

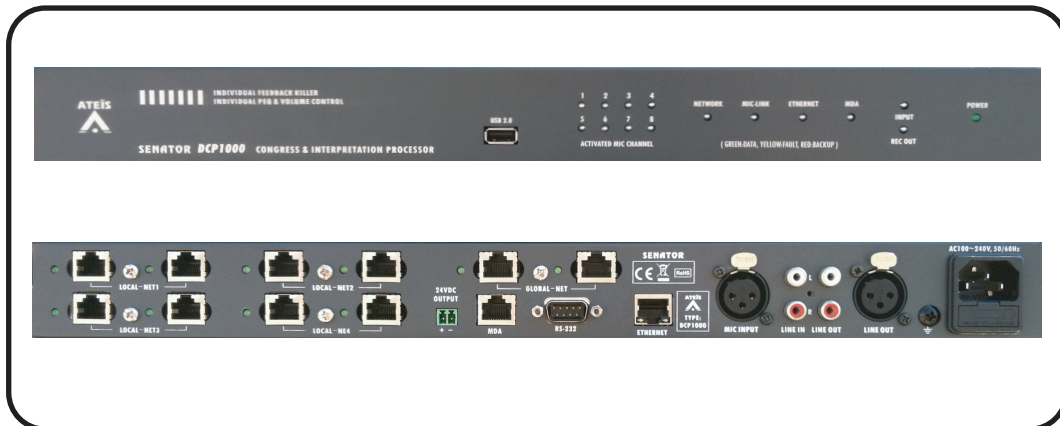
SENATOR Conference System



1

FEATURES

- Loop wired architecture with star wired benefits.
- Process up to 512 microphones individually from one DSP processor.
- Unique voice gate for each mic only opens the gate for human voice.
- Individual mic processing for PEQ, volume, priority, feedback suppression, and more.
- Up to 32 DSP Processors can be linked together for almost unlimited system size.
- Redundant network architecture with up to 330' between microphones using CAT-5 or 2 KM using fiber.
- The system auto-calibrates for mix-minus
- Chairman microphone with touch screen LCD panel for full system and participant control.
- Optional card reader and voting pad can be connected to each microphone.
- CE listed
- 5 year warranty



DESCRIPTION

The Senator system from Penton's Commercial Line is a revolutionary DSP driven digital network that offers considerable cost savings due to its ability to process up to 512 microphones individually from one DSP processor using a loop wired architecture. The parameters for each mic are stored in the DSP processor and utilizing blazingly fast, fully redundant digital network technology the specific settings are called up only when the mic is being used. Hence a relatively modest and cost effective processor can be used to manage a high number of microphones. Within the loop wired architecture each mic is addressable and can be individually processed for EQ, feedback suppression, mix minus as well as many other audio parameters. Microphones can be grouped in an auto or manual mixer according to project specifications. A fully digital multi-channel amplifier can be cascaded for system expansion and is connected to the controller via a simple loop in/out CAT 5 cable and the system will auto-calibrate for mix minus applications. The inherent redundancy also allows the network to survive even after accidental disconnects in one location.

With the Chairman microphone a coordinator can maintain full control over the system and participants. The display will give the meeting coordinator the ability to see who is speaking, gag microphones, adjust overall system volume, and many other features.

SPECIFICATIONS

DCP1000 Processor

FREQUENCY RESPONSE: 20Hz - 20kHz @ +4dBu (±0.6 db)
DYNAMIC RANGE: > 105 dB
MAXIMUM GAIN: 66 dB
CROSSTALK: Line <-78dB, mic <-73dB
OUTPUT IMPEDANCE: 200 ohms
INPUT IMPEDANCE: 8k ohms
MAXIMUM OUTPUT: + 24dBu
MAXIMUM INPUT: + 24dBu
PHANTOM POWER: + 48 VDC
INPUT GAIN RANGE: 0 to 54 dB
SAMPLING RATE: 48kHz or 96 kHz (selectable)
A/D D/A CONVERTERS: 24 bit
POWER CONSUMPTION: <20 Watts
DIMENSIONS: 17"W x 1 (RU) H x 8.5"D
MAX WEIGHT: 6 lbs.
COMPLIANCE: CE LVD and EMC Directive, EU Directive 2002/95/EC

DCA-6C60 Amplifier

FREQUENCY RESPONSE: 20Hz - 20kHz @ ±1dBu
POWER OUTPUT: 60 Watts X 6
THD: ≥ .1%
POWER CONSUMPTION: 423 Watts
DIMENSIONS: 17"W x 1 (RU) H x 10.5"D
MAX WEIGHT: 10 lbs.

DGB - 104

CONNECTORS: Incoming/Outgoing Loop Connector CAT5
MIC CONNECTOR: dB 9 x 4 (cable and connectors supplied)
DIMENSIONS: 6.25"W x 1.5"H x 3.25"D
LOCAL POWER: Needed for more than 4 boxes on the loop - 24VDC

Microphone DM

TRANSDUCER TYPE: Condensor
POLAR PATTERN: Cardioid
FREQUENCY RESPONSE: 30 Hz - 18 kHz
SENSITIVITY: -52 ±/ - 4dB
MAXIMUM INPUT SOUND LEVEL: 105 dB SPL, 1 kHz at 3% THD
SIGNAL-TO-NOISE RATIO: >60 dBA
DIMENSIONS: 20" - Fully Extended

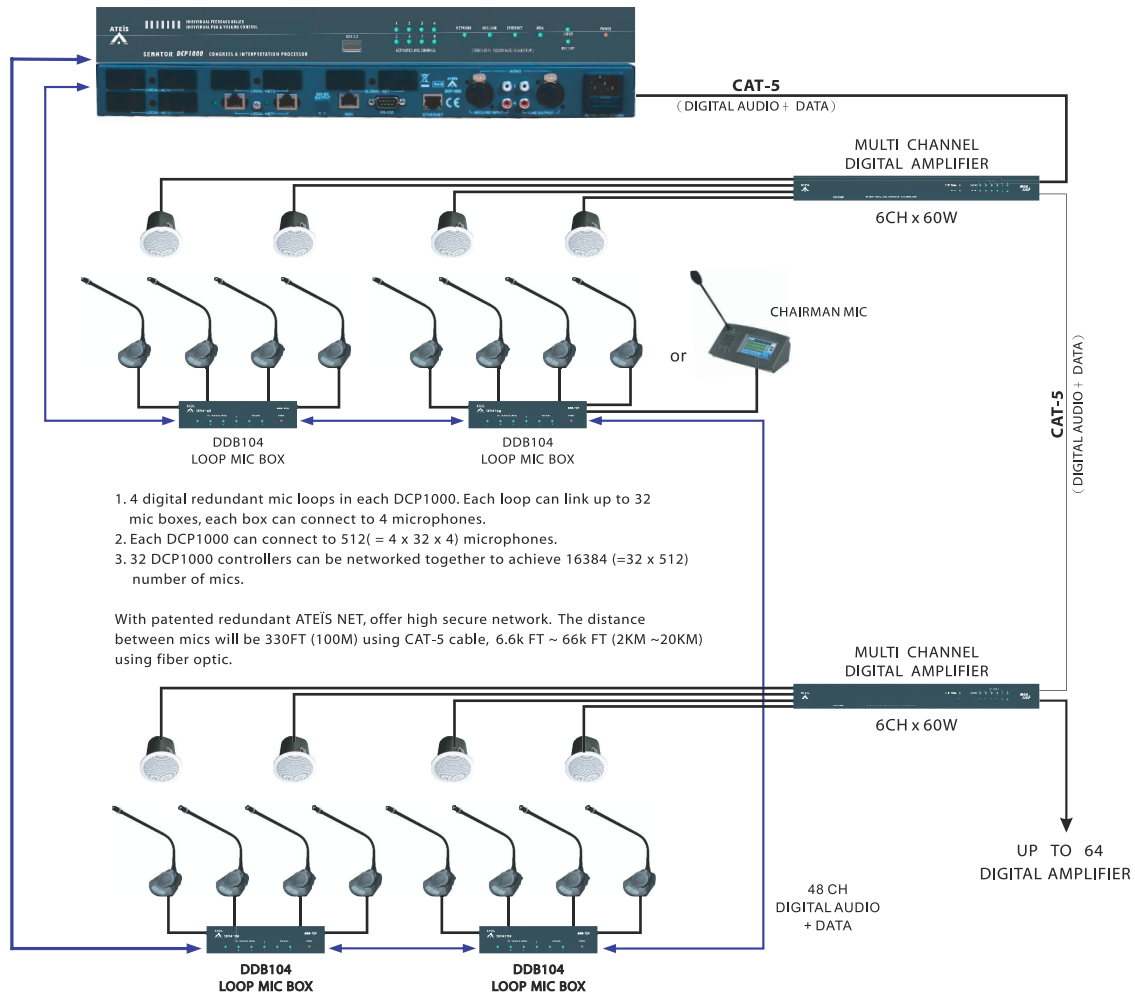
Microphone DM Base

LOUDSPEAKER FREQUENCY RANGE: 250 Hz - 12 kHz
LOUDSPEAKER MAX. POWER: 3 Watts RMS
SENSITIVITY: 90 dB
COLOR: Dark Gray
WEIGHT: 2 lbs.
DIMENSIONS: Approx. 5"W x 3"H x 6.5"D (Irregular Shaped)

SENATOR Conference System



2



ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The conference system shall be able to process up to 512 microphones using a single DSP processor. The microphones shall be wired in a loop configuration using standard CAT-5 cable. Each microphone shall be individually processed for volume, 6 bands of PEQ, feedback suppression, and priority. Each microphone shall utilize a voice gate sensing not just the dB input, but also differentiate between human voice and other sounds. Each 8 microphones shall be able to be grouped into an 8x9 gain-sharing auto-mixer.

Internal system software shall be true "Drag and Drop" configuration with an auto set-up feature for automatic layout of larger systems. Ethernet communication shall be utilized for local or remote software control, configuration and software control. Ater initial programming, the system shall have the option of being monitored by TCP/IP or RS 232 serial communication by third party control soystems (such as AMX, Crestron), by PC computer. Software shall operate on a PC computer running Windows Vista, 7 or higher.

The system shall be able to provide local amplification using a digital 6 channel amplifier connected to the DSP processor via a single CAT5 cable. After initial system set-up, the mix shall auto-calibrate for mix-minus applications.

The system shall be expandable to up-to 32 processors and 64 amplifiers.

Optional card readers/voting pads shall be connected to each microphone for parti cipant identification and voting purposes.

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