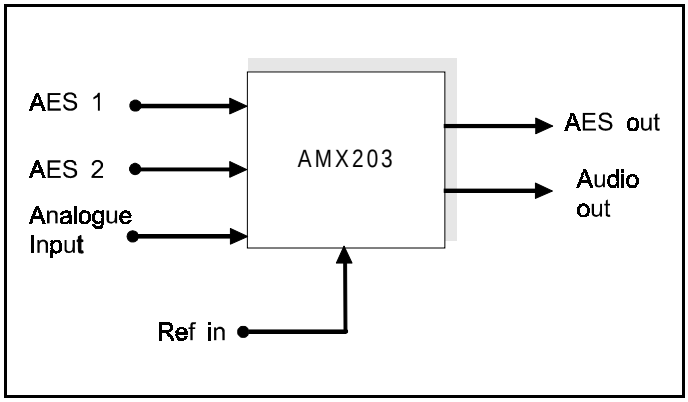
Microvideo

Series 200
AMX203

Audio Processing Card

- AES digital audio inputs
- Channel Swapping
- Reference Input
- Analogue Input Option
- Analogue Output
- 24 bit audio processing
- Silence Generator



Introduction

The AMX203 is a flexible audio processing module which can be made to perform a wide range of audio functions such as switching between different channels / analogue sources, delaying the audio and adjusting levels. Its compact size allows multiple channels to be put into a single frame. It can be used with Microvideo's PRC200 digital video proc amp module, allowing a single box solution for audio - video processing.

The exact functionality of the card is defined by the fitting of different options and software.

Specifications

Digital Audio Inputs / Outputs

2 x AES in, 1 x AES out
24 or 20 bit AES/EBU as described in EBU Tech 3250-E (or AES-3-1992), with 48Khz sample rate.
Standard module uses balanced AES input/output through 15 way D-types.
(Single Ended AES using BNC's can be provided as an option).

Analogue Input (Optional)

1 x Stereo, Balanced, level line, 10K impedance on 15 way 'D' type.

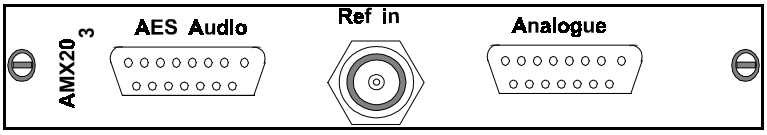
Analogue Ouputs

Stereo Balanced Line Level through 15 Way D-types,
Conversion is performed by 128x oversampling.

Timing Reference Inputs

Analogue Video Reference, for standard 1V Black and Burst into 75R, internally terminated.
TTL Level with Line Clock Timing (for use with Microvideo MUX200 embedder).
Alternatively the reference timing for the module may be taken from AES1**.**

Rear Panel for AMX203 with balanced AES/EBU interfaces:



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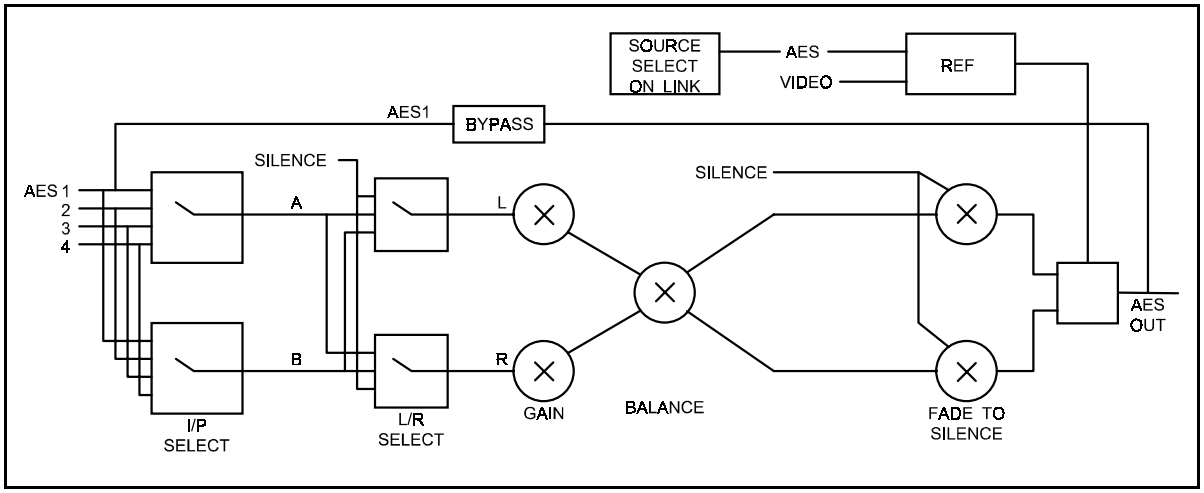
Data sheet ref - amx203-1.dtp (May 03)

Operation

The heart of the card is a Digital Signal Processor (DSP) which performs digital processing. The PIC configures and controls the operation of the DSP. It can communicate to a CPU card mounted in the frame to give front panel or remote control capability.

AMX204 Block Diagram



The following functions are available:

- Left channel selection
- Right channel selection
- Left channel gain
- Right channel gain
- Overall gain
- Balance
- Fade to silence
- Fade time

GPI inputs

GPI Inputs allow simple control of the card, enabling Fade up / Fade Down to be activated.
Tally Output indicates status.

CPU card

A CPU Card mounted in the frame allows configuartion and control from an automation system, front panel or one of our control panels. See the Remote Panel data sheet for Specification on this option.

Product Codes

AMX203	Digital Audio Processing Module with 2 x balanced AES inputs
AMX203A	Processor with 2 x AES and 1 x Analogue Input.
AMX204	Processor with 4 x AES inputs.

Contact Microvideo to discuss options for unbalanced AES i/o.

Note: These cards may be mounted in Microvideo's Series 200 1U or 3U frames.

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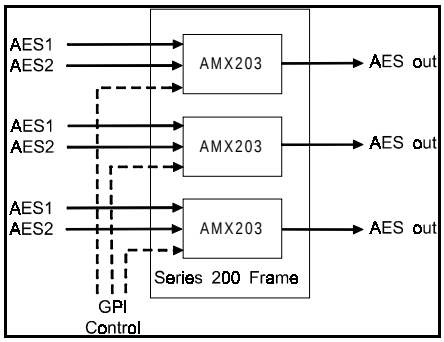
Applications for the AMX203

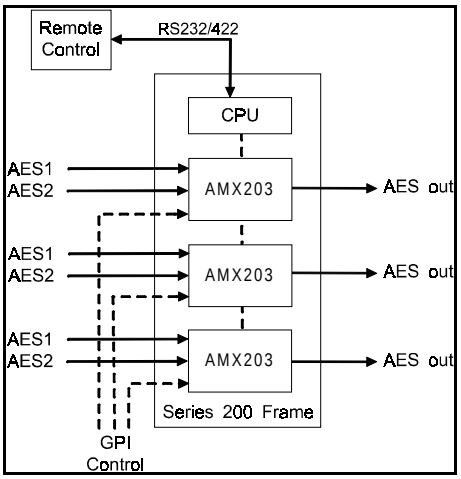
1) Multi-channel with GPI control

Ideal for multi channel processing. Fade to silence and bypass in GPI.



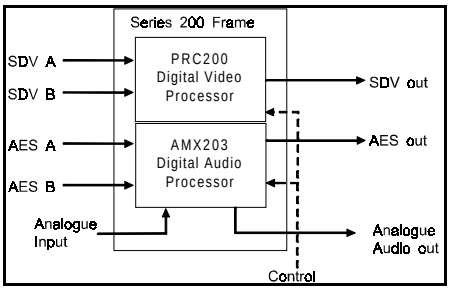
2) Multi-channel with Remote Control

The CPU card in the frame allows the user to configure any of the AMX202 modules. Here we show AES1 and AES2 but the user can change the fade source to any of the AES inputs, silence or the analogue input. They can also set gain levels and fade rates from the remote panel. The GPI's can still be used to initiate the fade or alternatively an automation system may use RS232 or RS422 to control the AMX202 modules.



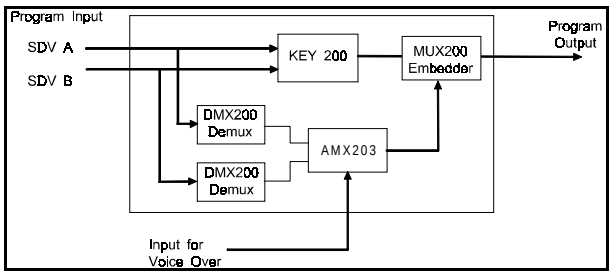
3) Audio and Video Processing

Using the PRC200 digital video processing module in the same frame enables mixing of audio and video.



4) Embedded Audio

Using our embedded audio modules a solution can be built to process embedded audio.



Above are just a few examples of systems that can be offered built around our AMX203. The modular approach we offer allows broadcasters to have a cost effective solution which exactly matches their requirements. Contact us with your system specification and we will provide a detailed proposal.

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