

# Aris MediaMation System

Models 700  
and 720i

## Audio/Video Matrix Switcher & Whole-House Control



Aris  
MediaMation  
System  
combines a  
multi-source  
multi-room  
matrix  
switcher &  
pre-amp  
with an  
advanced  
remote  
control  
system

The Aris MediaMation System, winner of the Design & Engineering Innovations '95 Consumer Electronics Show (CES®) Award, provides high-quality crossbar switching for audio/video distribution. The Aris System also integrates whole-house control of all A/V components.

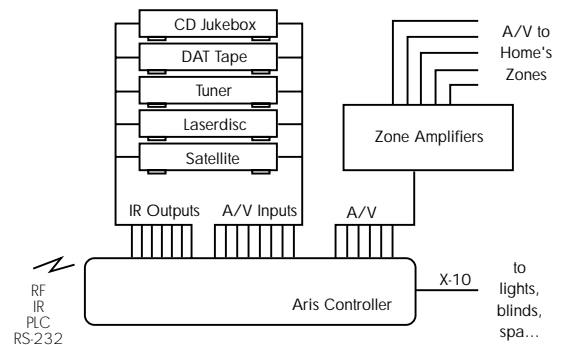
Imagine being able to watch, listen, and control your audio/video system from anywhere in your home, even outside. The CD jukebox may be routed to one room, the DAT to another, and the satellite signal to three other zones — all at the same time.

The Aris architecture allows for flexible control options: Vaux radio-frequency (RF) or infrared (IR) Remote Controls; learning IR remotes, keypads, or touchscreens; powerline controllers; and/or serial RS-232 computer control. Each zone may be individually controlled.

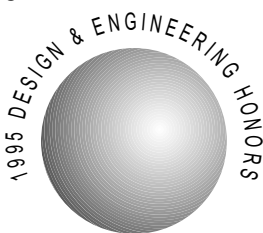
The Aris System allows you to switch between sources at the touch of a button. When the whole-house zone is selected, the desired audio/video source will be routed to every zone in your home, providing seamless entertainment from room to room.

### Aris at a Glance:

- High-fidelity, eight-source, six-zone A/V crossbar matrix switcher
- Line-level audio/composite video
- Multi-Source/Multi-Room/Multi-Input
- Expandable zone configuration
- Volume/Bass/Treble/Mute for each zone
- Programmable zone characteristics
- A learning infrared system for control of A/V and other components
- Support for X-10® devices for lighting, drapes/blinds, and spas.
- MACROs (key sequencing) for one-button ease-of-use
- RS-232 Control Port for a computer, control system, or a dial-in modem
- Downloadable system software



The Aris System: Whole-Home Theater



INNOVATIONS  
CONSUMER ELECTRONICS SHOW



Vaux Electronics, Inc.

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# Audio/Video Matrix Switcher and Whole-House

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## **8 x 6 Audio/Video Switch**

The Aris MediaMation Controller is a high-fidelity multi-source/multi-zone audio/video switch and pre-amplifier which features eight input sources and six output zones. Any source input can be routed to one or more of the output zones. For example, you can send the CD signal to one room, the tuner to another, and the cable signal to yet another room — all at the same time. Whole-house operation allows one source to be switched to all zones for seamless entertainment.

Four of the eight sources include composite-level video connections as well as stereo line-level audio inputs. Four of the six output zones include composite-level video signals as well as stereo audio outputs. For additional zones, multiple Aris Controllers may be strapped together.

Each of the output zones are independently controlled, remotely from Vaux Remote Controls, or directly from the RS-232 Computer Control Port. Digitally-controlled volume adjustment uses smooth 2 dB steps. Adjustable bass and treble levels allow each zone to be independently tailored to the room's acoustics. Some of the zone-adjustable features include:

- Volume, Bass, Treble, and Muting
- Zone Turn-On Volume Level
- Mute Volume Level
- Flattening (bass/treble to 0 dB)
- Passthrough (no volume adjust)
- Stereo or Mono mode
- Turn-On/Off Volume Ramping

## **Distributed Audio**

Distributing zoned audio throughout the home requires a stereo (2-channel) power amplifier for each zone. Since the Aris MediaMation System provides Volume/Bass/Treble control internally, the zone amplifiers are generally fixed-gain (no volume control) power amps. Zone amplifiers may be located near the Aris Controller, or may be remotely located closer to the zone's speakers.

The Aris System allows flexibility and choice as to the type and quality of amp to suit each zone. Instead of using a separate stereo amp for each zone, a multi-channel amp may be used — 2 channels (left and right) are needed for each zone (for example, a 6-channel amp will service 3 stereo zones).

## **Distributed Video**

The Aris MediaMation System also provides high-quality distribution of video, allowing switching between video sources such as VCRs, laserdiscs, satellite/cable tuners, or security/nursery cameras — at the touch of a button. Of the eight Aris source inputs, four have video inputs as well as audio. Of the six Aris zone outputs, four support video outputs.

The Aris System switches composite-level (baseband) video signals and provides for short-run composite video interconnections directly to a compatible video monitor or television; longer-distance runs may use a composite-level video buffer amplifier, or a video modulator may be used to move the video signal up to a television channel location.

If a video modulator is used to drive a television which has RF (antenna) input only, you have a choice on that zone's audio distribution: you may run the audio into the modulator and allow the TV to provide the sound, or you may elect to provide a separate zone amplifier and speakers for high-fidelity stereo or surround sound.

The Aris MediaMation System learns and stores up to 240 infrared (IR) codes from existing A/V remote controls. The A/V component's infrared codes are battery backed-up, allowing you to unplug the Controller and retain the programmed codes.

The Aris Controller has device or zone-specific IR output ports for (Xantech®-compatible) emitter cables. An IR Blaster output provides a common infrared signal to drive an emitter, an amplified room blaster, or an amplified multi-emitter connecting block.

## **Surround Sound Zones**

The Aris System allows external surround sound processors to be connected to zone outputs, by programming the zone for passthrough operation. The zone's volume level is then switched at a fixed 0 dB level, and bass/treble adjustments may be enabled or disabled. Volume adjustments for the passthrough zone will then provide the IR commands for the processor — to the user, the surround zones behave exactly as the stereo zones do!

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# Audio/Video Matrix Switcher and Whole-House Control

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## **Radio-Frequency Remote Control**

The Aris MediaMation Controller has a receiver for Vaux radio-frequency (RF) Remote Controls, such as the RC-8 RF remote. The Aris System can be controlled with one or more Vaux RF Remote Controls from different zones in the house.

The RF commands can transmit through the walls, floors, and ceilings of a home, even from outside. When operated by a Vaux Remote Control, the user controls the installation's source audio and video source selection, volume/bass/treble/muting infrared-controlled audio and video components, X-10-connected lighting and power-control devices, and system MACROs.



RC-8 RF Radio-Frequency  
Vaux Remote Control

## **Lighting and Appliance Control**

The Aris System provides an X-10 interface for power-line control of up to 256 X-10 lighting and appliance devices. Appliance modules are suitable for switching power to components, and lamp modules allow dimming of incandescent lighting. A variety of X-10-compatible modules are available which plug into AC outlets or replace existing wall switches or outlets. Relay contact output modules allow control of low-voltage devices.

## **MACROs (Key Sequencing)**

Multiple-command MACRO support allows you to define one-button commands, for example: dim room lighting, lower the projection screen, delay for 20 seconds, start the popcorn, power-up the laserdisc, and play. The Aris MediaMation System features MACRO buttons which each have up to 25 steps of audio/video routing, volume/bass/treble, infrared, X-10, and/or delay commands. MACROs are also useful for system power-up/down sequencing, and for powering-up a zone's audio amplifiers and/or video monitors.

MACROs are stored in battery backed-up memory in the Aris Controller, and are easily programmed from Vaux Remote Controls or through the Computer Control Port.

## **Serial (RS-232) Computer Control Port**

**Computer Control:** The Aris Controller may be operated by a computer, or control system, to adjust all audio/video zones, infrared components, and X-10-connected devices. An RS-232-connected system may be used to provide customized touchscreen control of an entire home, or for specialized applications such as CD jukebox management, or boardroom control. Two-way communications provides both control and feedback.

When using RS-232 control, the host computer may adjust each zone's: source-to-zone routing; relative or absolute volume, bass, and treble adjustments; muting; flattening; and configuration of any zone-programmable features. If remote controls are also in use, the computer may periodically poll for zone status (current on/off/muted state, current source/volume/bass/treble), or may update status immediately as buttons are pressed on remote controls.

**Remote Modem Access.** The Aris MediaMation Controller may also be used with a modem to allow dial-in access to the system. This allows remote site support for changes in system programming or configuration.

## **Aris Model 720i**

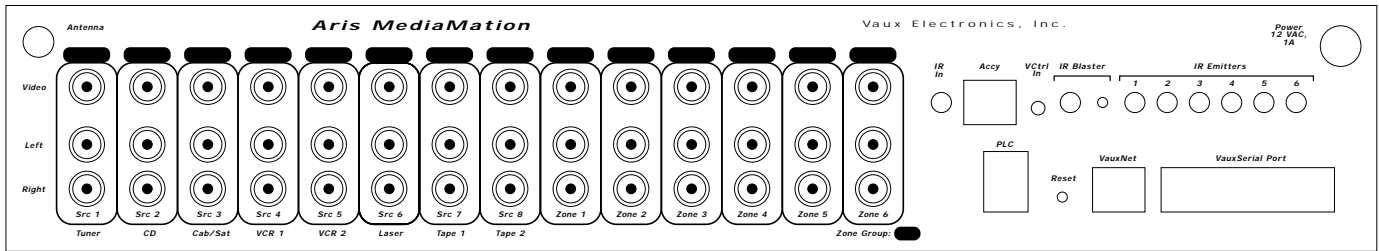
The Aris Model 720i Controller has the same feature set as the Model 700 Controller, but adds additional input capability to provide greater installation flexibility in the selection of control devices.

The Model 720i has support for infrared (IR) input control and is bundled with an RC-8 IR Remote Control. The RC-8 IR remote may be used to operate the system from the front panel, or remotely via an IR repeater system. Learning IR devices, such as in-wall keypads or wireless touchscreens, may learn the Vaux IR codes and control the entire 720i system. Rear panel connections support both modulated and unmodulated IR input from remote devices.

Also provided by the 720i is two-way X-10 support. This allows X-10 controllers, anywhere on the powerline, to command the Aris 720i system.

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Aris MediaMation Controller Model 720i Rear Panel

Aris Controller Models 700 & 720i Specifications:

Input/Output Connectors:

Stereo Line-Level Audio/Composite-Level Video Source Inputs (phono) .....	8A/4V
Stereo Line-Level Audio/Composite-Level Video Zone Outputs (phono) .....	6A/4V
Infrared Emitter Outputs (device or zone-specific; 3.5 mm phono) .....	6
Infrared Blaster Output (common; 3.5 mm phono & indicator light) .....	1
Powerline Control (PLC) X-10 Interface Port (4/6 modular jack) .....	1
Antenna Inputs, RF control (phono for std wire ant; F for coax/remote ant) .....	2
Power Jack (for 12 VAC, 1 Amp Adaptor; 2.1 mm) .....	1
VauxSerial RS-232 Computer Control Port (DCE configuration; DB-25 F) .....	1
VauxNet Expansion Port (Mini-DIN-4/6) .....	1
VauxAccy Expansion Port (Mini-DIN-8) *720i only* .....	1
VauxCtrl Input (UnMod IR; 2.5 mm phono) *720i only* .....	1
Infrared Input for Keypads/Repeaters (Mod IR; 3.5 mm phono) *720i only* .....	1

Audio Section:

Volume Adjustment Range (2 dB/step; off < -80 dB) .....	-64 to +6 dB
Bass Adjustment Range (3 dB/step; centered at 40 Hz) .....	-12 to +15 dB
Treble Adjustment Range (3 dB/step; centered at 15 KHz) .....	-12 to +12 dB
Input Impedance .....	33K ohm typ.
Output Impedance .....	100 ohm typ.
Frequency Response (into 33K ohm load; -3 dB rolloff) .....	15 Hz to 55 KHz
Frequency Response (into 33K ohm load; -1 dB rolloff) .....	25 Hz to 25 KHz
Input Signal Handling .....	2 Vrms max.
Zone Programmable: Turn-on Vol/Bass/Treb, Mute level, Passthrough, Mono/Stereo.	

Video Section:

Input Impedance .....	75 ohm typ.
Output Impedance .....	75 ohm typ.
Gain (unloaded) .....	x 2
Gain (75 ohm loaded) .....	x 1
3-dB Bandwidth .....	12 MHz min.
Differential Gain .....	0.5 % typ, 3 % max.
Differential Phase .....	2 degrees max.
Non-Linearity .....	0.5 % typ, 2 % max.

Other:

Infrared Code Storage (IR Learning) .....	8 Devices (pages) x 30 keys = 240 codes
Power Consumption .....	12 VAC @ 1000 mA typ.
Dimensions (17" W body) .....	19" W x 3.5" H x 10.2" D



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