

V2011-UDR-C
V2011-UDR-M
Ultra-Dynamic-Range
Video Systems



Overview

The V2011 video system is specially designed for live viewing and recording in the blinding light of arc welding. With a dynamic-range of over 1,000,000:1, the camera can capture both arc light and metal.

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 cameras.

The V2011 reaches UDR levels by combining an HDR camera with powerful PC-based digital signal processing. Each multiplies the range of the other resulting in a dynamic-range far greater than either can reach alone.

The V2010 does not use special spot-darkening filters so it does not have the positioning restrictions and tedious setup of a spot-filtered camera.

In addition to the live screen video, both video and stills can be digitally recorded for later analysis, email or archiving.

Standard Features:

Includes software, imaging camera and lens

Lens: 35mm megapixel lens (e.g. Fujinon HF35HA-1B)

Integrated Recording:

- AVI video files or full Dynamic-Range original
- Play, pause or single-step through frames
- Capture still images for documentation

No spot filters for easy setup

Frame-Rates up to 30 per second (fps)

Digital end-to-end

120 dB dynamic range (1,000,000:1)

Digital Image Processing

- Continuous zoom 1x – 10x
- Edge Sharpening
- Rotate, flip



V2011-C Color Camera System
(laptop not included)



V2011-C Color Screen Shot
(Hand TIG on Aluminum)

Application

View and record arc welding without specialized filters.

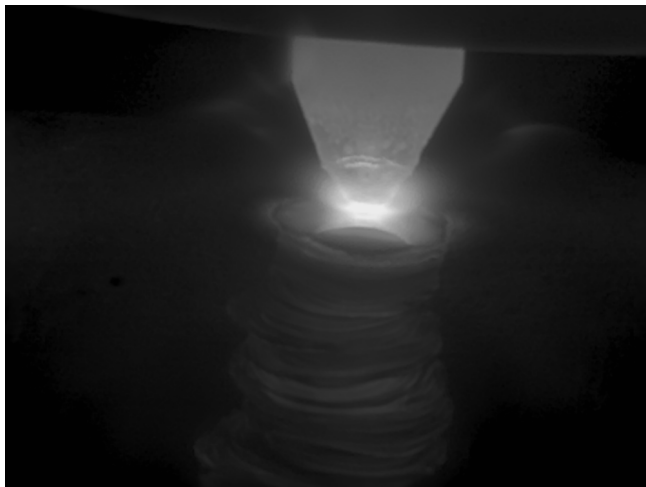
View and record the electrode, arc, puddle and joint before and during the weld

Perfect for development and setup of welding processes (TIG, MIG)

See through high glare for inspection or machine vision



V2011-M Monochrome Camera System
(laptop not included)



V2011-M Monochrome Screen Shot
(Automated TIG on Steel)

Technical Details:

PC requirements:

- Intel I5 or I7 processor
- 3 GB RAM
- 10 GB of disk space
- Windows XP, Windows 7 or Vista

Lens: C-mount

Video Outputs: Determined by the chosen PC. Typical outputs are VGA, Component and HDMI. These allow viewing on common monitors from palm-size to 50 inch LCD or even HD projectors

Options and Customization:

V2011-UDR-C Color Version:

- Sensor: $\frac{2}{3}$ inch (8.6 mm x 6.9 mm)
- Exposure: global-shutter
- Resolution: 1280x1024, 640x480, 320x240
- Camera size: 95 x 50 x 35 (mm)
(L x W x H without lens)

V2011-UDR-M Monochrome Version:

- Sensor: $\frac{1}{2}$ inch - (7.7 mm x 5.8 mm)
- Exposure: rolling-shutter
- Resolution: 640x480, 320x240
- Camera size: 28 x 32 x 34 (mm)
(L x W x H without lens)

Cabling: Ethernet Cat-6 or USB

A wide variety of C-Mount lenses available

Remote-control Lens Focus and Iris

Rugged cooled case

Extended Cables up to 60 feet