Miranda

SERIE DENSITE

ADA-1033 Single/ Dual Analogue Audio Distribution with remote gain
Guide to Installation and Operation
M479-9600-100
*July 2004*

ADA-1033

Introduction

L'ADA-1033 is an analogue audio distribution amplifier that can be configured for monaural or stereo applications. In single mode, it distributes one input to eight outputs and in dual mode each channel has four outputs.

Each channel gain is trim controlled from the frame controller or from an external remote potentiometer. All modules of the DENSITE Series include a push button on the card front edge, which permits to assign the front panel controller to consultation and adjustments. A multi-coloured Led, visible with the door closed, reports the card status

The ADA-1033 requires a 'single' or a 'double' rear connector panel.

Features

- Balanced input and outputs

- Distribution amplifier 1 input / 8 outputs or 2 x 1 input / 4 outputs

- Remote control of gain by external potentiometer or from front panel controller

- Intra frame output for monitoring

- Status LED and remote reporting

- Alarm configuration: absence signal, overload

- Easy to install audio connectors

ADA-1033 Functional Block Diagram
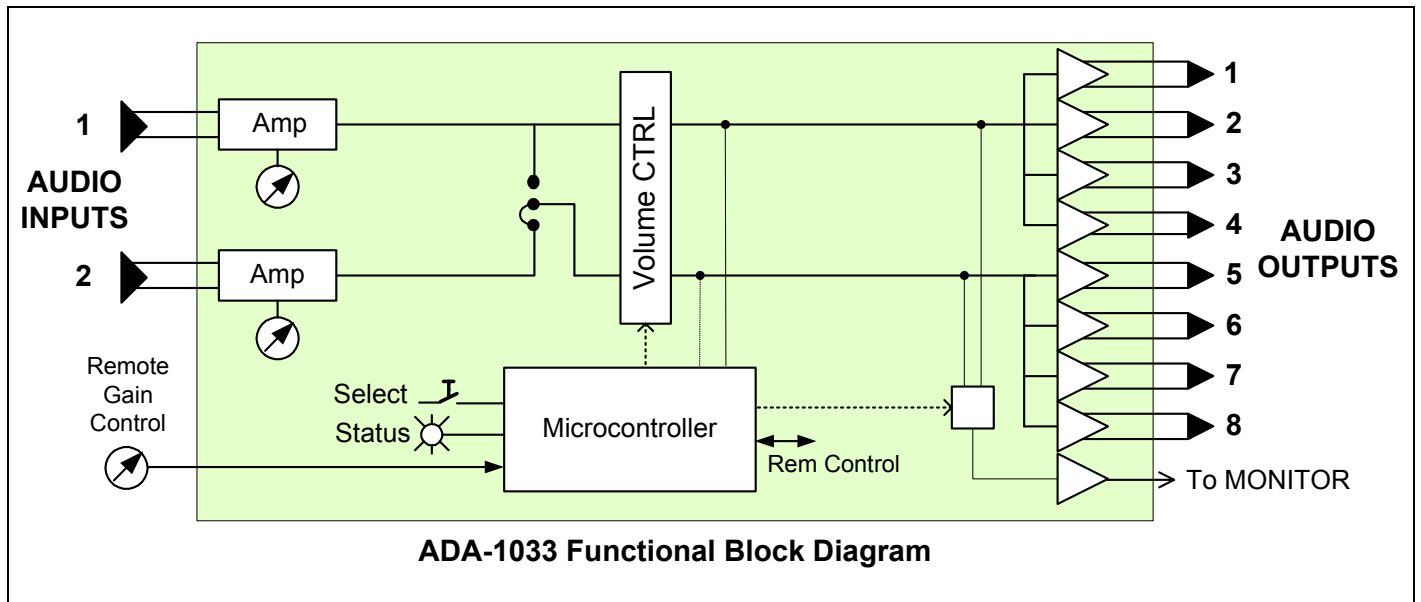
Specifications

Input

Balanced
Signal: .... analogue audio
Impedance: .... > 20 k Ω
Common mode
rejection: .... > 50 dB

Outputs

Balanced
Signal : .... balanced analogue audio
Impedance: .... < 50 Ω

Processing performance:

Gain: ....-96 to +31.5 dB (0.5 dB step)
Max. Level: ....+25 dBu
SNR: ....< -90 dBu
................................20 Hz to 20 kHz unweighted
Distortion: ....< -85 dB (20 Hz to 20 kHz) @ +23 dBu
Cross talk : ....<-100 dB (20 kHz)
Freq. response: ....±0.2 dB (20 Hz to 20 kHz)

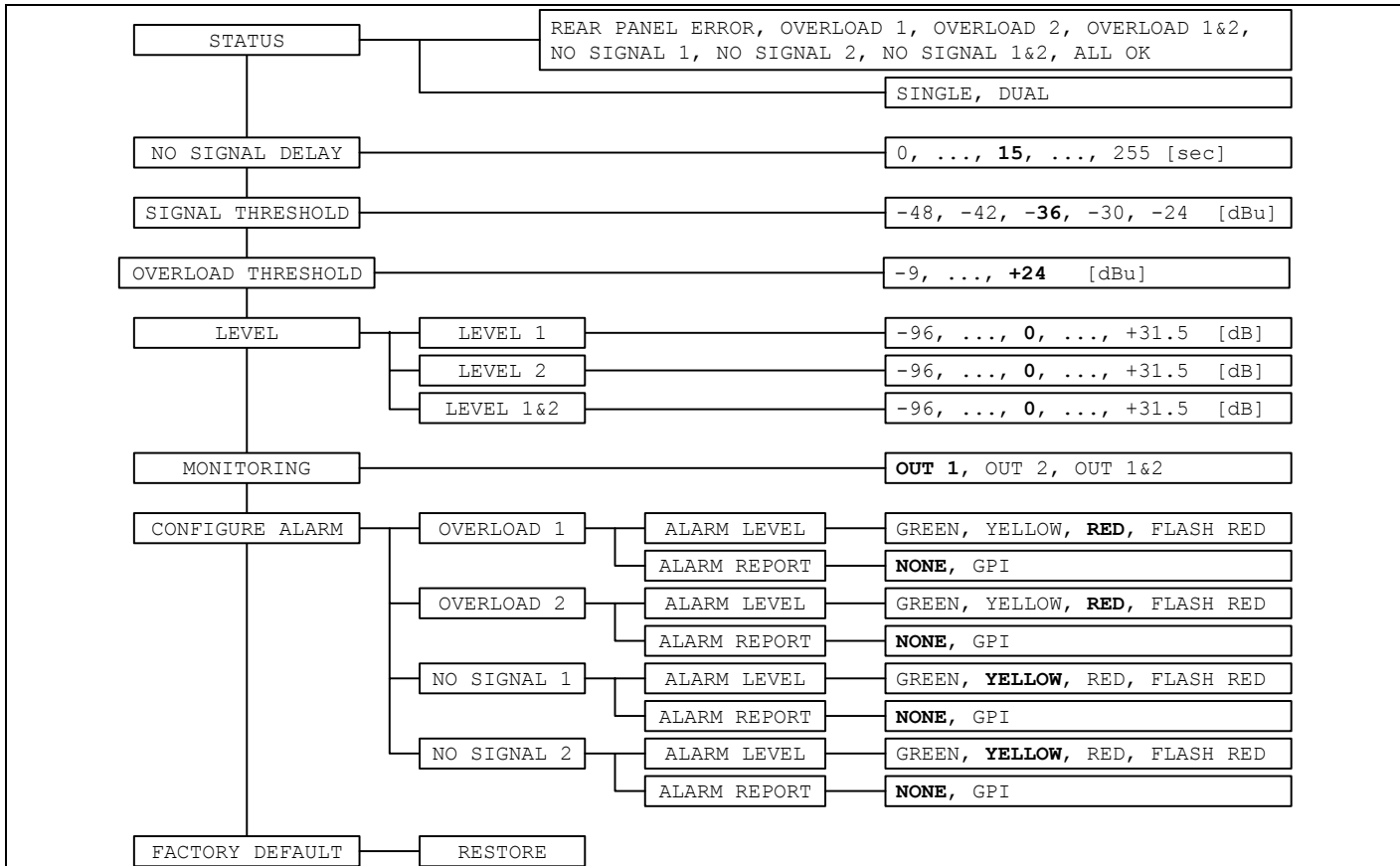**Miscellaneous**

Power: ....single 4 W
................................double 7.5 W

Specifications are subject to change without notice.

Menu Introduction

Most parameters are accessed and changed via an easy-to-use menu. The flow chart below outlines the entire ADA-1033 menu path. Each menu is described throughout this section.

The procedure and the operation mode are described in the common paragraph of the DENSITÉ Manual. The menu organisation is made out of a main menu and several sub-menus. A press on the [SELECT] front panel push button accesses to the menu. A lack of activity turns off the display. Default values are written with bold characters.

STATUS		REAR PANEL ERROR, OVERLOAD 1, OVERLOAD 2, OVERLOAD 1&2, NO SIGNAL 1, NO SIGNAL 2, NO SIGNAL 1&2, ALL OK
		SINGLE, DUAL
NO SIGNAL DELAY		0, ..., **15**, ..., 255 [sec]
SIGNAL THRESHOLD		-48, -42, **-36**, -30, -24 [dBu]
OVERLOAD THRESHOLD		-9, ..., **+24** [dBu]
LEVEL	LEVEL 1	-96, ..., **0**, ..., +31.5 [dB]
	LEVEL 2	-96, ..., **0**, ..., +31.5 [dB]
	LEVEL 1&2	-96, ..., **0**, ..., +31.5 [dB]
MONITORING		**OUT 1**, OUT 2, OUT 1&2
CONFIGURE ALARM	OVERLOAD 1 → ALARM LEVEL	GREEN, YELLOW, **RED**, FLASH RED
	OVERLOAD 1 → ALARM REPORT	**NONE**, GPI
	OVERLOAD 2 → ALARM LEVEL	GREEN, YELLOW, **RED**, FLASH RED
	OVERLOAD 2 → ALARM REPORT	**NONE**, GPI
	NO SIGNAL 1 → ALARM LEVEL	GREEN, **YELLOW**, RED, FLASH RED
	NO SIGNAL 1 → ALARM REPORT	**NONE**, GPI
	NO SIGNAL 2 → ALARM LEVEL	GREEN, **YELLOW**, RED, FLASH RED
	NO SIGNAL 2 → ALARM REPORT	**NONE**, GPI
FACTORY DEFAULT	RESTORE	

Menu Description

{STATUS}

Displays status of the different board alarms. The higher-level alarm is displayed, even if not configured to activate the *STATUS* Led. **ALL OK** indicates an absence of alarm.

REAR PANEL ERROR Indicates an absence of the rear panel or an incompatibility between the module and the rear panel. The *STATUS* led turns on flashing red.

OVERLOAD Indicates an internal signal level higher than the selected threshold.

NO SIGNAL Indicates an internal signal level lower than the selected threshold during a user defined period.

MODE SINGLE/DUAL Displays the module configuration.

{NO SIGNAL DELAY}

Signal absence is declared when the level signal is lower than the signal threshold during the selected period, it can be adjusted from 0 to 255 s. The default value is set to 15 s.

{SIGNAL THRESHOLD}

The presence signal threshold can be adjusted from – 48 to – 24 dBu by 6 dBu steps. The default value is – 36 dBu.

{OVERLOAD THRESHOLD}

The overload signal threshold can be set from –9 to +24 dBu. The default value is +24 dB.

{LEVEL}

Permits the adjustment of the level of channel 1 or 2 separately or simultaneously.

LEVEL   Signal gain can be set from –96 to +31.5 dB. The default value is 0 dB.

{MONITORING}

Allows the pre-selection of the monitored signal. The ON/OFF command will come from a monitor module like the MSB-1121 in slot 20 of the Densité frame.

{CONFIGURE ALARM}

It is possible to associate the *STATUS* Led colour and/or a GPI relay activation to each detected error.

Alarm relay activation depends of the ENABLE selection of the controller board menu GPI REPORT.

ALARM LEVEL   Associates to each error the *STATUS* led colour: GREEN, YELLOW, RED and FLASH RED. This selection has no influence on the {STATUS} menu display.

ALARM REPORT   The default value NONE is assigned to errors. Alarm relay activation will be associated to an error when GPI is set.

{FACTORY DEFAUT}

RESTORE   Set the module with the factory default parameters.

Status and Report

This table shows the front Led colour and the report action according to the level of a given error condition. Notice that the "Flashing Yellow" indicates that the SELECT button on the front panel has been pushed, and the card is being accessed via the communication protocol.

	Non requested	GPI Report	Green	Yellow	Red	Flashing Red	Flashing Yellow.
Overload on Input 1	✪				✪		-
Overload on Input 2	✪				✪		-
No signal detected on Input 1	✪			✪			-
No signal detected on Input 2	✪			✪			-
Card accessed via the communication protocol	-	-	-	-	-	-	Yes
Rear Panel not matching	-	-	-	-	-	Yes	-

✪ **: Factory default.**

Note: The non requested message affectation to an alarm status can only be accessed by the communication protocol (serial port)

Front Edge Presentation

Status Indicator

Gain Adjust.

Push Button

Gain Adjust.
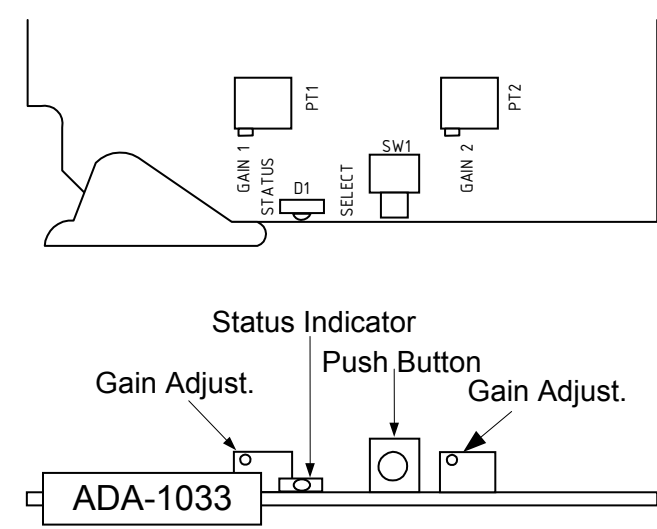
ADA-1033

Configuration

PT1 1 GAIN PT2 2 GAIN	**GAIN adjustment** Trimmer for fine adjustment of the gain within an 2.5 dB range
JP 1	JP 1 sets the operating mode Single = 1 x 8 or Dual = 2 (1 x 4)

Connections

ADA-1033 is used with the single rear panel ADA-1033-SRP that includes 1 input to 4 outputs or with the double rear panel ADA-1033-DRP that includes 1 input to 8 outputs (single mode) and 2 x 1 input to 4 outputs (dual mode).

ADA-1033-DRP **ADA-1033-SRP**
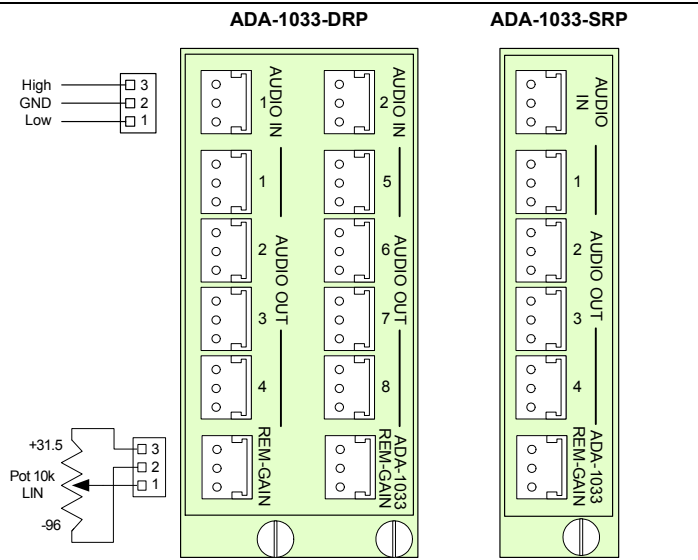
No need to terminate REM-GAIN connector when not used.

Board Presentation