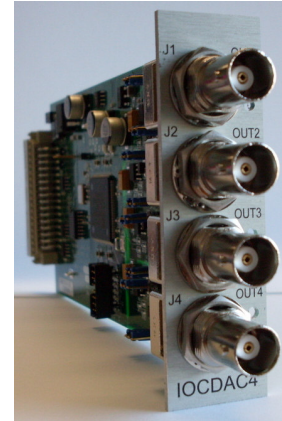




## IOCASO ASYNCHRONOUS CONVERTER MODULE

### FEATURES

- RS-232 FRAME Asynchronous Output
- Four independent channels
- 7,8 or 9 data bits
- User configurable BAUD rate
- Super commutation supported
- Sub commutation supported
- Active/Stale Bit supported
- Overflow bit
- RS-232 output Levels
- Programmable features:
  - ◊ Baud Rate
  - ◊ Word Length including Parity bit: 7/P, 7/N, 8/P, 8/N
  - ◊ Word location
  - ◊ Word Interval (super commutation)
  - ◊ Frame Interval (sub commutation)
  - ◊ Lookup table for non interval data



Sample Picture

### OVERVIEW

The IOCASO is a 4 channel asynchronous RS-232 output module that support connections to standard COM ports. It is configured to pick data words from an IRIG 106 PCM stream that is decommutated by a IOCDCM2 or DECOM module in the AL2873 chassis and place the data into a user defined RS-232 frame and output it on a BNC. User setup is provided that allows complete control of each of the 4 channels output baud rate, word length, and location of data in the PCM stream to be output.

Several IOCASO modules can be configured in a single AL2873 chassis providing numerous RS-232 outputs.

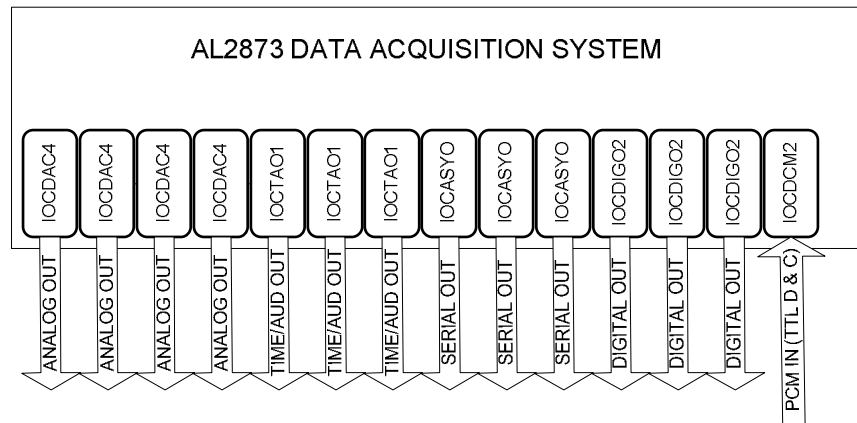
Control of the IOCASO is the front panel keypad and 3" x 2" LCD or Ethernet and the APEX software package. When configured the current setup is retained in non-volatile memory and is automatically restored on power up with a recovery time of less than 20 seconds.

## APPLICATION NOTES

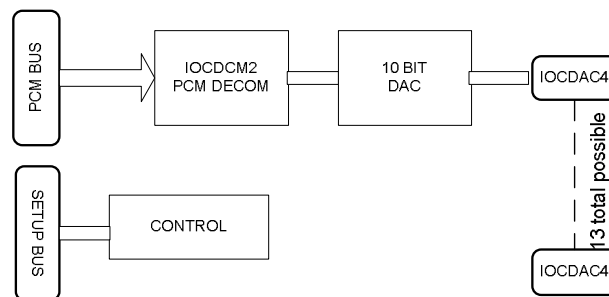
The IOCASO is RS-232 asynchronous output module capable of stripping data from a IRIG106 data stream and placing it into a COM port compatible format. This module is used in conjunction with the suite of data acquisition and decommutator boards that plug into the AL2873 chassis to recreate various signals from an IRIG 106 PCM data stream. The IOCASO is capable of reproducing RS-232 ASCII data embedded in a PCM data stream. An AL2873 decommutation system is capable of decoding analog, digital, PC Com ports, audio, and IRIG timing. Typical signals (but not limited to) are receiver AGC levels, Bit Sync and Frame Sync lock status, station timing, station voice, GPS RS-232 outputs and serial data streams from antenna position encoders.

System block diagrams are shown below.

**Figure 1: Fully Populated Chassis**



**Figure 2: Functional Block Diagram**



## SPECIFICATIONS

### GENERAL

- Single slot module (3" x 6" x 0.9")
- Up to 13 modules per chassis

### INPUT

- Binary coded data on internal AL2873 PCM bus
- 8 to 16 bits
- Super commutation supported
- User selectable word location in PCM frame

### OUTPUT

- 4 independent channels
- RS-232 Frame data
- User selected BAUD per channel
- User configured bits
- BNC connectors
- Control bit: ACTIVE/STALE

### ENVIRONMENTAL

- Operating temperature: 0° to 50° C
- Relative humidity: 15% to 95%; non-condensing
- Altitude: Sea level to 10,000 feet

### POWER

- +5V from AL2873 chassis backplane
- 

### MEAN TIME BETWEEN FAILURES

- ~ 100,000 hours