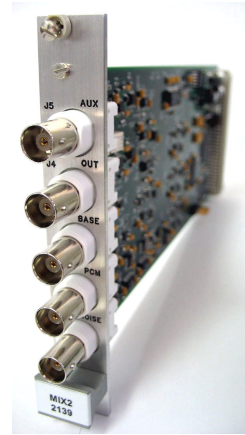




## MODEL 2070 MIX1 MODULE



### FEATURES

- Digital Data Input TTL levels, rates to 30 Mbps**
- Noise Level Input +/- 10 V maximum, frequency b/w to 15 MHz**
- Baseline Offset Level Input: +/- 10 V maximum, frequency b/w to 5 MHz**
- Dual Mixed Output: +/- 10 V maximum combined output level**
- All signals are single Ended BNC, 10k/ 75 / 50 ohm, Jumper selectable**

### OVERVIEW

The MIX1 accepts three inputs, which may consist of: a TTL input signal, baseline voltage and a noise source. (The nature of these signals is almost arbitrary.) The TTL data is internally converted to bipolar and is user programmable from 0.2 to 10 Vp-p. These three input signals are added in a high speed summing amplifier circuit. The output of this summing amplifier is conditioned with an adjustable gain amplifier to provide two identical bipolar output signals within the +/- 10 Volt range.

The MIX1 module is programmable from the front panel or by remote commands to the AL4300 chassis. All front panel programmable functions are also accessible by way of the remote control. Gain settings are available for the TTL input and mixed output. These parameters are settable from 0.2X to 5X, adjustable in 0.1 increments

**SPECIFICATIONS/DIAGRAMS**

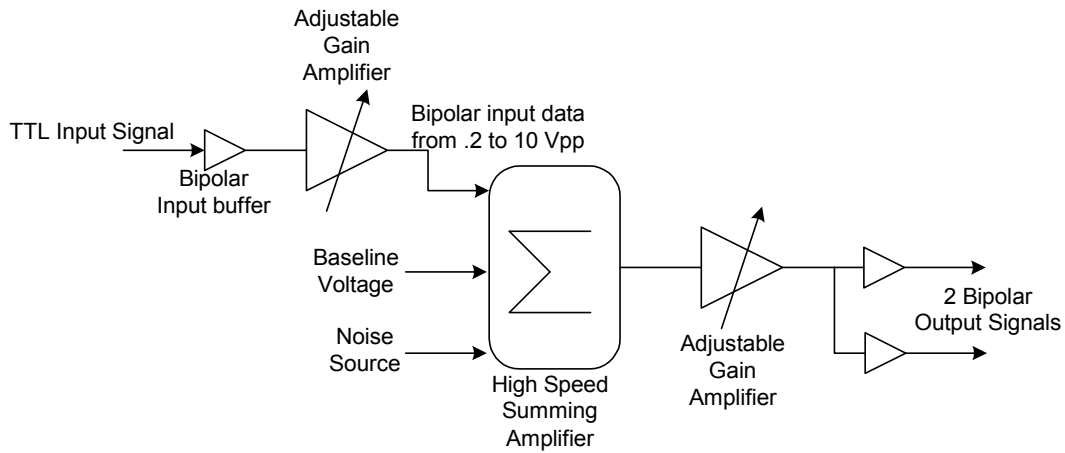
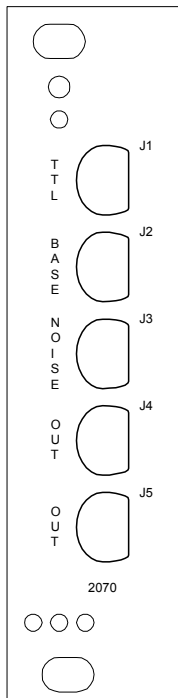


Figure 1 Model 2070 MIX1 Functional Block Diagram



Signal Descriptions:

Conn.	Signal	Termination
J1	TTL Data Input	J2: Off: 10K, On: Low impedance termination J3: Off: 75 ohm, On: 50 ohm
J2	Baseline Input	J5: Off: 10K, On: Low impedance termination J8: Off: 75 ohm, On: 50 ohm
J3	Noise Input	J7: Off: 10K, On: Low impedance termination J9: Off: 75 ohm, On: 50 ohm
J4	Bipolar Output	
J5	Bipolar Output	