

TRIPODS and QUICK RELEASES

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Why Use a Tripod?

- Photographer can be in the picture
- Sharpness
 - “Your best lens is only as good as your tripod”
 - More important at long focal lengths
 - Allows more depth of field
- Forces you to compose more carefully
 - Sometimes, pretend you only have one remaining shot

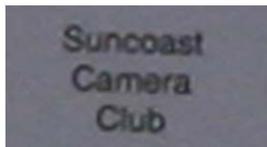
Hand-Held Rule

- OK to handhold if the shutter speed is the reciprocal of the focal length
 - Example: 100mm → 1/100 sec
 - This assumes good technique
 - Image Stabilized (IS) and Vibration Reduction (VR) lenses can tolerate about 2 stops slower
 - Example: 100mm → 1/100 → 2 stops → 1/25

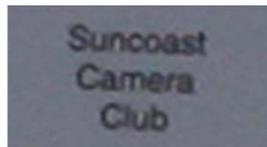
Tripod vs. Handheld

85mm Lens → 135mm Full Frame Equivalent
No IS, Actual Pixels @ 300%
14 pt type, 20 ft away

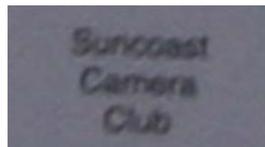
TRIPOD



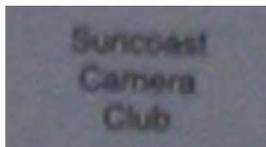
1/125



1/60



1/30



1/15



Handheld With and Without IS

85mm Lens → 135mm Full Frame Equivalent

Actual Pixels @ 300%:

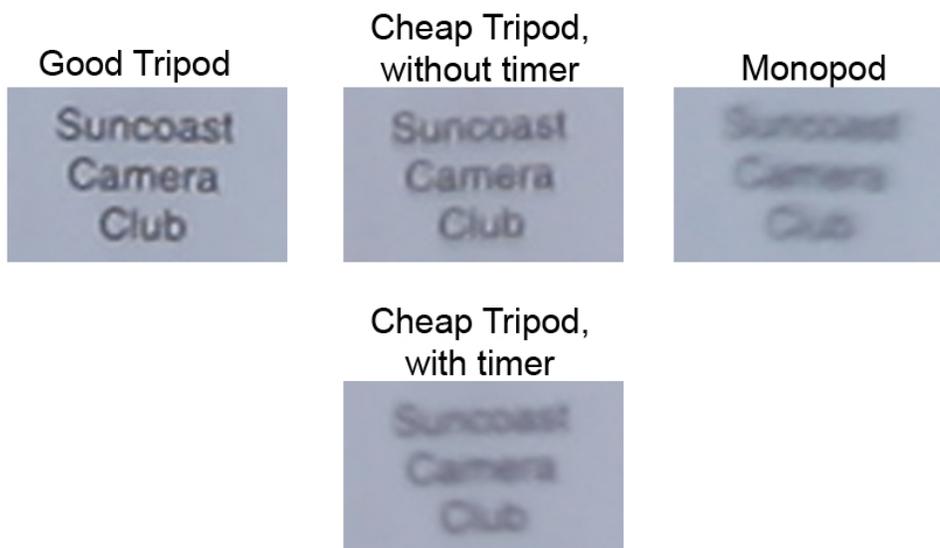
14 pt type, 20 ft away



Good vs. Cheap Tripod

85mm lens, ¼ Sec, No IS, Actual Pixels @ 300%:

14 pt type, 20 ft away



300mm lens, 1/8 Sec, No IS, Actual Pixels @ 200%:
6 pt type, 20 ft away



Tripod Leg Types

- Aluminum
 - Most common
 - 3-section more stable than 4-section
- Carbon Fiber
 - Lightweight
 - More easily damaged
 - Expensive
- Wood
 - Special purpose (large format)
 - Dampens vibrations well

Tripod Leg Manufacturers

- Most popular for pros and serious amateurs:
 - Bogen/Manfrotto
 - Gitzo
- Many others are more concerned with gizmos and gadgets than making a solid tripod

Tripod Legs

- Bogen/Manfrotto 3021N
 - Good aluminum legs for all-around use
 - Heavier tripods are available for studio only use
 - Lighter tripods are available for serious hiking
- Gitzo GT2330
 - Gitzo has many other models
 - Talk to a Gitzo user

Tripod Bonus Features

- Leg angle adjustment
 - Legs splay out to get tripod low to the ground
 - Remove ½ of Bogen 3021 center column to get lower
- Built-in Level
- Padded Legs
 - Option for many tripods
 - Cheap: pipe insulation & duct tape
 - Won't freeze your hands in cold weather
 - Can rest your tripod on your shoulder when carrying

Tripod Heads

- Pan/Tilt (3D)
 - Best for architecture & still life
 - Not as good for sports & nature
 - Slow to adjust



- Ball
 - Best for sports and nature
 - Allows quick repositioning
 - Good ones have adjustable tension/drag
 - Don't skimp and buy a small ball



- Gimbal
 - Wimberley
 - For large lenses only
 - Camera is well balanced allowing smooth motion in all directions with minimal force
 - Excellent for panning with large lenses



Quick Release

- Bolts to the bottom of camera
- Allows camera to be quickly mounted to tripod
- Eliminates sagging when shooting vertical
 - When shooting vertical with a regular tripod screw mount, the camera wants to rotate

Quick Release Types

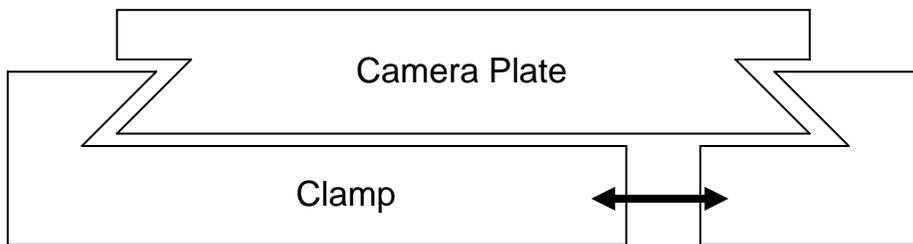
- Arca-Swiss
 - Highly recommended
 - Strong solid dovetail
 - Used by several manufactures
 - Arca Swiss
 - Really Right Stuff
 - Kirk Enterprises
- Others
 - Usually custom to tripod manufacture
 - Some don't prevent vertical sag

Custom Quick-Release Plates

- The best plates are custom designed for your camera
 - Perfect fit
 - Anti-rotation flanges



Really Right Stuff - Canon 30D Plate



Quick-Release L-Bracket

- Keeps lens balanced above the ball when shooting vertical
- Keeps lens position in approximately the same position when switching between horizontal and vertical



Lens Quick-Release

- Lens plates allow lens to be mounted to the quick release clamp



Tripod Technique

- Use a cable release or timer
- Use mirror lockup if time permits
- Avoid using the center column

Tripod Recommendations

- Good
 - Bogen 3021N legs
 - Bogen 3025 pan/tilt head
- Better
 - Bogen 3021N legs
 - Arca Swiss Z1 sp ball head
 - Really Right Stuff quick-release plate
- Best
 - Gitzo carbon fiber legs
 - Arca Swiss Z1 dp ball head
 - Really Right Stuff quick-release plate

Monopod Recommendations

- One-handed adjustable monopods
 - Slik E-Z Pod Junior – Model 617-200
 - For shorter people or for sitting
 - Bogen / Manfrotto 685B NeoTec Monopod Deluxe
 - For taller people