

Sensoray 611
4-Input Frame Grabber



© Artisan Technology Group

**Limited Availability
Used and in Excellent Condition**

Open Web Page

<https://www.artisanng.com/50576-1>

All trademarks, brandnames, and brands appearing herein are the property of their respective owners.



Your **definitive** source
for quality pre-owned
equipment.

Artisan Technology Group

(217) 352-9330 | sales@artisanng.com | artisanng.com

- Critical and expedited services
- In stock / Ready-to-ship
- We buy your excess, underutilized, and idle equipment
- Full-service, independent repair center

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

SENSORAY CO., INC.

PCI Frame Grabber

Model 611 (Rev.D)

July 2001

© Sensoray 2001
7313 SW Tech Center Dr.
Tigard, OR 97223
Phone 503.684.8073 • Fax 503.684.8164
sales@sensoray.com
www.sensoray.com



Table of Contents

LIMITED WARRANTY3

SPECIAL HANDLING INSTRUCTIONS.....4

INTRODUCTION4

SYSTEM REQUIREMENTS4

SPECIFICATIONS5

 Connectors6

Limited warranty

Sensoray Company, Incorporated (Sensoray) warrants the hardware to be free from defects in material and workmanship and perform to applicable published Sensoray specifications for two years from the date of shipment to purchaser. Sensoray will, at its option, repair or replace equipment that proves to be defective during the warranty period. This warranty includes parts and labor.

The warranty provided herein does not cover equipment subjected to abuse, misuse, accident, alteration, neglect, or unauthorized repair or installation. Sensoray shall have the right of final determination as to the existence and cause of defect.

As for items repaired or replaced under warranty, the warranty shall continue in effect for the remainder of the original warranty period, or for ninety days following date of shipment by Sensoray of the repaired or replaced part, whichever period is longer.

A Return Material Authorization (RMA) number must be obtained from the factory and clearly marked on the outside of the package before any equipment will be accepted for warranty work. Sensoray will pay the shipping costs of returning to the owner parts that are covered by warranty. A restocking charge of 25% of the product purchase price, or \$105, whichever is less, will be charged for returning a product to stock.

Sensoray believes that the information in this manual is accurate. The document has been carefully reviewed for technical accuracy. In the event that technical or typographical errors exist, Sensoray reserves the right to make changes to subsequent editions of this document without prior notice to holders of this edition. The reader should consult Sensoray if errors are suspected. In no event shall Sensoray be liable for any damages arising out of or related to this document or the information contained in it.

EXCEPT AS SPECIFIED HEREIN, SENSORAY MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AND SPECIFICALLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. CUSTOMER'S RIGHT TO RECOVER DAMAGES CAUSED BY FAULT OR NEGLIGENCE ON THE PART OF SENSORAY SHALL BE LIMITED TO THE AMOUNT THEREFORE PAID BY THE CUSTOMER. SENSORAY WILL NOT BE LIABLE FOR DAMAGES RESULTING FROM LOSS OF DATA, PROFITS, USE OF PRODUCTS, OR INCIDENTAL OR CONSEQUENTIAL DAMAGES, EVEN IF ADVISED OF THE POSSIBILITY THEREOF.

Third party brands, names and trademarks are the property of their respective owners.

Special handling instructions

The circuit board contains CMOS circuitry that is sensitive to Electrostatic Discharge (ESD).

Special care should be taken in handling, transporting, and installing circuit board to prevent ESD damage to the board. In particular:

- Do not remove the circuit board from its protective anti-static bag until you are ready to install the board into the enclosure.
- Handle the circuit board only at grounded, ESD protected stations.
- Remove power from the equipment before installing or removing the circuit board.

Introduction

The 611 PCI frame grabber allows the capture of monochrome and color images from a variety of analog video sources into computer memory (RAM). The 611 is designed to work with standard TV signal sources, compatible to the following video standards:

- color: NTSC-M, NTSC-Japan, PAL-B, PAL-D, PAL-G, PAL-H, PAL-I, PAL-M, PAL-N, SECAM;
- monochrome: CCIR, RS-170.

The 611 digitally locks to the incoming video signals providing a stable output regardless of the signal source. The input's 4:1 multiplexer allows the selection between four composite or three composite and one Y/C (S-Video) analog video inputs, which makes it possible to connect up to four video sources to the frame grabber. The signal components (luminance and chrominance) are digitized with two separate 8-bit A/D converters. Low-pass filtering and double over-sampling of the input signal provide precise digitization with no aliasing artifacts. The digital signal is then scaled and/or cropped to the desired dimensions, if necessary. The scaled image is transferred to the host RAM using the PCI bus mastering mode, which requires minimum CPU attention. An on-board FIFO provides necessary buffering, minimizing the probability of image loss.

An 8-bit general purpose I/O port allows interfacing of the 611 to external hardware, which could be used, for example, for triggered image acquisition.

System Requirements

The 611 is designed to work with 32-bit, 33 MHz, 5 V PCI bus. An important system requirement is fast PCI-to-DRAM transfer. Some systems may not provide bandwidth sufficient for image transfer, which may result in image corruption.

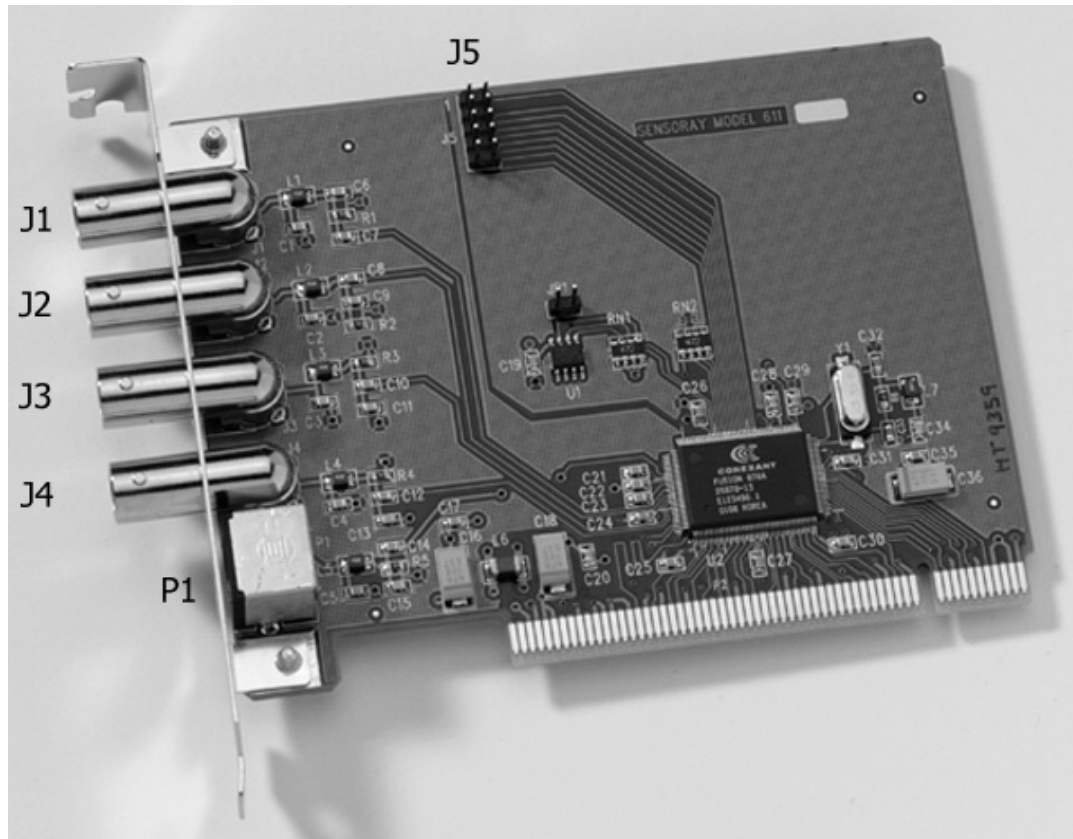
Specifications

Video sources	NTSC, PAL, SECAM, RS-170, CCIR
Video inputs	4 analog composite video; 1 analog Y/C (S-video) ^[1] .
Output formats	RGB (15, 16, 24, 32 bits/pixel), Y8 (8 bits/pixel), YCrCb (16 bits/pixel)
Output resolution (max), pixels	754x480 (NTSC, RS-170), 922x576 (PAL, SECAM, CCIR)
A/D resolution: luminance channel chrominance channel	8 bit 8 bit
Capture rate	Real time ^[2] : 30 fps (NTSC, RS-170), 25 fps (PAL, SECAM, CCIR)
General purpose I/O port	4 output and 4 input lines, CMOS, 1 interrupt input (can be used as an additional general purpose input). (10 pin ribbon cable connector).
Bus requirements	PCI, 33 MHz, 32-bit, 5 V
Power consumption	300 mA (max) @ +5V
Operating temperature	0°C to 70°C

Notes:

1. An S-video input can be used in place of 1 composite input.
2. The capture rate may be limited by the PCI-to-DRAM transfer bandwidth provided by the particular CPU design.

Connectors



Video inputs:

J1	Composite video 1
J2	Composite video 2
J3	Composite video 3
J4	Composite video 4
P1	S-video (Y/C)

Notes:

1. Composite video 4 and S-video inputs share the same physical line. Do not connect video sources to both at the same time.

GPIO connector (J5)

Pin	Signal	Pin	Signal
1	Ground	2	GPINT
3	GPO2	4	GPO3
5	GPO0	6	GPO1
7	GPI2	8	GPI3
9	GPI0	10	GPI1

Notes:

1. GPO0-GPO3 – CMOS outputs.
2. GPI1-GPI3 – CMOS inputs.
3. GPINT – general purpose interrupt pin.

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at [artisanng.com](https://www.artisanng.com) for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisanng.com | [artisanng.com](https://www.artisanng.com)

