

# V2019-C

## Ultra-Dynamic-Range™ Welding Camera



### Overview

The V2019-C is a compact C-mount video welding camera, specially designed for live viewing of arc welding. In addition, thanks to the included WeldWatch software, video and stills can be digitally recorded for analysis, email or archiving.

With a dynamic-range of over 10,000,000:1, the camera can capture both arc and metal simultaneously. See the arc, electrode, puddle and joint before, during and after the weld.

Ultra-Dynamic-Range (UDR) is the key to effective welding images. A welding arc can be a million times brighter than the metal, far exceeding even high-end industrial and specialty cameras.

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.



**V2019-C Color USB-3 Camera with  
C-Mount Lens (lens not included)**

### Features

#### Camera

- Full Color USB-3
- Hi-Def Resolutions up to 1200 x 1000
- Filter-less 140 dB dynamic range (10,000,000:1) allows arc anywhere in the frame
- Use any standard C-Mount lens
- Full 30 fps (frames-per-second) at 640x480

#### Factory ready

- Sturdy Aluminum case
- Powered over USB-3
- Compact 1.3" x 2" x 2" (33mm x 50mm x 50mm )
- Lightweight 4 oz. (110 g)

#### WeldWatch PC software (provided with cameras)

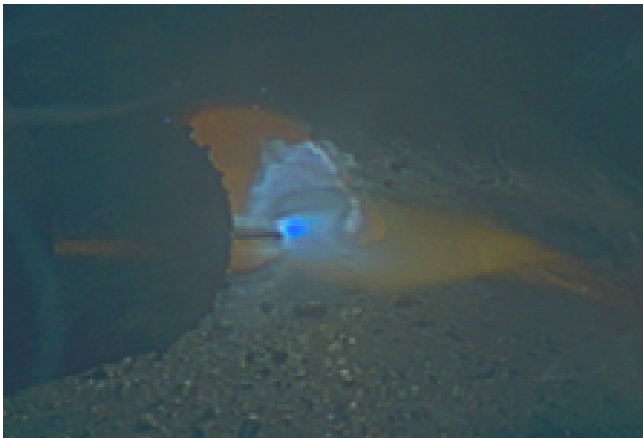
- Low Latency Digital Image Processing
- Proprietary Expanded Log rendering
- Integrated Recording and Playback
- Rotate, flip the image
- Digital zoom 1x – 10x



**Actual V2019-C Image – TIG on Aluminum**

## Applications

- Monitor weld or cladding machines away from toxic smoke and danger to improve safety
- Develop and debug new welding processes
- Record weld processes for quality management



V2019-C on high-current MIG welding

## Technical Details

### Video Output

The video output is determined by the PC running the WeldWatch software. This can be VGA, DVI or HDMI – allowing a wide range of standard monitors from 6” to 60”

### Recording

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

### PC requirements:

- Windows 8 or 10
- Intel I5 or I7 processor
- 4 GB of RAM