



# APOGEE LABS

## 2150

### PaKDst Packet Distributor Module



## FEATURES

- Demultiplexes composite data for transmission to application modules
- CCSDS compatible
- Supports rates from 200 Kbps to 19.44 Mbps
- Encodes received IRIG-B-122 output
- Supports 1ms or 10ms sample intervals
- Receives user entered notes
- Reports link status
- Supports DS1/DS3 and OC3 link interface modules

## OVERVIEW

The PaKDst module receives the composite CCSDS transfer frame data from a Packetizer or other compatible data link module as either serial TTL data or parallel data on the parallel data interface (PDI). This data stream, formatted as a synchronous transfer frame (TF), contains source packets produced by each active data channel in a multiplexer subsystem. The PaKDst extracts the source packets and presents them to the demultiplexer bus for capture and output by appropriate-channel application modules.

The serial TTL Clock and Data Interface is designed to connect directly to an Apogee Labs' Packetizer, recorder or communication link operating up to 35 Mbps. To support higher data rates or unique interface types and formats (such as T3, OC3, etc) the Parallel Data Interface (PDI) is used. This path supports up to ~10 MWd/s (155.52 Mbps). Only one PaKDst may be installed in an AL4300 series chassis.

A select set of Apogee Labs packetizers accept IRIG-B time code and transmit a digital representation of this code in the transfer frame. The PaKDst extracts the digital information and reconstructs the standard amplitude-modulated analog time code signal for processing by an industry standard time code translator

The 2150 PaKDst is used in conjunction with the Apogee Labs' 4082 APacKCol module.

## SPECIFICATIONS

### COMPOSITE INPUT FORMAT

- 8192 bits / transfer frame
- CCSDS compatible composite transfer frame with attached sync marker

### COMPLEMENTARY HARDWARE

- 4082 APacKCol

### OUTPUT

- IRIG-B-122 AM; 5.8Vp-p; 3:1 modulation ratio

### INPUTS

- Serial data and clock: TTL levels; NRZ-L data with 0° clock; 200 Kbps to 35 Mbps
- 8 bit parallel input; PECL levels; used in conjunction with Apogee Labs 2026 DS3IF, 2027/2032/2035/2055 OC3IF modules; 25 Kbps to 19.44 Mbps
- Receives user entered notes