

SOFTWARE RELEASE NOTES



Product: Series 400® Power & Data Distribution System

Manufacturer: PRG

Subject: S400 Software Version 5.0

Bulletin No: S400-009

Date: September 30, 2015

INTRODUCTION

S400 Software Version 5.0 Overview

Software version 5.0 is now available for the Series 400 System. This includes both the system device software and a new 5.0 version of the S400Tools utility.

Refer to "[Installing S400 Software Version 5.0](#)" on page 7 for instructions on updating Series 400 devices.

More information:

- + For complete Series 400 SV 5.0 operating instructions, refer to the latest version of the Series 400 Power and Distribution System User Manual (02.9680.0001).
- + For complete S400Tools 5.0 operating instructions, refer to the latest version of the S400Tools User Manual (02.9680.0020).

Note: To improve reliability of the software update/download process and the network hardware configuration, a new microSD Flash Memory Card should be installed in all Super Node™ units. Refer to Technical Bulletin VX76-015 for upgrade procedures.

New Features

- + **Streaming ACN (ANSI E1.31)** - Series 400 now supports Streaming ACN (sACN) in addition to Art-Net as a DMX-over-Ethernet protocol. This includes processing of externally generated sACN and the option of translating incoming DMX512 inputs to sACN instead of the default Art-Net.
sACN is an ANSI-standard protocol that includes several features to improve performance and manage system sources. Multicast addressing is used to allow receivers to filter unneeded universe data. A universe priority value is used to inform receivers which source(s) should be processed. The Series 400 system uses the priority to implement system source switching and to arbitrate between available external sources of sACN.
Series 400 systems can support mixed Art-Net and sACN inputs. Outputs configured for a given universe number will accept either Art-Net or sACN sources. If both are active, the Art-Net and highest priority sACN sources will be merged (if merging is enabled).
- + **Super Node** - Series 400 now supports software update and remote configuration of the Super Node in Series 400 mode, which can generate up to eight (8) DMX512 and sixteen (16) Art-Net outputs from incoming DMX-over-Ethernet data.
- + **Remote Device Management (RDM, ANSI E1.20)** - Devices connected to Series 400 Breakout modules or Ethernet can now be monitored and configured via RDM. (Supported by Super Node after FPGA upgrade.)
- + **MagicQ Takeover Support** - A hot takeover between two MagicQ consoles will happen instantly instead of after a ten second timeout.

Corrected Issues

- + Fixed Backlight configuration from S400 Tools.
- + Fixed issue where FOH did not allow input setting to ‘*’.
- + Fixed issue where FOH could not change system selection via switch or display.
- + Fixed issue with FOH rack module DMX outputs shutting down after extended up-time.
- + Super Node units now included in Node count on System Overview display.
- + Super Node: System source display now always displays properly.
- + Fixed issue with flickering/jumping on lights controlled by DMX connected to input ports 1 or 2 of FOH module.
- + Universe list in System menu now scrollable in both directions.

NEW FEATURE DETAILS

Series 400 System

Several of the interface menus have been updated to support the new features.

System Overview

The System Overview menu now shows sACN universe count, number of Node/Super Nodes, and number of Breakout Boxes.

```
System Overview a
-----
ArtN:  10  10  0  0
sACN:   2
Rack:   6  Node:  5
BOB:   9  FOH:  2
-----
univ  mod  foh  exit
```

System Universes

The System:Universes menu now includes a column which indicates "A" for Art-Net and "s" for sACN universes.

```
System: Universes a
-----
A  Aa  FOH1      P0
A  Ba  FOH1      P1
s  Ca  ModSR1     P1
s  Da  ModSR1     P3
-----
<    >      exit
```

Setup

The Setup 1 menu now includes a DMX to Ethernet option. This option is for all XLR inputs. It selects which protocol incoming DMX512 will be converted to, either Artnet or sACN.

```
Setup 1 a
-----
Name:  Mod101
Display: alpha
Merge: 2-way
DMX to Eth: sACN
-----
next  v  ^  done
```

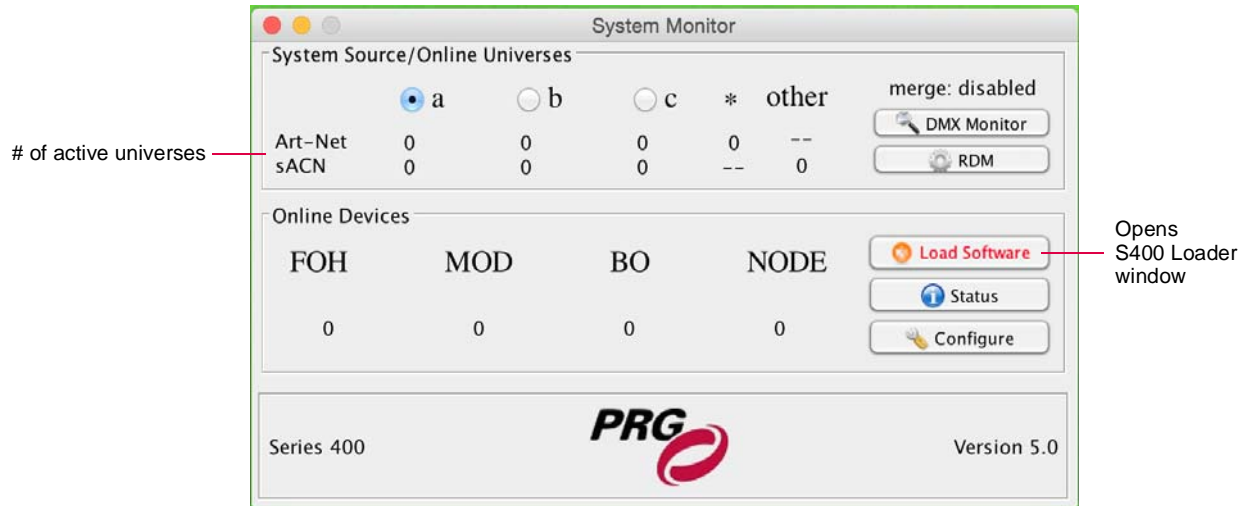
```
Setup 2 a
-----
Light: On
Confie: mod
Reset: no
S/N: 00042
-----
next  v  ^  done
```

S400Tools Utility

Several of the application windows have been updated to support the new features.

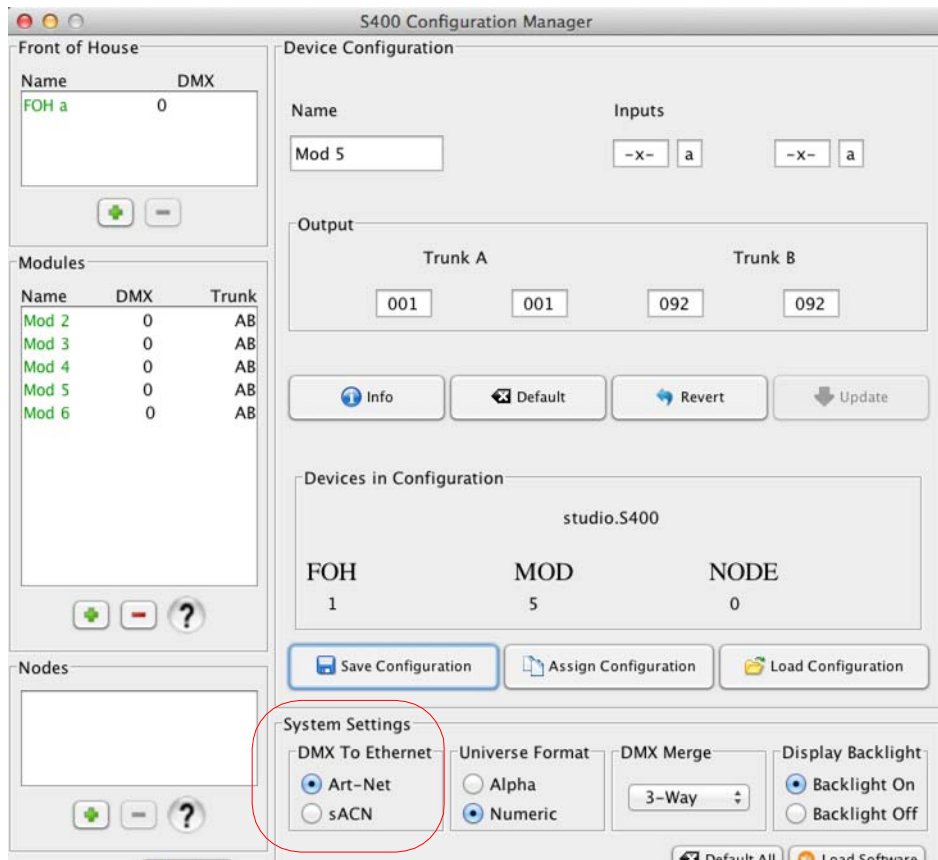
System Monitor

The System Monitor window now displays the number of active universes by both Art-Net and sACN. A convenient **Load Software** button has also been added to this window. (It will only be visible if software updates are needed.)



Configuration Manager

The Configuration Manager window now includes a "DMX To Ethernet" system setting. This option selects which protocol the incoming DMX512 will be converted to, either Art-Net or sACN.

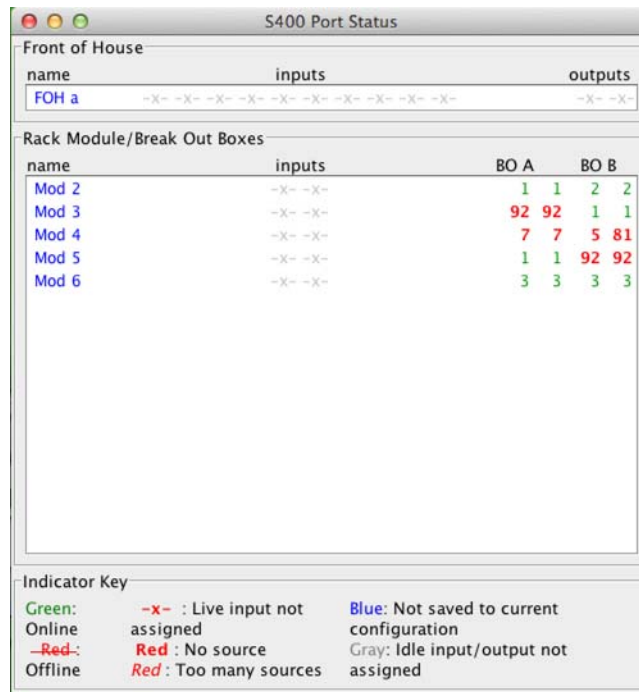


Note: RDM messages are interleaved with DMX512 control, so RDM should not be enabled during show conditions. For more information refer to the Series 400 Tools User Manual or the ANSI E1.20 standard.

Port Status

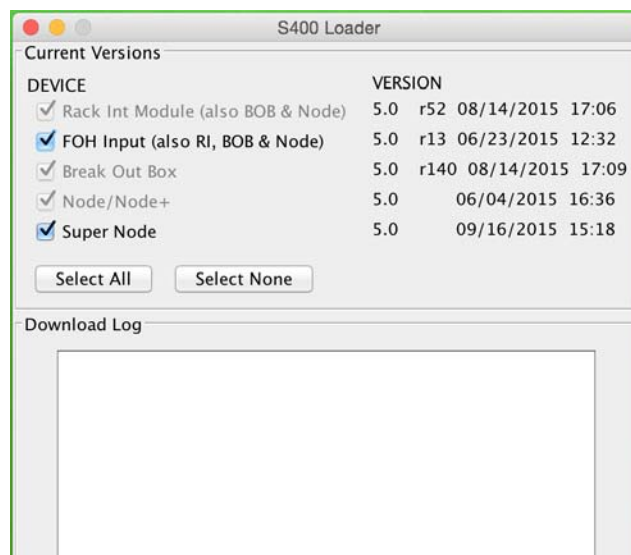
A new Port Status window has been added. The window displays the current status of online and stored devices along with the current state of configured DMX512 input and outputs.

Color coding indicates each device’s status, as defined in the Indicator Key at the bottom of the window.



Load Software Enable by Device Type

The S400 Loader window now supports loading of individual device types instead of always loading all device types. Devices can be selected by clicking their checkbox.

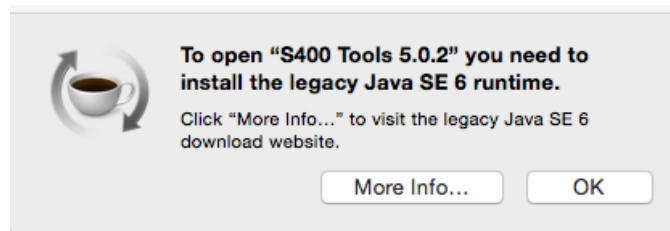


INSTALLATION

Installing S400 Software Version 5.0

The S400Tools Utility is used to update the software in all S400 devices. S400Tools can be run on any Mac® or Windows® computer running Java 6 or later. It may be necessary to install or upgrade Java on the computer before using S400Tools. Java is available at: <http://java.com/getjava/>.

Note that the following dialog comes up on a Mac that does not have any version of Java runtime installed. It is not required to install a legacy version of Java to run S400Tools; the latest version should be downloaded and installed.



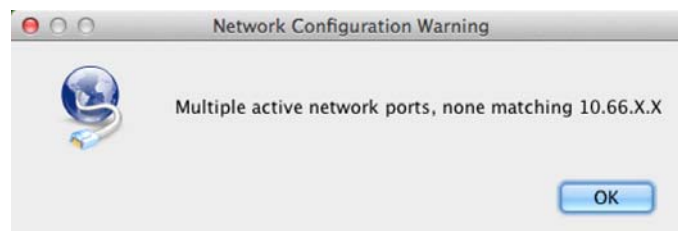
Requirements:

- + Mac® or Windows® computer with Java version 6 or later installed
- + CAT5e Ethernet Cable

To install S400 Tools Utility:

- Step 1. Download or copy S400Tools jar file to computer.
- Step 2. Connect CAT5e Ethernet Cable from computer to Series 400 system.
- Step 3. Configure network connection. The application looks for a port with an IP address in the pre-defined Series 400 subnet (10.66.x.x). Configure the IP address of the port to be used to an address in that range, such as 10.66.200.1, and the subnet mask to 255.255.0.0.

If an active 10.66 port is not found, the following message will be displayed:

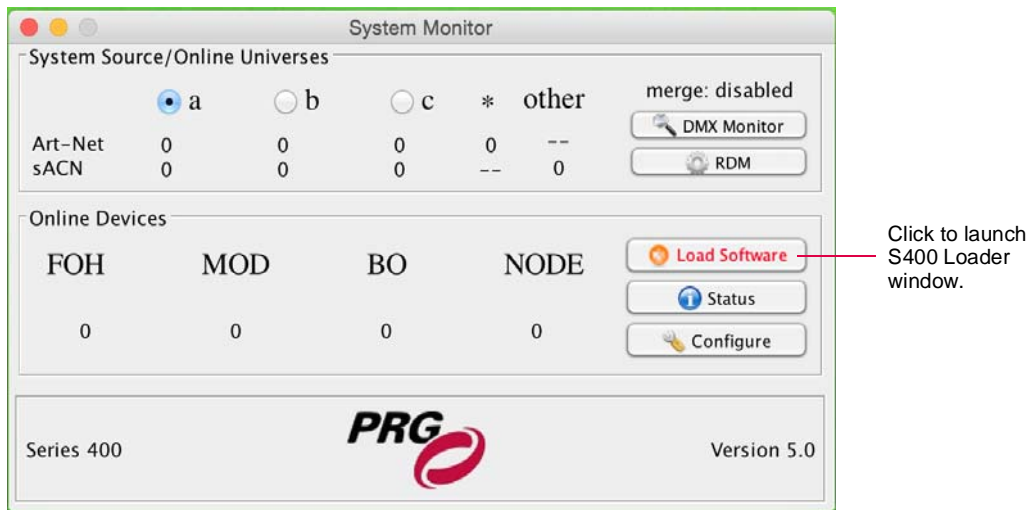


- Step 4. At computer, locate S400Tools application icon. Double-click icon to launch program.
- Step 5. After startup, the software will ask if the previous configuration file should be loaded. Click Yes or No as required.



To update S400 system software:

Step 1. At S400Tools System Monitor window, click **Load Software** button. (The button will only be visible if software updates are needed.)



Step 2. At S400 Loader window, select devices to update by clicking their checkbox.

Step 3. Click **Start Download** button to begin update. All device software versions will be updated sequentially. Progress of the update will be shown via the text display and the progress bar.

