DENSITÉ series

ADC-1101 Component to SDI Converter Guide to Installation and Operation

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Safety Compliance Information

Safety Compliance

This equipment complies with:

- CSA C22.2 No. 60950-1-03 / Safety of Information Technology Equipment, Including Electrical Business Equipment.
- UL 60950-1 (1st Edition) / Safety of Information Technology Equipment, Including Electrical Business Equipment. IEC 60950-1 (1st Edition) / Safety of Information Technology Equipment, Including Electrical Business Equipment.

CAUTION

These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are gualified to do so. Refer all servicing to qualified service personnel. Servicing should be done in a static-free environment.

Electromagnetic Compatibility

- This equipment has been tested for verification of compliance with FCC Part 15, Subpart B, class A requirements for Digital Devices.
- This equipment complies with the requirements of: EN 55022 Class A, Electromagnetic Emissions, EN 61000-3-2 & -3-3, Disturbance in Supply Systems EN 61000-4-2, -3, -4, -5, -6, -8 & -11 Electromagnetic Immunity

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ADC-1101 Component-to-SDI Converter

Introduction

The ADC-1101 is a broadcast quality component analog video to serial digital converter and is ideal for converting high-quality component analog sources to the digital domain. It provides input auto-calibration which can accommodate non-standard video or correct a calibration defect in the incoming video signal.

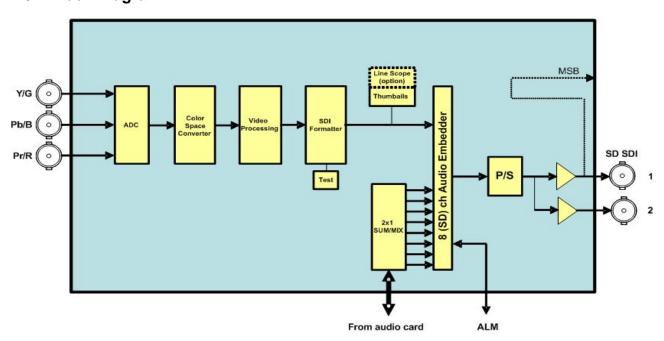
The ADC-1101 can also work in conjunction with up to two Miranda audio cards (such as Densité UAP-1781) to embed up to 8 audio channels in the serial digital output.

Finally, the ADC-11011 offers video thumbnail streaming and audio level meters for optimized real-time monitorina, usina iControl.

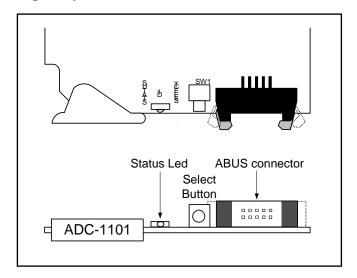
1.2 Features

- SD compatible
- High-quality 12-bit quantization
- Y/Pb/Pr input, GBR support
- SMPTE/EBU, Betacam levels support
- Input auto-calibration to accommodate non-standard video inputs
- Sync on green
- Embeds up to 8 audio channels using a Miranda audio card (such as UAP-1781)
- Ancillary data blank or pass, line by line
- Real-time monitoring via video thumbnails and audio level meters
- Built-in test signal
- Optional line scope for signal analysis via iControl

1.3 Block Diagram



1.4 Card Front Edge Layout



Installation 2

2.1 Unpacking

The following items should be included in the ADC-1101 package:

- ADC-1101 CAV-to-SDI Converter
- ADC-1101-SRP rear panel
- User manual

2.2 Installation in the Densité frame

The ADC-1101 must be mounted in a DENSITÉ frame. The installation includes both the ADC-1101 module, and the rear panel module. It is not necessary to switch off the frame's power when installing or removing the card.

When the ADC-1101 is used in conjunction with an audio module such as the UAP-1783, the ABUS flat cable must be installed between the ABUS connectors located on the front card edges (see section 1.4).

Note: for a two card installation, use the two end connectors of the flat cable and leave the middle one unplugged.

Detailed instructions for installing cards and their associated rear panels in the Densité frame are given in the Densité Frame manual.

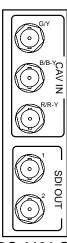
2.3 Connection

All video connections are made on the rear panel:

- Connect the CAV inputs to the three BNC connectors marked CAV IN
- Two SDI outputs are available on BNC connectors.

Component analog input formats supported by the ADC-1101:

525 formats	625 formats		
GBR without setup	GBR		
GBR with setup	EBU		
SMPTE	Beta		
Beta without setup			
Beta with setup			



ADC-1101-SRP

3 Operation

3.1 Control Options

The ADC-1101 has two primary control interfaces:

- The local control panel attached to the Densité frame's controller
- · Remote control using Miranda's iControl system

These will be explained in detail in the following sections.

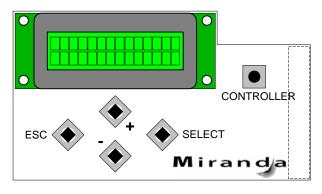
3.2 Local control using the Densité frame control panel

Push the SELECT button on ADC-1101 card edge (see Section 1.4) to assign the local control panel to operate the ADC-1101. Use the control panel buttons to navigate through the menu, as described below.

All of the cards installed in a Densité frame are connected to the frame's controller card, which handles all interaction between the cards and the outside world. There are no operating controls located on the cards themselves. The controller supports remote operation via its Ethernet ports, and local operation using its integrated control panel.

The local control panel is fastened to the controller card by a hinged connector, and when installed is located in the front center of the frame, positioned in front of the power supplies. The panel consists of a display unit capable of displaying two lines of text, each 16 characters in length, and five pushbuttons.

The panel is assigned to operate any card in the frame by pushing the SELECT button on the front edge of that card. Pushing the CONTROLLER button on the control panel selects the Controller card itself. The STATUS LED on the selected card flashes yellow.



The local control panel displays a menu that can be navigated using the four pushbuttons located beneath the display. The functionality of the pushbuttons is as follows:

- [CTRL] Selects the controller card for status monitoring and adjustment
- [+] [-] Used for menu navigation and value modification
- [SELECT] Gives access to the next menu level. When a parameter value is shown, pushing this button once enables modification of the value using the [+] and [–] buttons; a second push confirms the new value
- [ESC] Cancels the effect of parameter value changes that have not been confirmed; pushing [ESC] causes the parameter to revert to its former value.

Pushing [ESC] moves the user back up to the previous menu level. At the main menu, [ESC] does *not* exit the menu system. To exit, re-push the [SELECT] button for the card being controlled.

If no controls are operated for 30 seconds, the controller reverts to its normal standby status, and the selected card's STATUS LED reverts to its normal operating mode.

3.2.1 Status LED

The status monitor LED is located on the front card-edge of the ADC-1101, and is visible through the front access door of the DENSITÉ frame. This multi-color LED indicates module status by color, and by flashing/steady illumination, according to the chart. The chart also indicates fault reporting for this card on the DENSITÉ frame's serial and GPI interfaces.

	Serial Report	GPI Report	Green	Yellow	Red	Flashing Red
No input signal presence					•	
Input Format Error					•	
Test				٥		
Card System					•	

: Factory default.

NOTE: A "Flashing Yellow" Status LED indicates that the SELECT button on the front panel has been pushed.

3.2.2 Menu for local control

The ADC-1101 has operating parameters which may be adjusted locally at the controller card interface. After pressing the SELECT button on the ADC-1101 module, use the keys on the local control panel (described above) to step through the displayed menu and adjust the parameters. The menu is shown below.

STATUS	NO SIGNAL / 525 / 625						
	NO REAR / SINGLE REAR						
	TEST ON						
	A1 MISSING						
	A2 MISSING						
	HARDWARE FAILURE						
INPUT	FORMAT						
		[SMPTE / GBR / GBR w. setup / BETA / BETA w. setup]	(525)				
		[<u>EBU</u> / GBR / BETA]	(625)				
	CC	[OFF, ON]	(525)				
	WSS	[OFF, ON]	(625)				
AUTO CALIBRATE	START	O.K / NO GOOD					
USER PRESET	LOAD	[USER 1 ,USER 2, USER 3, USER 4, USER 5]					
	SAVE	[USER 1 ,USER 2, USER 3, USER 4, USER 5]					

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VIDEO PROC	Y OFFSET	[-100mV, -99.2mV, <u>0</u> 99.2mV, 100mV]					
	B-Y OFFSET	[-100mV, -99.2	2mV, <u>0</u> 99.2mV, 100	100mV]			
	R-Y OFFSET	[-100mV, -99.2	2mV, <u>0</u> 99.2mV, 100	mV]			
	Y GAIN	[-800, -799,(-			
	B-Y GAIN	[-800, -799, <u>0</u> , 799, 800] [-800, -799, <u>0</u> , 799, 800]					
	R-Y GAIN		<u>0,</u> 799, 800]				
	CORING	[<u>OFF</u> , ON]	_^ .				
		<u>[211</u> , 211]					
AUDIO	EMBEDDING	CHANNELS 123	34 TO [<u>OFF</u> , GRP 1, 0	GRP 2, GRP 3, GRP 4]			
* Available with Audio Card connected		CHANNELS 567	78 TO [<u>OFF</u> , GRP 1, 0	GRP 2, GRP 3, GRP 4]			
	OUTPUT MIXERS	CHANNEL 1	OPERATION MODE	[OFF, A, SUM(A+B), I	MIX]		
		CHANNEL 2	OPERATION MODE	[OFF, <u>A</u> , SUM(A+B), I	MIX]		
			ABUS	[<u>A1</u> , A2]			
			CHANNEL SELECT	[1, <u>2</u> , 3, 16]			
			LEVEL	[-96, -95, <u>0]</u> (<i>dB</i>)	1		
			MUTE	[<u>OFF</u> / ON]			
		CHANNEL 3	OPERATION MODE	[OFF, A, <u>SUM(A+B</u>), I	MIX]		
			SOURCE A	ABUS	[<u>A1</u> , A2]		
				CHANNEL SELECT	[1, 2, <u>3</u> , 16]		
			SOURCE B	ABUS	[<u>A1</u> , A2]		
				CHANNEL SELECT	[<u>1</u> , 2, 3, 16]		
			SUM (A+B) LEVEL	-6, <u>-3</u> , 0 <i>dB</i>			
			MUTE	[OFF / ON]			
		CHANNEL 8	OPERATION MODE	[OFF, A, SUM(A+B), <u>I</u>	<u>-</u>		
			SOURCE A	ABUS	[<u>A1</u> , A2]		
				CHANNEL SELECT	[1, 2, 3, 16]		
				LEVEL	[-96, -95, <u>0]</u>	(dB)	
			SOURCE B	ABUS	[<u>A1</u> , A2]		
				CHANNEL SELECT	[<u>1</u> , 2, 3, 16]		

MUTE

LEVEL

 $\underline{\mathsf{[OFF}}\,/\,\mathsf{ON]}$

[-96, -95, <u>0]</u> (*dB*)

WORD LENGTH [20 bits, 24 bits]

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BLANKING VBI (10-20) [PASS, BLANK, PROCESS, USER] (525) *USER available only with IControl

VBI (6-22) [PASS, BLANK, PROCESS, USER] (625) *USER available only with IControl

INPUT ERROR [KILL, PASS]

CARD SYSTEM [NONE, A1, A1 + A2]

TEST VIDEO [OFF / ON]

AUDIO CH 1&2 [OFF / ON] * Available with Audio Card connected

AUDIO CH 3&4 [OFF / ON] * Available with Audio Card connected

AUDIO CH 5&6 [OFF / ON] * Available with Audio Card connected

AUDIO CH 7&8 [OFF / ON] * Available with Audio Card connected

CONFIG ALARMS NO SIGNAL ALARM LEVEL [GREEN, YELLOW, RED, FLASH RED]

ALARM REPORT [NONE, GPI]

TEST ALARM LEVEL [GREEN, <u>YELLOW</u>, RED, FLASH RED]

ALARM REPORT [NONE, GPI]

CARD SYSTEM ALARM LEVEL [GREEN, YELLOW, RED, FLASH RED]

ALARM REPORT [NONE, GPI]

VERSION ADC-1101: xxx

OPTIONS LINE SCOPE ON/OFF Key: xx.xx.xx

FACTORY DEFAULT [RESTORE]

3.3 Remote control using iControl

The operation of the ADC-1101 may be controlled using Miranda's iControl system.

- This manual describes the control panels associated with the ADC-1101 and their use.
- Please consult the iControl User's Guide for information about setting up and operating iControl.

In iControl Navigator or iControl Websites, double-click on the ADC-1101 icon to open the control panel.

3.3.1 The iControl graphic interface window

The basic window structure for the ADC-1101 is shown in figure 3.1. The window identification line at the top gives the card type (*ADC-1101*), and the slot number in which the card is installed in the Densité frame. On the left is a Status icon for the card (see Section 3.3.12 for a discussion of status monitoring).

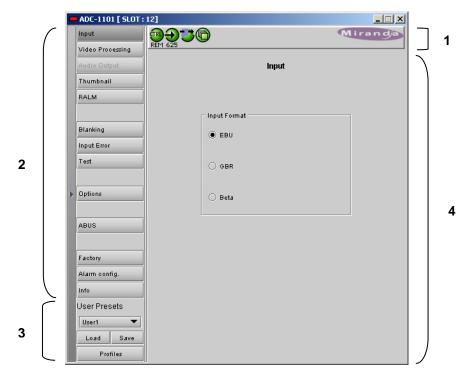


Figure 3.1 ADC-1101 iControl graphic interface window

There are four main sections in the window itself, identified in figure 3.1:

1. The top section displays icons on the left. These icons report different statuses such as card communication status, input signal and reference signal format and statuses.

Move the cursor over an icon to see its current status in the message area below the icons. If there is an error status, the message will appear automatically. If there are multiple error messages, the display will cycle through them

Icon #	Indicates	appearance	interpretation		
1	Card control status	CTRL CTRL REM LOCAL	Green if the card is controlled remotely Yellow when locally controlled		
2	Input status	①	Green if OK, Red if error detected		
3	Audio/Video test		Green if test signal is OFF, Yellow with type indicators when test signal is enabled: Color bar for color bar test signal Loudspeaker for audio test signal		
4	ABUS Multiple Card Configuration		Green if OK, Red if the detected card configuration does not match the configuration set on the ABUS panel		

- 2. The left portion of the window contains all the parameter groups, which become highlighted when they are selected; the main panel (4) then displays the group's set of parameters. Each of the groups is described in detail below.
- 3. The lower section of the window contains controls to access the user presets.
- 4. The main panel contains all the parameters specific to the group selected. It may contain several tabs to help manage the different parameters.

3.3.2 The Input group

Use the radio buttons in this panel to set the input video format for this card.

The available options are different for 525 and 625 operation:

525 input options

- **SMPTE**
- **GBR**
- **GBR** with SETUP
- **BETA**
- **BETA with SETUP**

625 input options:

- **EBU**
- **GBR**
- Beta

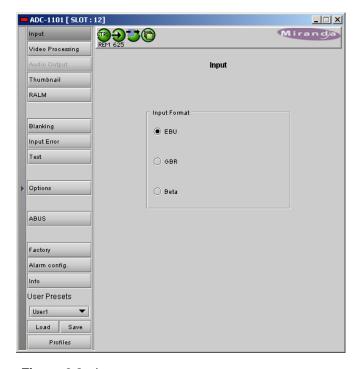


Figure 3.2 Input group

3.3.3 The Video Processing group

Use the controls on this panel to process the incoming analog video before the A-to-D conversion. The following controls are available:

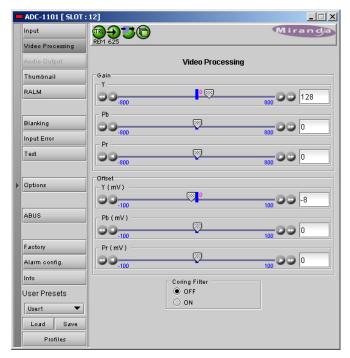


Figure 3.3 Video Processing group

3.3.4 The Audio Output group

Each of these tabs controls the output processing for two output channels – source selectors, level controls and mixers for each output.

The Operation Mode pulldown establishes the configuration of the controls for an output channel. There are four options:

A (see CH 1 in figure 3.4)

The source is selected using the Source A ABUS Select and Channel pulldowns, and its level is adjusted using the slider or data box.

- The ABUS select options are:
 - V select one of the 16 channels from the video card.
 - A1 select one of the 16 channels from an audio card. A1 is always Local, Slave 1 or Master
 - A2 select one of the 16 channels from an audio card. A2 is always Slave2 or Slave.

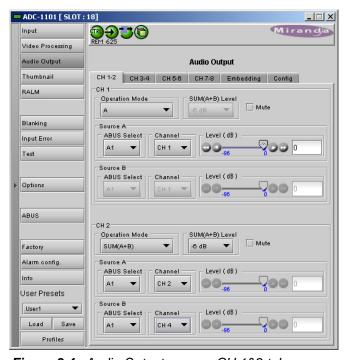


Figure 3.4 Audio Output group – CH 1&2 tab

The output Level is adjustable from -96 to 0 dB with the slider or a direct keyboard entry.

SUM (A+B) (see CH 2 in figure 3.4)

Two sources are selected using the Source A and Source B ABUS Select and Channel pulldowns. The two sources are added, and the level of the combined signal is attenuated by the amount selected in the Sum (A+B) LEVEL pulldown.

- The ABUS select options are:
 - o **V** select one of the 16 channels from the video card.
 - o A1 select one of the 16 channels from an audio card. A1 is always Local, Slave 1 or Master
 - o A2 select one of the 16 channels from an audio card. A2 is always Slave2 or Slave.
- The Sum (A+B) Level pulldown offers attenuations of 0 dB, -3 dB and -6 dB.

NOTE: If you attempt to mix two different audio types to an output, only the Source A signal will be routed to this output and the Source A audio type will be displayed. The Source B signal will be ignored.

Mix (see CH 3 in figure 3.5)

Two sources are selected using the Source A and Source B ABUS Select and Channel pulldowns. The two sources are mixed, with the level of each source adjusted using its slider or data entry box.

- The ABUS select options are:
 - V select one of the 16 channels from the video card.
 - A1 select one of the 16 channels from an audio card. A1 is always Local. Slave 1 or Master
 - A2 select one of the 16 channels from an audio card. A2 is always Slave2 or Slave.
- The contribution of each of the sources to the mix is adjusted using its Level slider or direct keyboard entry into the data box, over a range from -96 to 0 dB.



Figure 3.5 Audio Output group - CH 3&4 tab

NOTE: If you attempt to mix two different audio types to an output, only the Source A signal will be routed to this output and the Source A audio type will be displayed. The Source B signal will be ignored.

OFF (See CH 4 in figure 3.5)

The output is muted.

3.3.4.1 Audio Output – Embedding tab

CH1,2,3,4, and CH 5,6,7,8: the pulldown box allows the user to choose the AES audio group in which audio channels 1 to 4 and 5 to 8 will be embedded

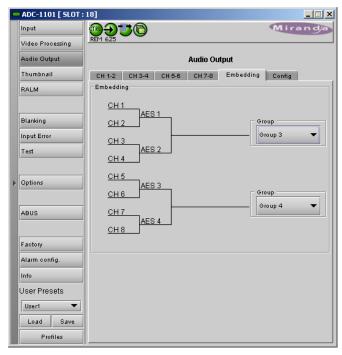


Figure 3.6 Audio Output group – Embedding tab

3.3.4.2 Audio Output - Config tab:

The *Audio Embed* pulldown box sets the bit level of the embedded audio at the output:

20 bits or 24 bits



Figure 3.7 Audio Output group – Config tab

3.3.5 The Thumbnail group

The thumbnail area displays a thumbnail image of the video signal being processed by the ADC-1101.

Player – turn the player function (i.e. display in this panel) OFF or ON (Thumbnail)

Enable – set thumbnail generation to Video, Test (test signal is generated, medium size only), or OFF. Use Video mode for normal operation.

Size – choose the thumbnail size: small, medium, large

Quality – choose the quality of the displayed image by selecting Poor, Normal or HiQ from the pulldown list

Rate – select the desired refresh rate from the pull-down box. The choices are:

[Fast, 1 sec, 2 sec, ..., 9 sec, 10 sec.]

Streaming Priority Control – Click the Take control from Slot [##] checkbox to force the Densité

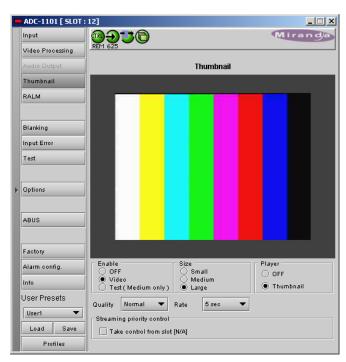


Figure 3.8 Thumbnail group

Controller for this frame to assign more bandwidth for this card's streaming output. Only one card in the frame can use this feature. It has no effect unless you have selected *Fast* for the refresh rate. The actual slot number of this card, as shown in the window title bar, will appear when the checkbox is ticked.

• Note that this check box is not available if the Densité frame is equipped with an ETH2 controller card.

3.3.6 The RALM group

The Remote Audio Level Meter (RALM) panel displays audio level meters for up to 8 channels.

 The source for each meter is configured in the RALM Remote Control area at the bottom of the control panel, and in the RALM Connections tab.

Speed – select the meter response from the pull-down list, options are [fast, medium, slow]

RALM Connections tab



Figure 3.10 RALM group – RALM Connections tab



Figure 3.9 RALM group

Use the radio buttons to turn the meter display ON (RALM) or OFF for the indicated channels. The meter appears directly above the controls.

Reset Counter: click this button to reset the overload counter on the ALM display to zero. See the next section for instructions on setting up the overload counter.

Meter Ballistics Config tab



Figure 3.11 RALM group – Meter Ballistics Config tab

Type – select a type of meter from the pull-down list

```
Digital Peak Meter - EBU Digital (IEC60268-18)
Analog Peak Meter - UK PPM (IEC60268-10 type IIa)
Analog Peak Meter - EBU PPM (IEC60268-10 type IIb)
```

Figure 3.12 Meters shown in Type pulldown

Upper Zone Limits – select the crossover level between the upper and middle zones of the meter (the range of values shown in the pull-down list depends on the type of meter selected)

Lower Zone Limits – select the crossover level between the middle and lower zones of the meter (the range of values shown in the pull-down list depends on the type of meter selected)

Color samples – the three samples show the current selected color for the upper, middle and lower zones of the meter.

 Click on the color sample of a zone to open a color selection panel to choose a different color for that zone

Overload Cursor – The overload cursor appears on the meter as an arrowhead in the meter scale. The two pulldown boxes set the position of the overload cursor on the left and right meters. If the audio level on that channel goes above the cursor, the Overload Counter at the top of the meter is incremented.

3.3.7 The Blanking group

This panel allows the Vertical Blanking Interval (VBI) processing to be specified. Options available are:

- Process Process any VBI information present at the input with the same gain and offset parameters used for the active video (these are set in the video processing tab)
- Pass Send any VBI information present at the input to the output SDI signal without modification
- Blank Replace any information that may have been present on a specific VBI line with black.

Apply an option to the entire VBI by selecting the option in the VBI box. If Line by Line is selected, the option can be specified for each individual line, in the Line By Line area.

Extended VBI:

The contents of this box depend on the input signal line rate:

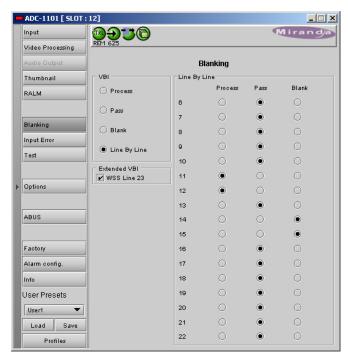


Figure 3.13 Blanking group

- 625 line: Click in the checkbox to include line 23 (WSS signal) in the VBI.
- 525 line: Click in the check box to include line 21 (closed captioning) in the VBI

3.3.8 The Test group

This panel inserts test signals at the output instead of the incoming video and/or audio.

Video – click in the checkbox to insert color bars in the output video

Audio – click in the checkbox to insert audio tones in the indicated output audio channels

Note – the audio checkboxes will only be active if there is an audio input signal

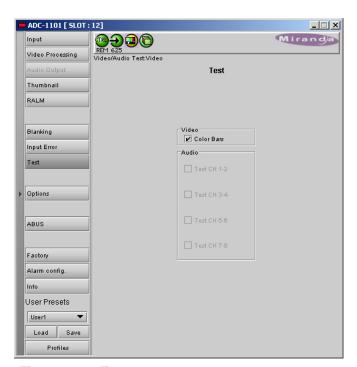


Figure 3.14 Test group

3.3.9 The Options group

The IP Scope option adds Waveform Monitor and Vectorscope over IP functions to the ADC-1101, using data generated by a line scope embedded in the ADC-1101.

- To activate this option, you must obtain a licence key from Miranda Technologies Inc.
- Type the licence key in the Enter Key box and then click on Enable Option to enable the option's features

Once the Key has been entered, and the IP Scope is activated, the controls on this panel can be used to set its operating parameters

- Enable Click in the checkbox to turn the IP Scope ON
- Line Use the slider to select the video line that will be displayed by the Line Scope
- Refresh Rate Use the pulldown to select how often the display will be refreshed..

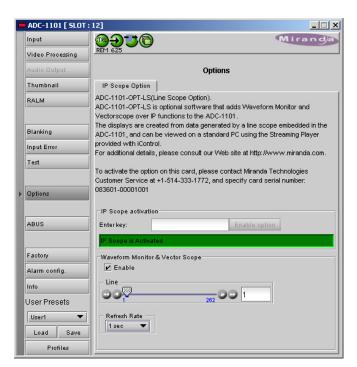


Figure 3.15 Options group

3.3.10 The ABUS group

When companion audio cards such as the UAP-1781 and UAP-1783 are used to provide additional audio channels, the ABUS audio bus links the installed audio cards and the ADC-1101. This panel, called ABUS group, is used to instruct the ADC-1101 about the presence of installed audio cards and the system configuration.

Multiple Card Config

A1/A2 Presence: Monitors the presence of companion audio cards installed in the chassis (see section 2.2 ADC-1101 Installation).

Card System Config: To enable the audio bus, use the pull-down box and select your system's configuration. Selecting Video restricts available audio signals to audio channels embedded in the input signal; Video / A1 or Video / A1 / A2 adds the audio channels incoming from the installed audio cards that have been detected.



Figure 3.16 ABUS group

3.3.11 The Factory group

Load Factory: Clicking this button will reset all ADC-1101 parameters to factory-default values.

 The user presets are not affected by the Load Factory command

Auto-Calibration (Color Bars): Click the Start button to calibrate the card automatically using the input signal.

 The input signal used to calibrate the card MUST be a full field 100% color bar.



Figure 3.17 Factory group

3.3.12 The Alarm Config group

This panel allows the alarm reporting of the ADC-1101 to be configured. The panel opens in a new window when the button is clicked, and can be resized if needed.

The panel is organized in columns.

Status/Name

This contains an expandable tree listing all the alarms reported by this ADC-1101 card.

- Each alarm name includes an icon that shows its current status
- Some alarms are text-only (see Input Format or ABUS in fig. 3.18) and the alarm status is shown in the name and not by a status icon

The Card LED, Overall alarm and GSM contribution columns contain pulldown lists that allow the level of contribution of each individual alarm to the alarm named in the column heading to be set.

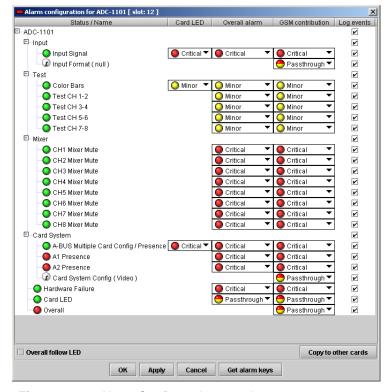


Figure 3.18 Alarm Configuration panel

Card LED

This column allows configuration of the contribution of selected individual alarms to the status LED located on the front card edge. The Card LED status is shown at the bottom of the alarm tree in the Status.Name column.

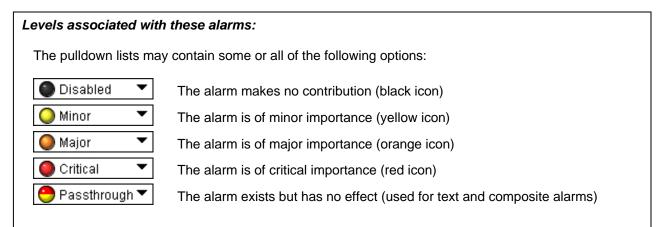
Overall Alarm

This column allows configuration of the contribution of each individual alarm to the Overall Alarm associated with this card. The Overall Alarm is shown in the upper left corner of the iControl panel, and also appears at the bottom of the Status/Name column..

• GSM Contribution

This column allows configuration of the contribution of each individual alarm to the GSM Alarm Status associated with this card. GSM is a dynamic register of all iControl system alarms, and is also an alarm provider for external applications. The possible values for this contribution are related to the Overall alarm contribution:

- If the Overall alarm contribution is selected as Disabled, the GSM alarm contribution can be set to any
 available value
- If the Overall alarm contribution is selected as any level other than disabled, the GSM contribution is forced to follow the Overall Alarm.



Shortcut: if you click in one of the columns beside a major heading in the Status/Name column (where there is no pulldown shown), you will open an "invisible" pulldown that lets you assign a level to all alarms in that section of the column simultaneously.

Log Events

iControl maintains a log of alarm events associated with the card. The log is useful for troubleshooting and identifying event sequences. Click in the checkbox to enable logging of alarm events for each individual alarm.

At the bottom of the window are several other controls

Overall follow LED

Click in the checkbox to force the Overall alarm to be identical to the Card LED status

- All Overall alarms for which there is a Card LED alarm will be forced to match the Card LED alarm
- All Overall Alarms for which there is no Card LED alarm will be forced to Disabled

A warning box will open allowing you to confirm the action, since it will result in changes to the configuration and there is no *undo* function.



Figure 3.19 Overall follow LED warning

Copy to other cards

Click this button to open a panel that allows the alarm configuration set for this card to be copied into another ADC-1101 card.

- Select one or more destination cards from the list in the window by clicking in the checkboxes, or all of them by clicking in the All checkbox
- Note that when you do a Copy Profile for this card (see Sect. 3.3.14), the alarm configuration is copied along with all the other settings.

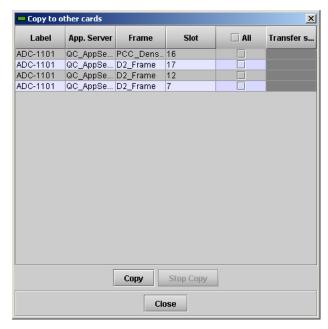


Figure 3.20 Copy to other cards

Get alarm keys

Click this button to open a save dialog where you can save a file containing a list of all alarms on this card and their current values, along with an Alarm Key for each. The alarm keys are useful for system integration and troubleshooting.

The file is saved in Excel.csv format

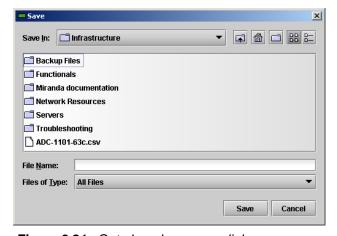


Figure 3.21 Get alarm keys save dialogue

OK, Apply, Cancel

- **OK** accepts the settings and closes the window once the card confirms that there are no errors.
- Apply accepts the settings, but leaves the window open
- Cancel closes the window without applying any changes, and leaves the previous settings intact.

3.3.13 The Info group

When the ADC-1101 is included in an iControl environment, certain information about the card should be available to the iControl system. The user can enter labels and comments that will make this card easy to identify in a complex setup. This information is entered into data boxes in the Info control panel.

Label: type the label that appear for this

ADC-1101 when it appears in

iControl applications

Short Label type the short-form label that

iControl uses in some cases (8

characters)

Source ID type a descriptive name for this

ADC-1101

Comments: type any desired text

The remaining data boxes show manufacturing information about this card.

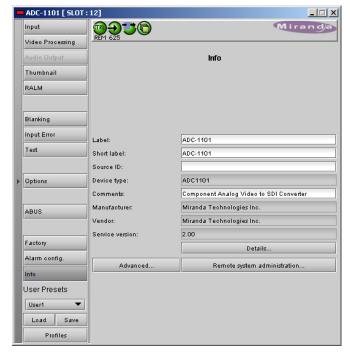


Figure 3.22 Info group

Three buttons in the panel give access to other information.

 Details...: Reports the Firmware version, service version, and panel version for this card

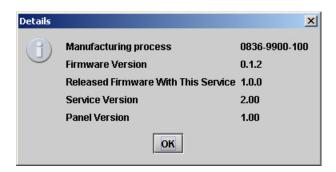


Figure 3.23 Details window

 Advanced...: Shows the Miranda LongID for this card. The Miranda LongID is the address of this ADC-1101in the iControl network.

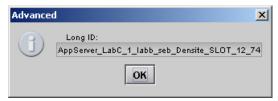


Figure 3.24 Advanced window

 Remote System Administration – opens the Joining Locators data box.

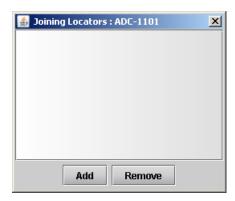


Figure 3.25 Joining Locators window

3.3.14 User Presets

The User Preset controls are located at the lower left corner of the iControl panel. If they are not visible, click the arrow icon on the left side to reveal the buttons and presets.

Select any one of the five presets using the pulldown list. The name of the currently-selected User Preset is shown on the pulldown icon (e.g. *User1*, *User2*,... *User5*)

- Click Load to load the contents of the selected User Preset into the ADC-1101.
 All parameter settings and values will be replaced by the contents of the selected User Preset.
- Click Save to store the current parameter settings and values from the ADC-1101 into the selected User Preset. The existing contents of the preset will be overwritten.



Figure 3.26 User Presets and Profiles

3.3.15 Profiles

A profile is a set of values representing the current configuration of the card. The profile can be saved to disk and recalled from disk. It can also be copied from this ADC-1101 to another ADC-1101. Access these operations by clicking on the Profiles button at the bottom left of the control panel (see figure 3.26)

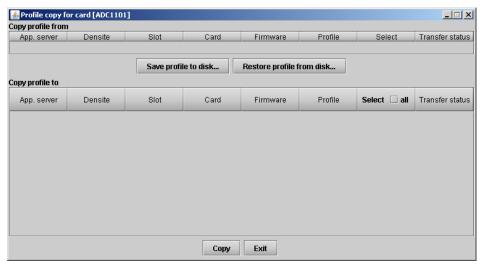


Figure 3.27 Profile Copy window

4 Specifications

ANALOG VIDEO INPUT

STANDARD YPbPr or RGB with sync

SMPTE/EBU, Betacam

CONNECTOR 3x BNC per IEC 60169-8 Amendment 2

IMPEDANCE 75 OHM

SIGNAL LEVEL 0.7V p-p or 1V p-p with sync RETURN LOSS > 35dB up to 5.75 MHz

SERIAL DIGITAL OUTPUT

STANDARD SMPTE-259M, (270Mbps)

NUMBER OF OUTPUTS 2

CONNECTOR 2x BNC per IEC 60169-8 Amendment 2

SIGNAL LEVEL 800mV nominal

RETURN LOSS ADC-1101: >15dB up to 270MHz

JITTER <0.2 UI (WIDEBAND)

PROCESSING

QUANTIZATION 12-bit

SAMPLING 27 MHz (2x oversampling for luma)

(4x oversampling for chroma)

FREQUENCY RESPONSE +/- 0.1dB up to 5.5 MHz (Y)

<+/- 0.1dB up to 2.75 MHz (Cr, Cb)

GAIN (3 Components) +-/ 3dB
BLACK LEVEL +/- 100mV
PROCESSING DELAY 10 µsec

TEST SIGNAL

VIDEO 75% color bar with 100% white bar
AUDIO 1 kHz tone (R: continuous, L: pulsed)

OTHER

MAXIMUM POWER 5W PHYSICAL FORMAT Densité