

Crystal Vision

MultiLogo HD/SD logo keyer



MultiLogo is a sophisticated modular logo keyer. This space-saving board provides three layers of keying from a variety of internal and external sources, including a generous multi-port non-volatile video store that can read six images and write two images all at the same time. MultiLogo is part of the Picturestore product range – Crystal Vision’s new area of speciality based on solid-state fast reading and writing DRAM and permanent Flash picture storage.

MultiLogo can be used either with graphics that have a separate key signal or with self-keyed graphics. Both additive and multiplicative keying is available. Three layer keying allows three still or animated graphics to be independently brought up either from the 4 GB video store or from external sources. The first external video input is normally dedicated to the main programme because of its relay bypass protection while the other three external feeds are completely flexible and configurable, and could typically be a back-up feed, a character generator for an emergency message and a key signal for that character generator. It is also possible to grab a logo from a live video feed.

MultiLogo offers excellent connectivity with a PC. Crystal Vision’s special drag and drop software runs on the graphics computer and will auto-convert images of most common file formats to the format required by the logo keyer before transferring them over 100MBit Ethernet directly from the PC into the board, allowing extensive information to be transported quickly.

MultiLogo runs the uCLinux operating system for sophisticated file handling and stability, while industry standard software protocols on the board help it to be used with automation systems. Look-ahead preview has the benefit of allowing sophisticated transitions.

MultiLogo is available in two versions – as either the ‘double decker’ V430 which gives the four external input sources (ideal for those wishing to use live rather than pre-prepared graphics) or as the single slot V130 which provides just one external input source.

MultiLogo is designed for branding HD or SD stations, while for people who just need one station ident the V430 can be used as a dual channel device – sharing the three keyers between two channels.

- ☛ Modular logo keyer, available in two versions
- ☛ Three layers of keying
- ☛ Eight-port 4 GB video store with DRAM and Flash memory
- ☛ Graphics can have separate key signal or be self-keyed
- ☛ Keyers have separate gain, lift and opacity controls
- ☛ Additive and multiplicative keying
- ☛ Up to four configurable external inputs for live video (MultiLogo V430)
- ☛ Drag and drop PC software for auto-conversion of graphics from any format
- ☛ Fast transfer of graphics from PC to board over 100 MB Ethernet
- ☛ Look-ahead preview
- ☛ Industry standard software protocols help use with automation systems
- ☛ Can be used as dual channel logo keyer where one layer of keying required (MultiLogo V430)
- ☛ Relay bypass protection of main input
- ☛ Space-saving: 100mm x 266mm module allows 12 MultiLogo V130 in 2U (24 in 4U, six in 1U and two in desk top box), while ‘double decker’ 100mm x 266mm module allows six MultiLogo V430 in 2U (12 in 4U, three in 1U and one in desk top box)

SPECIFICATION

MECHANICAL

MultiLogo V430: 'Double decker' Crystal Vision module 266mm x 100mm (uses two frame slots)

MultiLogo V130: Standard Crystal Vision module 266mm x 100mm

Weight: 300g (MultiLogo V430); 200g (MultiLogo V130)

Power consumption: 16 Watts (MultiLogo V430); 12.5 Watts provisional (MultiLogo V130)

VIDEO STORE

4 GB multi-port video store for pre-prepared still or animated graphics

DRAM store has four video output streams and Flash store has two video output streams

Can read and write multiple images at once

Flash store retains video data when board is unpowered

VIDEO INPUTS

MultiLogo V430: Up to four HD or SD inputs can provide external live sources for logo keyer. All inputs must be same format

MultiLogo V130: One HD or SD input (for main programme)

Sections of the live feeds can be grabbed

270Mbit to 1.485Gbit serial compliant to EBU 3267-E, SMPTE 259M and SMPTE 292M

HD cable equalisation up to 140m with Belden 1494 or equivalent (approx. 100m with Belden 8281). Cable lengths are for new HD version of frames. SD cable equalisation >250m Belden 8281 or equivalent

Input return loss: -15dB for 50MHz to 1.5GHz

Auto 525/625 line and video format (HD/SD) selection

VIDEO OUTPUTS

Two HD or SD main outputs and one HD or SD preview output using RM44 frame rear module (MultiLogo V130) or RM44 and RM34 rear modules together (MultiLogo V430). Relay bypass protection of the main input

Serial output: 270Mbit to 1.485Gbit serial compliant to EBU 3267-E, SMPTE 259M and SMPTE 292M. Output follows the input format

GRAPHICS SOFTWARE AND TRANSFER

Special drag and drop software running on the graphics PC will auto-convert most common graphic file formats to the format required by logo keyer

100 MB Ethernet connectivity from the graphics PC straight into the video store on the board for fast transfer of images

KEYING

Three keyers can independently bring up three graphics and associated keys from the internal or external sources

Keyers have separate gain, lift and opacity controls

Additive and multiplicative keying

Graphics can either have separate key signal or be self-keyed

Can be used as a simple dual channel device, with three keyers shared between two channels (MultiLogo V430)

DELAY THROUGH BOARD

Up to one video line. Each input has a one-line TBC to align the input signal timing

LOOK-AHEAD PREVIEW

Duplicate keyer functions mean that the Aux output can be used to preview the next state and the transition to that state before it is applied to the Main output

AUDIO

Audio storage and processing available early 2009

GPI INPUTS

Seven GPI inputs (MultiLogo V430) or four GPI inputs (MultiLogo V130).

Functions still to be fully defined

Active: pull to ground, pulled up to +5V through 10 kohm

The three top board GPI inputs are always available. The four on the main board are shared with the second serial port (link selection)

GPI OUTPUTS

One GPI output

Other GPI output connection is used to control the bypass relay

Electrically: Open collector transistors 48V, 270 ohm current limit resistors. Pulled up to +5V through 6800 ohm

LED INDICATION OF:

Power supplies okay

Main input present

SD/HD input

REMOTE CONTROL

RS422/485

Port 1: 19200, 8 bits, 1 stop no parity

Port 2: 38400, 8 bits, 1 stop odd parity

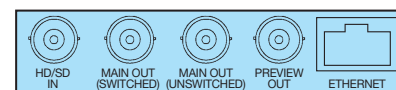
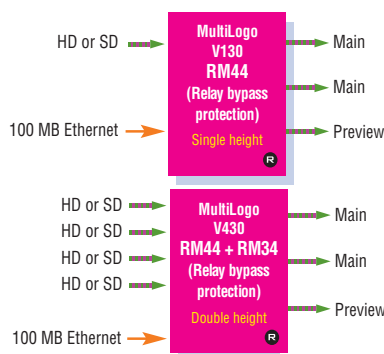
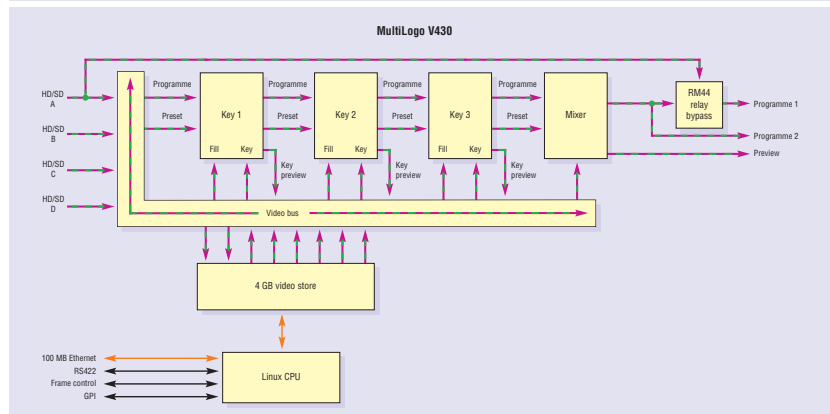
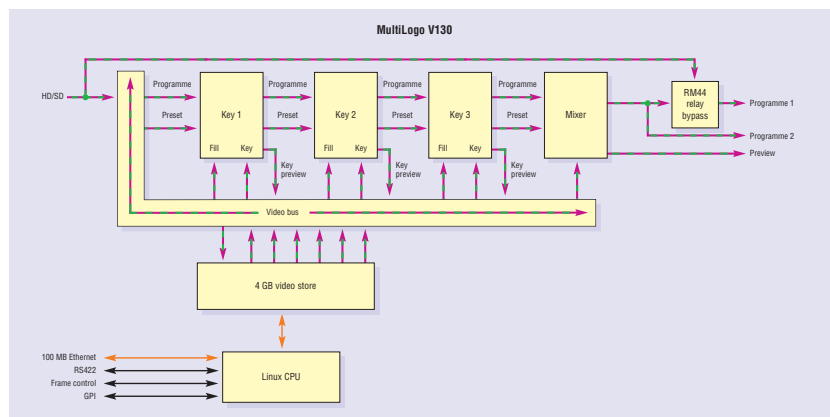
Basic control from frame active panel and remote panel

Statesman allows basic control from any PC on a network

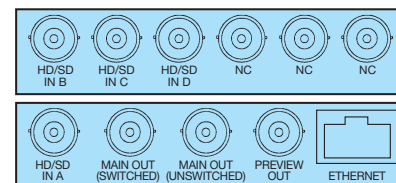
MultiLogo runs the uLinux operating system

Second serial port (link select instead of GPI inputs) allows connection to control panels and automation systems

Industry standard software protocols help it to work with automation systems and video mixers



RM44 used with MultiLogo V130



RM44 + RM34 used with MultiLogo V430

ORDERING INFORMATION

MultiLogo V430	Modular logo keyer with three layers of keying and 4 GB video store. Includes four HD/SD inputs providing external live sources
MultiLogo V130	Modular logo keyer with three layers of keying and 4 GB video store
Indigo 4	4U frame with passive front panel for up to 24 Crystal Vision modules
Indigo 4SE	4U frame with passive front panel fitted with Statesman CPU for up to 24 Crystal Vision modules
Indigo 2	2U frame with passive front panel for up to 12 Crystal Vision modules
Indigo 2AE	2U frame with active front panel for up to 12 Crystal Vision modules
Indigo 2SE	2U frame with passive front panel fitted with Statesman CPU for up to 12 Crystal Vision modules
Indigo 1	1U frame with passive front panel for up to six Crystal Vision modules. Power supply redundancy available with Indigo 1-DP
Indigo 1AE	1U frame with active front panel for up to six Crystal Vision modules. Power supply redundancy available with Indigo 1AE-DP
Indigo 1SE	1U frame with passive front panel fitted with Statesman CPU for up to six Crystal Vision modules. Power supply redundancy available with Indigo 1SE-DP
Indigo DT	Desk top box with passive front panel for up to two Crystal Vision modules
Indigo DTAE	Desk top box with active front panel for up to two Crystal Vision modules
Indigo DTSE	Desk top box with passive front panel fitted with Statesman CPU for up to two Crystal Vision modules
RM44 + RM34	Two single slot rear modules used together for MultiLogo V430. Allows 12 boards in 4U, six in 2U, three in 1U and one in desk top box. Provides relay bypass protection of the main input. Gives access to four HD/SD inputs, two HD/SD main outputs and one HD/SD preview output
RM44	Single slot frame rear module used for MultiLogo V130. Allows maximum number of boards in frame (24 in 4U, 12 in 2U, six in 1U, two in desk top box). Provides relay bypass protection of the input. Gives access to one HD/SD input, two HD/SD main outputs and one HD/SD preview output
REMIND	19" remote control panel
REMIND-E	19" Ethernet remote control panel
Statesman	PC Control System

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