Multimedia Scan Converter

MC-2085/MC-2086

MC-2085/MC-2086 are multi-video processors that can process 8K2K high resolution size in real-time. Employing a slot type input/output interface boards, MC-2085/MC-2086 will always function with the latest connectors. For external control, LAN/RS-232C/remote contacts are implemented, and control from various control devices is possible.

Features

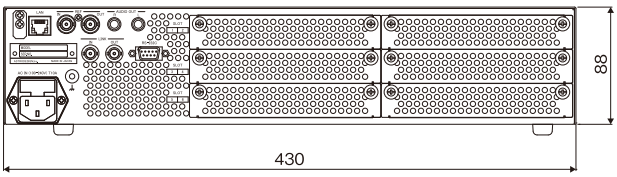
Model Name		MC-2085 -1 (2 I/F Board Type) -2 (4 I/F Board Type) -3 (6 I/F Board Type)	MC-2086 -4 (8 I/F Board Type) -5 (10 I/F Board Type) -6 (12 I/F Board Type) -7 (14 I/F Board Type) -8 (16 I/F Board Type)
Maximum number of boards		6	16
Maximum number of channels		12ch	32ch
Maximum number of windows	HD system	10 Window	30 Window
	4K system	4K-2 Window	4K-7 Window
User exchange	I/F board	○	○
	Power/Fan	×	○

Common Main Functions

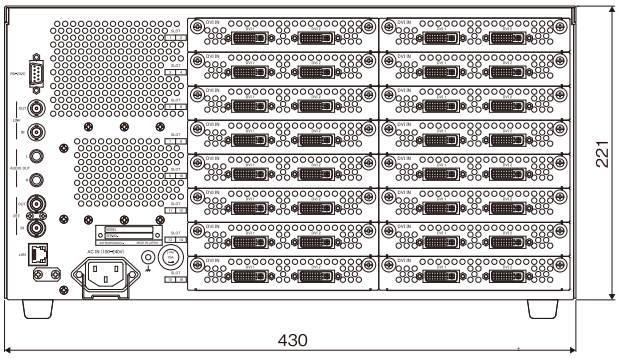
- Original zoom algorithm/10-bit arithmetic processing with use of motion adaptive IP conversion algorithm
- HDCP compatible, Audio compatible (embedded/main unit output)
- Aspect mode selection, input EDID rewriting (output copy/fixed selection)
- Key synthesis, fade switching, video rotation
- Joint/blending area setting
- Web browser settings

Rear view

MC-2085



MC-2086



Use case

Indoor/Outdoor Large-scale Display

Racing Facility/ Signage

Assumed Display: Specialized LED

High-Definition Display

Simulator/ Presentation/ R&D

Assumed Display: Fine pitch LED/ Projector/LCD

Collective Multi-Information Display

Crisis Management: Transportation/Lifeline/ Crisis Management

Assumed Display: Multi-LCD/Multi-DLP

Medical Sites: Information Communication/ Conference

Assumed Display: 4K Monitor/Projector

Specifications

Input/Output Specifications

ch		Item	Input Specifications (Per 1ch) MC-1561-A/-C/-D/-S/-H/-P	Output Specifications (Per 1ch) MC-1562-A/-D/-S/-H/-P
VGA MC-1561-A MC-1562-A	Video	Connector	D-Sub 15pin / No monitor out	D-Sub 15pin
		Scanning Method	Progressive / Interlaced	
		Pixel Clock	13.5 – 165MHz	
		Horizontal/Vertical Frequency	15 – 110kHz / 24 – 150Hz	
		Number of Display Pixels	Maximum 2048 × 1200	
		Color Format	Analog RGB / YP_BP_R	
		Video Level	0.7Vp-p / 75Ω termination	
		Video Data Resolution	10-bit	
		Sync Signal	HS / VS, G(Y)-on	
	Audio Signal	Connector	Stereo mini jack	
		Corresponding Standard	Stereo	
		Sampling	48kHz	
		Audio Level	0.25Vrms / -18dBFS	
Composite MC-1561-C	Video	Connector	BNC connector / No monitor out	—
		Scanning Method	Interlace	
		TV System	NTSC	
		Video Data Resolution	8-bit	
		Signal Level	1Vp-p / 75Ω termination	
	Audio Signal	Connector	Stereo mini jack	
		Corresponding Standard	Stereo	
		Sampling	48kHz	
		Audio Level	0.25Vrms / -18dBFS	
DVI (HDCP Compatible) MC-1561-D MC-1562-D	Video	Connector	DVI-I connector (signal is digital only) / No monitor out	DVI-I connector (signal is digital only)
		Data Format	DVI R1.0 (Single Link)	
		Scanning Method	Progressive / Interlaced	
		Pixel clock	25 – 165MHz	
		Horizontal/Vertical Frequency	15 – 110kHz / 24 – 150Hz	
		Number of Display Pixels	Maximum 2048 × 1200	
		Color Format	Digital RGB / YC_BC_R (4:4:4, 4:2:2)	
		Video Data Resolution	8/10/12-bit *Supports Deep Color	
	Audio Signal	Connector	Multiplexed to video	
		Corresponding Standard	L-PCM × 2	
		Sampling	48kHz	
		Data Resolution	24-bit	
SDI MC-1561-S MC-1562-S	3G-SDI	Connector	BNC connector x 1 system / Monitor out × 1 system	BNC connector × 2 systems (distributed output)
		Scanning Method	Progressive / Interlaced	
		Corresponding Standard	SMPTE-424M Level A / B	
		Timing	2048 × 1080 / 24p / 23.98p 1920 × 1080 / 60p / 59.94p / 50p 1920 × 1080 / 60i / 59.94i / 50i / 30p / 29.97p / 25p / 24p / 23.98p 1920 × 1080 / 30PsF / 29.97PsF / 25PsF / 24PsF / 23.98PsF 1280 × 720 / 60p / 59.94p / 50p / 25p / 24p / 23.98p	
		Color Format	Digital RGB / YC_BC_R (4:4:4, 4:2:2)	
		Video Data Resolution	10-bit	
	HD-SDI	Connector	BNC connector × 1 system / Monitor out × 1 system	BNC connector × 2 systems (distributed output)
		Scanning Method	Progressive / Interlaced	
		Corresponding Standard	SMPTE-292M	
		Timing	1920 × 1080 / 60i / 59.94i / 50i / 30p / 29.97p / 25p / 24p / 23.98p 1920 × 1080 / 30PsF/ 29.97PsF / 25PsF / 24PsF / 23.98PsF 1920 × 1035 / 60i / 59.94i 1280 × 720 / 60p / 59.94p / 50p / 30p / 29.97p / 25p / 24p / 23.98p	
		Color Format	YC_BC_R (4:2:2)	
		Video Data Resolution	10-bit	
	SD-SDI	Connector	BNC connector × 1 system / Monitor out × 1 system	BNC connector × 2 systems (distributed output)
		Scanning Method	Interlaced	
		Corresponding Standard	SMPTE-259M-C	
		Timing	720 × 480 59.94i / 720 × 576 50i	
		Color Format	YC_BC_R (4:2:2)	
		Video Data Resolution	10-bit	
	Audio Signal	Connector	Multiplexed to video	
		Corresponding Standard	L-PCM × 2	
		Sampling	48kHz	
		Data Resolution	24-bit	
DIGITAL 4K (HDMI) MC-1561-H MC-1562-H	Video	Connector	HDMI Type A × system	
		Corresponding Standard	HDMI 2.0a compatible/ TMDS clock 25 – 300MHz / TMDS data rate 0.75 – 18Gbps	
		Color Format	4K / 60p RGB / YC_BC_R 4:4:4 / 4:2:2 8-bit 4K / 60p YC_BC_R 4:2:0 10-bit *1 4K / 30p RGB / YC_BC_R 4:4:4 / 4:2:2 8-bit HDTV 60p RGB / YC_BC_R 4:4:4 / 4:2:2 8/10-bit	
		Number of Display Pixels	Maximum 4096 × 2160	
	Audio	Connector	(Embedded audio)	
		Corresponding Standard	Linear PCM × 2	
		Sampling	48kHz / 24-bit	
	Others		EDID editing function (MC-1561-H)/EDID read function (MC-1562-H)/CEC incompatible/HDR incompatible/ITU-R BT.2020 incompatible	
DisplayPort MC-1561-P MC-1562-P	Video	Connector	DisplayPort × 1 system	
		Corresponding Standard	DisplayPort 1.2 Maximum 5.4 Gbps 4 lanes	
		Color Format	RGB/YC_BC_R 4:4:4 6/8/10-bit YC_BC_R 4:2:2 6/8/10/12-bit (12-bit is internal 10-bit processing)	
		Pixel Clock	25 – 288MHz *1SLOT Type 594 – 4K2K60p *2SLOT Type	
		Number of Display Pixels	Maximum 3840 × 2160	
	Audio	Connector	(Embedded audio)	
		Corresponding Standard	Linear PCM × 2ch	
		Sampling	48kHz / 24-bit	
	Others		Not compatible with HDCP Compatible with AUX communication Compatible with DPCD (DisplayPort Configuration Date) Compatible with EDID (Extended Display Identification Date) Not compatible with MST (Multi-stream transfer) Not compatible with SSC (Spread spectrum) DP_PWR (External power supply) 3.3v 500mA	

*1 Internal processing is 8-bit

General Specifications

	Power Requirements (AC)	Power Consumption (AC)	Operating Temperature Range	Operating Humidity Range	Dimensions (Excluding Protrusions)	Weight (when fully mounted)
MC-2085	185W MAX (At full implementation)	AC 100-240V (50/60Hz)	+5 to 40℃	20 to 80%RH (No Condensation)	430 (W) × 88 (H) × 420 (D) mm	Approx. 9kg
MC-2086	475W MAX (At full implementation)				430 (W) × 221 (H) × 420 (D) mm	Approx. 24kg

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*** The specifications are subjected to change without notice.**

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