# LONG EXPOSURE CHEAT SHEET

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PHOTOGRAPHY

#### WHEN TO USE LONG EXPOSURE



- Smooth & silky water
- Night sky photography & star trails
- Fireworks
- City light trails
- Low light conditions such as dusk
- Light painting
- Aurora
- Intentional Camera Motion (ICM)

### WHAT YOU NEED



- DSLR or mirrorless camera, or mobile phone with Pro mode
- Tripod to prevent movement of camera during shot
- Remote shutter release or camera 2-second timer to prevent movement when shutter operated
- Neutral Density filter(s) if you want to do long exposures during daylight

## HOW TO DO IT





- Securely attach your camera to a tripod & make sure everything is tight
- Compose your photo
- Switch to Manual mode (M on your mode dial)
- Set your ISO to 100
- Set your aperture to f13 (assuming you want a deep depth of field).
- Increase your shutter speed until your light meter shows a good exposure
- If you need to increase your shutter speed more, you can attach an ND filter to cut out light, or shut down your aperture further (or both)
- Set your 2 second timer or attach cable release
- Focus preferably use back button focus so the focus does not change when you press the shutter & preferably focus before attaching ND filters
- Press the shutter to take the shot
- Check the shot and retake if necessary

#### SOME RULES OF THUMB





- Waterfalls 1/4 to 2 seconds to slightly blur movement
- Flatten the sea 20-30 seconds
- Moving clouds 30 seconds to several minutes (will need to understand how to use Bulb mode)
- Milky Way 10-15 seconds (any more will result in star trails)
- Star trails 15 minutes to several hours (often done in shorter bursts then combined later)
- Fireworks 2 to 10 seconds to capture full bursts
- Light trails (e.g. moving cars) 10-30 seconds
- Aurora 5-10 seconds (slower if aurora moving fast)
- ICM around 0.5 seconds