# Tethered Photography or Remote Photography
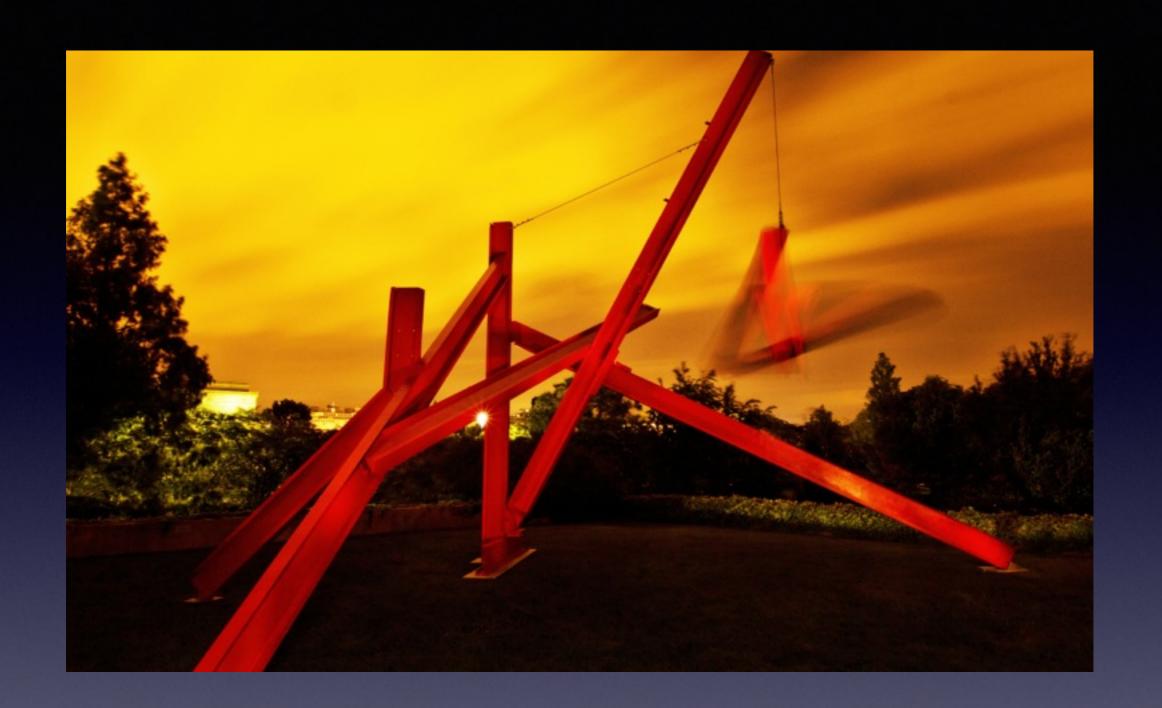
Why and How

# Tethered Shooting

- Connecting your camera to a computer or computer like device

- Viewing on a larger screen

- Recording images to off camera memory

- Remote control

# Why

You or client want to see images on a large screen as you are shooting, i.e., portrait, fashion, product, …

# Why

Camera is remote, i.e., on a tall tripod

# Why

Shooting wildlife or candid scenes and you can't or shouldn't be with the camera

# How - Three Techniques

- Basic - Camera wired to computer

- Wifi - In camera router to phone, pad or computer

- Remote Router - Camera wired to remote router to phone, pad or computer

# Basic

- DSLR with remote capability

- Cable (may want an extension cord)

- Computer with monitor (I use a laptop)

- Software

  - Manufacturer supplied (I use Canon EOS Utility, apparently Nikon charges for Camera Control Pro 2)

  - Lightroom (other 3rd party software)

# Basic +/-'s

- Simple to implement

- Images stored at capture

- Distance limited by wires

- Images stored in camera and/or computer

- Average speed

# Camera Router

- Some cameras have a built-in WIFI capability, such as the Canon 6D

- Computer with monitor ( I use a laptop or iPhone)

- Canon EOS utility available for Phones and Pads

- Software

  - Manufacturer supplied (such as Canon EOS Utility)

# Camera Router  +/-'s

- No additional hardware

- Uses up camera resources

- Canon is difficult to set-up per session

- Images stored in camera and/or computer

- SLOW

# Remote Router

- DSLR

- Cable to Router

- Battery powered remote Router (I use a TP-Link Portable 3G/4G Wireless N Router TL-MR3040 with DSLR Controller firmware)

- iPad (or equivalent, I use a Samsung Galaxy Tab3, Android based)

- Software

  - DSLR Controller (for Canon)

  - qDSLR Dashboard (for Nikon, Canon and others)

  - CamRanger (for Nikon or Canon)

# Remote Router  +/-'s

- Fully featured software

- Flexible

- More difficult to implement

- Easy session set-up

- Requires more parts and pieces

- Images stored in camera

# What's Next

- Multiple cameras

- Remote control vehicles, ground based and air based

- Internet based remote

- ...

# Demonstration

- Basic with EOS Utility

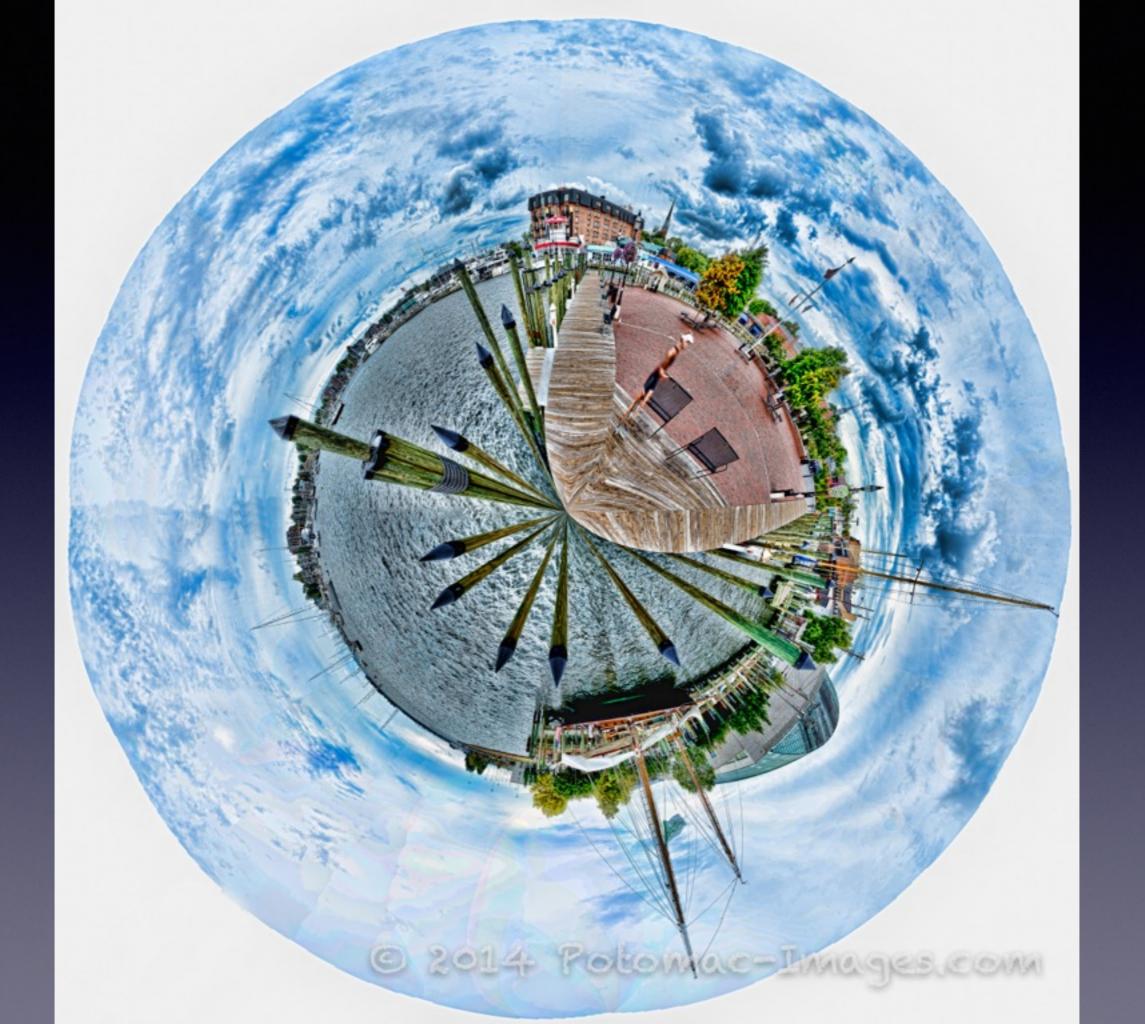- Basic with Lightroom 5

- Remote Router / Samsung Pad

# Making a Planet

or,
Playing with 360 degree Panoramas

# Planet Steps

- Shoot 360 degree panorama (20-25 images)

- Standardize color and exposure in ACR or LR with synchronize

- Merge with Photoshop Photomerge from LR

- Crop image and clip sides to match end to end

- Resize to 8000 by 8000 pixels

- Rotate image 180 degrees, otherwise you get a "tunnel"

- Wrap using "Filter/Distort/Polar Coordinates"

- Clean up using Crop, Stamp, Filters, etc.