



MIRION
TECHNOLOGIES



IST-QUADTEK® M701

Colorizer and Contrast Expander

Under ideal conditions a camera system gives operators an excellent view of the combustion process, but most industrial processes are prone to conditions that make it hard to see clearly. The IST-Quadtek M701 Contrast Expander gives operators an added advantage by overcoming these difficult imaging problems by coloring the image and providing contrast expansion and custom shading control.

FEATURES/BENEFITS

- **Colorization**
The M701 colorizes the incoming infrared black and white video signal. Hot items appear as yellow or white, while cooler items appear as darker reds.
- **Contrast Expansion**
Independent operator control of the black and white levels allow the maximum contrast range to be achieved. Increased contrast expansion provides a better picture.
- **Shading Correction**
A finer degree of control is possible using the four shading controls. This allows contrast to be adjusted over a portion of the screen. Extremely useful when difficult imaging conditions only affect part of the image.

imaging systems

A Mirion Technologies Division

Featuring:

 **ist-quadtek**

SPECIFICATIONS AND PERFORMANCE

Figure A shows a typical video signal. The distance between the white level (at the top) and the black level (at the bottom) is the total range of contrast available.

Figure B shows that by dropping the black level, the distance between the white and black levels gets bigger, increasing the contrast range. By lowering the black level the darker objects get darker without changing the white ones. Likewise is true when the white level is raised, the white objects get whiter without changing the dark ones.

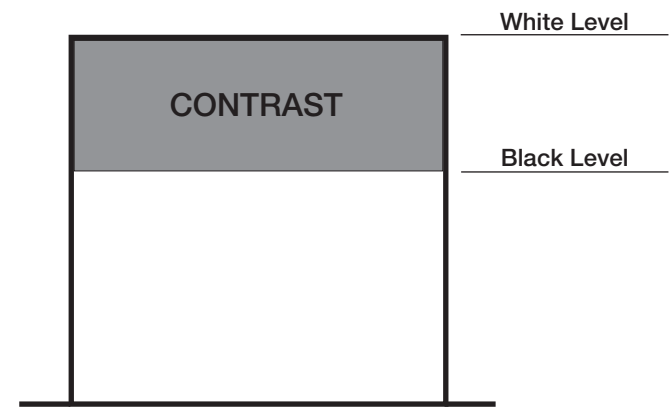


Figure A

Shading correction is accomplished by applying sawtooth and parabolic correction signals to the video signal.

For example, when the video signal is combined with the horizontal sawtooth signal, one side or the other of the picture gets lighter while the other side darkens. The horizontal parabolic signal lightens or darkens only the edges of the picture. The vertical controls do the same thing as the horizontal, only from top to bottom.

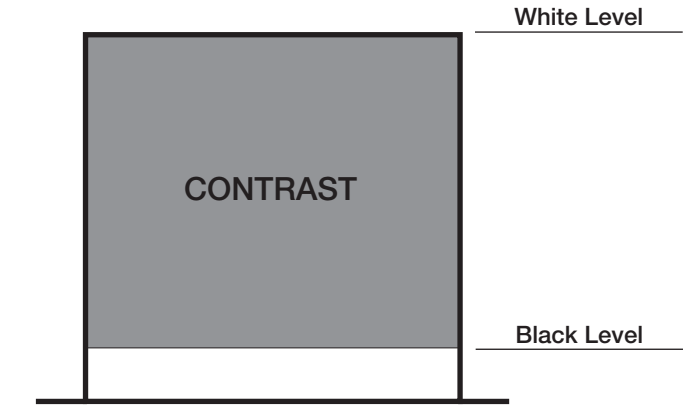


Figure B

CAMERA	
Power Requirements	100/115/230 VAC, 50/60 Hz
Physical Dimensions	92mm H x 191mm W x 241mm D (3.63" x 7.50" x 9.50")
Operating Temperature Range	0 to 40° C (32 to 104° F)
Relative Humidity	95%
Video Input	Composite or BNC connector
Video Output	Composite or BNC connector Compatible with the Quadtek BedBug Camera System
Color Video Output	Analog RGB on 9-pin D-type
Weight	2.15 kg (4.75 lbs)



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