

Application Note

BITTNER
AUDIO

Intelligent Power

**XR
SXL II
AX16**



The Job:

Low-impedance public address system with optimal intelligibility and system reliability according to EN-60849 incl. permanent line and amplifier monitoring.

- **in fixed installations:** large venues such as stadiums, multipurpose venues, congress centers, theaters, or cinemas
- **for mobile sound systems:** big events such as open air, public viewing, tour productions

The Solution:

1. Amplifiers

Bittner XR amplifiers with integrated DSP allow for an accurate adjustment of the settings for the relevant public address areas at loads down to 2 ohms (level, EQ, delay, dynamics)

2. Control Interface

Bittner SXL II Control Interface:

- monitoring and control of up to 16 channels
- permanent line and amplifier monitoring according to EN-60849
- permanent evaluation of control signals
- control of the AX16 amplifier switch incl. the transfer of DSP settings
- integrated webserver allows configuration and storage of different setups as well as readout of the logfile

3. Automatic Amplifier Switch

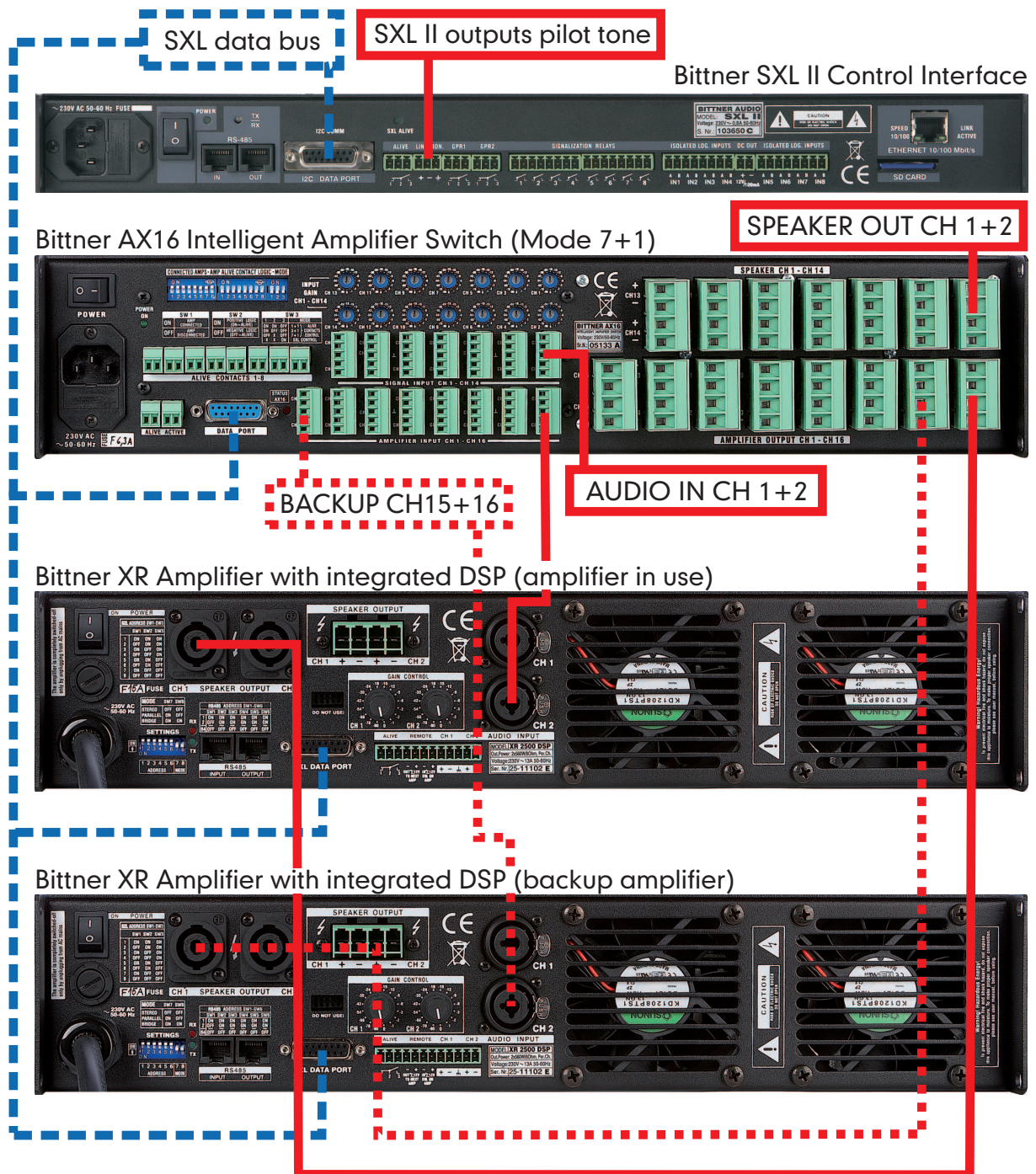
Bittner AX16 Intelligent Amplifier Switch:

- noiseless switching of the inputs and outputs of a defective amplifier incl. automatic transfer of DSP settings and level to a backup unit
- 14 signal channels and 2 backup channels with three different switching modes (7+1, 3+1 or 1+1)

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Assembly of the Amplifier Rack



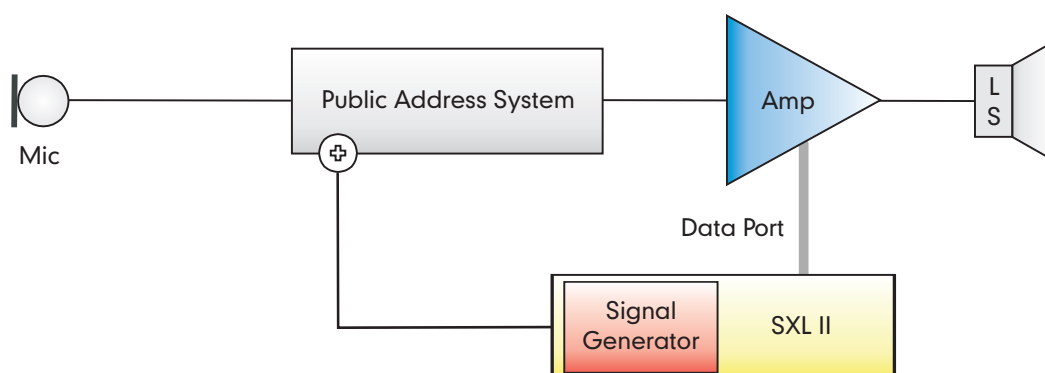
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Function: Permanent Line Monitoring



SXL II

- time controlled pilot tone via SXL II (e. g. every 90 sec)
- the amplifiers monitor their output lines synchronically to the pilot tone
- monitoring of input signals
- reporting of measuring results from the amplifier to the SXL II via the data bus
- display of the data in the SXL web interface, the SXL front panel and in the SXL log file
- activation of a relais contact in case of a malfunction (SXL relays 1 to 8 user configurable)

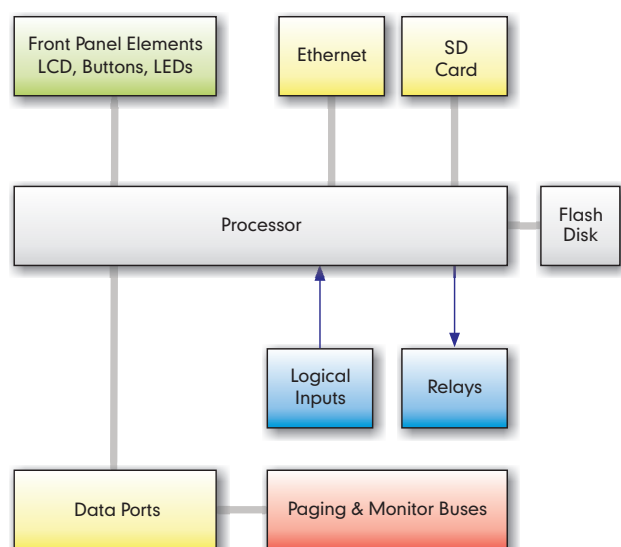


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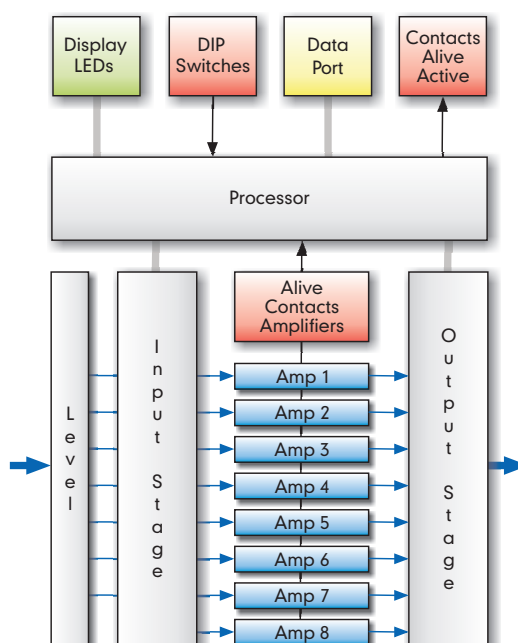
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Amplifier Switching incl. the Transfer of DSP Settings

SXL II Block Diagram



AX16 Block Diagram



Activation of the AX16 Intelligent Amplifier Switch by SXL II

- a defective XR amplifier is detected via SXL data bus
- corresponding command for audio switching to the AX16 via SXL data bus
- all XR parameters are transferred via SXL data bus to backup amplifier incl. level and DSP settings
- message and display of backup switching at the front LEDs of the AX16, configurable error relays, and the SXL log file