

General

The Series AP32B and AP16RGB provide the system engineer with an optional signal interface to the System S2560E, programmable 256x256 switching system. The unique high density design of the System S2560E demands high density signal connectors on the unit. These connectors are 50-position SCSI-II type and allow for a smaller overall package size for the capability of the S2560E.

The Series AP32B (32 channel) and the AP16RGB (16 RGB channel) adapter panels allow the user to connect to the S2560E unit via industry BNC connectors. The units are 1RU and 2RU, respectively, and can be installed on a rear-facing set of equipment rails, or on front-facing equipment rails. This capability provides tremendous system flexibility allowing inputs and outputs to be connected at either the front or rear, or both. With versions with longer cables, the I/O can even be located in an adjacent rack.

The adapter panels are active and convert the single-ended BNC signals to high-performance differential signals compatible with the System S2560E. Input and output panels perform opposite functions and are not interchangeable. Each panel assembly is self-contained and requires only AC power.

Other adapter panel types are available for other applications, different connector types or additional gain. Contact the factory or your local sales engineer.

Model AP16RGB



Applications

- Communication installations
- RGB video routing
- Switching of NTSC, PAL, YC or Composite Video
- Satellite control centers
- Ground station signal routing
- Telemetry data distribution and routing

Features

- Standard BNC connectors
- Unit can be remotely located on front or rear rails
- Different impedances available
- Standard video levels ($\pm 1V$) or high capacity ($\pm 5V$)

Input Configurations

- | | |
|---|--------|
| ■ AP32BI-07375 ohm input, (video) | 3-foot |
| ■ AP32BI-07675 ohm input, (video) | 6-foot |
| ■ AP32BI-05350 ohm input, (video) | 3-foot |
| ■ AP32BI-05650 ohm input, (video) | 6-foot |
| ■ AP32BI-0S3500 ohm input, (sync) | 3-foot |
| ■ AP32BI-0S6500 ohm input, (sync) | 6-foot |
| ■ AP16RGBI-073 . . .75 ohm input, (RGB video) | 3-foot |
| ■ AP16RGBI-076 . . .75 ohm input, (RGB video) | 6-foot |

Output Configurations

- | | |
|---|--------|
| ■ AP32BO-07375 ohm output, $\pm 1V$ (video) | 3-foot |
| ■ AP32BO-07675 ohm output, $\pm 1V$ (video) | 6-foot |
| ■ AP32BO-05350 ohm output, $\pm 1V$ (video) | 3-foot |
| ■ AP32BO-05650 ohm output, $\pm 1V$ (video) | 6-foot |
| ■ AP16RGBO-073 . . .75 ohm output, $\pm 1V$ (video) | 3-foot |
| ■ AP16RGBO-076 . . .75 ohm output, $\pm 1V$ (video) | 6-foot |
| ■ AP32BO-H7375 ohm output, $\pm 5V$ (video) | 3-foot |
| ■ AP32BO-H7675 ohm output, $\pm 5V$ (video) | 6-foot |



Model AP32B (front view)



Model AP32B (back view)

AP32BI Specifications

Number of channels32 inputs, 32 outputs
Frequency responseDC-200MHz
Status LED'sVEE and VDD
Nominal signal level±5VDC
Maximum input level±5.5VDC (no damage)
SCSI cable length3-foot or 6-foot (2 supplied)
CoolingConvection
AC power requirements90-264VAC, 47-440Hz, 60Watts
Power cord6-foot (Belden 17250)
Ground stud10-32
Weight6 lbs
Size1.75H x 5.00D x 19.00W (1RU)
Operating temp0 to +60C
Non-operating temp-20 to +85C
Humidity0 to 95% (NC @ +25C)
MTBF>85,000 hours
(per MIL-HDBK-217F, N1
ground benign @ +25

Input Characteristics

TypeSingle-ended
Signal connector50 ohm BNC or 75 ohm BNC
CouplingDC (AC coupling optional, call factory)
Impedance50 or 75 (500 ohm on sync version)

Output Characteristics

TypeDifferential
Signal connector50 position SCSI-II
CouplingDC
Impedance100 ohm differential

AP32BO Specifications

Number of channels32 inputs, 32 outputs
Frequency responseDC-125MHz
Status LED'sVEE and VDD
Nominal signal level±1.5VDC (±5.0VDC on H version)
SCSI cable length3-foot or 6-foot (2 supplied)
CoolingConvection
AC power requirements90-264VAC, 47-440Hz, 60Watts
Power cord6-foot (Belden 17250)
Ground stud10-32
Weight6 lbs
Size1.75H x 5.00D x 19.00W (1RU)
Operating temp0 to +60C
Non-operating temp-20 to +85C
Humidity0 to 95% (NC @ +25C)
MTBF>85,000 hours
(per MIL-HDBK-217F, N1
ground benign @ +25

Input Characteristics

TypeDifferential
Signal connector50 position SCSI-II
CouplingDC
Impedance100 ohm differential

Output Characteristics

TypeSingle-ended
Signal connector50 ohm BNC or 75 ohm BNC
CouplingDC (AC coupling optional)
Impedance50 or 75 ohm

AP16RGBI Specifications

Number of channels48 inputs, 48 outputs
Frequency responseDC-200MHz
Status LED'sVEE and VDD
Nominal signal level±5.0VDC
Maximum input level±5.5VDC (no damage)
SCSI cable length3-foot or 6-foot (2 supplied)
CoolingConvection
AC power requirements90-264VAC, 47-440Hz, 60Watts
Power cord6-foot (Belden 17250)
Ground stud10-32
Weight8 lbs
Size3.50H x 5.00D x 19.00W (2RU)
Operating temp0 to +60C
Non-operating temp-20 to +85C
Humidity0 to 95% (NC @ +25C)
MTBF>82,000 hours
(per MIL-HDBK-217F, N1
ground benign @ +25

Input Characteristics

TypeSingle-ended
Signal connector50 ohm BNC or 75 ohm BNC
CouplingDC (AC coupling optional)
Impedance50 or 75

Output Characteristics

TypeDifferential
Signal connector50 position SCSI-II
CouplingDC
Impedance100 ohm differential

AP16RGBO Specifications

Number of channels48 inputs, 48 outputs
Frequency responseDC-125MHz
Status LED'sVEE and VDD
Nominal signal level±1.5VDC
SCSI cable length3-foot or 6-foot (2 supplied)
CoolingConvection
AC power requirements90-264VAC, 47-440Hz, 60Watts
Power cord6-foot (Belden 17250)
Ground stud10-32
Weight8 lbs
Size3.50H x 5.00D x 19.00W (2RU)
Operating temp0 to +60C
Non-operating temp-20 to +85C
Humidity0 to 95% (NC @ +25C)
MTBF>82,000 hours
(per MIL-HDBK-217F, N1
ground benign @ +25

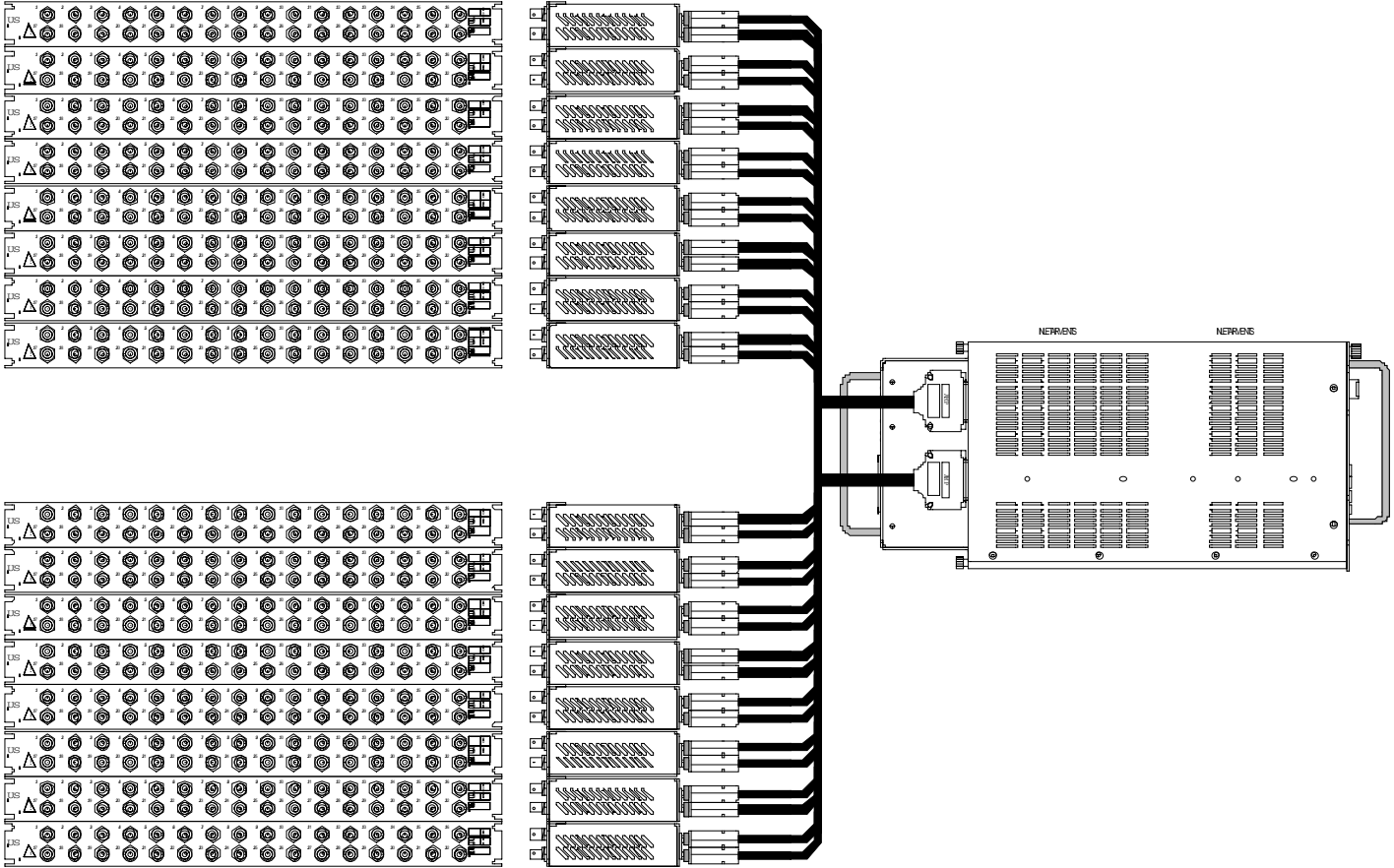
Input Characteristics

TypeDifferential
Signal connector50 position SCSI-II
CouplingDC
Impedance100 ohm differential

Output Characteristics

TypeSingle-ended
Signal connector50 ohm BNC or 75 ohm BNC
CouplingDC (AC coupling optional)
Impedance50 or 75 ohm

Example of a 256x256 Matrix using Adapter Panels (System S2560E)



Universal Switching's policy is one of continuous development, and consequently the company reserves the right to vary from the descriptions and specifications shown in this publication.