

SACO CORE PROCESSOR SPECIFICATIONS

SHOCKWAVE
VIDEO LIGHTING



CORE
VIDEO PROCESSOR

SACO

SACO CORE PROCESSOR SPECIFICATIONS



CORE VIDEO PROCESSOR

EXCEPTIONAL PERFORMANCE

OVERVIEW

The SACO HDVS-CORE Video Processor is a proprietary design using state-of-the-art electronics to process and transmit video signals to the SACO video displays.

HIGHLIGHTS

Flexible by design, the SACO HDVS-CORE Video Processor offers the following features:

- Two (2) independent input channels
- Two (2) output channels, one connected to the Video Screen and the other for monitoring (typically the second output is VGA or DVI)
- Up to 36-bit processing for each input channels
- 16bit per colors (48 bits) = 281 Trillion shades of color (actually 281,474,976,710,656)
- Monitoring and Status indicators



CAPABILITIES

The SACO HDVS-ECKO Video Processor processing capabilities include:

- **INPUT / OUTPUT COLOR SPACE CONVERTER:**
This feature ensures true color reproduction and display on LED Video Screen.
- **GAMMA CORRECTION:**
This feature ensures that the image appearance is crisp by adjusting darker and brighter areas.
- **EDGE AND MOTION DEINTERLACER:**
This feature ensures that moving images are replicated on the screen without any choppiness or lagging.
- **PIXEL BASED ADAPTIVE MULTI-DIRECTIONAL EDGE DETECTION:**
This feature adjusts the images and edges on diagonal shapes rendering them smooth and crisp.
- **NOISE REDUCTION:**
This feature ensures that background noise is filtered out.
- **DETAIL ENHANCEMENT:**
This feature enhances the sharpness of an image.
- **CROPPING, POSITIONING, SCALING:**
This feature allows cropping, positioning and scaling of video inputs to fit the screen aspect ratio.

PICTURE LEVEL CONTROL:

This feature allows the adjustment of picture parameters such as brightness, black level, contrast, etc.

MULTIPLE LIVE INPUTS:

The SACO HDVS-ECKO Video Processor is capable of processing two (2) live inputs. If more inputs are required the processor can be daisy chained.

SEAMLESS SWITCHING:

The SACO HDVS-ECKO Video processor allows seamless transition between the different live inputs.

NETWORKING:

The SACO HDVS-ECKO Video Processor is network ready through an RJ45 (10/100/1000Mbps) connector mounted on the rear.

HIGH DEFINITION CAPABILITY:

The SACO HDVS-ECKO Video processor supports the HD-SDI (SMPTE-292M) & 3G-SDI (SMPTE-424M) standards.

FILM MODE DETECTION:

This feature is specific to the movie industry. It synchronizes the cameras with the screens.

DITHERING:

This feature ensures that the low bits on an image are treated to enhance the displayed image.

SACO CORE PROCESSOR SPECIFICATIONS



TECHNICAL SPECIFICATION

MODEL NUMBER: SACO-HDVS-CORE

SIGNAL PROCESSING	- UP TO 36-BIT FOR EACH INPUT CHANNEL
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COLOR PROCESSING	- 16-BIT COLOR PROCESSING
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COLOR	- 16BIT PER COLORS (48 BITS) = 281 TRILLION SHADES OF COLOR (ACTUALLY 281,474,976,710,656)
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DIMMING	- 8BIT, 256 LEVELS OF BRIGHTNESS CONTROL MANUALLY AND AUTOMATICALLY ADJUSTABLE
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INPUTS	<ul style="list-style-type: none">- HDMI / DVI IS AN INPUT DESIGNED TO SUPPORT HDMI / DVI COMPUTER GRAPHICS CARDS.- HD-SDI (SMPTE-292M) STANDARDS. FORMAT SUPPORTED INCLUDE 525I, 525P, 656I, 656P, 720I, 1080P AND 1080I- 3G-SDI (SMPTE-424M) STANDARDS. FORMAT SUPPORTED INCLUDE 525I, 525P, 656I, 656P, 720I, 1080P AND 1080I- THE FOLLOWING FORMATS NTSC, PAL, SECAM, 525I, 625I, 525P, 625P, 720P AND 1080I ARE SUPPORTED VIA EXTERNAL CONVERTER.
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OPERATING TEMPERATURES	- 0°C TO 45°C
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STORAGE TEMPERATURE	- -30°C TO 85°C
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WEIGHT	- 2.25 KG (5 LBS.)
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OUTPUTS	<ul style="list-style-type: none">- 6 X LC MULTI MODE, DUPLEX, FIBER OPTIC OUTPUTS THAT CONNECT TO THE LED VIDEO DISPLAYS- 1 X SDI FOR MONITORING (LOOP TROUGH).
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NETWORKING	- NETWORKING READY THROUGH RJ45 (10/100/1000 MBPS) CONNECTOR MOUNTED ON THE REAR
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DIMENSIONS	- 3U STANDARD, 19" RACK-MOUNT DESIGN
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FUSING	- 1 AMP FUSE
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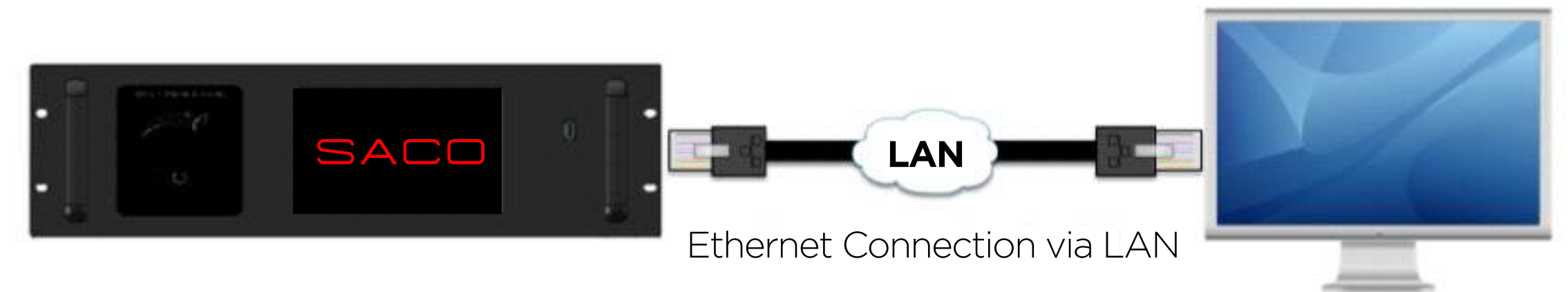
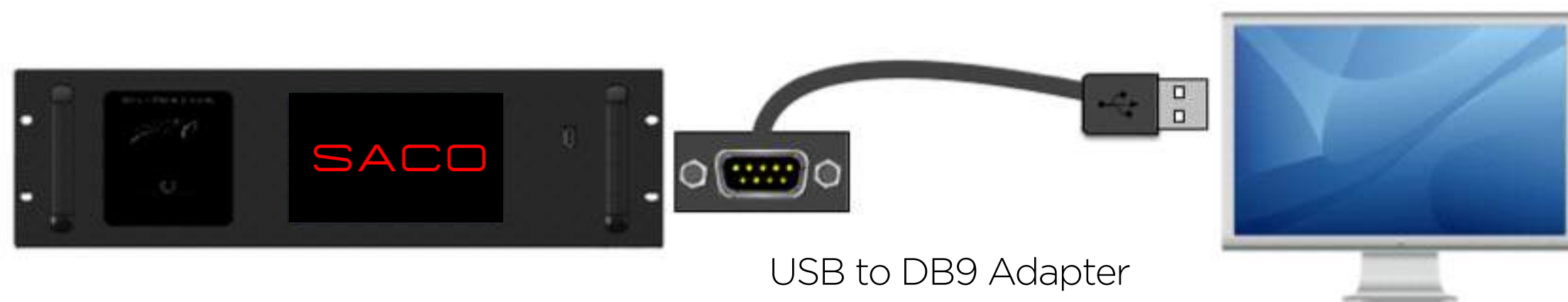
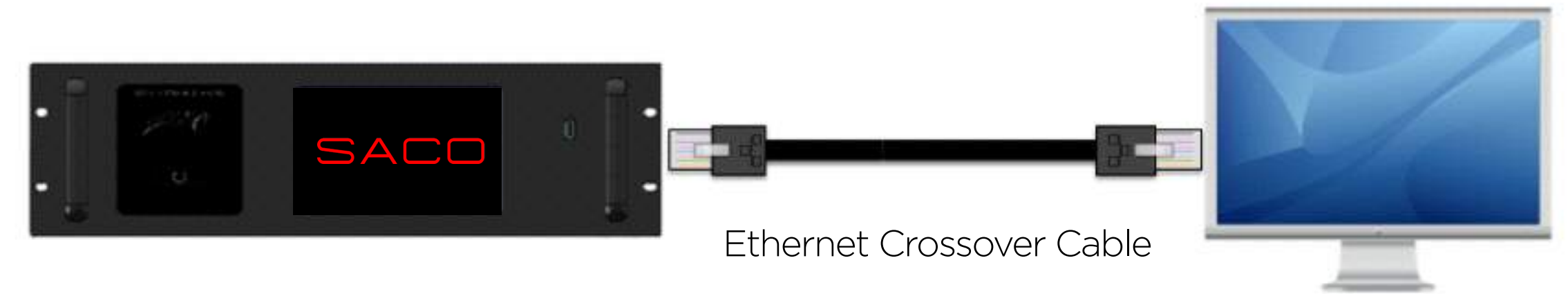
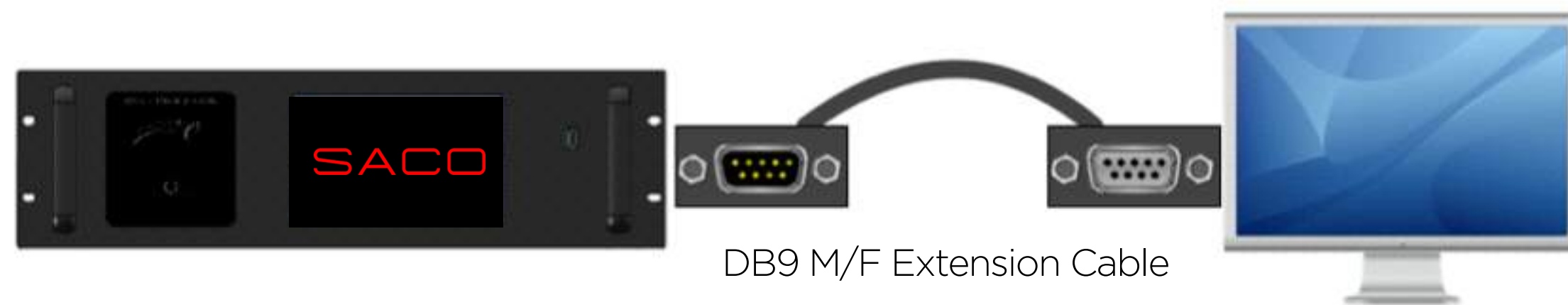
POWER CONSUMPTION	- 75WATTS
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INPUT VOLTAGE	- UNIVERSAL INPUT 85-264VAC, 50 / 60HZ
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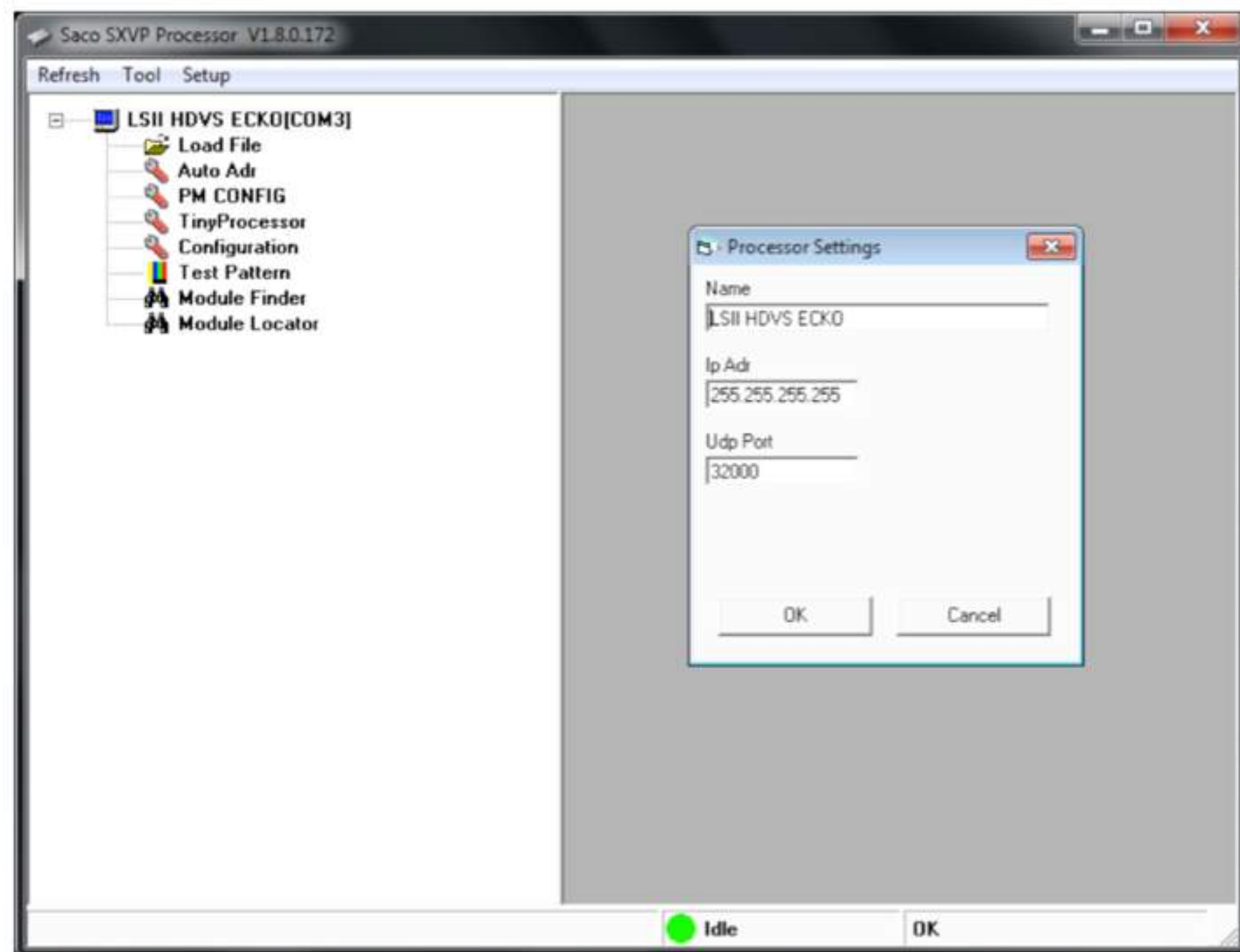
COMMUNICATION PORTS

The HDVS-ECKO Processor has two communication ports, the Serial RS232 port, and the Ethernet port. A Windows® base computer should be connected to one of these ports to be able to communicate and to configure the LED Display.



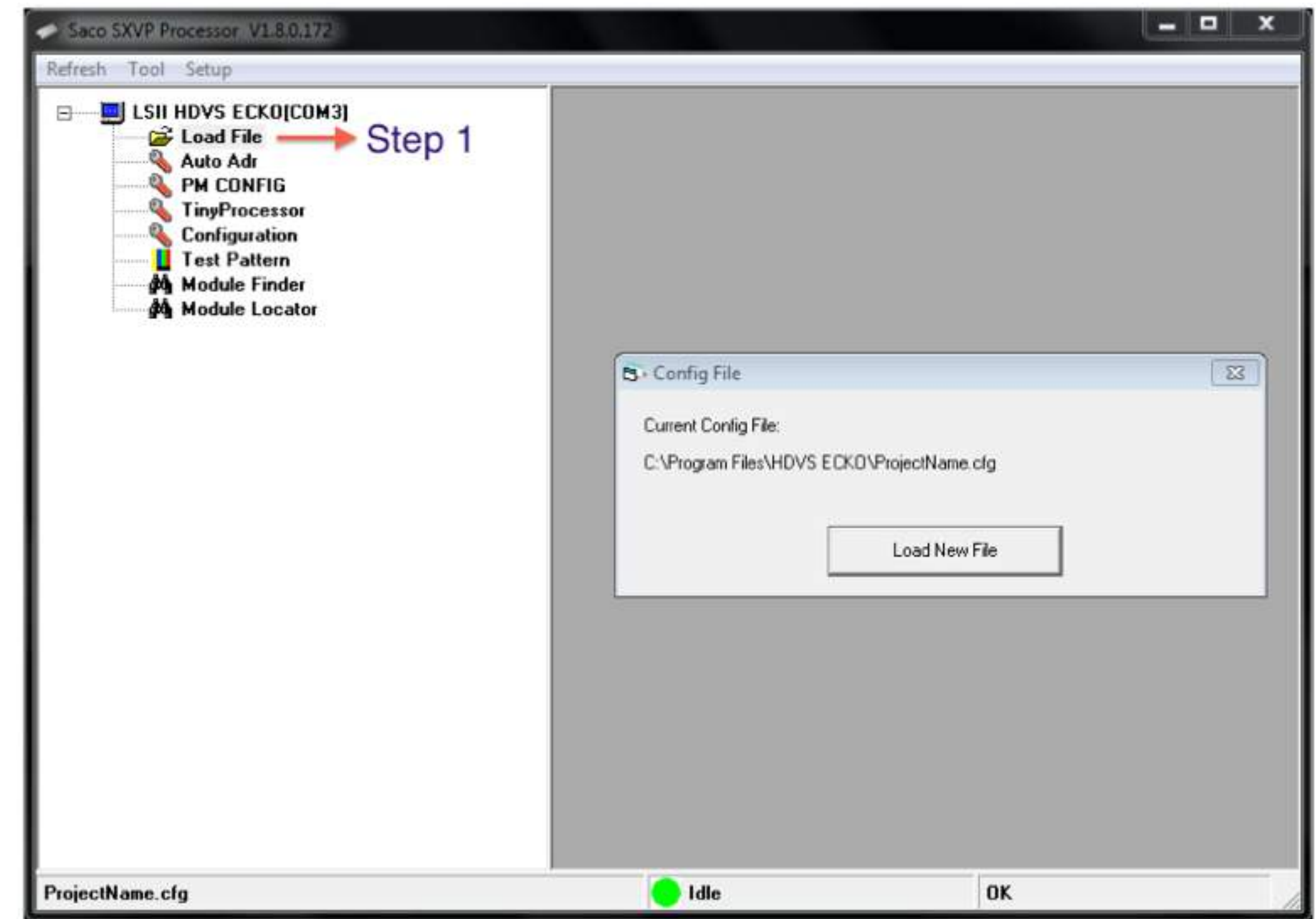
SOFTWARE USER INTERFACE

The SACO HDVS-ECKO processor has a friendly user interface, which communicates with the processor to configure the LSII LED Display (see image below).



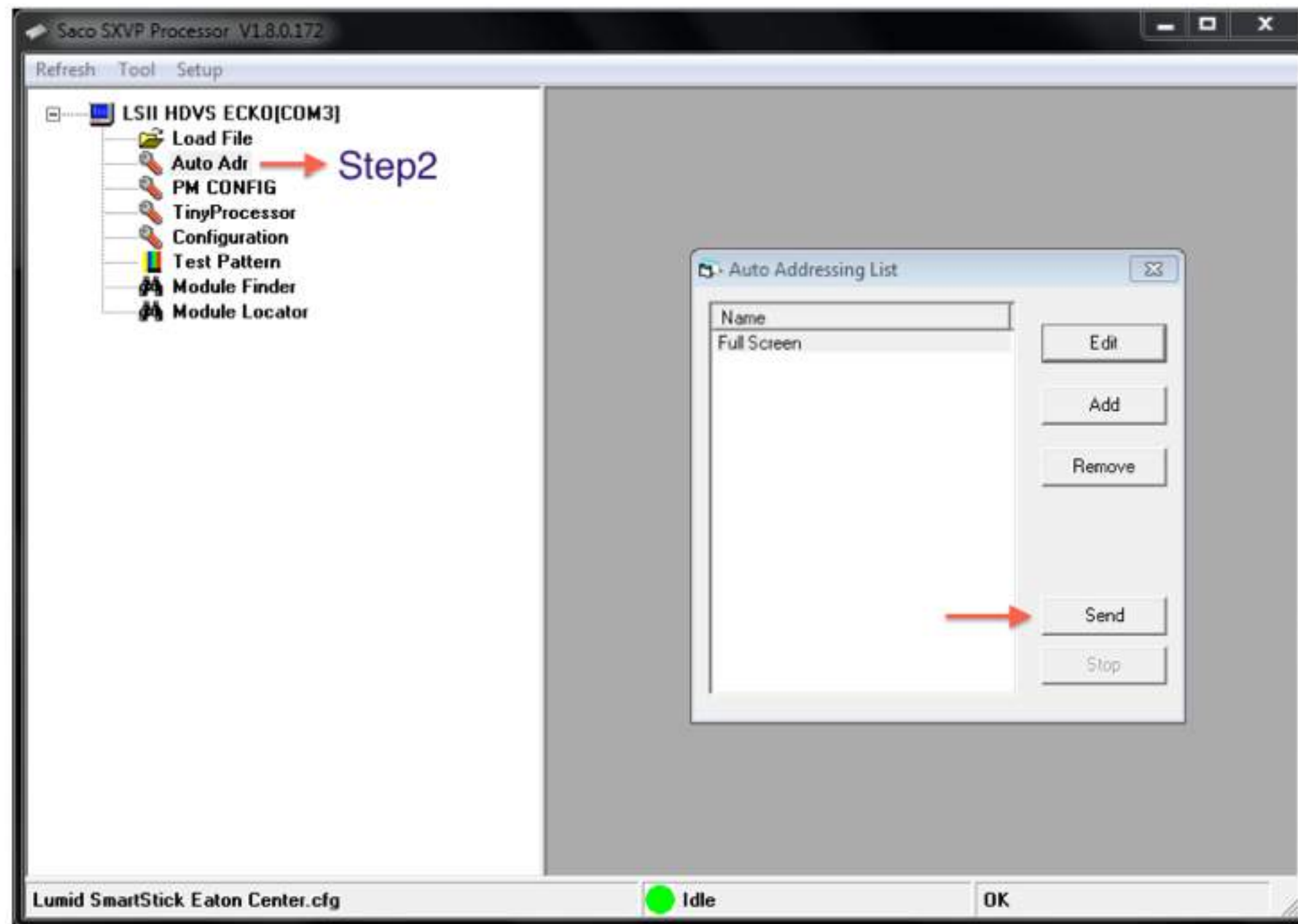
LED DISPLAY CONFIGURATION

There are four simple steps to follow to configure your LED Display: Step1: Load File
Click on "Load File" to load the configuration file for your display (see picture below)



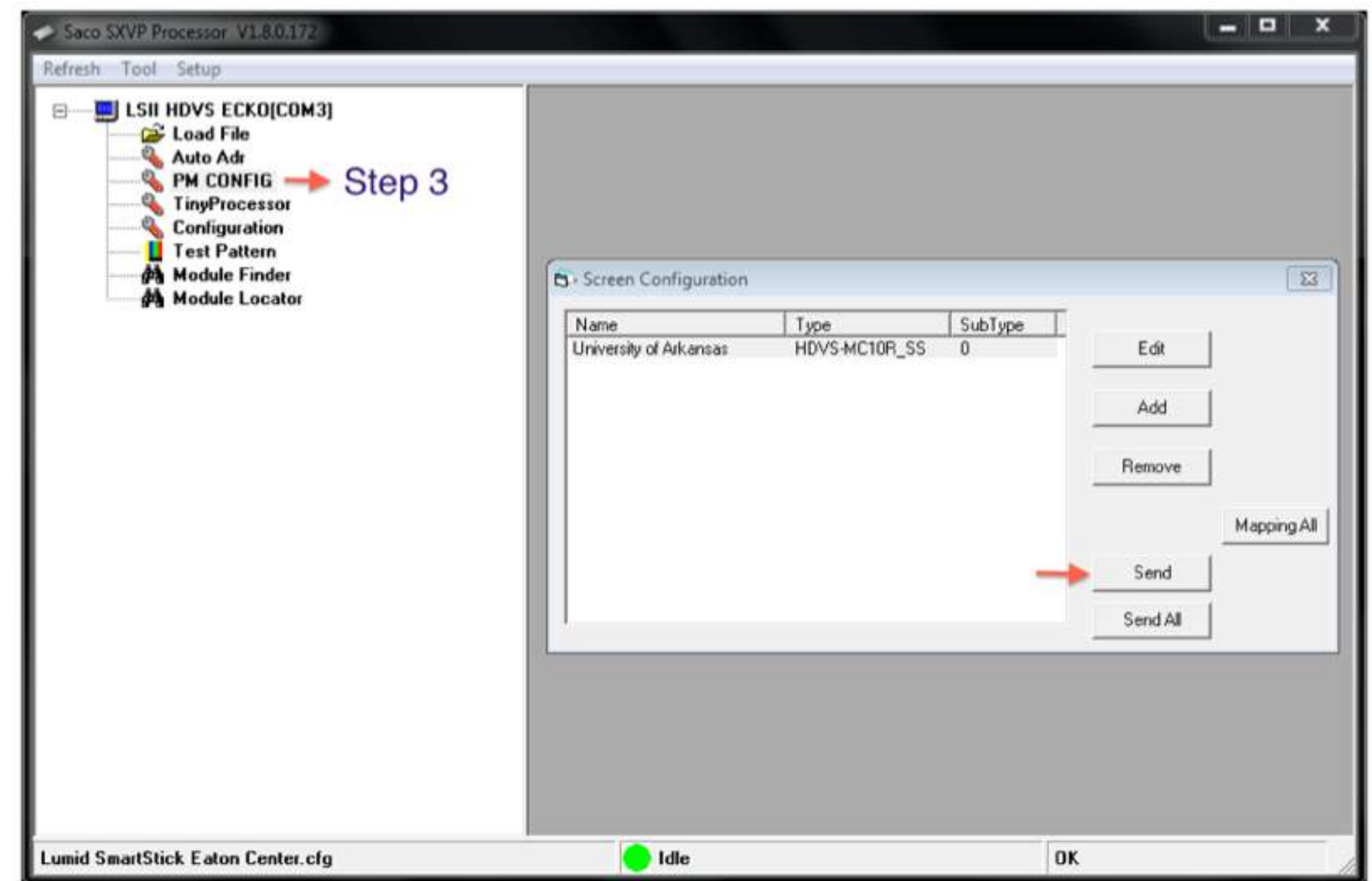
STEP 2: AUTO ADR

Click on “Auto Adr” to open the auto address window, Click on “Send” to Auto Address the LED Display (see picture below).



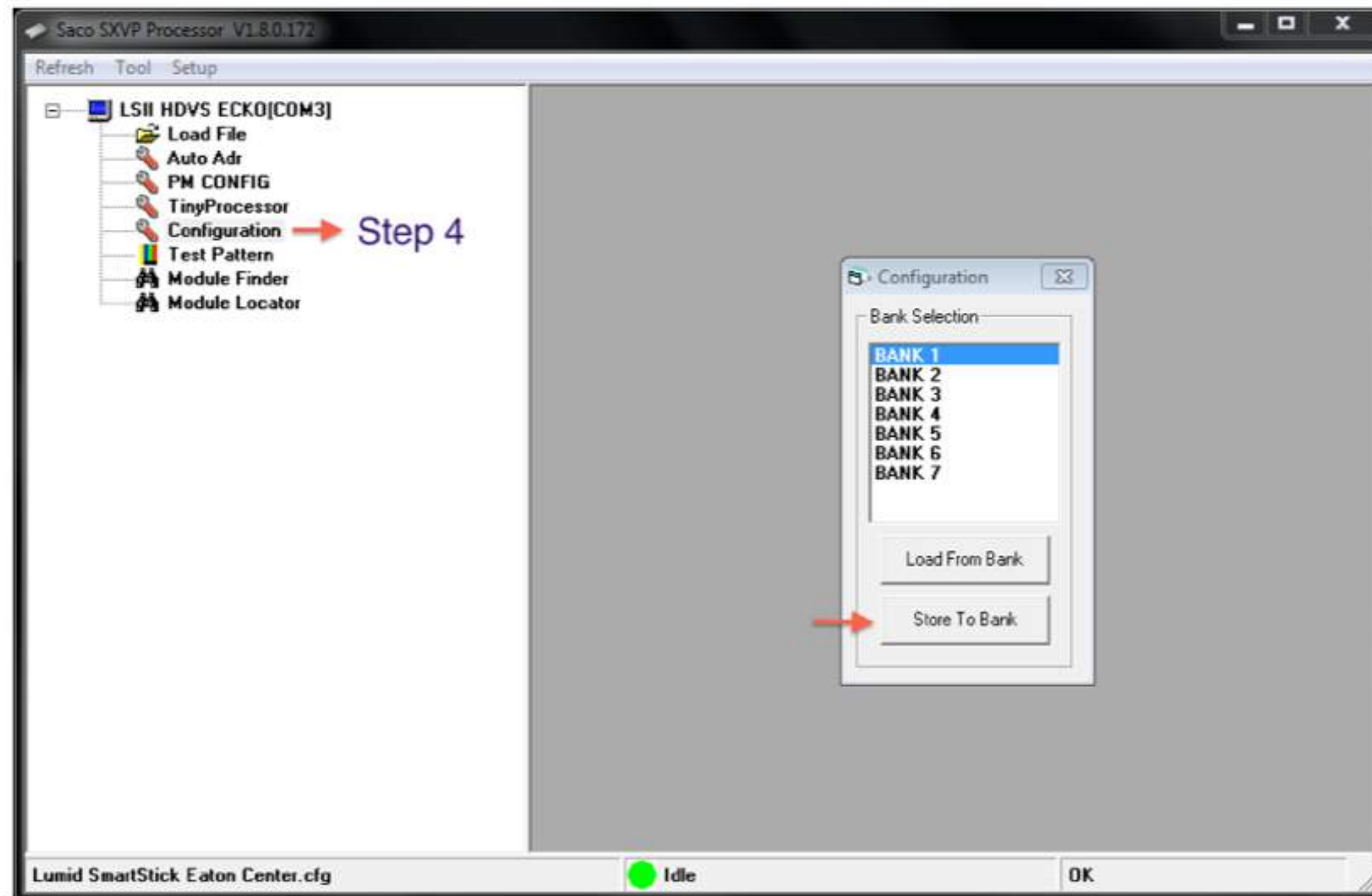
STEP 3: PM CONFIG

Click on “PM CONFIG” to open the display configuration window. Click on “Send” to configure your Display (see picture below).



STEP 4: CONFIGURATION

Click on “Configuration” to open the configuration window.
Click on “Store To Bank”.



MAINTENANCE

SACO recommends periodic cleaning of location where the processor is being installed. Over time these components can become dirty or full of debris.

IMPORTANT:

The SACO HDVS-ECKO processor should never be open for cleaning or any others reasons, this will void the warranty. If any contamination is notice on the inside of the SACO HDVS-ECKO processor, this should be photographed, photo sent to SACO, and unit should be returned on RMA (return material authorization) to SACO for service.

TROUBLESHOOTING

If problems occur during usage, unplug the product immediately and call or email us: SACO: Tel: +1 (514) 731-3999, Fax: +1 (514) 733-9444 or support@saco.com

REPLACEMENT OF FAILED COMPONENTS

If SACO HDVS-ECKO processor is in need of being replaced, please follow in order the steps below:

1. Ensure the AC power to the SACO HDVS-ECKO processor is turned off.
2. Remove the SACO HDVS-ECKO processor
3. Replace the SACO HDVS-ECKO processor with a spare one.
4. Send the SACO HDVS-ECKO processor back to factory for repair.
5. Reconnect power to the newly installed the SACO HDVS-ECKO processor Verify replaced the SACO HDVS-ECKO processor is working properly and that the integrity of the entire system is maintained.



SACO

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