

# Software features

#### Software features

- Windows 2000 professional or XP.
- True color image editing.
- Mouse orientated graphics software.
- Network capable.
- Camera Support—see back.
- Real time automatic/background calibration so that the displayed temperature values are accurate to the camera specifications.
- IR Remote control works directly with the computer and camera controls if available.
- · Level/Set tool allows drag and drop mouse selection of a range of temperature display from 1 degree C to the full Camera range.
- Real time analysis to the frame rate capabilities of the IR cameras.

### **Real-Time Module**

- Measure temperature in real-time with POINT, SPOT, SHAPE, CIRCLE/ ELIPSE, and RECTANGLE.
- Drag and drop multiple ISOTHERMS in windows or palette colors.
- Use exclusion tools to mask unwanted objects from reporting temperature.
- Display and analyze temperature in C, F, DV, or Kelvin.
- Settable Emissivity and temperature corrections with a ROI drawn with a mouse.
- Send images to Image Editor for post image processing with one click.
- Real time graphing and transmission of temperature data spreadsheets.
- · Capture a series of images with FAST SAVE and then display and analyze images frame by frame with the REPLAY EDITOR.

# Image Editor for post image processing.

- · Repeats all the capabilities of the Real Time Module.
- · Zoom any part of the image.
- · Graph static data or send data to a spread sheet.
- Exclusion objects Shape, Freehand, Circle/ELIPSE/and Rectangle.
- Standard Deviation reported with CIRCLE, SHAPE, RECTANGLE.

### Infrared Movie capability.

- NO LIMITATION ON the number of frames, up to 20 hours of video, that can be saved, requires 2 GHZ or greater CPU. Continuous, or under control of event manager.
- Editor . Apply all the software tools to IR video, frame by frame.

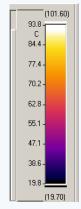
Free patches and upgrades from FTP site



- 120 Old M-21
- Jenison, MI 49428
- Phone 616 457-7155
- FAX: 616 457 5210
- Email: sales@eic-inc.com
- Web: www.eic-inc.com



IR Remote



Color Bar



Level/Set



Irris 256 image

Display and analyze temperature cali-

Real Time.

mation tasks.

Av 87.0F

Mx 125.81

brated thermal data as it takes place in

Real Time software with powerful process

monitoring capability for demanding auto-

Firewire and Ethernet camera support.

Mx 113.1F





## More Features of the software continued

ThermoSoft II has the fully integrated modules required for setting up a complete automatic process and monitoring control system, by use of the Event Manager.

### **Event Manager**

Setup is easy with fill in boxes, with review, editing, and save possible.

The Event Manager allows easy user set up for automatic monitoring, and reporting scenes for sending real-time temperature data to a D/A cards, hard disk, printers, chart recorders and other types of equipment.

Any number of temperature tools with MIN, MAX, or AVG selectable value can be used to collect data.

The user can select a variety of different kinds of triggers to initiate a recording session. The remote IR can also be used to trigger events.

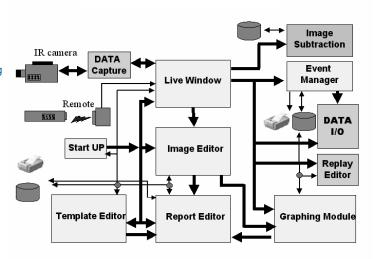
#### **Image Subtraction**

Comparing two images can be done by capturing images by Fast Save or using Process. The degree of comparison is settable and the resulting images can be fully analyzed with the software tools.

#### Remote IR

Allows setting functions, such as focus, range, brightness, contrast of the IRRIS cameras. Major software functions such the event manager functions available for all cameras.

### Software Block Diagram



#### Customization.

The software is complete as is, but is also entirely modular and based upon the 32 bit GRAND RAPIDS frame work. It is designed to permit easy customization with the modules of the software that can stand alone. New modules can be designed and placed in operation easily. The software can operate with RS-170 frame grabbers in which case Windows 2000 professional or xp can be used, and which allow other IR cameras to be used with the software.

### **Software Specifications**

### **Temperature Accuracy**

- · Accurate reporting of radiometric data sent from IR camera.
- Live image rate 60 frames per second.
- Range and span selection control with graphical selection of temperature displayed.
- Displayed temperature resolution possible to 1/100 of a degree.

### **Event Manager**

- Max duration of events is 1 MS to 360 days for any event.
- Event sequences can be initiated by Frame Grabber frames, time, or low or high going persistent or non-persistent external triggers.
- Events can be both latching and transitory, and can be terminated by an external event if latching.
- Delays can be set into triggers for debounce.

#### DA Outputs and inputs available by design.

Accuracy –full real time radiometric information sent by camera and read in each and every pixel of the screen image.

### **Image Subtraction**

 Software permits full comparison between thermal images with settable degree of subtraction.

### **Isotherms**

 No limit on the number that can be applied by CLICKING on COLOR BAR

# **Associated Equipment**

#### **Software Package**

- Video cables.
- IR remote.
- AD cards if required.
- Digital Capture card.
- Software disk set.
- Operating Manual and Getting Started Manual.
- Windows 2000 style online help.

# **Supported IR Cameras**

- FLIR with NI capture card SC 2000, SC 3000
- FLIR with Fire Wire (no capture cards needed) A 20,
- \$60, and \$40, and \$40.
- IRRIS 256 and 156 captures with capture card.
- Supported cameras capture rate up to 60 FPS

# **Suggested Computer Equipment to operate software**

- Windows 2000 operating system, required by capture board.
- CPU 1 GHZ or better.
- 256 Meg of RAM minimum. More for movie mode.
- 19" monitor.
- Operates on any MB in compliance with relevant specifications.
- 15 inch laptops or more.
- UPS mandatory.

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