Nexio IconMaster™

Master Control Switcher

Nexio IconMaster™ is a cost-effective, modular master control and branding solution, offering the ability to combine critical master control functions with multi-integrated branding — all in a modular card format with room to add and grow as requirements change.

Nexio IconMaster is both SD and HD-ready, right from the outset. Customers are able to migrate from an SD Master Control to an HD Master Control by means of a straightforward configuration utility, without additional cost or hardware changes.

Product Features

Future-proofed

- SD- or HD-configurable with no hardware changes
- Upgrade from the Nexio IconLogo™ branding system to Nexio IconMaster master control
- RoHS-compliant
- Up to eight channels controlled from one RCP (remote control panel) or SCP (software control panel — one at a time or as mater and slaves.)

Flexible

- Optional assignable (two-channel) squeezeback with third background input
- Direct control of up to 12 auxiliary bus router inputs on up to 12 auxilliary router busses
- Program Bus Hot Cut for quick single-button on-air program changes
- Fast reset for single-button reset of audio and video processing parameters
- Hot keys for keyer changes, audio overs, background changes
- Quick Select single-button macros to save and recall source, keyer, and audio setting combinations
- 16 programmable and flexible effects with multiple segments for powerful looks

Routing Options

- External routing with 12 or 22 directly accessible inputs and connection to any size primary router
- Dynamic routing control capabilities allows router inputs to be re-mapped on the fly
- Automatic control of emergency backup source routing
- Native Ethernet or serial control of Platinum™ routing systems
- Available third-party router control

Control

- 12- or 22-input deskmount/rackmount control panel
- Industry-standard buttons with LEDs for source selection and transitions
- User-configurable LCD buttons
- Optional intelligent audio control panel
- Optional enhanced software control application
- CCS™ control and monitoring with Magellan CCS™ when NEO® Resource Card (3901RES-E) is installed

Multi-channel modular design

- Two NEO-slot solution provides up to six channels in 3RU
- Three NEO-slot solution with optional discrete audio processing
- Audio monitoring (embedded audio with external routing)
- Operate multiple channels from single panel including master/slave modes

Audio Control

- Dedicated audio control panel offers direct access to channel gains
- Multiple audio channels can be ganged together as a cluster and controlled from a single knob
- Audio cluster gain values are tracked independently of sub-channel, providing powerful gain control
- Directly accessible audio over ratio control
- Up to 16 audio mapping profiles may be assigned from the control panel
- Passes non-PCM audio such as Dolby® E and Dolby® AC-3 on selected channels while processing PCM channels

Additional Features

- Full next-event preview
- Six keyers with assignable key priorities
- Two external, key/fill
- Four internal branding keys with up to 4 GB online logo storage
- Static and animated logos
- Analog and digital clocks
- Crawls, static text and Emergency Alert System (EAS)/Amber Alert
- Assignable clean output
- Flexible audio options
- Eight channels discrete (SD or HD)
- Eight or 16 channels embedded (SD)
- 16 channels embedded (HD only)
- Two audio overs with dedicated inputs
- Full-channel audio assignment and processing
- Machine control via serial or GPI outputs
- Full automation control
- Zero frme cut

Options

- Relay bypass with dedicated bypass input
- Discrete AES audio inputs/outputs
- Two-channel video effects/squeezeback
- Text crawl with dynamic data insertion via RSS and ODBC connectivity
- EAS and Amber Alert insertion

Product Details

Enhanced Control

IconMaster features a 12- or 22-input deskmount/rackmount control panel and in-dustry-standard buttons with LEDs for source selection and transitions, as well as fully configurable LCD buttons. An intelligent audio control panel and touch-screen configuration and control are available as options.

The IconMaster is fully controllable under automation, and is supported by a broad range of automation systems including Imagine Communications D-Series™ and ADC™ playout automation.

Unsurpassed Flexibility

With IconMaster, flexibility is a core feature. With assignable (two-channel) squeezback position, you have the power to choose. External routing with 12 or 22 directly acces-sible inputs is available, with or without emergency bypass routing.

Superior Branding

IconMaster delivers superior branding, including four internal and two external key lay-ers. Standard features supported include static and animated logos, analog and digital clock capability, optional crawls, optional temperature probe, optional emergency alert system (EAS) and Amber Alert.

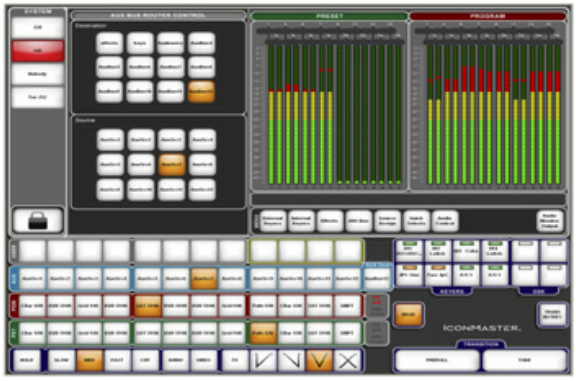
IconMaster is based on our industry-leading NEO modular platform, and IconMaster is the only master control that can be combined with other advanced applications to create a complete, self-contained channel release system.

IconMaster — master control and branding needs for today and tomorrow.

Images / Diagrams

Remote Control Panel - ICONM-RCP-MAF

Navigator Software Control Panel - MGI-GUI



Specifications

Specifications and designs are subject to change without notice

Serial Digital Video Inputs	
Number of Inputs	7 (A, B, Fill1, Key1, Fill2, Key2, squeeze background)
Standard	
SDTV	270 Mb/s 525/625 per SMPTE 259M-C
HDTV	1.485 Gb/s serial per SMPTE 292M 1080i/720p 59.94 Hz/50Hz
Equalization	Automatic up to 100 m (328 ft) of Belden 1694
Connector Type	BNC
Return Loss (HD only)	>18 db
Impedance	75 ohms

Genlock Input	
Connector Type	BNC
Number of Inputs	1 genlock
Return Loss	-40 dB to 6 MHz
Impedance	75 ohms
Reference Type	NTSC/PAL, color black, or 525/625 comp sync or tri-level per SMPTE 240M 29.97/30/25
Level	200 mV to 2 V nominal
Connector Type	BNC
Serial Digital Video Outputs	
Standard	
SDTV	270 Mb/s 525/625 per SMPTE 259M
HDTV	1.485 Gb/s serial per SMPTE 292 M 1080i/720p 59.94 Hz/50 Hz
Connector Type	BNC
Number of Outputs	4; PGM (2), PVW, CLEAN
Return Loss	>18 db
Impedance	75 ohms
Embedded Audio	
SDTV	Per SMPTE 272M (embedded as 20-bit audio only)
HDTV	Per SMPTE 299M (embedded as 24-bit audio) 48 KHz per AES3-1992
Channels	2 groups SD, 4 groups HD
Mode	Delete existing and rewrite new audio groups
Discrete Audio for Audio Over	
Inputs	2 AES (internal routing)
Resolution	24-bit operation
Sampling Rate Input	48 KHz (33, 44.1 KHz)
Sample Rate Converter SRC Disable	No
Connector	Multi-pin DB62/coax or balanced inputs on terminal strips on optional breakout module
Format	AES audio levels
Optional Discrete AES Audio	
The following specifications apply when the optional MKA-3901 audio module is used.	
Number of Inputs	4 AES in each for bus A and B
Number of Outputs	4 AES for PGM, PST, Clean and Monitor
Resolution	
Input	20- or 24-bit operation, set by data configuration bits (with SRC off)
Output	20- or 24-bit operation, user-selectable
Sample Rate Converter SRC Disable	No
Sampling Rate	
Input	48 KHz (33, 44.1 KHz)
Output	48 KHz
Connector	Multi-pin DB62/coaxial or balanced inputs on terminal strips on optional breakout module
Format	AES audio levels

Audio Processor	
Number of Bus Inputs	2 - A, B
Number of AES Streams	4
Channel Assignment	Not restricted within A path or B path
Modifiers	Left or right invert Left and right sum Independent left and right level
Number of Audio Overs	2
Transitions	Dissolve, cut, fade-fade, fade-cut, cut-fade
Dolby® Handling	Restricting transition to “cut”, embedded audio only
AES User and Configuration Bits	
C Bits Input	Read and analyzed for format, word size only
C Bits Output	Reinserted based on configuration setting Selectable individually for each AES path
U Bits Input	Not read or used
U Bits Output	Reset to 0 Common for all AES paths
Monitoring Audio Level	
Monitor Gain Control	0 to 100% (requires audio control panel or software application)
VANC Data	
For 525 systems, line 21 may be selected to be part of active picture or blanking.	
VANC Data	Data will be allowed to pass through video processor
GPI Inputs and Outputs	
It is assumed that these inputs/outputs are externally isolated. They are low voltage TTL style input/outputs.	
GPI Input	
Quantity	18
Type	Non-isolated TTL
Polarity	Software specified
Voltage Range	-0.3 V to 5.3 V maximum
Current Load	1 mA
Connector	Part of 62-pin “D”-type or terminal strips on optional breakout module
GPI Output	
Quantity	13
Type	Open drain
Polarity	software specified
Voltage Range	-0.3 V to 5.3 V maximum
Load	40 mA maximum
Connector	Part of 62-pin “D”-type or terminal strips on optional breakout module
Power Consumption	
Control Panel	250 W maximum; 150 W typical
Frame	NEO (1RU) or NEO (3RU): <25 W
Timecode Input	
Standard	ANSI/SMPTE 12M timecode (LTC)
Electrical	0.5 – 12 V pk-pk
Impedance	>10 kW
Connector	Part of 62-pin “D”-type or terminal strips on optional breakout module

Serial Communications Interface	
Standard	RS-422 (SMPTE S207M)
Connector	Female 9-way “D”-type
Maximum Output Drive	–0.25 V to 6 V
Receiver Input Sensitivity	±200 mV
Data Comms	38,400 baud 8-bit No parity 1 stop bit
Ethernet Port	
Standard	10/100Base-T IEEE 802.3 u
Connector	8-pin RJ45
Temperature Probe	
Electrical	24 V to 75 R
Connector	Part of 62-pin “D”-type or terminal strips on optional breakout module
Miscellaneous	
Performance Temperature	41° to 104° F (5° to 40° C)
Operating Temperature	32° to 122° F (0° to 45° C)

Ordering Information

Nexio IconMaster Master Control Systems	
Complete SD/HD Nexio IconMaster systems come standard with configurable SD/HD master control with an embedded multi-layer branding engine. Each system includes a 3RU NEO frame with redundant power supplies, IconMaster master control module set with 6 layers of keying (2 external, 4 internal branding keys), 2 discrete AES audio overs, and GPI/serial breakout with relay bypass. Control panels are ordered separately.	
Embedded Audio Only Systems	
ICON-S-0-E	SD/HD IconMaster system with embedded audio support, external video router required; occupies 2 NEO slots
Discrete Balanced AES Audio Systems	
ICON-S-0-B	SD/HD IconMaster system with mixed embedded audio and up to 4 balanced AES in/out/monitor support, balanced audio breakout, external video and AES router required; occupies 3 NEO slots
ICON-S-0-C	SD/HD IconMaster system with mixed embedded audio and 4 coaxial AES in/out/monitor support, coaxial audio breakout with relay bypass, external video and AES router required; occupies 3 NEO slots
Control Panels	
ICONM-RCP-MA	SD/HD IconMaster remote control panel with enhanced audio control
ICONM-RCP-MAF	SD/HD IconMaster remote control panel with fader bar and enhanced audio control
ICONM-RCP-A-UPG	SD/HD IconMaster audio control panel for customer field retrofit to IconMaster base panel
ICONM-RCP-F-UPG	SD/HD IconMaster manual fader bar for customer field retrofit to IconMaster base panel
ICONM-SCP	IconMaster Software Control Panel. Navigator-based full software control panel for IconMaster module sets
ICONM-SCP-LT	IconMaster Software Control Panel Lite touch screen companion application for IconMaster Remote Control Panel with enhanced control and audio metering

Discrete Balanced AES Audio Systems	
ICONM-E	SD/HD IconMaster master control module set with embedded audio support, 6 layers of keying (2 external, 4 internal branding keys), 2 discrete AES audio overs; occupies 2 NEO slots
ICONM-B	SD/HD IconMaster master control module set with embedded audio and 4 balanced AES audio support, 6 layers of keying (2 external, 4 internal branding keys), 2 discrete AES audio overs; occupies 3 NEO slots
ICONM-VAB	SD/HD IconMaster master control module set with embedded audio and 4 balanced AES audio support, 6 layers of keying (2 external, 4 internal branding keys), 2 discrete AES audio overs, balanced AES audio breakout and video relay bypass; occupies 3 NEO slots
ICONM-VAC	SD/HD IconMaster master control module set with embedded audio and 4 balanced AES audio support, 6 layers of keying (2 external, 4 internal branding keys), 2 discrete AES audio overs, coaxial to balanced AES audio breakout and relay bypass; occupies 3 NEO slots
Master Control Options	
ICONM-FX	SD/HD IconMaster 2-channel squeezeback effects
ICONM-CRAWL	SD/HD IconMaster character crawl with static text insertions
ICONM-EAS	SD/HD IconMaster interface to TFT, SAGE and Digital Alert Systems (using Sage or TFT protocol) for Emergency Alert System (includes CRAWL option)
ICONM-ODBC	SD/HD IconMaster content editor for IconLogo text crawls or static text with Web and database connectivity
ICONM-3903-UPG	Upgrade IconMaster units based on MGI-3901 to MGI-3903, includes 4 GB DDR2, 8 GB Compact Flash, text and EAS
Master Control Components	
ICONM-BO-V	IconMaster GPI/serial audio breakout panel with relay bypass
ICONM-BO-VAB	IconMaster discrete balanced audio breakout with relay bypass
ICONM-BO-VAC	IconMaster discrete coax audio breakout with relay bypass
Master Control Branding Memory Options	
ICONM-CF4096	Compact Flash (Type 1) upgrade, 4 GB card
ICONM-CF8192	Compact Flash (Type 1) upgrade, 8 GB card Note: only for MGI-3902 and MGI-3903-based systems
ICONL-DDR2-2G	DDR2 memory upgrade, 2 GB module — 2 GB branding memory configured with quantity 1 of this upgrade, 4 GB configured with quantity 2 Note: only for MGI-3902 and MGI 3903-based systems