PIXEL LIGHT
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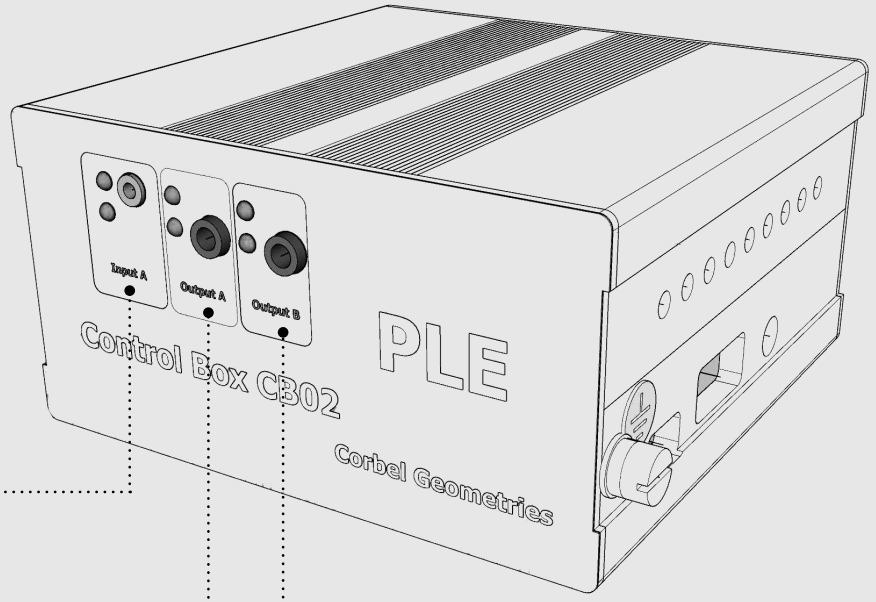
Control Box CB02

CAMERA & FLASH SYNCHRONIZATION

Any remote trigger with 2.5mm can be used for **Input A**. Once the trigger signal is sent to the device, it will split the signal into two – a signal **Output A** and a customizable delayed signal **Output B**.



INPUT A

i.e. Canon RS-60E3 Remote Switch

OUTPUT A : FOR CAMERAS

Could be connected to either one camera or our camera hubs for multiple cameras.

OUTPUT B : FOR FLASHES

To further explain this, please see the chart below:

	Flash Delay 1	Flash Delay 2		Flash Delay 3		Flash Delay 4	
Time (ms)	0	50	100	150	200	250	300
Camera 1							
Camera 2							
Camera 3							
Camera 4							
Camera 5							
Camera 6							
Camera 7							
Camera 8							

In this example we have 8 cameras; flash was set to 4 different delay times — 0ms, 50ms, 150ms, and 250ms, as indicated by the orange bar.

Due to the nature of DSLR, it requires to mechanically flip the mirror and open the shutter every time it takes a shot, which means the exact time (in millisecond scale) could be affected, and often randomly. We solved this problem by using a slower shutter — 1/5 seconds. Hence the green bar, which indicates the duration of the shutter being released.

You only need to connect **Output B** to one flash and set rest of the flashes to slave mode.

We also use a small aperture (f1/13 to f1/18) and ISO 100, to ensure the best image quality. As long as you are shooting indoor without intensive amount of ambient lighting, the photos will remain dark without the flashes, which means the ambient lighting has extremely limited affect on the image. Please ensure that any windows and outdoor lighting is properly covered.

A slower shutter speed means a longer green bar, which means it has better chances to catch the flash. As you can see at 0, 50, and 250ms, some of the green bars didn't catch the orange bar, which means they will result in some dark frames. However, the one at 150ms was caught by all the cameras, which will result in a perfectly synchronized set of photos.

The delay time can be customized to adapt different brands and models of cameras, please refer to **CB02 User Manual** for instructions. We found the delay time could be between 80-200ms for most camera models. There is a bit trial and error in it, we recommend using following setting to start with:

Camera: 1/5sec, f/18, ISO 100
Flash delay: 150ms

We also developed the **CB07** for sequenced lighting. CB07 has 9 output ports, which means you can have flashes coming from 8 different directions: Please contact us directly for your configuration, and we will program it for you: