

MatrixPRO-II 3G/HD/SD-SDI series

A new slim line of 3G serial digital routers



Barco's MatrixPRO-II SD/HD/3G-SDI series offers three models of high speed serial routers: 8x8, 16x16 and 32x32. All three models are compact, have an extremely slim profile, are cost-effective, and provide an excellent solution where budget and space are at premium.

All routers support SDI formats from SD formats to 3G/HD. Their superior design allows for image switching and signal distribution without artifacts. They all feature a genlock input with loop through, insuring that all switching is synchronized with the house sync.

The routers can be controlled from the front panel, RS-232, Ethernet connections or the Encore and ScreenPRO-II presentation systems.

Barco's MatrixPRO-II SDI router series allows a single unit to be subdivided into multiple layers:

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Technical specifications

Supported signal formats	DVB-ASI, SMPTE 259M, SMPTE 292M, SMPTE 424M; 270M bps – 2.97Gbps; 2K, 2048x1556/23.98 and 24
Inputs	Standard: SMPTE 259M / SMPTE 292M / SMPTE 424M Data rate: 270Mbps – 1.485Gbps / 2.97Gbps Connector: 75 ohm BNC female Impedance: 75 ohm nominal Return loss: > 15dB (5MHz-1.485Ghz); > 10dB (1.5GHz – 3GHz) Cable equalization: Automatic up to 70m @ 2.97Gbps, typical Belden 1694A Automatic up to 100m @ 1.485Gbps, typical Belden 1694A Automatic up to 300m @ 270Mbps, typical Belden 8281
Outputs	Connector: 75 ohm BNC female Impedance: 75 ohm nominal Return loss: > 15dB (5MHz-1.485Ghz); > 10dB (1.5GHz – 3GHz) Signal level: 800mVp-p ±10% Rise/fall time: - 20% - 80% - SD limit: 0.4ns – 1.5ns, < 0.5ns rise/fall variation; - HD limit: < 270ps, < 100ps rise/fall variation; - 3G-HD limit: < 135ps, < 50ps rise/fall variation Amplitude overshoot: < 10% Signal polarity: Non-inverting electrical with respect to inputs
Signal Speed	Timing jitter: SD: < 0.2 UI; 3G-HD/HD: <1UI Alignment jitter: SD: <0.2UI; 3G-HD/HD: <0.2UI
Safety Regulations	Compliant with CE EN55103-1 and 2
Control	Serial port: RS-232, DB9 connector female Ethernet port: 10/100BaseT Ethernet bus, 1x RJ45 connector