

# 7420

## HD/SD Logo Inserter

### HD and SD Logo Insertion and Branding

The 7420 is a dual rate logo inserter that can accept either an SD or HD video input and key still logos and animations over program material. The logo insertion capability can be used to add letterbox framing. It can also be used to key sports or event logos, or to source a virtual set background. The on-board memory can play back almost a minute of uncompressed video.

### Handy Flash Memory

The 7420 is fitted with a Secure Digital flash memory card in order to provide an extremely fast and easy way to transfer material. This is a particularly convenient method for pre-building material off-line. Simply transfer logos and animations to a Secure Digital flash memory card using a standard card reader, then insert into the 7420.

The 7420's flash memory card can be removed and reinstalled without interrupting logo playback. The flash memory card is used for transfer while the actual logo and animation playback comes from the 7420's DDR2 memory.

### Linear Keying

The 7420 provides two cascaded, full linear keyers with transparency and a programmable transition rate. Each keyer is independently controllable and each has independent access to up to 2 GB of stored video and sound files. Standard configuration is Keyer 1 and 2 each populated with 1 GB of DDR2 (SODIMM) memory. Users can upgrade to 2 GB of DDR2.

### Audio Support

Sound and voice-overs can be associated with logos and clips. Each keying channel can playback a stereo sound file simultaneously with video. Audio is mixed into the user-selected output channel.

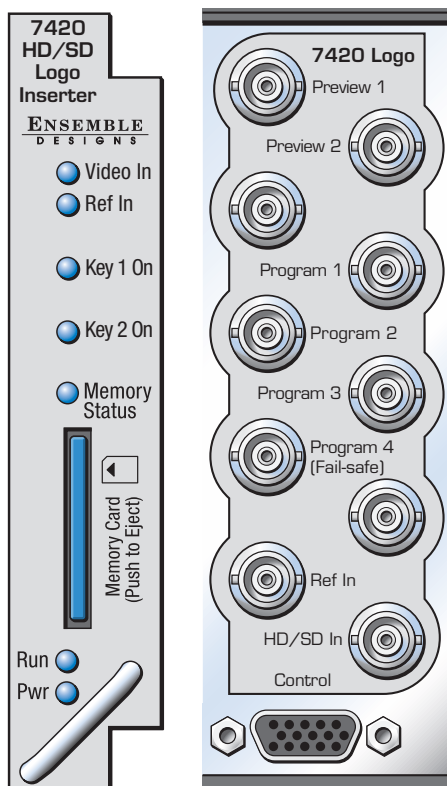
### Avenue Logo Authoring Environment

The Avenue Logo authoring environment provides a means to import graphics, animations and sound files. Video files are converted to the appropriate SD or HD color space, adjusted for proper aspect ratio, and organized in a form suitable to download into the 7420. Lossless compression ensures logos, animations and clips look as good in the program output as when they were created. The authoring system allows importing sound files which can be associated with one or more still or animated logos. Video and audio files are associated through the Avenue Logo authoring software. Avenue Logo software can be provided to your clients so they can build sports or event logos off-line.

### Control

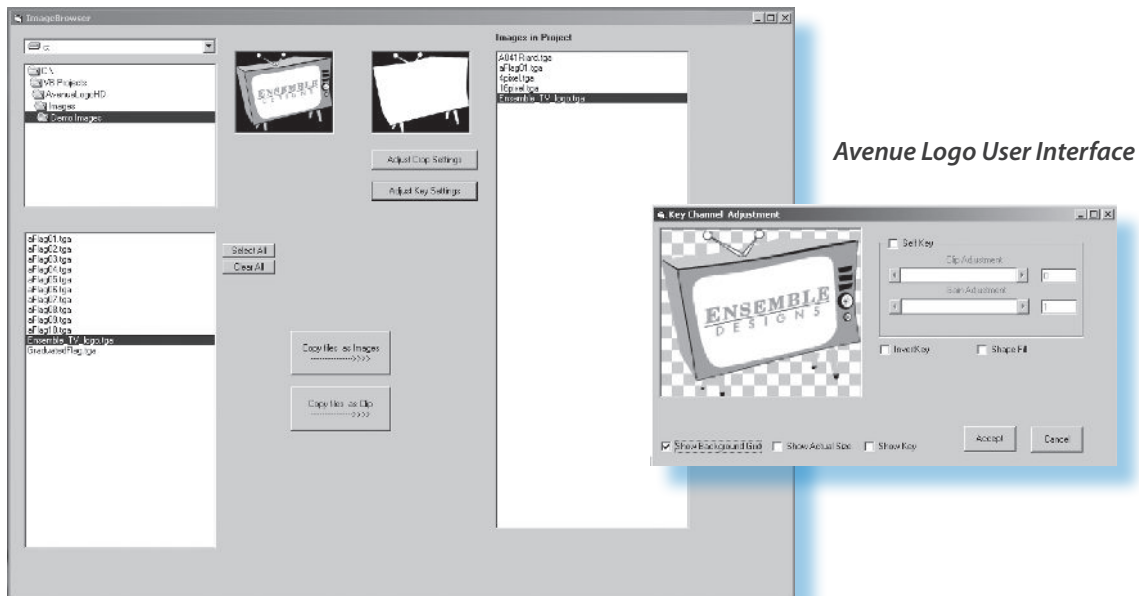
Playback of sequences can be issued through a variety of methods. All Avenue modules can be accessed via Ethernet with Avenue Logo software, Avenue PC software, or through third-party support using TCP/IP or SNMP protocols.

Automation interfaces can be made through a simple ASCII protocol via the RS-232 port specific to the module. Single GPI contact closures can be used to initiate logo sequences.



### Features

- Key still logos and animations
- HD and SD operation
- Fail-Safe bypass in case of power failure
- Flash memory card for transferring logos
- Includes Avenue Logo Authoring and Management software
- Control through Avenue Control System and 8 GPI triggers
- 16 channel audio support, passes embedded audio
- Program/Preview outputs
- Full 10 bit linear keying and processing



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## HD/SD Logo Inserter

### Serial Digital Input

Number	One
Signal Type	HD Serial Digital 1.485 Gb/s, SMPTE 274M, 292M or 296M or SD Serial Digital 270 Mb/s, SMPTE 259M
Impedance	75 Ω
Return Loss	>15 dB
Max Cable Length	270 Mb/s 300 meters Belden 1694A 1.485 Gb/s 100 meters Belden 1694A

Automatic Cable Input Equalization

### Serial Digital Output

Number	Four Program (includes one fail-safe bypass) Two Preview
Signal Type	Follows input
Impedance	75 Ω
Return Loss	>15 dB
Output DC	None (AC coupled)
Delay	4 μSec

### Standards Supported

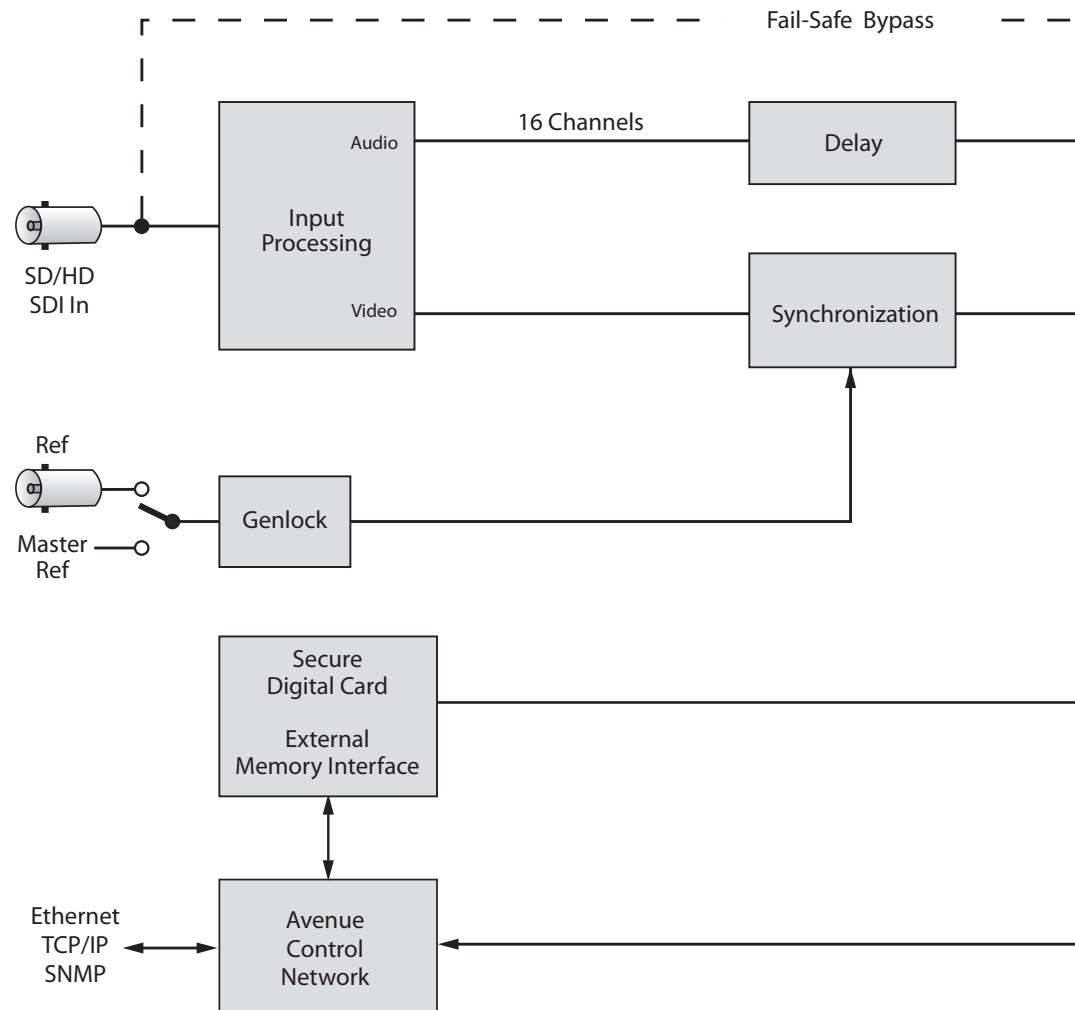
1080i 50, 59.94 or 60 Hz, SMPTE 274M -4,5,6  
720p 50, 59.94 or 60 Hz, SMPTE 296M -1,2,3  
1080p 23.98, 24 or 25 Hz, SMPTE 274M -9,10,11  
1080sF 23.98, 24 or 25 Hz, RP211 -14,15,16  
625i 50, 525i 59.94

### Reference Input

Number	One external (module's BNC) One internal (frame master ref BNC)
Signal Type	PAL or NTSC composite video or Tri-Level Sync
Return Loss	>40 dB (applies to external ref input)

### Flash Memory

Number	One
Type	Secure Digital SD Flash Memory Card
Size	2 GB card included



GPI Inputs

### Memory Capacity with 2 GB DDR2 Installed

One or a combination of the following:

8.5 sec	HD video
53 sec	SD video
256	HD full screen image
1595	SD full screen images
768+	HD lower thirds
4785+	SD lower thirds
3600+	HD still corner bug 300x300 px
18,000+	SD still corner bug 300x300 px
120+ sec	HD animated corner bug 300x300 px
600+ sec	SD animated corner bug 300x300 px

Capacity numbers above calculated at 60 Hz frame rate.

Any combination of logos, animations and audio files can be stored.

### Playback/Keyer Memory

Comes standard with 1 GB in Keyer 1 and Keyer 2 positions. Must install equal amount of memory in both Keyer positions.

Number	Two positions max
Type	DDR2 SODIMM, 200 pin Type PC4200 or faster

### File type

Image	.tga
Animation	###.tga
Audio	.wav

### General Specifications

Power Consumption	10 watts
Temperature Range	0 to 40°C ambient (all specs met)
Relative Humidity	0 to 95%, noncondensing
Altitude	0 to 10,000 ft

7420 module cannot be installed in slot 3 of a 1RU frame when 5035 System Control module is installed

