## The Study on the Expandable Shutter Release and Its Assorted Functional Modules

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Abstract As an exterior device, the shutter release has been widely used. A common shutter release can prevent the camera from shaking and some shutter releases can preset time and shoot long time exposures, but all these functions are inherent to the shutter release, which cannot be expanded freely. The present device can't help photographers to capture some unexpected events and shoot unnoticed on other special occasions. This project focuses on a new shutter release which can be expanded and which can be connected to different functional modules. This project has three functional modules at present, that is, lightning triggering shutter module, time-lapse shooting and displacement triggering module. And all of these supporting functional modules have been tested and have got much better photos. In conclusion, the expanded shutter release will be compatible with existing equipment. And supporting modules of different functions can be used in different situations, such as taking photos of lightning, moving objects and time-lapse shooting. Therefore, it can meet the special needs of some photographers.