

V2019-Z WeldWatch Camera and Weld Monitoring System



V2019-Z Ultra-Dynamic-Range™ Welding Camera & Software

Overview

V2019-Z 10x zoom color welding camera combined with the included WeldWatch Software creates the highest-performance Weld Monitoring system.

The V2019-Z camera reaches UDR levels thanks to our specially modified High Dynamic Range (HDR) log sensor which gives over 10x the range of the stock HDR sensor.

Combined with powerful digital signal processing, the hardware and software complements each other resulting in a quality and dynamic-range greater than any weld camera on the market.

All this is accomplished without special filters or optical tricks, allowing the arc to be anywhere – not just in the center.

Benefits

- See the arc, electrode, puddle and joint before, during and after the weld.
- Add a big-screen TV to show welding to a group
- View live or record industrial weld processes for real-time monitoring and quality control
- Record and review welds in the lab or for training



V2019-Z Color Zoom Video Camera

WeldWatch System Features

Camera

- Full Color USB-3
- Hi-Def Resolutions up to 1280 x 1024
- Filter-less 140 dB dynamic range (10,000,000:1) allows arc anywhere in the frame
- Built-in Lens with 10x optical zoom
- Full 30 fps (frames-per-second) at 640x480

Ready to Use

- Rugged aluminum case
- Ultra-bright LED for setup
- Replaceable spatter-shield
- Optional Air-cooled case allows Ambient temp. to 212° F (100° C)
- Self-powered over USB-3
- Compact 2" x 3" x 4.7" (50mm x 75 x 120)
- Lightweight 24 oz. (680 g)

WeldWatch® PC software (included with cameras)

- Low Latency Digital Image Processing
- Proprietary Expanded Log rendering
- Integrated Recording and Playback
- Rotate, flip the image
- Digital zoom 1x – 10x



WeldWatch Video of TIG on Aluminum

V2019-Z Applications

Training:

- Use the camera to show live demos to the whole class on a big-screen TV.
- Add a new dimension to training with close-up and reverse views; provide “aha” learning.
- Record demos so students can review later, using slow-motion and pause.
- Record student welds so they can see which skills need practice.
- Save a video library of welds so you can quickly show students the good, the bad and the ugly.

Industry:

- Monitor weld or cladding machines
 - Away from smoke and danger
 - Improve ergonomics and safety
- Record weld processes for quality
- Debug welding processes
- Develop new weld procedures
- Produce high quality marketing videos



V2019-Z Configured for Air-Cooling with Fittings and Air Hoses Attached

Technical Details

Built-in Lens

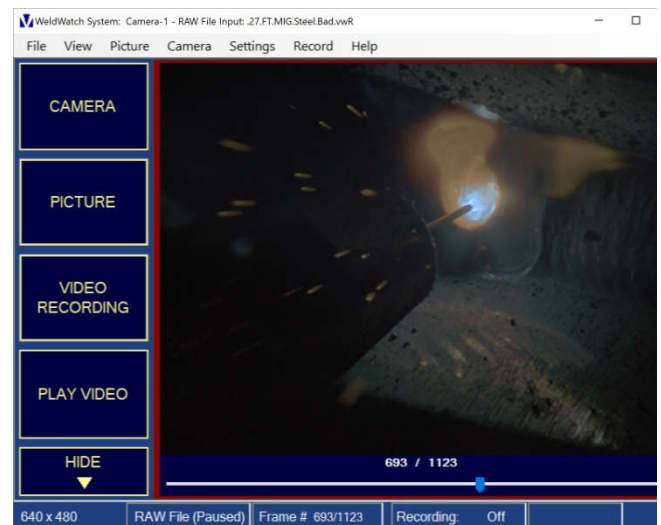
- 10x Zoom (5mm – 50mm)
- Focus distance to object 8” to 50”
- Field of View (60° -wide - 7° -zoom)
- Remote focus
- Automatic Iris
 - f /2.1 – wide, f /3.2 - zoom

Recording

- Standard AVI video files for viewing or email
- Flexible playback: fast, slow, single step, forwards or backwards
- Exclusive auto-record
 - Start record 2 sec before arc
 - Stop record 2 sec after arc
- Also save high-quality JPEG stills

PC requirements:

- Intel I5 or I7 processor
- 4 GB RAM
- Windows, 8 or 10
- Video outputs for PC monitor, projector or big-screen TV



WeldWatch Screen-Shot

For more information and sample weld videos, visit www.VisibleWelding.com