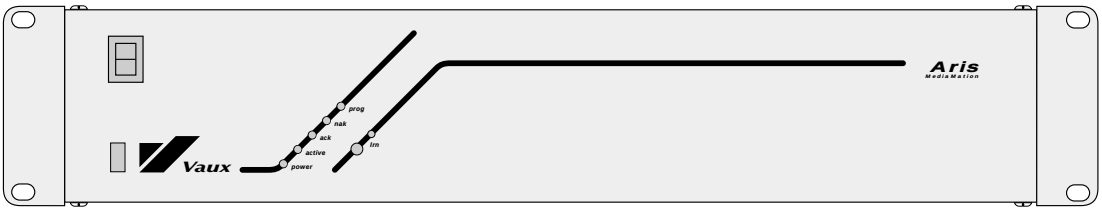
AR-520A



The Aris MediMation System is a matrix switch and pre-amplifier which features8-input sources and 8-output zones. Zones may be expanded by adding additional controllers (up to 255 zones). Any source input can be switched to one or more of the output zones. Whole-house operation allows one source to be switched to all zones for seamless entertainment.

Each of the output zones are independently controlled, remotely from Vaux Remote Controls (RF or IR), Vaux Keypads, 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 preset or tailored to the room's acoustics.

Aris AR-520A at a Glance:

- High-fidelity, 8x8 stereo audio matrix switcher
- Control via RS-232, RF remote, IR remote, and / or wired keypads
- Volume, Bass, Treble, Balance, and Mute for each zone
- *Memory-Presets* for save & recall of different routing / volume states
- *Zone-Clusters* group various zones for concurrent routing / volume, in addition to independent control
- Any stereo zone can be *Paired-Mono* (same source, independent volume) for up to 16 mono zones
- Stack multiple switchers for up to 255 total stereo zones
- Program each zone's min / max / initial volume, mute level, volume taper, etc.
- *Source-Leveling* for input trim
- Power-up to *Standby* or *Previous* routing / volume state
- Downloadable system software

Aris MediaMation System

Vaux

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 are typically located near the Aris Controller in the media center.

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 (with optional module)
The Aris MediaMation System also provides high-quality distribution of video, allowing switching between video sources such as VCRs, DVDs, satellite/cable tuners, or security/nursery cameras. Depending on the option selected, the video section will have 4x4 or 8x8 switching.

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.

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!

Advanced Remote Control System
In addition to audio/video switching and zoned pre-amplification, the Aris MediaMation System features an advanced remote control system, which includes: an infrared learning and replay system, Vaux IR remote controls (which can used to control the system or to teach other learning infrared remotes), Vaux RF remote controls, Vaux wired in-wall keypads, Vaux wireless (RF) in-wall keypads, Power Management of source devices, MACROs, X-10 control, and an RS-232 Control Port.

Infrared (IR) Learning System
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 non-volatile, allowing you to unplug the Controller and retain the programmed codes.

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

Vaux

Aris MediaMation System

Infrared Control
Aris has support for infrared (IR) input control and is used 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 remote controls, may learn the Vaux IR codes and control the entire system.

Radio-Frequency (RF) 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 using 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/video selection, volume/bass/treble/muting, infrared-controlled audio and video components, X-10-connected lighting devices, and system MACROs.

Vaux In-wall Keypads
The Vaux in-wall keypads come in a standard 2-gang configuraion, with the first gang defined as a set of 8 illuminated source devices for source selection. The second gang of 8 button is the function control, such as, play, pause, stop, etc. Configurations of the keypads can be customized and relabeled with removable keycaps and by adding additional gangs of 8 keys for more functions, including IR commands, X-10 commands and/or MACROs. The wireless version of the keypad has a typical range of 100 feet. The wired keypad requires simple, 2-pair wiring (home-run) up to 1000' feet.

Power Management of Source Devices
The Aris system can automatically power A/V sources as necessary, tracking the state of the source across all zones. Infrared, X-10, and MACROs automate the source-selection process, requiring only a single button press to turn on a zone and configure the source as desired.

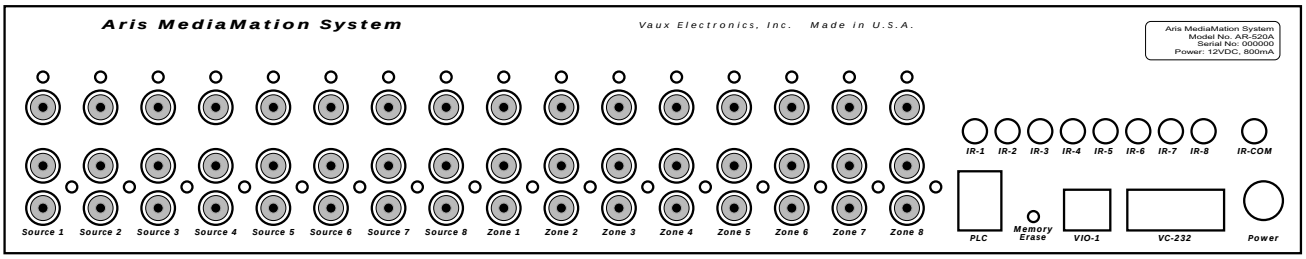
MACROs
Multiple-command MACRO support allows you to define one-button commands. You may automate sequences of commands, to handle special situations. For example, you may need to send a sequence of commands to a unit to configure surround-sound modes, or you may want to issue a series of lighting commands to set dimming levels.

Lighting Control
The AR-520A 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.

The AR-520A system also "listens" (provides 2-way X-10 support) to the poweline for X-10 commands from other X-10 controllers. These commands are mapped to user MACROs for easy programming. For example, an X-10 motion detector light may trigger a Macro that starts the VCR recording the door camera.

RS-232 Control Port
The Aris System 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 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 and keypads are also in use, the computer is immediately updated as buttons are pressed on remote controls, changing the state of the system -- this "closes-the-loop" around the entire system.



Aris Model AR-520A Specifications:

Audio Section:

Volume Adjustment Range (2 dB/step; off < -80 dB)	–64 to 0 dB
Bass Adjustment Range (3 dB/step; centered at 40 Hz)	–12 to +12 dB
Treble Adjustment Range (3 dB/step; centered at 15 KHz)	–12 to +12 dB
Input Impedance	47K ohm typ.
Output Impedance	100 ohm typ.
Frequency Response (into 47K ohm load; –3 dB rolloff)	15 Hz to 100 KHz
Input Signal Handling	2 Vrms max.

Zone Programmable: Min/Max/Initial Volume, Mute level, Passthrough, Mono/Stereo, etc.

Video Section:

Input Impedance	75 ohms
Output Impedance	75 ohms
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

Input/Output Connectors:

Stereo Line-Level Audio Inputs x Outputs (phono)	8x8
Composite Video Inputs x Outputs (phono)	none, 4x4, or 8x8
VC-232: RS-232 Control Port (DB-9 F)	1
PLC: Powerline control port for X10 interface module (6P4C)	1
IR Emitter (output) ports (3.5 mm)	8 programmable, 1 common
Power Jack (for 12 VDC, 800 mA Adapter, auto-polarity) (2.1 mm)	1

Other:

Dimensions (2U rack chassis; 17" W body)	19" W x 3.5" H x 10" D

DS-AR520A-1298

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