

PIN MIXER DYNASEN MODEL CS2-50-300

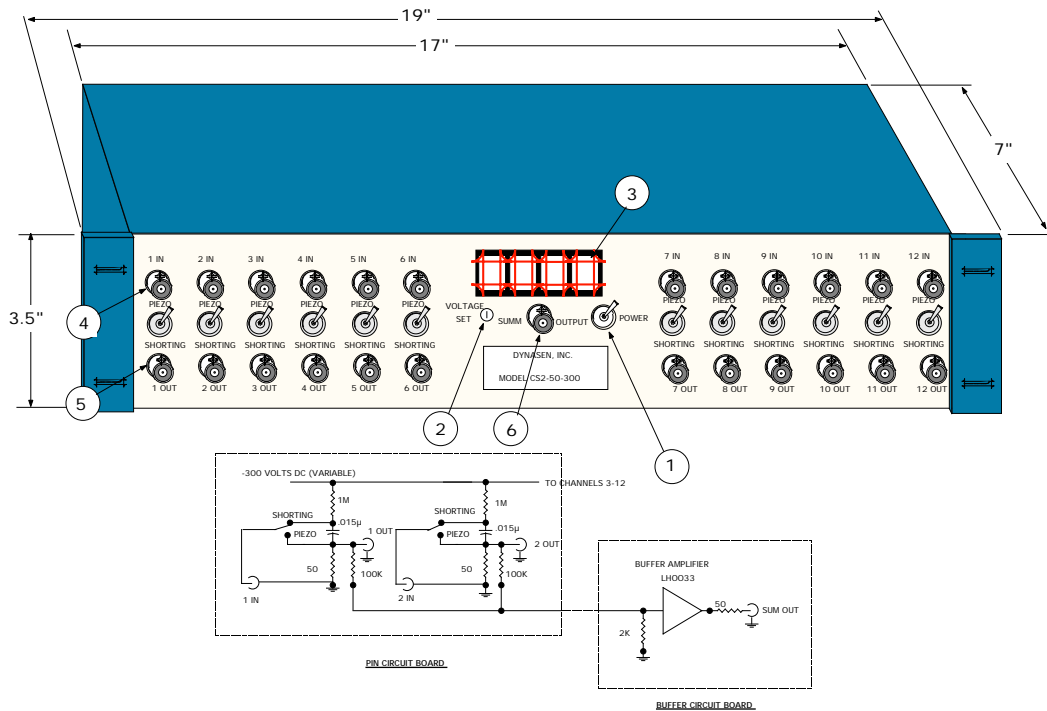


FIGURE 1. FRONT PANEL AND PARTIAL (2-CHANNEL) SCHEMATIC

Dynasen's pin mixer, model CS2-50-300, is a twelve-channel instrument that can be used to bias self-shorting or ionization pins or to condition the output produced by piezoelectric pins. The unit is constructed to provide the user with an unattenuated output signal (hi-z) for each pin, and a summation of all of the outputs attenuated by 1/100. The summation output is capable of driving a 50 Ω output line and should be terminated with 50 Ω .

The pin mixer can simultaneously accommodate ionization pins, shorting pins, and piezoelectric pins of positive polarity. The output of negative polarity piezoelectric pins will not get through the summation circuit and will only appear at the hi-z outputs. The pin mixer's main features are as follows:

- A. 110/220 Volts AC power requirement (internally switchable).
- B. Twelve identical dual-mode pin channels: shorting or piezoelectric modes (front panel switchable).
- C. Continuously adjustable charge voltage from -30 to -300 volts with front panel control and digital readout.
- D. Dual output capability: Hi-Z output for each channel and 50 Ω summation output for all channels.
- E. Balance capability (DC offset null) is provided for the 50 Ω output.

CONTROLS AND CONNECTIONS (See fig.1)

1. **Power Switch**--Applies power to the system.
2. **Voltage Set**--Adjustment sets the charge voltage for all channels
3. **Digital display**--Indicates the capacitors' charge voltage
4. **Input**--BNC connector which attaches to the pin
5. **Output**--BNC connector which monitors the voltage drop across the internal 50 Ω resistor
6. **Sum Out**--Provides the summation of all of the pins' outputs divided by 100.