



SOFTCAST

Software for Broadcast

Technical Document

Release Version 1.0

Product Sheet

SC-Device Manager

3rd Party Device Control Module

<http://www.softcast-technology.com>

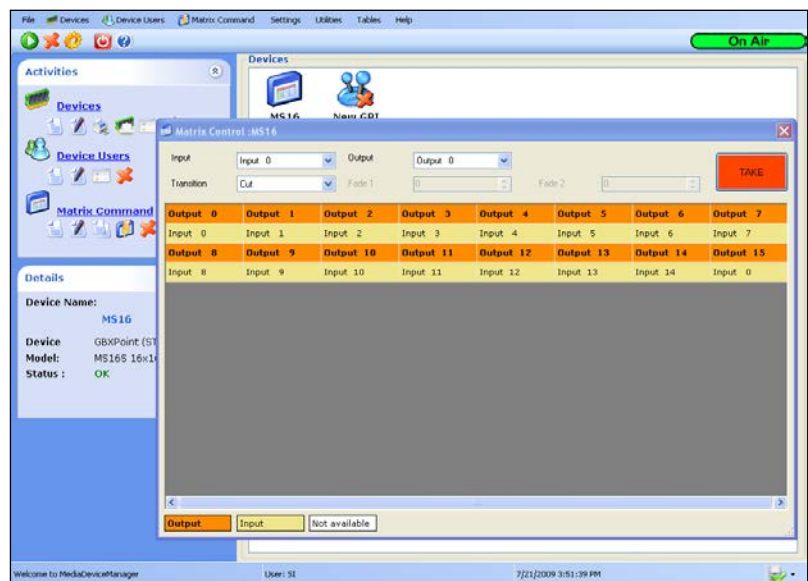
SC-DeviceManager

SC-DeviceManager is the module that manages all the devices involved in the automation process. It supports and controls devices like Audio/Video Routers, VTRs, Master Control Switchers, Logo generators, Graphic and Character generators, Aspect Ratio converters, Time-code generators and others.

The control of the devices could be done using IP or Serial port. SoftCast usually provides the multi-serial MOXA NPORT 5650: it is a device that works in the network and can be shared between **SC-DeviceManager** and its Backup (if there's).

Key Features:

- Local language GUI
- Centralized control over IP or via Serial connection of all devices
- Matrix commands
- User management
- Fault-tolerant architecture
- Time-code board and synch
- More than 200 different device drivers hosted



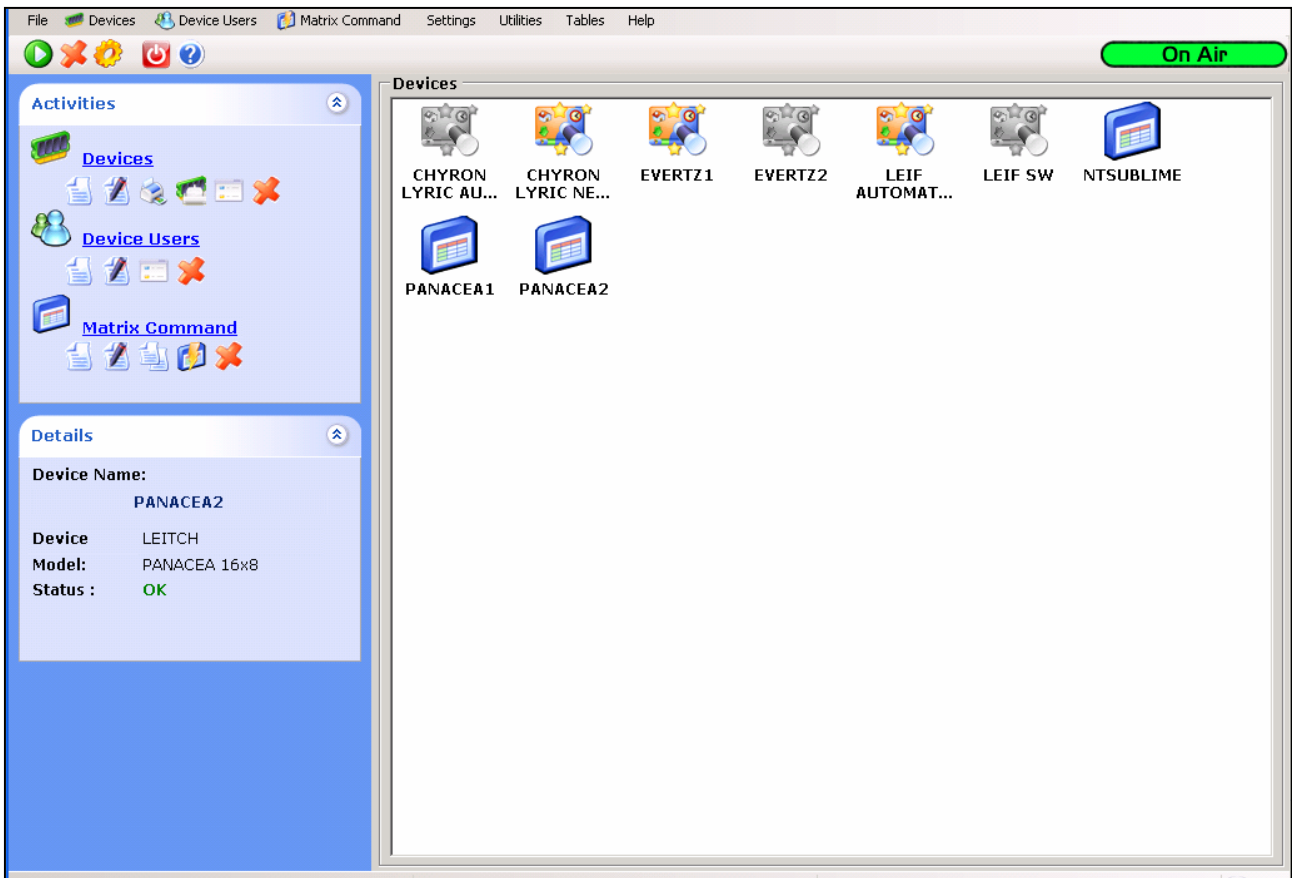
SC-DeviceManager module includes an intuitive GUI that displays all the connected devices. Each device can be identified by the name, that is fully customizable by the user, and by the icon that shows the device type.

SC-DeviceManager constantly monitors the status of each device.

SC-DeviceManager flexible design allows the quick definition of all the matrix commands used by the automation. Each IN (Source) and OUT (Destination) in the router can be renamed and assigned to a specific command; in addition it's possible to specify the users that can use and execute these commands.

SC-DeviceManager module is composed of two sub-modules. The first is installed and runs as a Windows service and enables the serial or IP control of the devices; the second one is the monitoring application for the user.

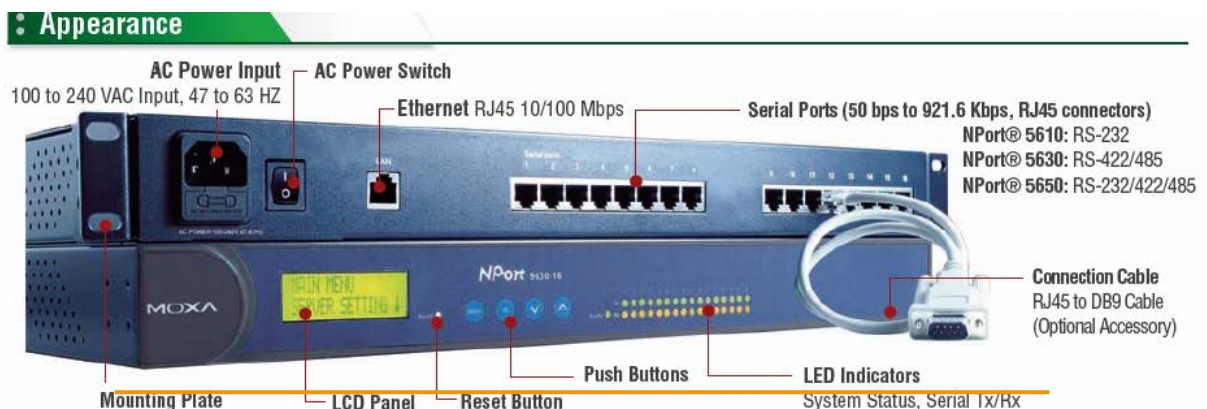
Each configuration change is saved in real time in the database and will be immediately applied for all the users.



Centralized control over IP or via Serial connection of all devices involved into broadcast automation

The devices involved in automation are divided in two different types. There are devices controlled via Serial Protocol RS-232, RS-422 or RS-485 and devices controlled using TCP/IP or UDP/IP Protocol.

The two types can coexist in **SC-DeviceManager** and they will be both monitored and controlled by the application.

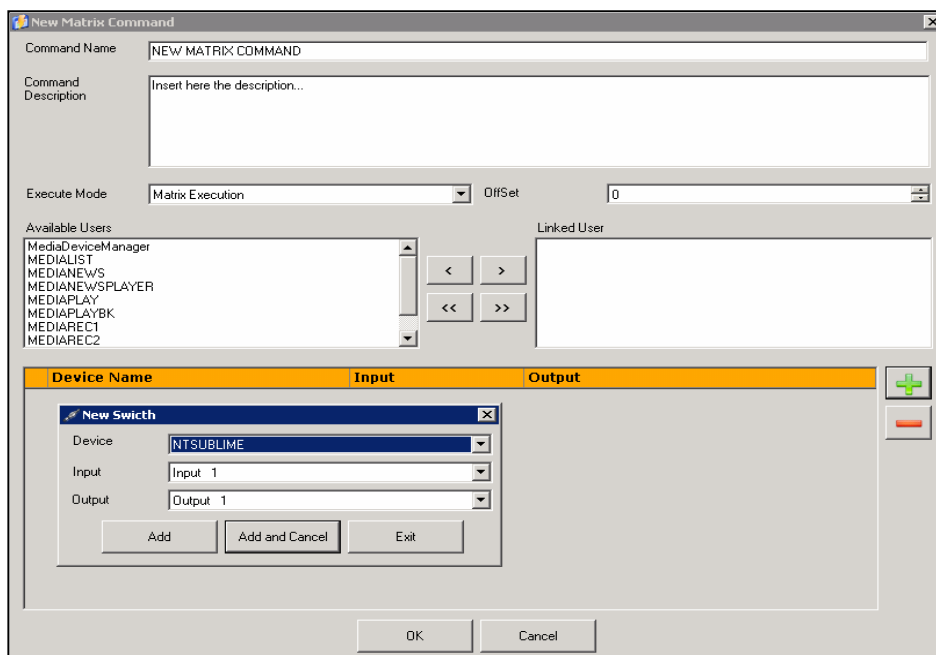


The management module is run by a multi serial device, like the MOXA NPORT-5650 or similar.

Regarding devices connected using IP Protocol they need to be connected in the automation Service network.

Matrix commands

SC-DeviceManager Manager allows the addition of all the matrix commands that the automation needs in order to perform properly. It's possible to tag each device, with user defined names.



User management

Each command can be used only by the users that are linked to that command.
As user, we define the Softcast application that will use the command.

For example we can create the user **“SC-Ingest”** (Softcast module for ingest from VTRs and live sources) that will be linked only to the commands for ingest (VTRs, Live sources, Satellite sources, etc.).



Fault-tolerant architecture

The fault-tolerant backup option for **SC-DeviceManager** is a 1:1 (i.e. Clone) configuration installed in a separate server machine and running in stand-by mode (Active/Passive) and constantly updated.

Both the **SC-DeviceManager** are installed and running as Windows Services either in the main machine and in the backup machine. Both the services are working at the same time: one in Active mode and the other in Passive mode. Should a fault occur in the main machine or service, all SoftCast client applications switch to work with the backup service.

TIMECODE board and synchronization

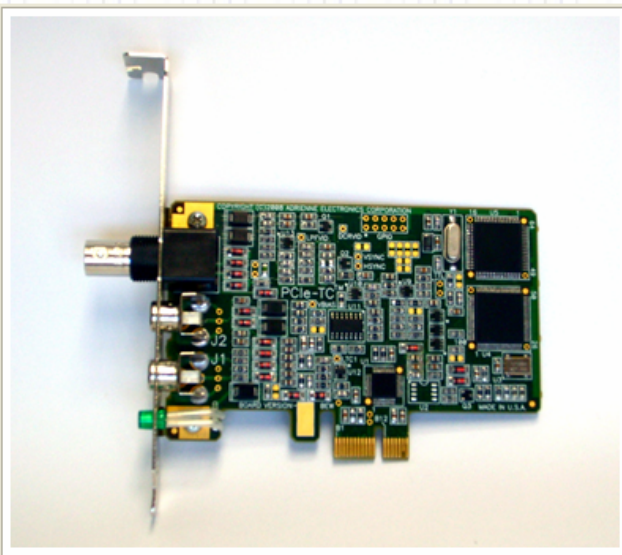
In the image below you can find the specs of the board we use to sync the time code.

The Adrienne board is installed in the same machine as the **SC-DeviceManager**, this machine will work as a Server and the other workstations will operate as Client. The synchronization will be done using AboutTime software.

The time setting will be done thru a GPS Time Code Unit or as an alternative the synchronization can be done via IP using NTP (Network Time Protocol).

TIME CODE & CAPTION BOARDS FOR THE PCI-EXPRESS BUS

Our fifth generation of time code boards. These boards fit into PCI Express x1 through x16 slots, both standard height (by default, shown at right) and low profile (see pictures below, LOWB option). All boards include a high performance on-board processor, a green-colored external time code status LED, system diagnostics, in-system electronic software updates, plug and play installation (no jumpers), software drivers, full RoHS compliance, full FCC and CE-Mark approval, and automatic SMPTE/NTSC(30fps), EBU/PAL(25fps), and FILM (24fps) operations. Analog video circuitry can synchronize to 13 different video standards, including 720p and 1080i signals having tri-level sync pulses. RCA jacks are standard for LTC, and a BNC connector is used for video/VITC. 4-channel GPIO option available for external logic interfacing. Large order customization may be available. See details below for pricing, additional model/function and connector option information.



More than 200 different devices drivers hosted

Until today Softcast supports with **SC-DeviceManager** more than 200 different devices:
here's a partial list:

SUPPORTED DEVICES

Matrix

BlackMagic Design

Micro VideoHub 16x16 16 Input,16 Output

ELCA Matrix

SR16 super regia(16x16) 16 Input,16 Output

Elpro TZ

Elpro TZ16 16x16 16 Input,16 Output

Elpro TZ08 8x8 8 Input,8 Output

Elpro SDZ16 16x16 16 Input,16 Output

Evertz (Quartz) QMC Series

64 Input,2 Output - Master Control

Down Stream Keyers support (3 DSK)

Evertz (Quartz) QMC-MCS/QMC-2/QMG (64 x 2)

GBXPoint (STE/BTS)

MS8S 8x8 8 Input,8 Output

MS16S 16x16 16 Input,16 Output

MS24SV\MS24SAV 24x24 24 Input,24 Output

MS32SV\MS32SAV 32x32 32 Input,32 Output

MS64SV\MS64SAV 64x64 64 Input,64 Output

MS32SV\MS32SAV 48x48 48 Input,48 Output

Grass Valley

BDS6464 (NE) 64 Input,64 Output

VikinX (NE) 8x8 8 Input,8 Output

VikinX (NE) 16x16 16 Input,16 Output

VikinX (NE) 128x128 128 Input,128 Output

Grass Valley 100

KayakDD1 GVG100 16 Input,2 Output - Master Control

Grass Valley 200

Pinnacle PDS 9000 36 Input,2 Output - Master Control

Grass Valley Master control 2100

M2100 16 Input,2 Output - Master Control

LEITCH

PANACEA 8x8 8 Input,8 Output

PANACEA 16x16 16 Input,16 Output

PANACEA 32x32 32 Input,32 Output

PANACEA 16x8 16 Input,8 Output

Network Sublime 64x64 64 Input,64 Output

Platinum 32x32 32 Input,32 Output

Platinum 40x40 40 Input,40 Output

PANACEA 32x16 32 Input,16 Output

Integrator 64x64 64 Input,64 Output

Platinum 64x64 64 Input,64 Output

BlackMagic Micro Videohub 16x16 16 Input,16 Output

Miranda Presmaster series

17 Input,3 Output - Master Control

Down Stream Keyers support (4 DSK)
Presmaster Control System 17x3

PESA

OCELOT 8x8 8 Input,8 Output
OCELOT 16x16 16 Input,16 Output
OCELOT 32x32 32 Input,32 Output

Philips - Venus

Venus 64x64 64 Input,64 Output
Venus 48x48 48 Input,48 Output

ProBel Sirius/Nevion

Sirius 256x256 256 Input,256 Output
Nevion 34x34 256 Input,256 Output
Nevion 128x128 256 Input,256 Output

ProBel TX

ProBel TX 420 20 Input,2 Output - Master Control

Quartz Type I

Quartz Type I (64x32) 64 Input,32 Output
Quartz Type I (64x64) 64 Input,64 Output
Quartz Type I (16x16) 16 Input,16 Output
Quartz Type I (32x32) 32 Input,32 Output
Quartz Type I (128x128) 128 Input,128 Output

Savis 2xx

Savis 204 (10x1) 10 Input,1 Output
Savis 208 (8x8) 8 Input,8 Output

Savis 3xx

Savis 316 (16x16) 16 Input,16 Output

Sierra Video Series

Sierra Video ProSeries 8x8 8 Input,8 Output
Sierra Video ProSeries 16x16 16 Input,16 Output
Sierra Video ProSeries 32x32 32 Input,32 Output

Sigma

Sigma SCI-2144 16x16 16 Input,16 Output
Sigma SCI-2144 32x32 32 Input,32 Output
Sigma MRX 16x16 16 Input,16 Output
Sigma MRX 32x32 32 Input,32 Output
Sigma MRX 32x24 32 Input,24 Output
Sigma SCI-2144 32x24 32 Input,24 Output
Sigma SCI-2144 8x8 8 Input,8 Output
Sigma MRX 8x8 8 Input,8 Output
Sigma MRX 48x32 48 Input,32 Output
Sigma SCI-2144 48x32 48 Input,32 Output

Utah

Utah Matrix 16x16 16 Input,16 Output
Utah Matrix 16x8 16 Input,8 Output
Utah AVS Matrix 30x10 30 Input,10 Output

Utah Prosan

Utah SC2000 16x16 16 Input,16 Output

Memory Card Recorder

Panasonic DVCPro
AJ-SPD850

Graphic Generator

Anywhere Video CastGenie
CastGenie Logo, Graphic Projects
CD Multimedia
KAPPA2 Logo, Graphic Projects
Chyron Intelligent Interface
Converge Horizons Logomaster II Logo, Graphic Projects
Pixel Power Collage Logo, Graphic Projects
ORAD HDVG Logo, Graphic Projects
Lyric Pro 7 Logo, Graphic Projects
Inscriber Logo, Graphic Projects
Chyron LEIF Lyric
Chyron LEIF Lyric Logo, Graphic Projects
ClassX
CGPlayout Logo, Graphic Projects
ClassXStealthCG
StealthCG Logo, Graphic Projects
Control Bus Protocol
Harris NEO IconLogo (MGI-3903) Logo, Graphic Projects
ELCA
LD 3000 Logo
LD 2000 Logo
DL 16 Logo
DL 8 Logo
Evertz (Quartz) QMC Series
Evertz (Quartz) QMC-MCS/QMC-2/QMG (64 x 2) Logo
Evertz 77xx-78xx(GVG M2100 prot)
Evertz 7725DSK-LG Logo, Graphic Projects
Evertz 9500-9600 series
Evertz 9525DSK Logo, Graphic Projects
Evertz 9525DSK-LG Logo, Graphic Projects
Evertz 9525LG Logo, Graphic Projects
Evertz 9625LG Logo, Graphic Projects
Evertz 97xx(GVG 2100 prot)
Evertz 9725 Logo
FORA
Compix Logo, Graphic Projects
Karoui & Karoui Interactive
NOOR CG System Logo, Graphic Projects
Leitch CCS X50 Protocol
Leitch X50 HD/SD Logo, Graphic Projects
Leitch CCS X75 / X85 Protocol
Leitch X75 HD/SD Logo, Graphic Projects
Leitch X85 HD/SD Logo, Graphic Projects
Leitch DCN Protocol
DPS-475/575 Logo, Graphic Projects
Miranda Presmaster series
Presmaster Control System 17x3 Logo, Graphic Projects
Oxtel/Miranda
ImageStore II Logo, Graphic Projects
ImageStore 750 Logo, Graphic Projects

Densitè LGK-3901 Logo, Graphic Projects
Peripheral Bus II Protocol
Harris NEO IconLogo Logo, Graphic Projects
SImedia MediaCG
MediaCGPlayer Logo, Graphic Projects
STE LG Series
STE LG100 Logo, Graphic Projects
STE LG32 Logo, Graphic Projects
STE LG4-LG32 (2 channel) Logo, Graphic Projects
STE LG3000 Logo, Graphic Projects
STE LG200 Logo, Graphic Projects
TitleBox
TitleBox Graphic Projects

VideoTape Recorder

Panasonic DVCPro

AJ-D250
AJ-D455
AJ-SD255
AJ-SD755E
AJ-SD93
AJ-SD930B
AJ-SD955B
AG-DV2500

SONY RS-232C Protocol

UVW-1400
UVW-1400P
UVW-1400A
UVW-1400AP
UVW-1200
UVW-1400P

SONY RS-422A Protocol

PVW-2800
PVW-2800P
UVW-1800
UVW-1800P
PVW-2600
PVW-2600P
PVW-2650
PVW-2650P
UVW-1600
UVW-1600P
DSR-1500
DSR-2000
UMATIC SP
VO-9000P
VO-9600P

GPI

Decision

Decision PCI 8i - 8o

Moxa

Moxa ioLogik E2210

Encoder

Demo

Demo GhostDevice #1

Digital Rapids

DRC Stream 500
DRC Stream 1000
DRC Stream 1400
DRC Stream 1500
DRC Stream 1600
DRC Stream 2500

DirectShowEncoder

Aja - Xena SD
BlackMagic - DeckLink SD
ViewCast - Osprey 2xx
EZCapture - Video only
DirectSound

EVS

EVS XT Family

GammaRed

GammaRed Shine

GrassValley

K2 Media Client

Leitch Nexio

Nexio 400

Matrox

Matrox DS.Xmio
Matrox DS.Xsd

Omneon

Omneon Spectrum

Seachange

Seachange Node
Seachange MediaClient

Windows Media Encoder

WindowsMediaEncoder Series 9

Decoder

Demo

Demo GhostDevice #1

DirectShowDecoder

Aja - Xena SD
BlackMagic - DeckLink SD
VideoToaster - VT4
Demo - VGA

EVS

EVS XT Family

GammaRed

GammaRed Shine

GrassValley

K2 Media Client

IP-TV

DVB-IP Decoder

Leitch Nexio

Nexio 400
Nexio NX3600

Omneon

Omneon Spectrum
Seachange
Seachange Node
Seachange MediaClient
Stradis
Stradis DM275
Stradis DM280
Stradis DM290

Display

BiosElettronica
Display VS5-6
Display ML70C
Elman
Elman 04
EuroDisplay
VS 13-6
Ible
Ible 20
Sis
Sis 06

Storage Archive

Demo
Demo GhostDevice #1 Video File Storage
EVS
EVS XT Family Video File Storage
FileServer
Windows FileServer Video File Storage
FTPServer
Standard FTP Network Server Video File Storage
GammaRed
GammaRed Shine Video File Storage
GrassValley
K2 Media Client Video File Storage
Leitch Nexio
Nexio 400 Video File Storage
Nexio NX3600 Video File Storage
MediaTape Library
Standard MediaTape Library Tape Storage
Omneon
Omneon Spectrum Video File Storage
Omneon MediaDeck Video File Storage
Quantum
SuperLoader 3A Tape Storage
SeachangeStorage
Seachange Node Video File Storage
Seachange MediaClient Video File Storage

Prompter

Demo

Demo GhostDevice #1

Graphics Overlay

AJA

AJA Xena LHe/LHi

AJA Xena 2K

AJA Corvid22

BlackMagic

DeckLink

Demo

Demo GhostDevice #1

Frame Synchronizer

Demo

Demo GhostDevice #1

Leitch CCS X50 Protocol

Leitch X50 HD/SD

Leitch CCS X75 / X85 Protocol

Leitch X75 HD/SD

Leitch X85 HD/SD

GSM Modem

AT Modem

Standard AT GSM Modem

Moxa G2110 AT GSM Modem