Shooting Sports Highlights

Goals, Workflow, Equipment Camera Setup, Framing Positioning, Shots, Documentation



Presentation Goals

- Primary: Shooting Sports Highlights
 - Document the "Story" or Highlights
 - Most information useful for both
 - · Photography
 - Videography
- Info Also Applicable to Event Imaging
 - Fairs, Festivals, Community Events, etc
- Form of "Run & Gun" imaging

Goal: Tell the Story

- Goal: Recreate event with photos/video
- Workflow
 - Shoot & document highlight images
 - Post
 - Sort, Grade (100-250 images common)
 - Edit (correct, zoom, pan, caption, etc)
 - Produce highlight reel (not covered)

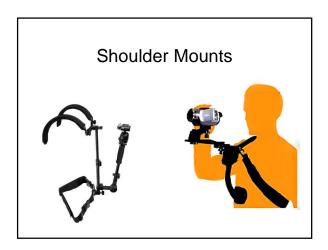
Equipment - Camera

- Lens (zoom best)
- Viewfinder or LCD shade
- · Optional larger monitor
- · Lens filters
 - Polarizer for reflections
 - VND for exposure





Equipment - Support • Shoulder mount - Most effective - Can free hands • Tripod/Monopole • Clamp



Equipment - Documentation

- Common to shoot 100-250 images
 - Only a few good highlights
 - Must document best images
 - Summary
 - Period | time | player # | image #
 - Documentation options
 - Notepad
 - Small audio recorder



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Camera - White Balance

- Best Fixed White Balance
 - Factory Presets
 - Color Temperature Kelvin Dial-in
- Not Dependable Auto White Balance



Camera Setup - Exposure

- Exposure Triangle Set to Manual
- Aperture Deeper DOF
 - Typical F5.6-F8
 - Also provides focus stability
- Shutter Fast Freeze Motion
 - Photos: 1/250 -1/500 common
- Video: 180 Degree rule (1/60 sec default)
- Zebra to set exposure of main players

Exposure Adjustments

- Usually only minor adjustment needed
- Fixed aperture & shutter
- Best Option: Variable ND filter
- Alternate: ISO/Gain Adjustment
 - Allows stability in exposure triangle
 - Allows quick exposure tweaking
 - Not Smooth Digital Stepwise
 - Use w/zebra for optimal adjustment

Exposure Issue: Lighting

- 2 Types of Lighting
 - Primary: Players
 - Background, Extraneous, Reflections
- Set exposure for Players/action
- Control Background changes
 - Used fixed manual exposure triangle
- Reflections (Glossy floor, water sports)
 - Polarizing Filter removes reflected light

Exposure: Why To Use Fixed

• Lighting changes across field of action



Camera Setup - Focus/Stab

- Focus: usually Auto (F5.6+)
- Stabilization
 - Best choices
 - Shoulder mount w/optical stab
 - Tripod/Monopole
 - Active stab usually degrades image
 - Recommended to turn active stab off
- Keep horizon stable and horizontal

Camera Framing

- Use wider frame to capture context
 - Close-up: hard to maintain frame
- Close-ups do not tell the story Rule of Thirds · Turn on display grids
- Runners position
 - 1/3 frame behind runner
 - 2/3 frame in front of runner
- · Video: protect border

Border Protection

Camera Framing Properties

- · Framing Format
 - Provide "in person" experience
 - Photos need to integrate w/video
 - Use horizontal perspective
 - 16 x 9 frame
 - Integrates photos & video easily
 - · Provides most context
 - Most like natural eye sight
 - · Tells more of the story

Framing Example 4 x 3 Photo 16 x 9 Photo

Camera - Rolling Shutter

- · Caused by CMOS chip scanning
 - Also called "Jello" effect
 - Only problem on motion
 - Worse with large chip cameras
- · Best practices to reduce effect
 - Avoid close-in framing
 - Video: Pan/zoom very slow
 - Use fast shutter
 - Use support



Camera - Zoom Lenses

- Par-focal Zoom Lenses
 - Lenses that maintain focus on zoom
 - Photo camera lenses rarely par-focal
 - Most camcorders have par-focal lenses
- · Good auto focus important
- Fixed aperture zoom best choice (F2.8)
- Deeper DOF keeps more frame in focus

Zooming in Post

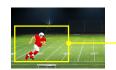
- · Use editor to zoom
- 2x 4x zoom possible
- Useful with both photos & videos





Frame Zooming/Cropping

- Most cameras resolve 6000+ px wide
- FHD 1920 px wide image
 - Provides 3x-4x zoom range
 - Excellent 8" x 10"* print





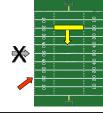
* from B&H

Common Problems

- Framing too tight no context
- Shallow DOF -
 - Blurs important secondary action
 - Lens loses / hunting focus
- · Stability & horizon problems
- Blown out highlights (in main subjects)
- · Noise w/higher ISO settings @night
- · Rolling shutter

Shooting Locations

- · On field of action
 - Position so motion comes toward you
 - Oblique angle on sidelines
- Other best locations
 - In press box
 - On top of press box
 - Top row of stands



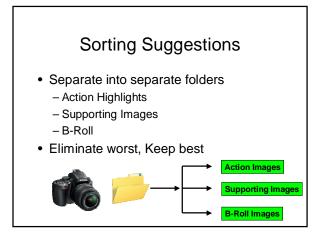
Type of Shots

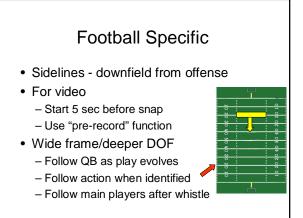
- · Action Shots Primary images
 - During action
 - Following Action
- · Supporting shots
 - Scoreboard on each score & end of period
 - Coaches, benches, player huddle
- B-Roll shots: Band, crowd, ceremonies

Documentation

- · Always buy a program
 - Need players numbers w/names
 - Team info, coaches names
- · Log good highlights
 - Summary of highlight
 - Period, time, image #, Player #
- Ex: TD, 2, 3:20, 46, 5







Summary

• Exposure: Manual, use VND/ISO & zebra

• Framing - wide, deeper DOF, grids on

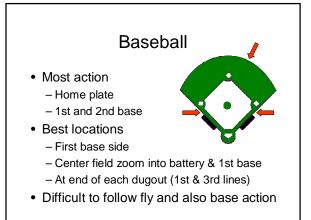
- Follow ball & action -- before & after play

· Stabilize: shoulder mount or other

• Choose good location

· Document important shots

· Focus: auto



Questions

