

The MATCO MA-1600 MPEG2 Video Server may accommodate one to four channels, while offering a broad range of storage capacities. Like all MATCO Servers this attractively priced package is custom configured and tested to meet your specific needs; yet offers you the flexibility to add inputs, outputs or more storage at a later date when you need it.



SERVER APPLICATIONS

Play to Air Server
 Low-Power (LPTV)
 University Campus
 Post Production
 Locally originated cable channels
 Shopping channels
 News/Weather
 Public Educational
 Government
 Hospitals

MA-1600 Features

- Extremely reliable RAID-5 or RAID-6 Storage protection.
- Up to 1080 hours of storage at 12 Mb/sec RAID 6
- Redundant power supplies
- Redundant cooling
- Hot-swap drives
- Remote station software for ingest, edit, playlist/payout
- Up to 4 inputs or outputs custom built for your needs (field upgradeable)
- SDI, HD, Composite, S-video, Component input and output options all available.
- Supports simultaneous conversion and distribution of multiple audio and video formats using Grass Valleys Pro-coder 3.0™
- Fast search and sort features
- Includes user definable fields, assignable categories, and Kill dates.
- Interfaces with Traffic systems.
- Trimming and Virtual Video clip creation.
- Exchange Content with Non linear editors
- Transfer files from network servers, FTP from Satellite, or over broadband networks.
- Automatically Archive video clips to anywhere on your network.
- As Run logs for billing
- Level 1 Internal Automation (level 2 &3 optional)
- Horizontal and Subcarrier phase adjustments
- Independent Channel genlock per output (frame synchronizer)
- Video Input level adjustment
- Input Audio Attenuator
- Output Audio level adjustments
- Play multiple video channels over your network from central/Archived storage(see MA-5000)
- GPI inputs.

Highly Reliable Operation

MATCO Video Servers are custom-configured high quality Video Servers, designed to run 24/7 for years trouble free operation. While our Video Servers may cost a little more than some, our lengthy list of standard features, along with our three year warranty, impeccable reputation, prompt attention to special customer requests, free software upgrades, and superior reliability, make for a superior long term value.

When Flexibility is a must

All MATCO video servers are custom-configured for your needs. You are not stuck with a fixed number of inputs, outputs, and storage. If you only need one input and one output, that is what we build for you. If down the road you need two more outputs and more storage, or an HD upgrade, just call and place the order. We send the parts, and our technicians will talk you through the installation within minutes.

Networking

Sharing content with the whole world is easy with the MA-1600 dual Gigabit Ethernet channels. MATCO Servers maybe networked to share inventory with other Servers, and can even play several channels of video back from a remote Server or from a central storage unit (*see MA-5000*). You may also Setup the MATCO software for automatic transfer of Video files to anywhere on the network. Transfer content with Non Linear Editors like Final Cut Pro™ and Avid™. You can Share content with network affiliates over broadband networks. Play downloaded FTP content form PathFire™. You can also use Remote Server Automation software to ingest, or edit your Playlist from anywhere on your Network.

If you are running our advanced Internal automation Level 2 or 3 software the server may also network to our MA-124S (Ethernet to Serial port) interface that allows MATCO Server to control external routing switchers, and multiple VTR and DVD players.

Software

In addition to complete control of Capture and Playback, the resident software includes Key File and TOD insertion and attachments. You also have the ability to create what we call Virtual Elements, which allow you to mark multiple In and Out points on an existing piece of video without creating a whole new video file. Many of our customers use this feature to pick out content from previously recorded Network shows. So they may play a Network show at a later time with their own local commercial content. MATCO software also provides the ability to create entire new clips from existing video content.

MATCO also includes easy to use, extensive software for Live or VTR/DVD video ingest. Sequence building or manual control of video channel playout.

The MA-1600 has VDCP remote protocol enabling it to be controlled by all leading Automation companies.

Interfaces to Traffic and billing systems.

The MA-1600 comes standard with Grass Valley™ Pro-coder 3.0 software enabling you to have your content automatically converted to practically any Video format and sent to anywhere on your network. Set it up and forget it. It is that simple! This software combines speed and flexibility into a streamlined video conversion tool for professionals. Widely acknowledged as the leading software transcoder, ProCoder 3 features extensive input/output options, advanced filtering, batch processing and an easy-to-use interface installed on the MA-1600's which utilizes it's extremely fast Single or Dual Quad core processors with 2Gb-32Gb of RAM.

Pro-coder Key Features

Professional high-speed, high-quality encoding and conversion of video to all popular formats including MPEG-1, MPEG-2, Windows Media®, QuickTime® and more

Grid encoding for MPEG-2 (transport stream, program stream) – support for multiple CPUs within one PC (including dual and quad core CPUs). Applies to 'HDV Target' and 'Preview DVD target' settings

NEW

Watch folder function for automated encoding

Job queuing manager with priority functions

Stitching of multiple source files to create a single file

Simultaneous creation of multiple target files

Aspect ratio conversion

NTSC/PAL conversion

Frame rate interpolation and conversion

Timecode creation and preservation **NEW**

Automatic adaptive deinterlacing

3:2 pull down

Inverse telecine **NEW**

Multi-pass VBR processing

Full HD support for MPEG and Windows Media

VOB file and DVD-Video image creation with chapter points

Save droplets for quick, drag-and-drop conversion

Separate audio import/export options including multiplexing

Audio channel mapping **NEW**

Export plug-in for Grass Valley EDIUS version 4 and Adobe Premiere Pro 2.x, which provides extensive timeline export capabilities including DVD-Video image export options

Multiple colorspace support including YUV and RGB

Internal Automation (Level 1 Standard)

As an option to, or as a backup for your MA-210 Automation System, the Internal automation software will manage the playback of multiple on-air channels, as well as schedule captures (ingest). The optional Internal Automation Level 2, and 3 will control an external routing switcher, and numerous other controlled devices, such as VTRs and DVD players. With **RSAA** (remote server automation app), the server automation can be controlled from anywhere on the network.

Contains easy to use tools for fast list building, like “Point-and-click”, which is easier than “Drag-and-drop”. You may loop list, skip, copy, paste and insert sections on any playlist. Automatically update start times. As-run logs for traffic billing. Automatic Load List features. We have many configuration options and features, far more than could be explained adequately in these pages. Consult MATCO directly to discuss your special requirements.

Ease of Use

MATCO video servers have been designed for ease of use, and to make sense to broadcast personnel. Most operators are comfortable operating a MATCO video server within about an hour.

Optional:

- Level 2 & 3 Internal Automation upgrade
- HD inputs or outputs (per channel)
- Analog only Inputs or outputs (per channel)
- 4:2:2 Encoding up to 50Mbps
- Upgrade up 32Gb of RAM
- Dual Quad Core CPU
- RAID 6 (RAID 5 standard)
- Mirrored Systems drive
- Backup Systems Drive
- Built in Hot Spare

Available Audio and Video Features

- VITC/LTC input
- Real-time encoding and multiplexing in MPEG-2 and MPEG-4 Profile formats
- PAL and NTSC television formats
- Composite video input
- Digital video input (SDI)
- YUV component video inputs
- Closed caption support
- Embedded audio in the SDI stream
- Dolby® Digital bitstream pass-through audio
- Dolby® Digital 2.0
- DVB/ASI output

Encode Parameters

- **MPEG Standard**
MPEG-2, ML@MP, MPEG-4 Advance Simple Profile
- **Stream Format**
MPEG-2 Program and Transport
MPEG-4 ASP
- **Video Bit Rate (4:2:0 Encoder)**
MPEG-2 500kbps - 15Mbps
MPEG-4 20kbps - 15Mbps
- Constant or Variable bit rate encoding
- **GOP Structure**
I, IBP, IBBP, IP open or closed

Decode Parameters

- MPEG Elementary, Transport and Program Streams up to 50Mbps

Video Inputs

- Composite Video
- SDI
- S-Video or Component YUV

Audio Inputs

- AES/EBU digital audio: 8 channel / dual stereo
- SMPTE 272M audio embedded in the SDI stream (8 channel / dual stereo)
- Stereo balanced/unbalanced analog audio: 4 channel /dual stereo

Video Outputs

- Composite, S-Video, SDI
- Genlock to Reference Video In

Audio Outputs

- 600 Ohm balanced, unbalanced, optional AES-3 Digital with up to 8 channels of embedded audio