

WeldWatch Video Monitoring System



V2016-Z Ultra-Dynamic-Range™ Welding Camera & Software

Overview

The WeldWatch Video Monitoring System is a complete solution for weld monitoring and viewing. It is composed of the V2016-Z 10x zoom color welding camera with our proprietary WeldWatch Software. The V2016-Z camera has Ultra Dynamic Range specially designed for live viewing of arc welding. The WeldWatch software is tightly integrated with the camera to squeeze the maximum performance from the hardware. WeldWatch performs extensive image processing, in real time as well as digital recording and playback of weld video and still images.

Benefits

- See the arc, electrode, puddle and joint before, during and after the weld.
- Big-screen support to project welding to a group
- View and record industrial weld processes for real-time monitoring and quality control
- Record and review welds in the lab or in welder training
- Create marketing and instructional videos

WeldWatch System Features

Camera

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

Ready to Use

- Solid aluminum case
- 2 bright LEDs for setup
- Replaceable spatter-shield
- Optional Air-cooled case
 - Ambient temp. to 212° F (100° C)
 - Air-knife blows dirt from spatter-shield
- Powered over USB-2
- Compact 2" x 3" x 3.8" (50mm x 75 x 95)
- Lightweight 24 oz. (680 g)

WeldWatch® PC software (included with cameras)

- Low Latency Digital Image Processing
- Proprietary Log Rendering
- Rotate, flip the image
- Integrated Recording and Playback
- VGA and HDMI video outputs support small monitors as well as giant 60-inch LCD screens



V2016-Z Color Zoom Video Camera



Camera with laptop and weld goggles

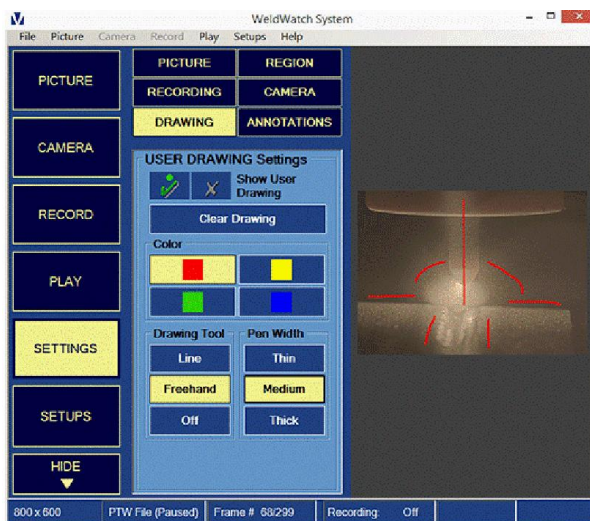
Applications

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.
- Save a video library of welds so you can quickly show students the good, the bad and the ugly.
- Record student welds so they can see what skills needs practice.

Industry:

- Monitor weld or cladding machines
 - Away from smoke and danger
 - Improve ergonomics and safety
- Record weld processes for quality management
- Debug welding processes
- Develop new weld procedures
- Produce high quality marketing videos
- Use optional goggles to observe welds in tight spaces



WeldWatch Screen-Shot

Technical Details

Built-in Lens

- 10x Zoom (4.9mm – 49mm)
- FOV (60° -wide - 7° -zoom)
- f /2.1 – wide, f /3.2 - zoom
- Automatic Iris
- Remote focus
- Focus distance to object 6” to 60”

Recording

- Standard AVI video files for viewing or email
- Flexible playback: fast, slow, single step, forwards or backwards
- Save high-quality JPEG stills
- Exclusive auto-record
 - Start record 5 sec before arc
 - Stop record up to 15 sec after arc

PC requirements:

- Intel I5 or I7 processor
- 4 GB RAM
- Windows 7, 8 or 10
- Standard VGA and HDMI video outputs for PC monitor, projector or big-screen TV

Options and Accessories

- Replacement spatter-shield
- Video goggles for weld-by-camera
- Remote control pendant for adjusting zoom and focus up to 15 feet from the PC



WeldWatch Shot of TIG on Aluminum

For more information and sample weld videos: www.VisibleWelding.com