MIOPS Splash
User Manual

Content:

1. Content of the Package

When you purchase a MIOPS Splash Water Drop Kit, it will be delivered with the following items.

1 x MIOPS Splash
1 x Flash Cable (3.5mm to PC SYNC)

2. Power and Operation

MIOPS Splash operates with a single 23A (12V Alkaline) battery. It is important that you use a compatible battery only. Otherwise, you may damage the unit. You can change the battery by removing 4 screws on the back side of the device.
In order to change the battery, turn it off first. Then remove the four Philips screws. Then you can take the bottom cover apart from the unit. You can remove the battery with a flat head screwdriver. Be careful not to damage any component on the board. Put the fresh battery in by observing the battery polarity

3. First Use

Your MIOPS Splash may not be delivered with the latest firmware. If a new firmware has been released, before you have used it for the first time, you should

update the firmware first. To get detailed information about the firmware upgrade, see the Firmware Upgrade Section.

When you slide the switch to the ON position, the LED will blink with short intervals and the device will start to work.

4. Camera and Flash Connection

The MIOPS Splash uses connection cables to trigger your camera or flash unit. Your unit will be shipped with a flash cable. You should purchase a camera cable separately if you need to trigger your camera. The MIOPS Splash is a versatile device, which is compatible with many brand and models. You can use the same device with many different cameras by just changing the connection cable.

The MIOPS Splash has separate outputs for the camera and flash cables. 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 flash cable port is a 3.5 mm stereo female jack. There is only one type of flash connection cable. It has a 3.5 mm male jack on one end. This end is plugged into the flash connection port. The other end of the cable is a standard PC Sync port. This end is connected to the PC Sync port of the flash unit. If your flash does not have a PC Sync port, you can use a hot shoe adapter with a PC Sync port.

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

5. Mobile Application

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

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

6. Connecting to MIOPS Splash

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

After opening the mobile app, you will be asked for selecting your MIOPS product. After selecting MIOPS Splash from the list, you will be listed all available Splash devices around. In case your device is not shown in the list, make sure that your Splash is turned ON and click the Scan button again.
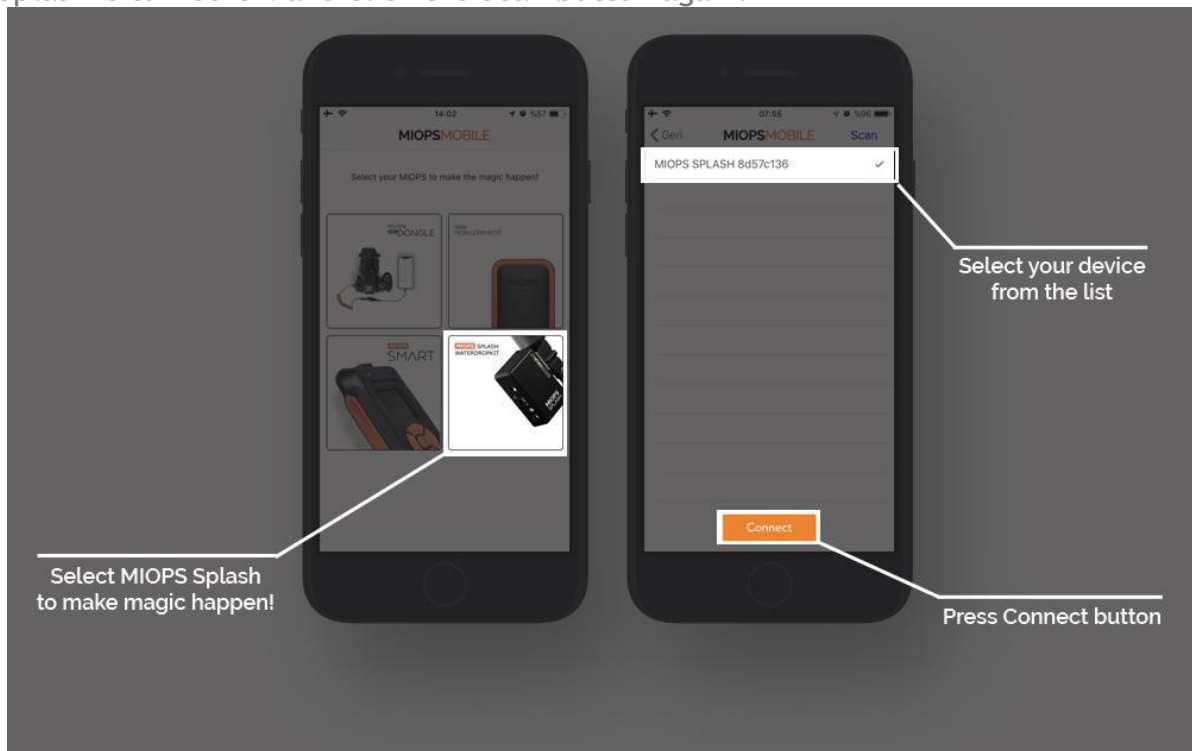

7. Firmware Upgrade

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

When you connect your device through MIOPS MOBILE app, it automatically checks your device's firmware version and prompts a pop-up message if a new firmware is available.
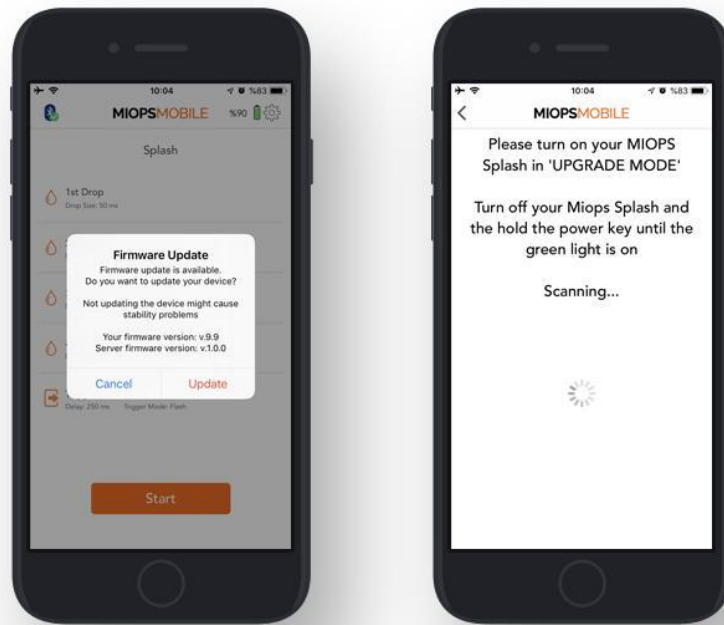
When you click the "Update" button, you will be asked to put your device to upgrade mode. In order to put your device to upgrade mode, you should turn your device off, then turn it back on while holding down the valve button on the left side of the device.

After clicking to the Ready button, the firmware upgrade process will start immediately.
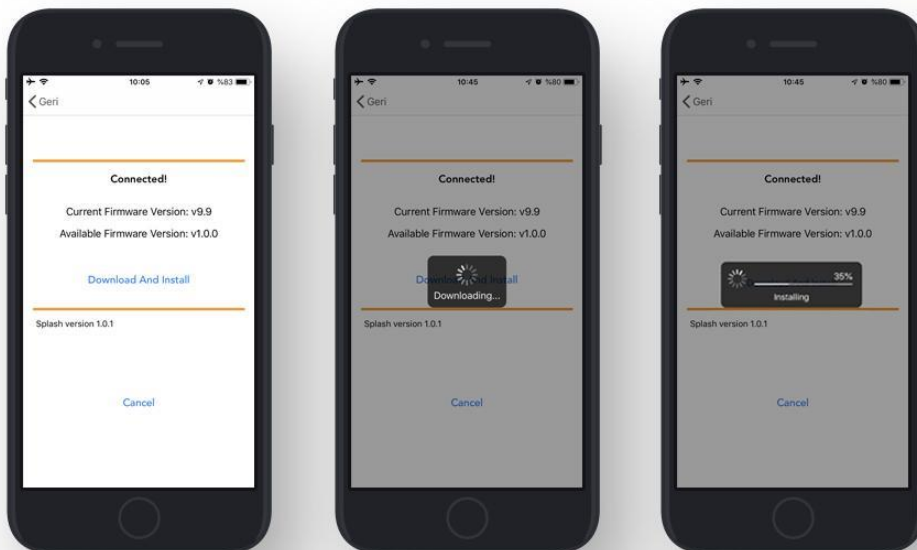
You can also use the "Check Firmware Update" option in the Settings menu to check manually if there is a new firmware available.

Check firmware update
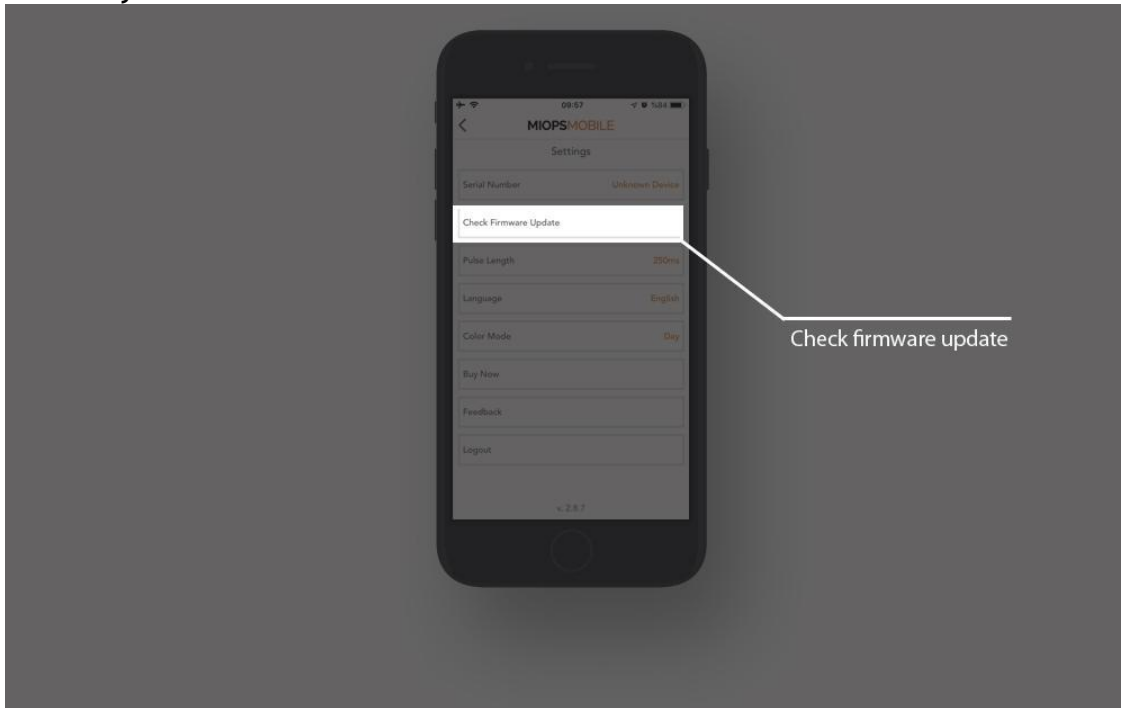
8. Using the Mobile Application

The mobile app has a main screen to change the settings of your water drop setup. You can see all of the parameters on this screen.

When you connect your MIOPS Splash through the MIOPS MOBILE app, your device will stop blinking and you will notice a Bluetooth icon with a green tick on the top left-hand side of the app screen. This shows that you connected your device successfully. If you click the same icon, you will notice a warning asking if you really want to disconnect from Splash. You can click "Yes" if you want to disconnect and search for other devices.

Connection status
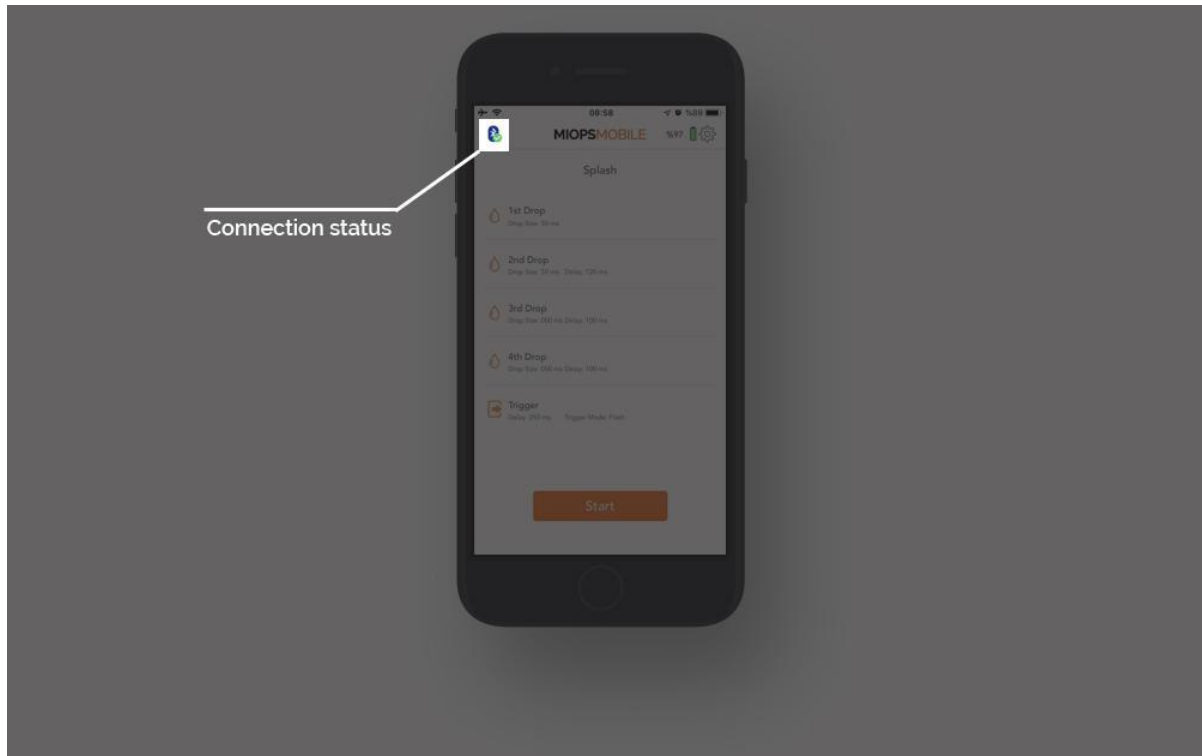
9. DEVICE SETUP
This screen is used to set parameters for your water drop photography setup.
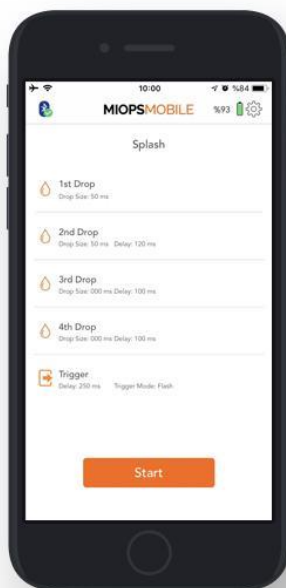
9.1. 1st Drop:
This screen is used to set the first drop. It has a single parameter.
Drop Size: This parameter is used to set the size of the drop. The unit is in milliseconds. So if you set the drop size to 50, the valve will be open for 50 milliseconds.

Drop size cannot be zero for the first drop as a single drop is a minimum requirement for the water drop photography.

9.2. 2nd Drop:

This screen is used to set the second drop if needed. It has two parameters.

Drop Size: This parameter is used to set the size of the drop. The unit is in milliseconds. For example, if you set the drop size to 50, the valve will be open for 50 milliseconds.

Delay: This parameter is used to define the delay between the second drop and the first drop. The unit is in milliseconds. For example, if you set the delay to 120, the second drop will be released 120 milliseconds later than the first drop.

You can set the drop size to zero if you don't want to drip the second drop.

9.3. 3rd Drop:

This screen is used to set the third drop if needed. It has two parameters.

Drop Size: This parameter is used to set the size of the drop. The unit is in milliseconds. For example, if you set the drop size to 50, the valve will be open for 50 milliseconds.

Delay: This parameter is used to define the delay between the third drop and the second drop. The unit is in milliseconds. For example, if you set the delay to 120, the third drop will be released 120 milliseconds later than the second drop.

You can set the drop size to zero if you don't want to drip the third drop.

9.4. 4th Drop:

This screen is used to set the third drop if needed. It has two parameters.

Drop Size: This parameter is used to set the size of the drop. The unit is in milliseconds. For example, if you set the drop size to 50, the valve will be open for 50 milliseconds.

Delay: This parameter is used to define the delay between the fourth drop and the third drop. The unit is in milliseconds. For example, if you set the delay to 120, the fourth drop will be released 120 milliseconds later than the third drop.

You can set the drop size to zero if you don't want to drip the fourth drop.

9.5. Trigger:

This screen is used to set the output behavior of your device. It has 2 parameters:

Delay: This parameter is used to define the delay between the last drop and triggering of the flash or the camera. The unit is in milliseconds. For example, if you set the delay to 100, the flash or camera will be triggered 100 milliseconds later than the last drop.

Trigger Mode: This parameter is used to define which output will be triggered after the last drop. You can select one of the two possible modes. The modes are the "Flash" and the "Camera". In the "Camera" mode, it will trigger the camera after dripping the drop(s). In the "Flash" mode, it will trigger the camera to start the long exposure before releasing the drop(s) and trigger the flash after releasing the drop(s).

10. Example Setup:

You can find an example setup for 2 drop water collision below.
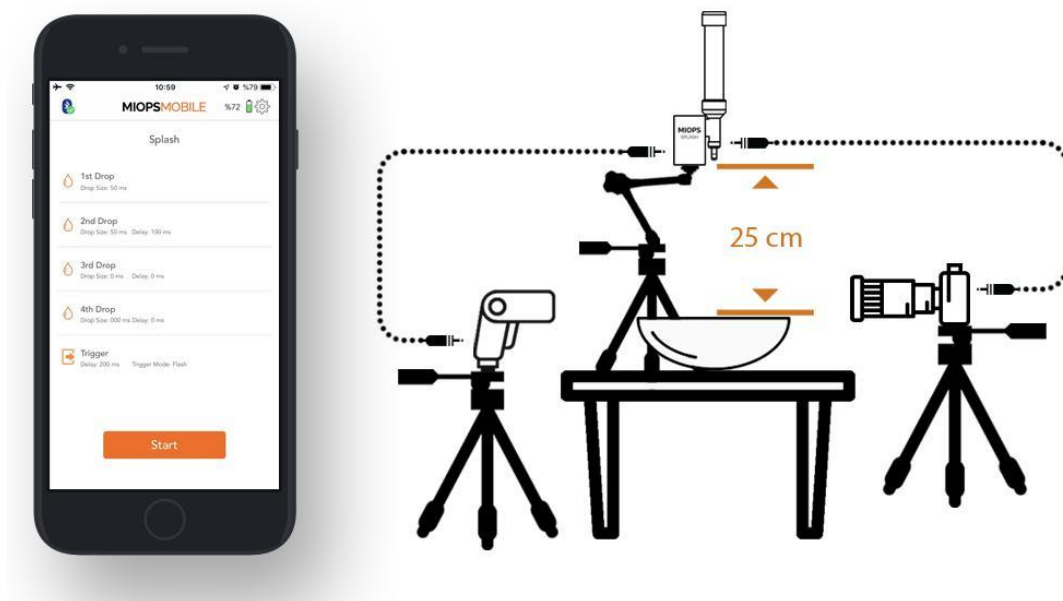
1st Drop: Duration: 50ms

2nd Drop: Duration:50ms - Delay:100ms

3rd Drop: Duration:0 - Delay:0

4th Drop: Duration:0 - Delay:0

Trigger: Mode: Flash Delay:200ms

Height: 25 cm (from the water surface to the dripper)

11. SETTINGS:

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

Serial Number: This parameter shows the serial number of your device.

Check Firmware Upgrade: This button is used to check if there is a firmware available.

Pulse Length: This parameter is used to determine the pulse length of each trigger signal for the camera and the flash.

Language: This parameter is used to change the language of the mobile application.

Color Mode: This parameter is used to change the color of the mobile application. It can be switched between "Day" and "Night".

Buy Now: This button is used to visit the store for purchasing the product.

Feedback: This screen is used to give feedback about the mobile application to the developers.