Scientific Atlanta

DESCRIPTION

PowerVu Cue Triggering is a powerful and flexible solution for automating the insertion and synchronization of commercial messages into video programming. Cueing is typically used for the remote operation of VTR and/or other commercial insertion equipment located at a remote site such as a cable headend. A PowerVu receiver generates the cueing and triggering control for this equipment. Cue triggering support is provided for the PowerVu Commercial, Headend and Business Satellite Receivers. Uplink interfacing for remote cueing control is available via the Cue Trigger I/O cards serial port or 8-bit parallel port. These interfaces can be connected to a PC workstation or terminal, or to other equipment such as a VITC decoder.

Cue Triggering at the PowerVu Uplink

PowerVu uplink support for cue triggering is provided by the optional Model D9783 Cue Trigger I/O card. This I/O card operates with the Model D9787 MPEG-2 Video Encoder Card to provide a direct interface between the Model D9110 Digital Video Encoder and external equipment for commercial insertion.

The RS-232 serial port operates via specialized remote control commands to provide data I/O control and monitoring for externally-connected equipment. Information is transmitted synchronously as part of the compressed MPEG-2 video signal, appearing at the expansion port of the destination receiver.

The byte-wide parallel port provides eight input pairs for direct (relay) connection to equipment via two removable spring terminal blocks. Each input pair corresponds to one bit of the 8-bit control word, and is isolated from all other inputs, and from chassis power and ground. In addition, the assertion level of each port pin is selectable via PowerVu Command Centre (PCC) system software.

Cue Triggering on the Receiver

The PowerVu family of receiver products supports up to four separate open collector outputs. The Model D9223 Commercial Satellite Receiver also supports four additional open collector outputs. Compatible operation of the receiver expansion port is supported by separate receiver remote control commands.

The PowerVu Advantage

The PowerVu Model D9783 Cue Trigger I/O card solution ensures frame-level synchronization of the inserted commercial messages. Integrating cue triggering as part of your encoder configuration can substantially reduce overall system complexity and maintenance requirements.

Future availability is planned for integrating cue tones operability with cue triggering as a software and hardware enhancement.

POWERVU® CUE TRIGGERING

The figure below shows typical program or event cueing applications using both serial port (ref. A) and parallel port (ref. B) interface facilities provided by the Model D9783 Cue Triggering I/O card.

Satellite Uplink

Satellite Downlink

R1
- Standby Digital Video Encoder 1
- Digital Video Encoder 1
- Video Patch Panel
- Audio Patch Panel 1
- Audio Patch Panel 2
- VAA Switch
- AA Switch
- Master Sync Generator
- Video Dist Amp
- Audio Dist Amp
- Digital Video Encoder 2
- Digital Video Encoder 3
- Fan

R2
- Digital Video Encoder 4
- Digital Video Encoder 5
- Primary Modulator
- Secondary Modulator
- 2 RU Blank Panel
- 10-Base-T Ethernet Hub
- Digital Video Encoder 6
- Primary Packet Multiplexer
- Secondary Packet Multiplexer
- Fan

PowerVu Uplink System

To Receiver RF Input

Model D9223 Receiver

Receiver Video Output To Event Controller Video Input

To Cue Trigger Serial Port I/O

To Cue Trigger Parallel Port Input

VTR

Receiver Expansion Port I/O To Event Controller Serial I/O

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VTR Video Output To Event Controller Video Input

Event Controller Port I/O To VTR Serial I/O

PC/Workstation or terminal (or other automatic contact-closure device)

Event Controller Switching Device

Switched Video Output (Receiver or VTR)