



MODEL AL4301

COMMUNICATIONS and RECORDING MULTIPLEXER and DEMULTIPLEXER



1. FEATURES

- **Modular Design**
- **Back-Plane Supports up to 155.52 Mbps Multiplexed Serial Data Rate**
- **Full Duplex or Simplex Operation**
- **Channel Interfaces for: PCM, Analog, Voice, Time Code and Video**
 - **High Speed Digitizer for FM Multiplexers and Analog Signals**
 - **T1, DS-3, HSSI or OC-3 Serial Communication Outputs**
- **Serial, SCSI-II and DRSI Recorder Interfaces**
- **Bright, High Contrast Display and Simple to Use Controls**
- **5 1/4" High Rack Mount Chassis, Sturdy Construction**
- **Up to 17 available module slots**

2. PURPOSE

The AL4301 is a serial data multiplexer and demultiplexer depending upon its configuration. As a multiplexer, the unit is used to combine several data streams into one higher speed stream for convenient data transmission or storage on a single channel recording device. The demultiplexer configuration subsequently accepts the composite data-stream and reconstructs the original channel signals. In full duplex applications, a single AL4301 chassis is used to house both the multiplexer and demultiplexer. Figure 1 illustrates a simplex configuration. However, if all of the modules shown in the drawing are contained in a single chassis and that chassis is duplicated at the opposite end of the data link, the application becomes full-duplex. In record/playback applications the independent operation of the Multiplexer and Demultiplexer sections allow playback and read after write functionality using only one unit.

The exact operation of the AL4301 varies with the number and type of plug-in modules installed in the unit. Each time that power is applied to the chassis, initial turn-on tests are performed. Each card slot is tested to determine if an application module is installed. Each installed module automatically enters the operational mode and re-activates its last programmed settings. Control of the unit is provided by front panel controls and indicators or an external computer using an RS-232 serial link. These facilities are provided in the basic chassis. Optionally, an auxiliary remote control module may be installed to implement IEEE-488 or an Ethernet connection.

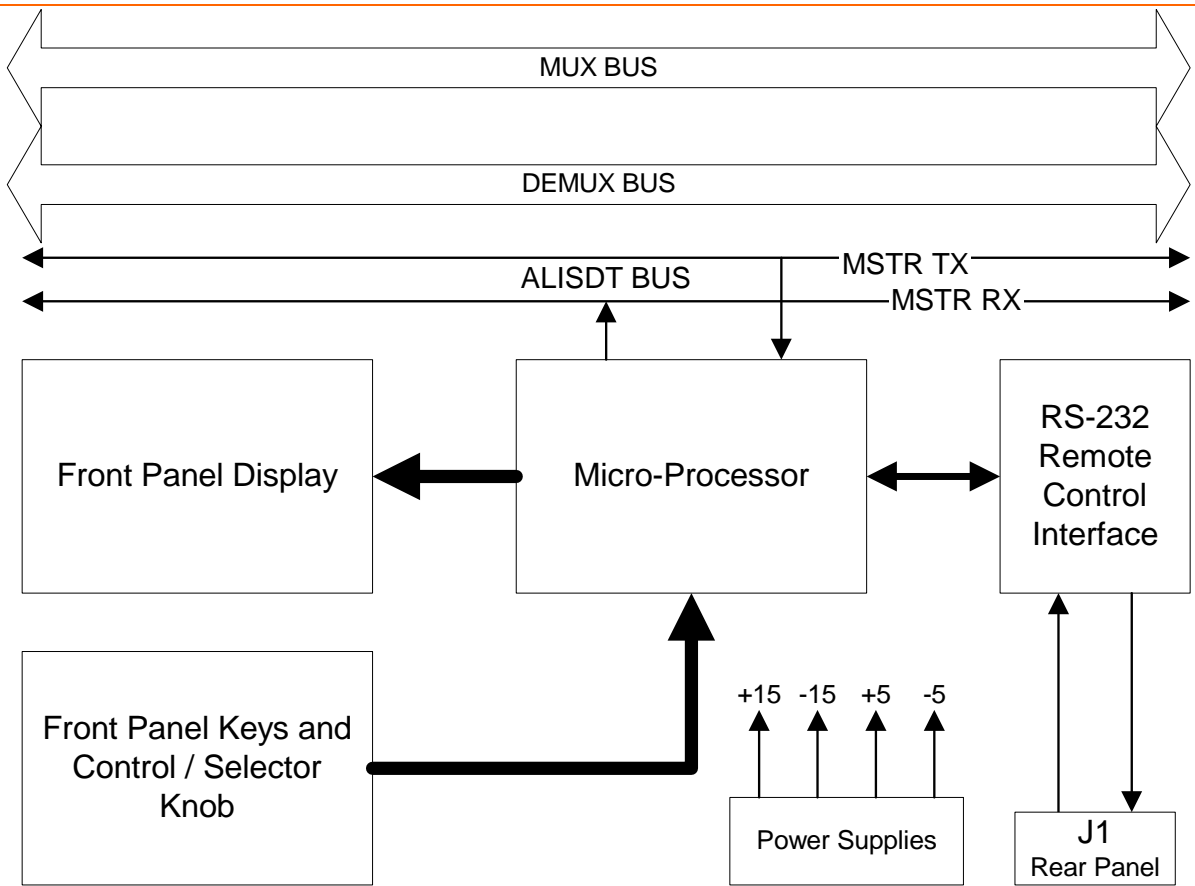


Figure 1: Model AL4301 Functional Block Diagram

3. SPECIFICATIONS

PHYSICAL

Chassis dimensions

5¼" high x 19" wide x 14½" deep
Rack mount (standard EIA rack) or stand alone

Weight

15 lbs., without modules
8 oz. per module (approximately)

Power

90 VAC to 240 VAC, single phase, auto select
47 Hz to 63 Hz
Less than 250 watts

Environmental

0° C to 40° C, operating temperature
-20° C to 70° C storage temperature
15% to 95% relative humidity, without condensation
10,000 feet altitude

Remote Control RS232

DB9 connector
9600 Baud, 8 bits, 1 stop, no parity
Application Modules:
3U x 220 mm Eurocard Format
Up to seventeen (17) available module slots

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