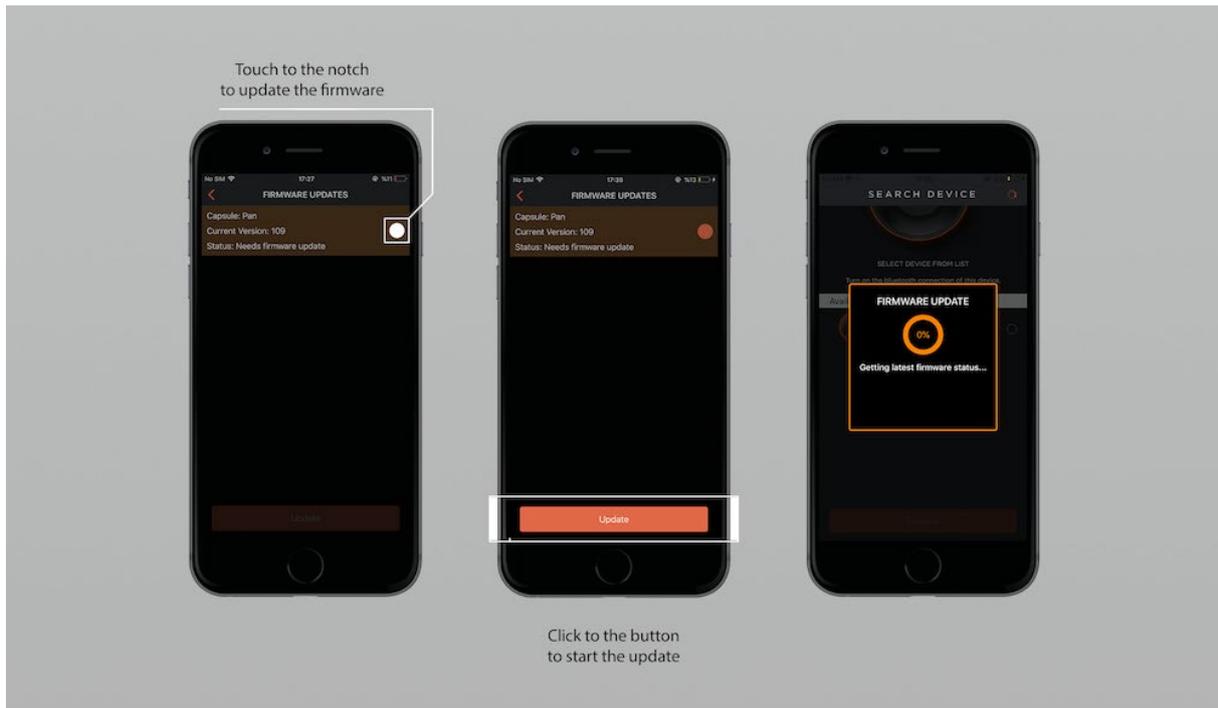
Capsule360 has the capability of updating its firmware without needing any cable connection to a computer. You can use the Capsule360 mobile app to check for new firmware version and then update the device with a single click.

When you connect your device through Capsule360 mobile app, it automatically checks your device's firmware version and prompts a pop-up message if a new firmware is available.

If you want to check it manually, go to the settings by the settings icon at the top-right hand side of the app screen. Go to **“Check for Updates”**.



The app automatically lists the firmware updates. Check the status, if it is not “up to date” then select your Capsule360. When you select your device, “update” icon will turn orange at the bottom of the screen. Click “update” the firmware upgrade process will start immediately.



7.1 Log-in & Create an Account

After you connect to your device, you will see the “check for updates” option on the list when you touch to the settings icon on the top right-hand side of the screen.

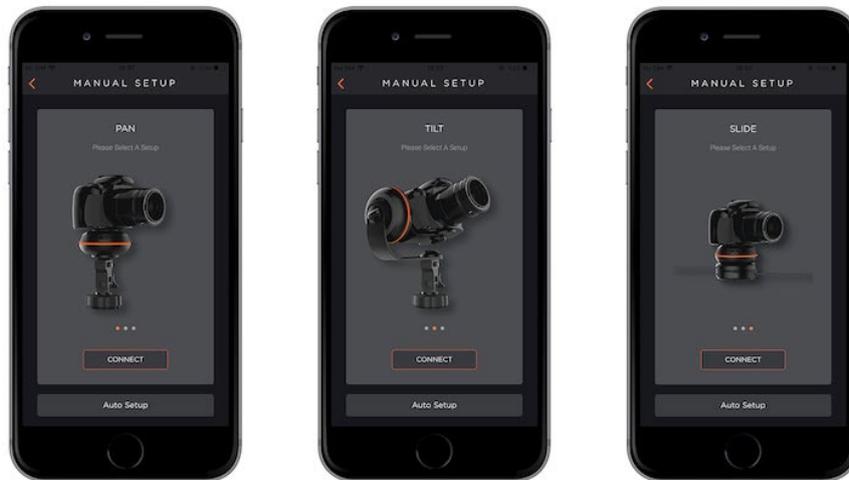
When you touch the **"Check for Updates"** option, Log-in screen will be opened automatically. If you already have an account you can log in or if you do not have, you can sign in and then login with a new account.

8. Using the Mobile Application

When you turn your Capsule360 and Capsule360 Mobile App on first thing you will need to do is to connect your Capsule360 to your smartphone. For that, you will see a “renew” icon at the top-right hand of the app screen. Renew the device search by touching the icon. All the available devices will be listed.

As you can connect multiple Capsule360 devices at the same time, choose the device/devices that you want to connect. You will notice that when you choose the device/devices, an orange “connect” button will appear at the bottom of the app screen. You can easily connect to the device by touching the button.

After you connect to the device, you will be directed to the “Auto Setup” menu. If you want to connect to “PAN” mode just touch the button to connect. When you are in the “Auto Setup” menu but you want to use the other modes, notice the “Manual Setup” icon at the bottom of the app screen. Touch “Manual Setup” and you will be directed to the **“Manual Setup”** menu. You can choose between **“PAN”**, **“TILT”** or **“SLIDE”** modes.



PAN: If you want to control your Capsule360 horizontally, choose the “PAN” mode.

TILT: If you want to control your Capsule360 vertically, choose the “TILT” mode.

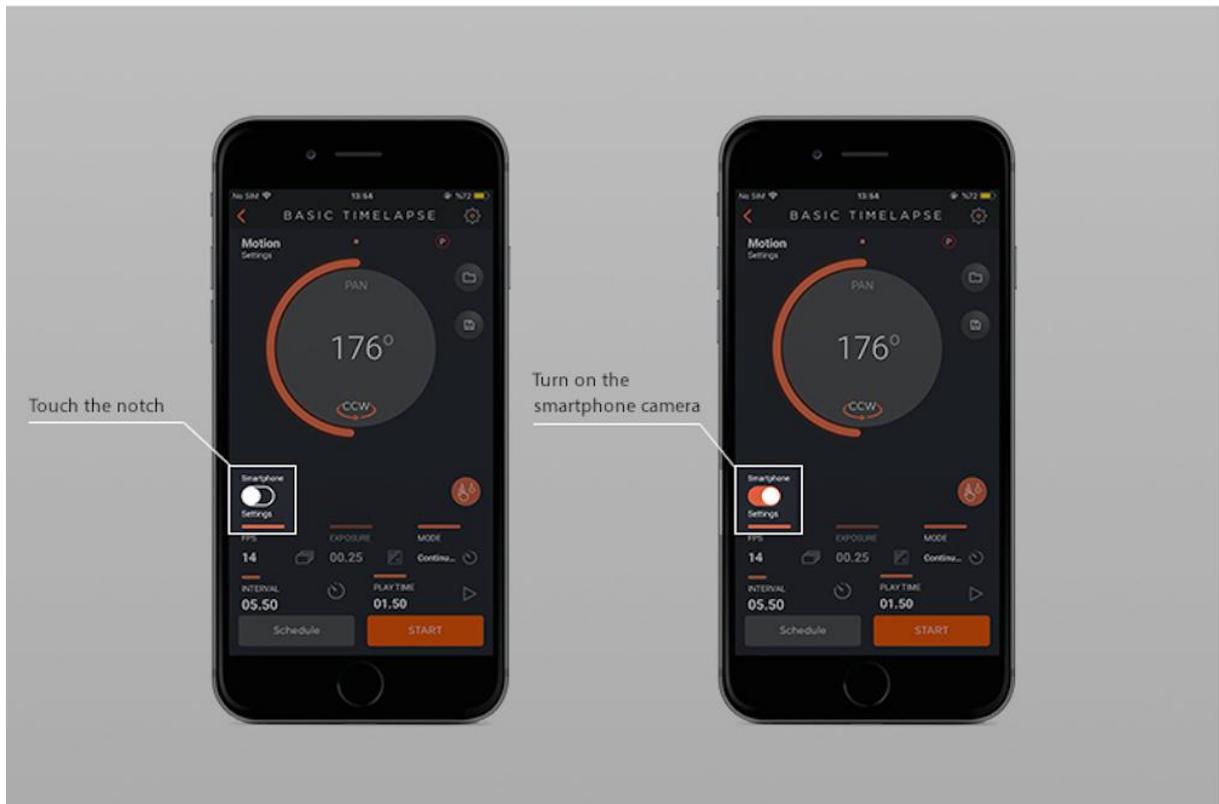
SLIDE: If you want to control your Capsule360 on the slider, choose the “SLIDE” mode.

8.1 Smartphone Camera Control

Place your smartphone to the smartphone holder to place it to your Capsule360.

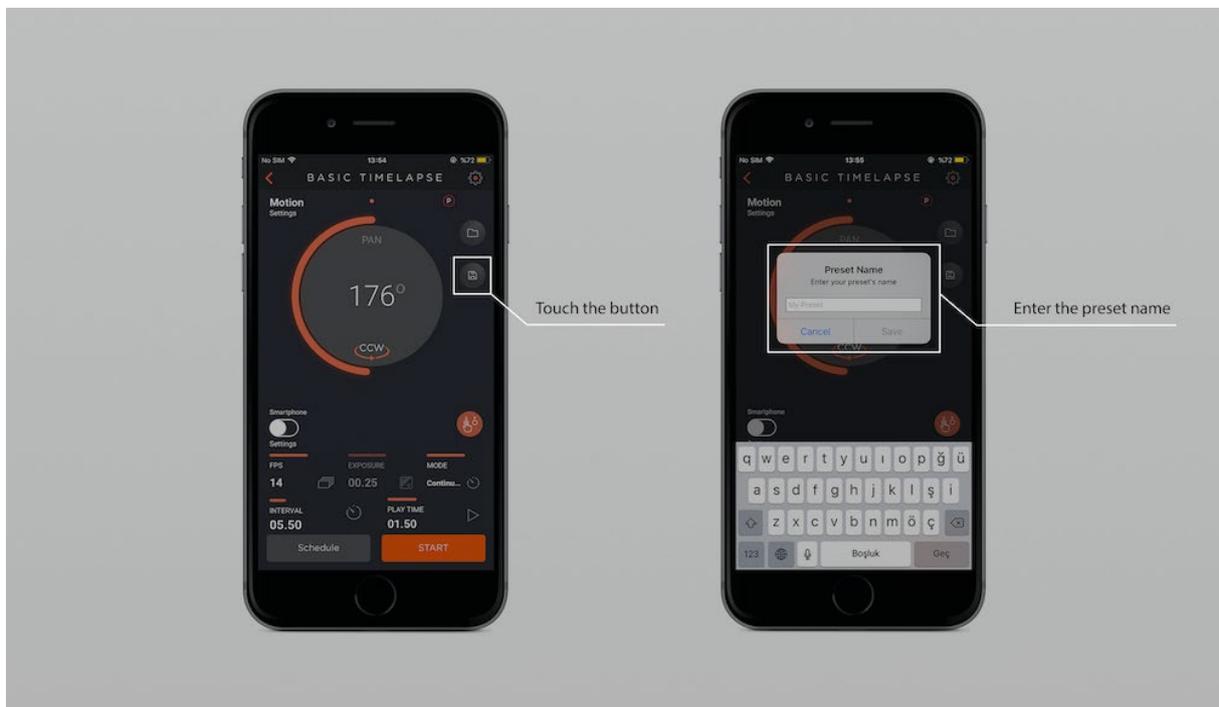
Your smartphone will be activated for the photoshoot when;

- 1- You choose the shooting mode that you will use.
- 2- You enter the data for the parameters of the mode.
- 3- You touch the smartphone notch that is placed on the left-hand side of the screen.
- 4- Finally, you touch the start button that is placed on the below right-hand side of the screen.

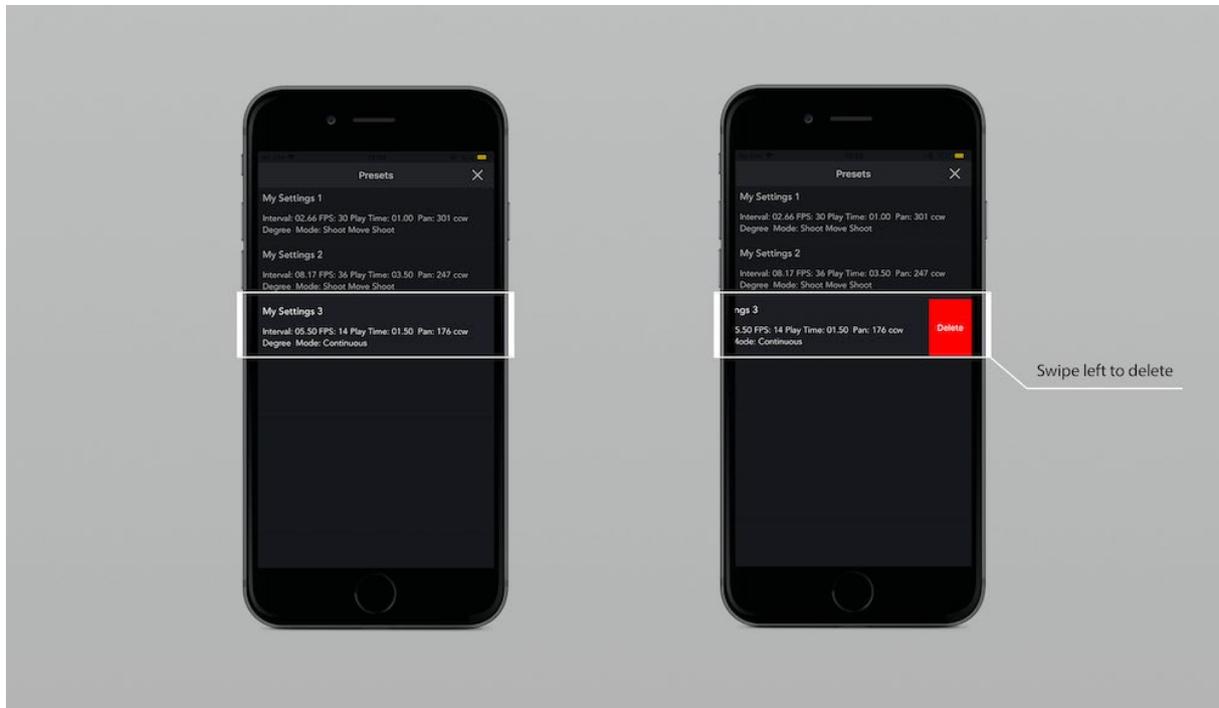


8.2 Saving Presets

To save the parameters you use, you can touch the save icon on the right-hand side of the screen.



To pick between the saved presets, touch the folder icon on the right-hand side of the screen. You can delete the saved presets by swiping them to the left and touching the “delete” icon that appears.



8.3 Learn Motion

In this mode, you can control the PAN, TILT and SLIDE motions by manually moving your smartphone in certain ways.

8.3.1 Motion Control by Smartphone

You can control the motions of multiple devices at the same time.

SMARTPHONE CONTROL OF PAN



PAN to the Left

Rotate the smartphone right.



PAN to the Right

Rotate the smartphone left.

PAN: Pan motion is done by holding the smartphone horizontally and moving it to the left and right by holding down your finger on the PAN circle.

SMARTPHONE CONTROL OF TILT



TILT to the Forward

Move the smartphone frontward.



TILT to the Back

Move the smartphone backwards.

TILT: Tilt motion is done by holding the smartphone horizontally and moving it back and forth by holding down your finger on the TILT circle.

SMARTPHONE CONTROL OF SLIDER



Slide to the Left

Moving down from left-hand



Slide to the Right

Moving down from right-hand

SLIDE: Slide motion is done by holding the smartphone horizontally and moving it up and down from the sides by holding down your finger on the SLIDE circle.

How does it works?

Firstly, set the start and end position of your shooting by touching the PAN, TILT or SLIDE circle which are in the right-side of the screen. (You must keep touching until the movement is complete.) or use the "Multi Axis" button to do PAN, TILT or SLIDE at the same time by moving your smartphone.

Secondly, Move the camera to the start position by and tap the "**set start**" button at the top right-hand corner of the screen. After that move your smartphone to assay your camera's PAN, TILT, and SLIDE motion you want to be occurred during shooting by Capsule 360 as described in "*8.3.1 Motion Control by Smartphone*". When you complete the motion flow, tap the "**set finish**" button which is at the bottom right-hand corner of the screen to save motion.

Finally, After specifying the start and end points, touch the "**OK**" button. When you tap the "OK" button, you will see the motion settings which are determine by moving smartphone in the previous screen and you can begin the shooting by touching the "**Start**" button.

Set Start: When you set the starting position of your camera, tap the " Set Start" button.

Set Finish: When you set the finishing position of your camera, tap the " Set Finish" button.

FEATURES

9.1. Basic Timelapse

The Basic Timelapse mode offers to take time-lapse photos automatically without changing the exposure. It has five parameters:

PAN : Set the angle of turning value by swiping your finger under the circle on the screen. You can choose start (S) and finish (F) point by using S an F buttons.

Before you start shooting, if you want to control shooting area of your camera, you can use the grey button inside of the PAN circle.

CCW : Counterclockwise (Your Capsule360 will turn in counterclockwise direction.)

CW : Clockwise (Your Capsule360 will turn in clockwise direction.)



Interval : This parameter defines the duration between each frame. The Interval can have a value from 13 milliseconds up to 100 hours.

Frames Per Second (FPS) : This parameter defines how many pictures are to be taken in one second. If you set the frame number to 0, this will mean that the time-lapse will continue until you stop it.

Play time : Enter the total time value of final video which you want to create.

Mode : There are two shooting mode which you prefer such as “Shot move to shot” and “Continuous” mode.

Shot move to shot mode

When Capsule360 is turning around it pauses to take a shot. After the camera takes the shot Capsule 360 starts turning again.

Continuous mode

Capsule360 can take a shot when it is moving.

The Basic Timelapse mode does not offer any control over the exposure. The exposure settings of your camera will be valid.

How does it work?

Once you start the mode, you can see the progress on the status screen. The circle on the top will show the PAN value. After you adjust the all parameters, touch the start button which is on the bottom right-hand corner, your camera will start moving. When your camera starts moving, you can observe it on the app screen as the orange area around the circle runs out. At the same time, the interval period is over and the camera will take shots in numbers that you specified beforehand in the settings of FPS (Frames Per Second). On the bottom right-hand corner, you will see another shows the number of photos already taken.

Motion Settings : To turn Capsule360 to its starting point after the programmed movements are finished, touch the “motion settings” button at the top left-hand side of the app screen.

Smartphone Button : If you want to use your smartphone`s camera to shooting, turn on the smartphone setting button by touching the white button which is left-hand on the screen.

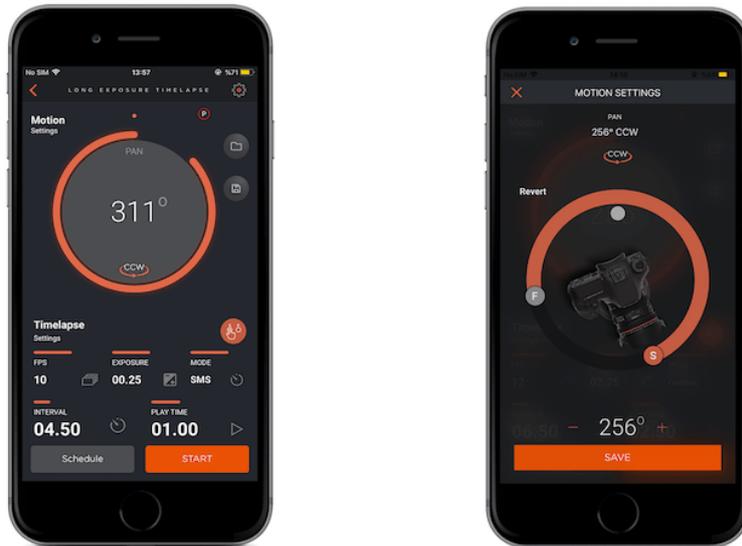
9.2. Long Exposure Timelapse

In this mode, you can define a custom exposure for the timelapse photos. It has six parameters:

PAN : Set the angle of turning value by swiping your finger under the circle on the screen. You can choose start (**S**) and finish (**F**) point by using S an F buttons. Before you start shooting, if you want to control shooting area of your camera, you can use the grey button inside of the PAN circle.

CCW : Counterclockwise (Your Capsule360 will turn in counterclockwise direction.)

CW : Clockwise (Your Capsule360 will turn in clockwise direction.)



Interval : This parameter defines the duration between each frame. The Interval can have a value from 13 milliseconds up to 100 hours.

Exposure : This value defines the exposure value for each photo. You can set a custom exposure up to 100 hours in milliseconds.

Frames Per Second (FPS) : This parameter defines how many pictures are to be taken in one second. If you set the frame number to 0, this will mean that the time-lapse will continue until you stop it.

Play time : Enter the total time value of final video which you want to create.

Mode : There are two shooting mode which you prefer such as “**Shot move to shot**” and “**Continuous**” mode.

Shot move to shot mode

When Capsule360 is turning around it pauses to take a shot. After the camera takes the shot Capsule 360 starts turning again.

Continuous mode

Capsule360 can take a shot when it is moving.



How does it work?

Once you start the mode, you can see the progress on the status screen. The circle on the top will show the PAN value. After you adjust the all parameters, touch the start button which is on the bottom right-hand corner, your camera will start moving. When your camera starts moving, you can observe it on the app screen as the orange area around the circle runs out. At the same time, the interval period is over and the camera will take shots in numbers that you specified beforehand in the settings of FPS (Frames Per Second). On the bottom right-hand corner, you will see another shows the number of photos already taken.

Motion Settings : To turn Capsule360 to its starting point after the programmed movements are finished, touch the “motion settings” button at the top left-hand side of the app screen.

Smartphone Button : If you want to use your smartphone`s camera to shooting, turn on the smartphone setting button by touching the white button which is left-hand on the screen.

The Long Exposure Timelapse mode requires that your camera is set to **BULB mode**. This is the only way of achieving custom exposures. If you do not set your camera to BULB mode, the exposure value of your camera will be valid and you will not get photos with the exposure set on the Capsule360 app.

Please note that, if the exposure setting of your camera is greater than the interval value, the time lapse process will not function properly. The exposure of your camera must be greater than the interval value. Otherwise, the number of the taken photos will be less than shown on the screen.

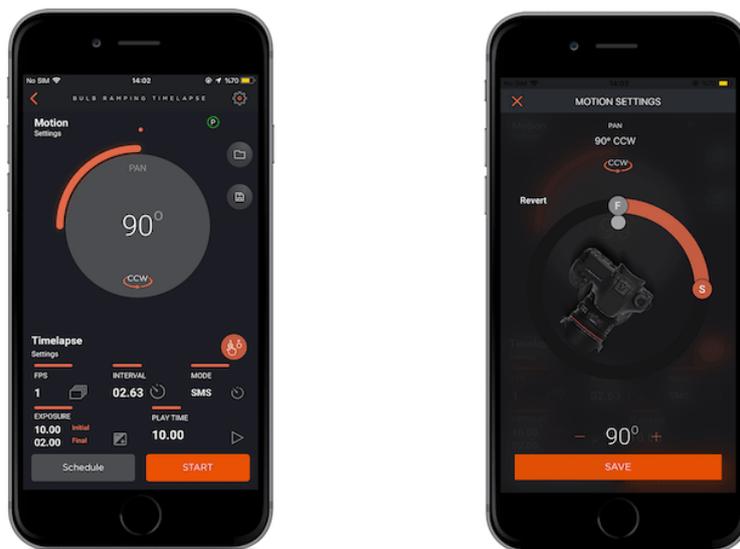
9.3. Bulb Ramping Timelapse

The Bulb Ramping Timelapse mode gives you the opportunity to take time-lapse photos with changing exposures. In regular time-lapse modes, all of the pictures will have the same exposure. This can be enough for some cases, but sometimes the light changes throughout the whole photo taking process. The exposure needs to be adjusted accordingly to avoid too dark or too bright pictures. Bulb Ramping Timelapse mode takes care of that.

PAN : Set the angle of turning value by swiping your finger under the circle on the screen. You can choose start (**S**) and finish (**F**) point by using S an F buttons. Before you start shooting, if you want to control shooting area of your camera, you can use the grey button inside of the PAN circle.

CCW : Counterclockwise (Your Capsule360 will turn in counterclockwise direction.)

CW : Clockwise (Your Capsule360 will turn in clockwise direction.)



Interval : This parameter defines the duration between each frame. The Interval can have a value from 13 milliseconds up to 100 hours.

Initial Exposure : This value defines the initial exposure value for each photo. You can set a custom exposure up to 100 hours in milliseconds.

Final Exposure : This value defines the final exposure value for each photo. You can set a custom exposure up to 100 hours in milliseconds.

Frames Per Second (FPS) : This parameter defines how many pictures are to be taken in one second. If you set the frame number to 0, this will mean that the time-lapse will continue until you stop it.

Play Time : Enter the total time value of final video which you want to create.

Mode : There are two shooting mode which you prefer such as “Shot move to shot” and “Continuous” mode.

Shot move to shot mode

When Capsule360 is turning around it pauses to take a shot. After the camera takes the shot Capsule 360 starts turning again.

Continuous mode

Capsule360 can take a shot when it is moving.



How does it work?

Once you start the mode, you can see the progress on the status screen. The circle on the top will show the PAN value. After you adjust the all parameters, touch the start button which is on the bottom right-hand corner, your camera will start moving. When your camera starts moving, you can observe it on the app screen as the orange area around the circle runs out. At the same time, the interval period is over and the camera will take shots in numbers that you specified beforehand in the settings of FPS (Frames Per Second). On the bottom right-hand corner, you will see another shows the number of photos already taken.

Motion Settings : To turn Capsule360 to its starting point after the programmed movements are finished, touch the “motion settings” button at the top left-hand side of the app screen.

Smartphone Button : If you want to use your smartphone`s camera to shooting, turn on the smartphone setting button by touching the white button which is left-hand on the screen.

The process starts with Initial Exposure. With each frame, the exposure will be changed towards the final exposure linearly. At the final frame, the picture will have the final exposure. In order to be able to create custom exposure, the camera must be in BULB mode; otherwise, all of the pictures will have the same exposure.

The exposure value can have an ascending or descending change. This depends on the initial and final exposure values. The change of exposure will be the same between each frame.

9.4. Interval Ramping Timelapse

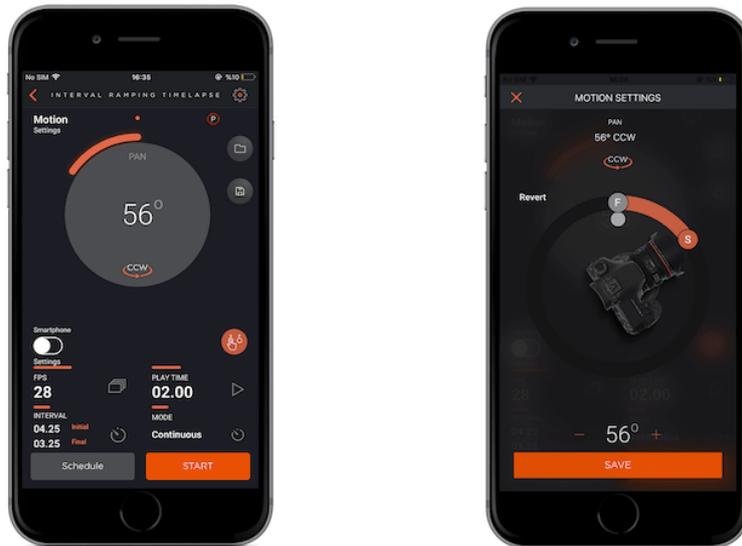
The Interval Ramping Timelapse lets you ramp the interval so you have control to change the interval over time . This mode has six parameters:

PAN : Set the angle of turning value by swiping your finger under the circle on the screen. You can choose start (**S**) and finish (**F**) point by using S an F buttons.

Before you start shooting, if you want to control shooting area of your camera, you can use the grey button inside of the PAN circle.

CCW : Counterclockwise (Your Capsule360 will turn in counterclockwise direction.)

CW : Clockwise (Your Capsule360 will turn in clockwise direction)



Initial Interval : This value defines the initial interval value for starting to shooting.

Final Interval : This value defines the final interval value to end of shooting.

Frames Per Second (FPS) : This parameter defines how many pictures are to be taken in one second. If you set the frame number to 0, this will mean that the time-lapse will continue until you stop it.

Play Time : Enter the total time value of final video which you want to create.

Mode : There are two shooting mode which you prefer such as “**Shot move to shot**” and “**Continuous**” mode.

Shot move to shot mode

When Capsule360 is turning around it pauses to take a shot. After the camera takes the shot Capsule 360 starts turning again.

Continuous mode

Capsule360 can take a shot when it is moving.



How does it work?

Once you start the mode, you can see the progress on the status screen. The circle on the top will show the PAN value. After you adjust the all parameters, touch the start button which is on the bottom right-hand corner, your camera will start moving. When your camera starts moving, you can observe it on the app screen as the orange area around the circle runs out. At the same time, the interval period is over and the camera will take shots in numbers that you specified beforehand in the settings of FPS (Frames Per Second). On the bottom right-hand corner, you will see another shows the number of photos already taken.

Motion Settings : To turn Capsule360 to its starting point after the programmed movements are finished, touch the “motion settings” button at the top left-hand side of the app screen.

Smartphone Button : If you want to use your smartphone`s camera to shooting, turn on the smartphone setting button by touching the white button which is left-hand on the screen.

After you have set the parameters, touch the start button to begin the shooting process.

9.5. HDR Timelapse

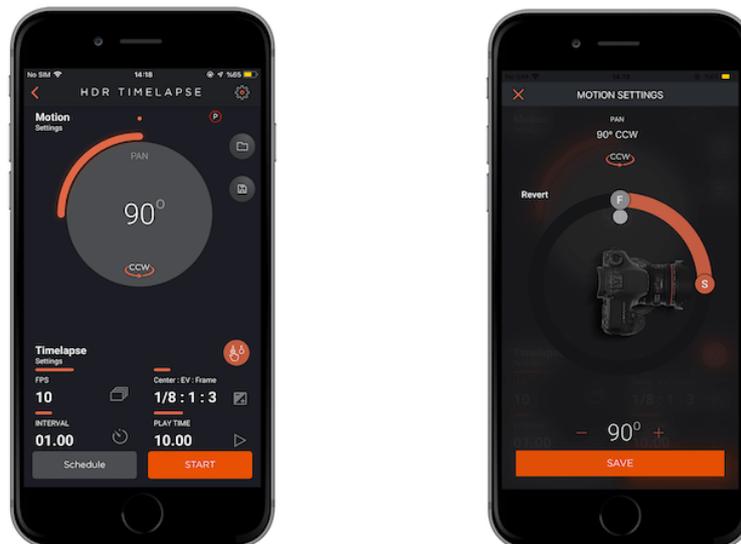
The HDR Timelapse mode combines the time-lapse with HDR (High Dynamic Range) mode. In other words, each frame of the time-lapse video will be an HDR photo.

This can be a complex goal to achieve, but the HDR Timelapse mode takes care of it very easily. This mode divides the screen into two parts. The upper part of the screen is about the PAN value. The lower part of the screen shows the HDR settings. The HDR part has six parameters to be adjusted, **Interval value, Frames Peer Second (FPS), Center, EV(+/-), Frame and Play Time.**

PAN : Set the angle of turning value by swiping your finger under the circle on the screen. You can choose start (**S**) and finish (**F**) point by using S an F buttons. Before you start shooting, if you want to control shooting area of your camera, you can use the grey button inside of the PAN circle.

CCW : Counterclockwise (Your Capsule360 will turn in counterclockwise direction.)

CW : Clockwise (Your Capsule360 will turn in clockwise direction.)



Frames Per Second (FPS) : This parameter defines how many pictures are to be taken in one second. If you set the frame number to 0, this will mean that the time-lapse will continue until you stop it.

Interval : This parameter defines the duration between each frame. The Interval can have a value from 13 milliseconds up to 100 hours.

Center : This parameter shows the exposure value that will sit in the middle of the sequence.

EV(+/-) : This parameter shows how many stops each change will be.

Frame : This parameter shows how many pictures are to be taken for an HDR photo.

Play Time : Enter the total time value of final video which you want to create.



Warning: The HDR functionality is provided with the BULB mode of the camera. The camera must be in BULB mode; otherwise, all of the photos will have the same exposure. The shutter speed you can achieve over the shutter release port is limited. In most cameras, you cannot get faster than 1/30th of a second from the cable release port. Because of this limitation, some EV(+/-) and Frame values will be disabled for some Center values.

9.6. Basic Video

With the **PAN**, **TILT** and **SLIDE** modes, you can move your camera in different directions and angles. Your videos will be much more dynamic!

Speed : To change the video speed, give a value between 1 and 100.

Mode : There are three options to set the starting movement of Capsule 360.

One way

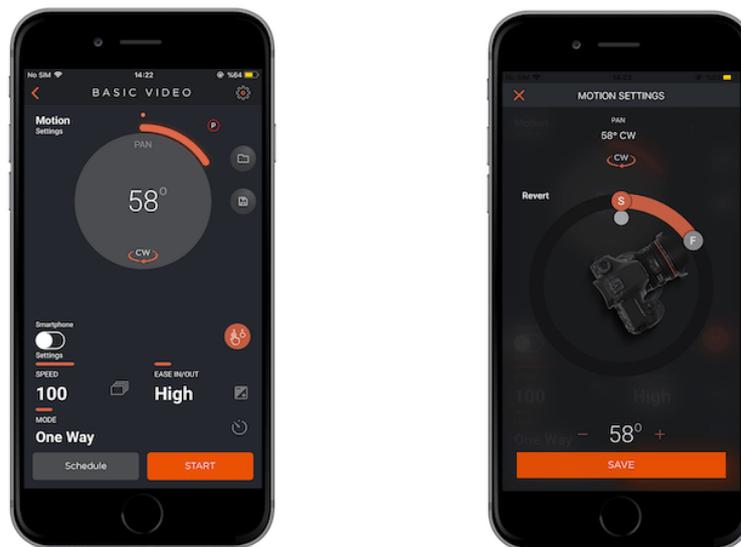
Capsule 360 moves in only one direction.

Two way

Capsule 360 will move in both directions only once.

Continuous

Capsule360 will continuously do the movements you set.



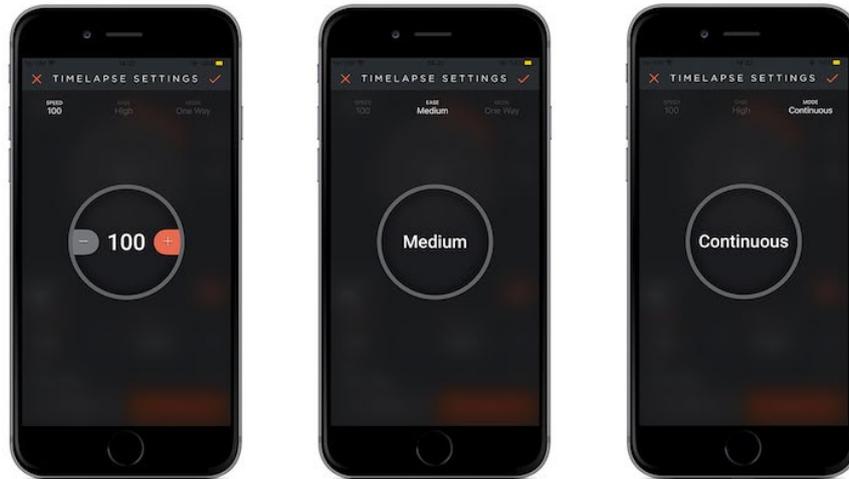
Ease IN/ OUT : There are three options of Ease IN/ OUT such as low, medium and high.

If you choose;

Low : Capsule360 will slowly accelerate.

Medium : Capsule360 will accelerate in medium speed.

High : Capsule360 will accelerate in high speed.



9.7. Follow Me

“Face Tracking” can only be performed in a smartphone.

When you direct your phone camera to the person whom you are aiming for the camera to follow, a green area will appear on the person’s face.

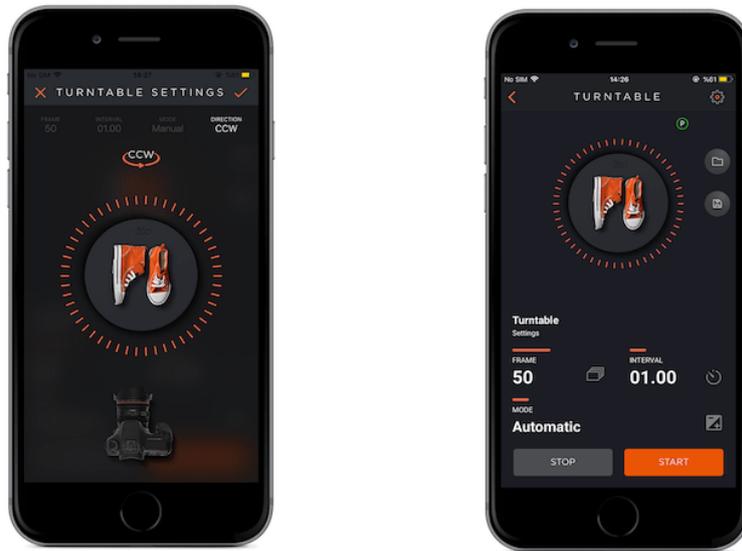
The video record will start after 3 second you touch the red start button. When the person that is being captured by the camera is in the middle of the frame, Capsule360 won’t be moving. When the face starts moving away from the middle and goes to the sides of the frame, Capsule 360 will follow the face and move in the same direction.

9.8. Turntable

You can make the product shootings much more easy if you automate it with your Capsule360. You can shoot your products in the angles and the speed you want!

Frame : This parameter shows how many photos are to be taken at one 360 turning of turntable.

Interval : This parameter defines the duration between each frame. The Interval can have a value from 13 milliseconds up to 100 hours.



Mode: There are three mode options to set as Manuel, Automatic and Smartphone.

Manuel

You can manually press your camera's hot shoe and take a photo when your slider pauses according to the frame numbers that you specified.

Automatic

In this mode via using MIOPS Mobile Dongle, you will ensure that your camera is triggered. You can manually press your camera's hot shoe and take a photo when your slider pauses according to the frame numbers that you specified.

Smartphone

In this mode when your slider pauses according to the frame numbers that you specified, your smartphone camera will take shots automatically.

Direction : It helps you to control the rotation direction of the Turntable.

CCW : Counterclockwise (Your Capsule360 will turn in counterclockwise direction.)

CW : Clockwise (Your Capsule360 will turn in clockwise direction.)



How does it work?

Product photographs will be taken according to the frame numbers that you specified while the camera makes the 360 degree turn. For instance if you input the frame value as 60 ($360/60=6$), from 6 different angles you will obtain 6 different product photographs.

9.9. Multi-Row Panorama

Panoramic Photography is capturing images on a wider format, so as to include much more than what eyes can see naturally from a point.

To capture a panoramic image, a larger width-height ratio is needed. Thus you will achieve an unobstructed, wide outlook.

Panoramic Photography helps us to capture images that are in very wide angles so that it includes more than our eye's sight range.

With its rotating property, Capsule360 enables us to get 360 degree images. Via a photo editing software you can combine all of the images together and attach them to each other to create a panoramic image.



Angle of view : The term “angle of view” represents the angular extent of the given location that is imaged by the camera.

If you are aiming to take a multi-panorama shot, you should adjust the “angle of view” values given below separately.

Width

Horizontal degree (This mode should be selected if you are going to shoot with the camera in landscape mode.)

Height

Vertical degree (This mode should be selected if you are going to shoot with the camera in portrait mode.)

Overlap : Determines how similar will be the photos’s areas which will be stitch through the whole panorama shot. Overlap value represents the defined area of right-side of the first shot that will be stitch with the defined area of left-side of the second shots.

Exposure : This value defines the exposure value for each photo. You can set a custom exposure up to 100 hours in milliseconds.

Frame Delay: The time that has passed from the time when the camera finishes the exposure, to the time when the camera processes the photographs and shows it to you is called “frame delay”.



Camera Sensor : Enter the your camera `s sensor type.

Landscape

Should be chosen if the camera will be used vertically.

Portrait

Should be chosen if the camera will be used vertically.

Focal Point: The zoom value that is expected from the camera to perform in must be set.

How does it work?

First, you need to set the angle of view. You need to set it for both horizontal and vertical. Let`s say you want to cover 180 degrees horizontally and 90 degrees vertically, set it to 180 and 90.

You can control the exposure value using Capsule360 too, for that you need to set your camera on bulb mode. Now set frame delay, it`s a time gap between each shot so your camera gets enough time to save the image.

Now you need to set overlapping percentage, set it to 35% (Overlap value depends on the nature of the shot you want to take.). Capsule360 will automatically take overlapping images according to this parameter.

You also need to enter whether you have a full-frame camera or crop sensor and you placed the camera on Capsule360 vertically or horizontally.

Once you set all the parameters, tap on start and I'll start taking required pictures. In the case of a multi-row panorama, you need to use two Capsule360, one for pan and one for tilt.

Warning: The camera cable must be connected to the PAN device during Multi-Row Panorama.

9.10. Remote Controller

In this mode, you can control the PAN, TILT and SLIDE motions by manually moving your smartphone in certain ways. Complete the first movement by touching (You must keep touching until the movement is complete.) the PAN circle and then touch "first move" that is on the right-hand side of the screen. After you complete the second move, touch the "last move".

You can control the motions of multiple devices at the same time.

Pan: Pan motion is done by holding the smartphone horizontally and moving it to the left and right.

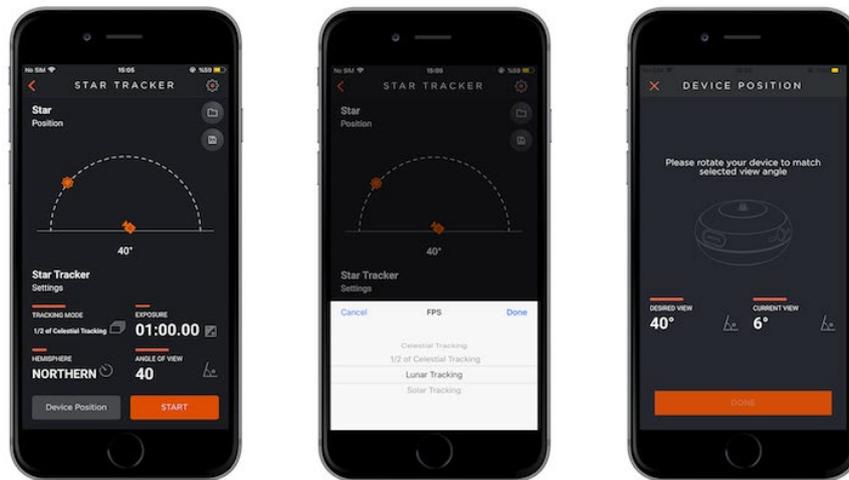
Tilt: Tilt motion is done by holding the smartphone horizontally and moving it back and forth.

Slide: Slide motion is done by holding the smartphone horizontally and moving it up and down from the sides.

9.11. Star Tracker

With your Capsule360 you can capture the sun, the moon, the stars and the milky way in high resolution. When you input your necessary settings properly, Capsule360 will follow the stars in high precision and make you able to catch the best moments.

Tracking Mode: Choose one of the options for tracking, such as; Celestial Tracking, ½ of Celestial Tracking, Lunar Tracking, Solar Tracking.



Exposure : This value defines the exposure value for each photo. You can set a custom exposure up to 100 hours in milliseconds.

Hemisphere: Select if your location stays on the Northern or Southern side of the Pole Star.

Angle of view: The angle between your location and the location of the pole-star.

How does it work?

First you align your Capsule360 with the axis rotation of the earth. After the setting, Capsule360 will turn in the reverse direction of the earth's motion and follow the star. This prevents the star trail effect and at the same time, since it does long exposure it gathers more

light into the lens and allows the photo to be in high definition.



9.11.1 Polar Alignment

First level the tripod, it should be leveled accurately otherwise you would not be able to follow the object precisely. Now use a compass or your smartphone's compass to find the north direction. Set your tripod screw in a way that is facing north and put the Capsule360 to your tripod. We need to align (turn) the screw of Capsule360 with the **Pole star** or **Polaris**. You can find the Polaris by using Capsule360 mobile app provides you angle of view automatically or you can enter it manually. The angle of view is calculated based on your location. Tap to "device position" button and set to position of Capsule360 by changing the angle of dip. Finally, you must fine-tune on the position of Capsule360 manually to make Polar Alignment.

Warning: After the completion of all steps, you can take long exposure but don't forget that the long exposure time is affected by accuracy of Polar Alignment and zoom value (focal point) which you used.

POLAR ALIGNMENT

Star Tracking mode of Capsule360

Step 1

Connect your Capsule360 to tripod.



Step 2

Now let's align Capsule360.

You can get help from Capsule360 mobile app by setting the device position and you can fine-tune the Capsule 360's position by using Polar Star.

The orange line is the rotation axis of Capsule360. Align this with the axis of Polar Star.

Polar Star



Step 3

After set the device position, you can connect your camera to ball head and turn it to any star you want to exposure.

Keep the position of tripod that is set in step 2 !



Step 4

After the completion of all steps, you can connect to the Capsule360 mobile app to start Star Tracking mode.

Additional Info

- You can find the ideal exposure time by starting with short exposure and gradually increasing the exposure time.
- The Polar Star is visible only from the Northern Hemisphere and is the closest star to the rotation axis of Earth. We use this star to make polar alignment easy. In fact, our goal is to align the Capsule360 parallel to the rotation axis of Earth.
- Constellations (like Southern Cross) and sigma octantis can be used to align in the Southern Hemisphere.
- The more accurately you align the Earth's axis, the longer the exposure time.

9.12. Focus Stacking

Warning : This is slide available through a slide device.

Focus stacking is a method where multiple photos are captured at slightly different focal positions and these photos are merged together to form a single image using only the focused areas of each of them.

Parameters should be entered via connecting to the slider.

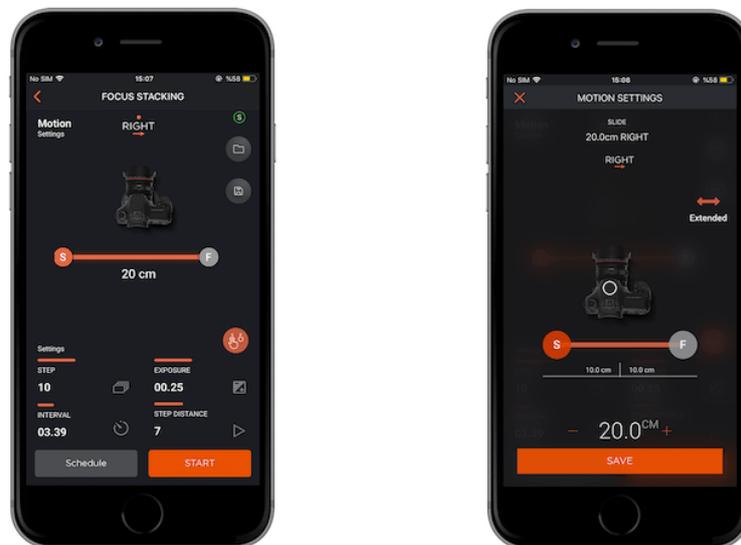
Slide: Allows you to control Slider's movement length and direction. When you touch the camera icon or the orange line at the top of the screen, the menu that you will input the slide value will appear.

Right - Slide Option

Input the value of how many centimeters to the right you want the slider to go and touch the save button.

Left - Slide Option

Input the value of how many centimeters to the left you want the slider to go and touch the save button.



Interval : This parameter defines the duration between each frame. The Interval can have a value from 13 milliseconds up to 100 hours.

Exposure : This value defines the exposure value for each photo. You can set a custom exposure up to 100 hours in milliseconds.

Step Distance : According to the step distance value that you specified for the slider, mechanism will pause and take photographs. For instance, if you input the step distance value as 7 for a slider that is 70 cms ($70/7=10$), 1 shot in every 7 cms, in 10 steps 10 shots will be taken.

Step: Show how many times the Slider is going to pause and take shots according to the step distance value.



How does it work ?

After you apply the parameters that belong to this mode, touch the start button that is on the below right-hand side of the screen. While your camera is moving on the SLIDER, it will pause and take one photo in every step distance that you specified.

After you see the Slider's length and direction, input the parameters that belongs to this mode.

The shooting will start when you touch the start button on the right-below of the screen.

10. SETTINGS:

You can use the settings menu to change application related or device related settings or to get information.

Pulse Length: This parameter is used to determine the pulse length of each trigger signal for those modes which don't have an exposure parameter.

HDR Interval: This parameter is used to determine the interval between each frame for HDR mode.

Check for Updates : This button is used to check if there is a firmware available.