

# Technical Specifications

## Polycom® SoundStructure™

### Models C16, C12 and C8



#### Specifications

##### Dimensions

- 19" (483 mm) W x 13.5" (343 mm) L x 1.75" (45 mm) H (one rack unit)

##### Weight

- 12 lbs. (5.5 kg) dry, 14 lbs. (6.4 kg) shipping

##### Connectors

- RS-232: DB9F
- OBAM In/Out: IEEE 1394B
- CLINK2 : RJ45
- LAN: RJ45
- Control /Status: DB25F
- Audio: Mini (3.5mm) quick connect terminal blocks
- IR Receive: Mini (3.5mm) quick connect terminal block

##### Power and Thermal

- Internal supply
- Input voltage of 90-250 VAC; 50-60 Hz; line power requirements (including 0.6 PF): 130VA (C16), 115VA (C12), 95VA (C8)
- Thermal dissipation (Btu/hr): 266 Btu/hr
- (SoundStructure C16), 230Btu/hr (C12), 200 Btu/hr (C8)
- 0 to 40°C operating temperature

##### Inputs

- Phantom power: 48 V DC through 6.8kOhm series resistor per leg, 7.5mA per channel, software selectable
- Analog input Gain: -20 to 64 dB on all inputs in 0.5 dB steps, software adjustable

- Maximum input amplitude: +20.4dBu, 1% THD + N
- Nominal level: 0 dBu (0.775V rms)
- Equivalent input noise: <-122 dBu, 20 - 20,000 Hz,
- Rs=150 Ohms (1%)
- Input Impedance: 10 kOhms
- Input EMI Filter: Pi filter on all audio inputs

##### Outputs

- Output Gain: -100 to 20 dBu in 1 dB steps, software adjustable
- Maximum output amplitude: +23 dBu, 1% THD + N
- Nominal output level: 0 dBu (0.775 V rms)
- Output impedance: 50 Ohm, each leg to ground, designed to drive loads > 600 Ohms
- Output EMI Filter: Pi filter on all audio outputs

##### System\*

- Frequency response: 20-22,000 Hz, +0.1 /- 0.3 dB
- Idle channel noise: <-109 dB FS no weighting, 20 -20,000 Hz, -60dB FS, 0.997 kHz input signal, 0 dB gain
- Dynamic range: >109 dB FS no weighting, 20 - 20,000 Hz, -60 dB FS, 0.997 kHz input signal, 0 dB gain
- Linearity: 0 dB FS to -122 dB FS +/- 1 dB
- THD+N: < 0.005%, -20 dB FS input signal
- Common Mode Rejection Ratio: <-61 dB, 20 - 20,000 Hz, no weighting

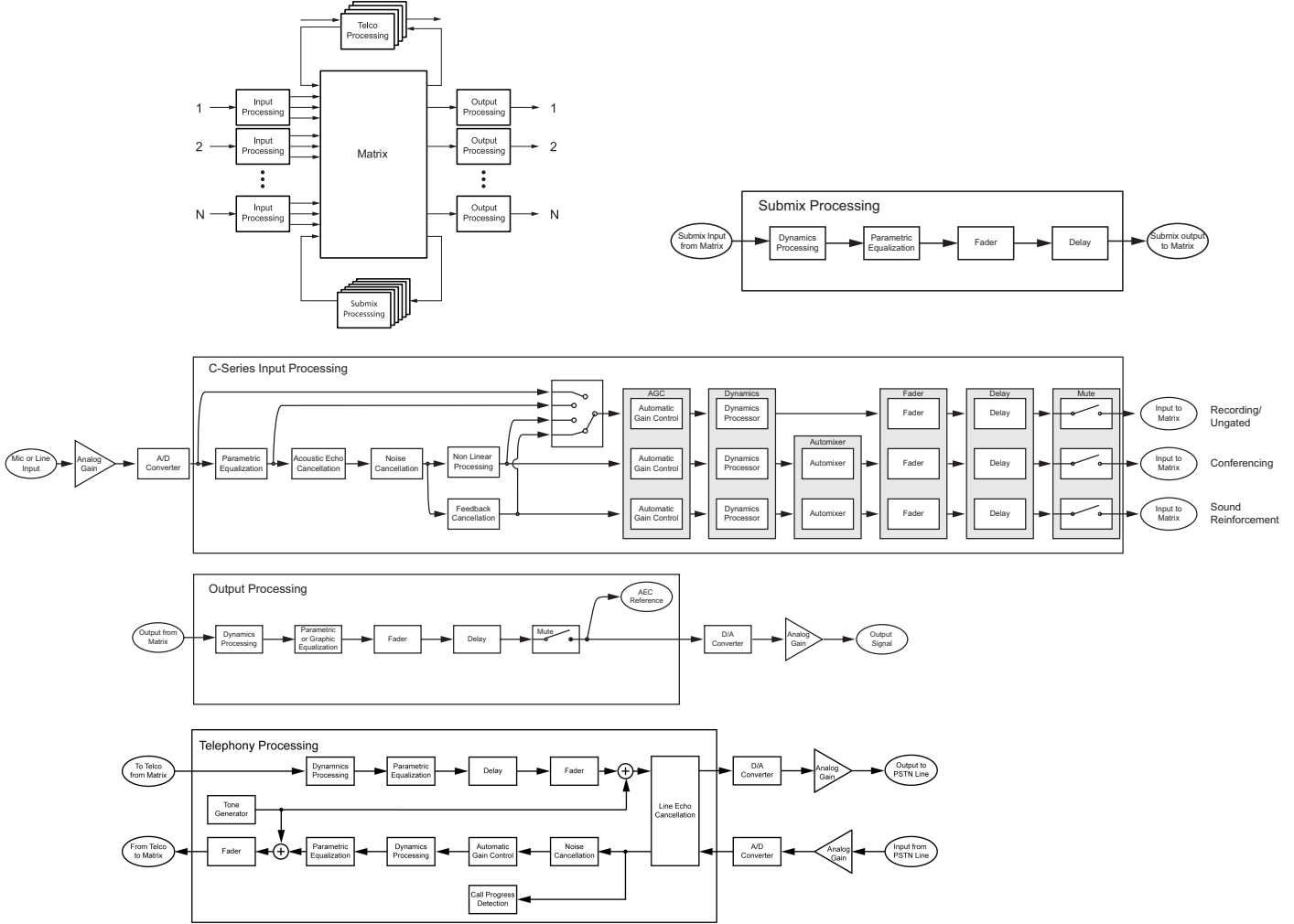
- Cross talk: <-110 dB, 20-20,000 Hz, 1kHz, channel-to- channel
- Latency: Mic/Line inputs to outputs: 20 ms, AEC and NC processing enabled
- Acoustic Echo Cancellation Span: 200 ms
- Total Cancellation: >65 dB
- Convergence Rate: 40 dB/second
- Noise cancellation: 0-20 dB, software selectable
- Control Inputs: Contact closure
- Status Outputs: Open collector 60V and 500mA maximum per output
- All signal ground pins connected to chassis ground through low impedance planes

\*Unless noted, all values are valid for all channels at 0dB input gain

##### Optional Telco Cards

- Input gain: -100 to +20 dB in 1 dB steps, software adjustable
- Nominal transmit level: 0 dBu in SoundStructure yields
- -15 to -17 dBm to phone (country code dependent)
- Nominal receive level: -15 to -17 dBm from phone yields 0 dBu output (country code dependent)
- Off hook loop current: 10 mA (minimum) to 120 mA (maximum)
- Output gain: -100 to +20 dB in 1 dB steps, software adjustable
- Frequency response: 250-3300 Hz
- Dynamic range: >70 dB FS, 250-3300 Hz, "A" weighted

## Block Processing Diagram



## Back of Unit

