APOGEE LABS

AL2573
RF, Pulse, and Time Distribution

The AL2500 product line is designed to accommodate complex analog and digital distribution functions, including RF distribution, IF distribution, pulse distribution, time code distribution and amplification. Typical applications are those in which the user requires the dissemination of multiple copies of a single RF, digital or analog signal. Moreover, the modular and scalable design (up to 6 available module slots) permits users to easily expand and adapt the capabilities to specific applications. The chassis is designed reduce the rack space requirements while providing the same proven reliable performance of the larger more densely populated AL2500 chassis and supports following modules currently in use with the 15 channel AL2500.

CHASSIS FEATURES

- 3.5" (H) x 9" (D) x 19" (W) rack-mount
- RF Distribution & Amplification
- Pulse Distribution
- IRIG Time Distribution

- Modular & scalable - Up to 6 modules
- Hot swappable, redundant power supply
  - Independent power source & switch
  - Front panel LED power indicator

CHASSIS SPECIFICATIONS

PHYSICAL CHARACTERISTICS
- 3.5" H x 19" W rack mountable
- Weight: 6 lbs. empty
- 6 module slots - rear loading
- 1 power supply bays

OPERATING ENVIRONMENT
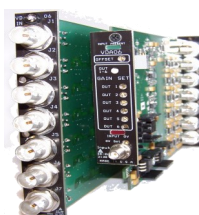- Temperature: 0º C to 50º C

POWER SUPPLIES
- Modular rear mounted plug in
- Auto-sensing 115/230 VAC; 50/60/400 Hz
- Power on/off switch
- Front panel power-on indicator

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AL2573-RF04 / RF06

RF Distribution Amplifier

With Adjustable Gain and Offset

The Apogee Labs RF04/RF06 is an Interfacer II module that is designed to accept a single wide-band signal and reproduce it on four or six independent gain controlled outputs. The module presents its controls and indicators and a test-point connector on its front panel. The signal input and four/six outputs are located on the module rear panel. All rear panel connectors are BNC type. The front panel connector is SMA type.

The user is given a front panel screw driver control for: input signal DC offset (BIAS) adjustment, over voltage (OVER) LED indication threshold by means of the SET adjustment, individual GAIN control for each of the four outputs, and an overall GAIN control. The presence of an input signal is indicated on an LED identified as

RF SPECIFICATIONS

- One input on BNC connector
  - ◊ 1 V-rms nominal
  - ◊ 75Ω termination
  - ◊ Max input range ±10V
  - ◊ Max input without damage ±10Vrms
  - ◊ DC offset control ±50%
- Four / Six outputs on BNC connectors
  - ◊ 75Ω termination
  - ◊ 1 V-rms nominal
  - ◊ Output level +/-10V no load
- Individual output gain control
  - ◊ -10 dB to +15 dB with 1 V-rms nominal input

- Wide-band frequency response
  - ◊ ±1 dB, DC to 30 MHz
  - ◊ ±2 dB, DC to 60 MHz
- Harmonic distortion > 40 dB below rated output
- Noise floor > 60 dB below rated output
- Input signal port return loss > 20 dB
- Channel to channel isolation
  - ◊ > 80 dB at 1 MHz
  - ◊ > 60 dB at 20 MHz
- Front panel indicators
  - ◊ Test point , isolated –20 dB of input
  - ◊ Over voltage LED with set point control

AL2573-PD04

Pulse Distribution & DC Time Code Distribution

2 Input / 4 Output distribution

The AL2573-PD04 Pluggable Interface Module is a conversion module capable of receiving two Pulse or DC time code level input signals and produces four Pulse or DC time code level output signals. All input signals may be inverted independently. The AL2573-PD04 uses two BNC input connectors, four BNC output connectors and operates up to 35 Mbps. The AL2573-PD04 can also drive the daisy chain bus of the AL2500/2573 chassis enabling the user to create additional copies of the input data signals. A valid input to J1 and J2 will illuminate the corresponding A & B LED on the front of the module respectively. The AL2573-

- Operates up to 30 Mbps
- Two Pulse or DC Time Code Level Inputs
- Four Pulse or DC Time Code Level Outputs

- Jumper Selectable Input Polarity
- Drives Daisy Chain Bus for additional distribution
- Input Activity LED

SPECIFICATIONS

GENERAL
- 2 Independent channels
- Single slot module
- Model AL2500 / 2573 Pluggable Interface Module

INPUT
- Selectable: J1/J2 BNCs or internal daisy chain bus
- Pulse or DC Time Code level signal
- Rate: up to 35Mbps
- 50/75/1K ohm selectable termination
- Jumper selectable polarity
- Jumper selectable output control

OUTPUT
- J3-J6: Pulse or DC Time Code data
- Jumper selectable output control

AL2573-PD05

Pulse Distribution & DC Time Code Distribution

Additional distribution for use with AL2573-PD04

The AL2573-PD05 Pluggable Interface Module is a conversion module capable of receiving two Pulse or DC Time Code level signals from the AL2573/2500 daisy chain bus and producing six Pulse or DC Time Code level output signals. The AL2573-PD05 uses six BNC output connectors and operates up to 35 Mbps. The AL2573-PD05 can also drive the daisy chain bus of the AL2500/2573 chassis enabling the user to create additional copies of the input data signals. The AL2573-PD05 requires 1 chassis slot.

- Output only module
- Receives data from chassis daisy chain bus
- Six Pulse or DC Time Code Level Outputs
- Operates up to 35 Mbps
- Drives Daisy Chain Bus for additional distribution

SPECIFICATIONS

GENERAL
- 6 Independent output channels
- Single slot module
- Model AL2500 / 2573 Pluggable Interface Module

INPUT
- From chassis daisy chain bus
- Pulse or DC Time Code level signal
- Rate: up to 35Mbps

OUTPUT
- J1-J6: Pulse or DC Time Code data
- Jumper selectable output control

AL2573-TCD04

Amplitude Modulated IRIG Distribution Module

2 Input / 4 Output Distribution

The AL2573-TCD04 Pluggable Interface Module is a conversion module capable of receiving two AM IRIG level input signals and produces four AM IRIG level output signals. The AL2573-TCD04 uses two BNC input connectors, four BNC output connectors and operates up to 100 KHz. The AL2573-TCD04 can also drive the daisy chain bus of the AL2500/2573 chassis enabling the user to create additional copies of the input data signals. A valid input to J1 and J2 will illuminate the corresponding A & B LED on the front of the module respectively. The AL2573-TCD04 requires 1 chassis slot.

- Two independent analog IRIG time level inputs
- Two Independent analog IRIG time level outputs
- 1 KHz to 100 KHz bandwidth
- Independent input gain control
- Signal indicator LEDs

- Inputs drive daisy chain bus
- High current outputs
- IRIG-A, B, D, E, G, H compatible
- NASA 36 compatible

SPECIFICATIONS

GENERAL
- 2 input / 4 output
- Single slot module
- Model AL2500 / 2573 Pluggable Interface Module

INPUT
- Dual input (analog) capability
- BNC connectors
- Rate: 1 KHz to 100 KHz

OUTPUT
- Four selectable outputs
- BNC connectors
- High current

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AL2573-TCD05

Amplitude Modulated IRIG Distribution Module

Additional distribution for use with AL2573-TCD-04

The AL2573-TCD05 Pluggable Interface Module is a conversion module capable of receiving two AM IRIG level signals from the AL2573/2500 daisy chain bus and producing six AM IRIG level output signals. The AL2573-TCD05 uses six BNC output connectors and operates 1 KHz and 100 KHz. The AL2573-TCD05 can also drive the daisy chain bus of the AL2500/2573 chassis enabling the user to create additional copies of the input data signals. The AL2573-TCD05 requires 1 chassis slot.

- Six Independent analog AM IRIG time level outputs
- 1 KHz to 100 KHz bandwidth
- High current outputs

- IRIG-A, B, D, E, G, H compatible
- NASA 36 compatible

SPECIFICATIONS

GENERAL
- 6 independent outputs
- Single slot module
- Model AL2500 / 2573 Pluggable Interface Module

INPUT
- From chassis daisy chain bus
- Rate: 1 KHz to 100 KHz

OUTPUT
- Six outputs
- BNC connectors
- High current

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