

# Angelo RTV-24

## 4 Channels Real-time Video Capture Board for Standard Cameras

### Features

- Four color video digitizers operating in parallel
- Up to 120fps in 32-bit, 33MHz/66MHz PCI bus
- Color (PAL / NTSC), monochrome (CCIR / EIA) camera
- Up to 16 channels extension
- On-board TTL I/O lines
- Built-in watchdog timer
- Protection circuit for security issue
- User Friendly ViewCreator utility
- Software trigger supported



### Introduction

#### General

The Angelo RTV-24 acquisition board is designed without compromise for security and video surveillance applications. It's the ideal device for PC based multiple-channel digital video recording.

This 32-bit, 33MHz/66MHz PCI bus frame grabber can capture simultaneously four analog video streams in real time. It accepts standard composite colors (PAL, NTSC) or monochrome video formats (CCIR, EIA).

The resolution is programmable including square-pixel (640 x 480 or 768 x 576) and broadcast resolution. Before captured images are transferred to the PC's memory, images can be scaled down using available selectable ratios.

Arbitrary cropping to regions of interest is possible. The RTV-24 generates bitmaps in all popular color formats such as RGB, YUV, planar or packed. System integrators also benefit from a watchdog for fault-tolerant applications and easy-to-use standard connectors.

#### Image Acquisition

**Frame Rate:** 30 full-frame images acquired per second for each channel.

**Color Image:** Color video format is compatible with the following composite video input formats: NTSC-M, NTSC-Japan, PCL-B, PAL-D, PAL-G, PAL-H, PAL-I, PAM-M, PAL-N and SECAM

**Monochrome Image:** The monochrome video acquisition is compatible with CCIR and EIA (RS-170).

**Optional Scaling:** The acquire images or portions of images can be optionally scaled:

- Acquisition of a programmable area of interest
- Scaling of the image (down to 1:16)
- Adjustment of hue (for NTSC signals), contrast (0 to 200%), brightness and saturation (0 to 200% for U and V signals)
- Automatic chrominance gain control

#### Channel Extension

The Angelo RTV-24 is designed to receive up to 3 video input modules, each with four BNC connectors with the ability to connect up to a maximum configuration of 16 cameras.

**Channel Extended Interface:** Three 10pin header connectors on-board.

#### I/O Lines

The Angelo RTV-24 is fitted with TTL compatible I/O lines, supporting 4 inputs, 4 outputs and 4 soft trigger lines with protection against overloads and electrostatic discharges.

Every line maybe configured as an input or output or can be used to trigger an acquisition or report an alarm condition.

#### Watchdog

A hardware watchdog is available on the Angelo RTV-24. The watchdog is able to monitor the PC's application operation and will automatically reset the PC after a programmable inactivity time-out. This ensures a reliable operation of remote systems.

### Applications

- PC Based Surveillance System
- Digital Video Recorder (DVR)
- Factory Monitoring System
- Machine Vision Inspection System
- Scientific Research Instrumentation
- Medical Research Instrumentation

### Software Support

#### WDM driver

The driver's supports VC++/VB/C++ Builder/Delphi programming under Windows NT/98/2000/XP platforms with DLL.

#### ViewCreator

ViewCreator assists developers to evaluate initial tests and functions.



### Ordering Information

- Angelo RTV-24  
4-Channel real-time video capture board  
for standard cameras