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**F3G  
Fusion**

**Option** 



**Analog Audio/Video Options (+AN•••• Option Codes)**

# ***Manual Supplement***

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**Cobalt Digital Inc.**

2406 E. University Ave.  
Urbana, IL 61802  
Voice 217.344.1243 • Fax 217.344.1245  
[www.cobaltdigital.com](http://www.cobaltdigital.com)

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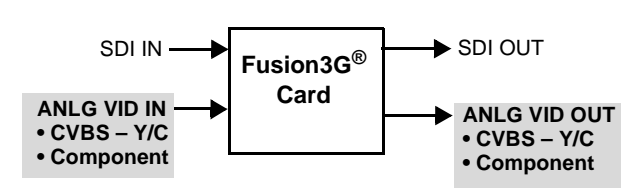
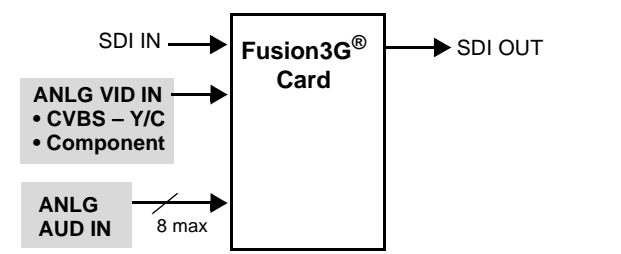
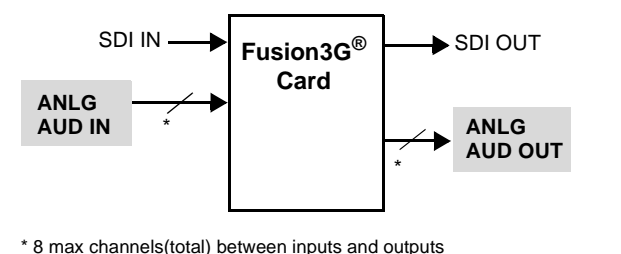
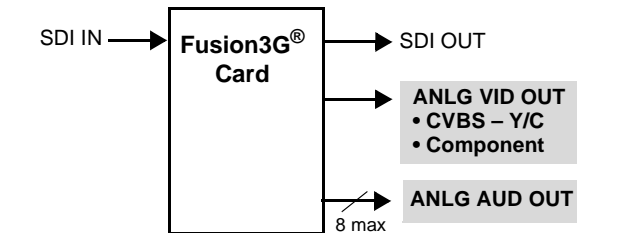
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## Overview

This manual supplement provides descriptions and operating instruction for the +AN--- options available as an option on new Cobalt® FUSION3G® (9900-Series) cards, which are options that add analog audio/video inputs and outputs. Table 1 lists the various available analog option packages.

**Note:** +AN--- options are available only as new purchase options and cannot be added as a field-installed option.

**Table 1 Fusion3G® Analog Options Descriptions**

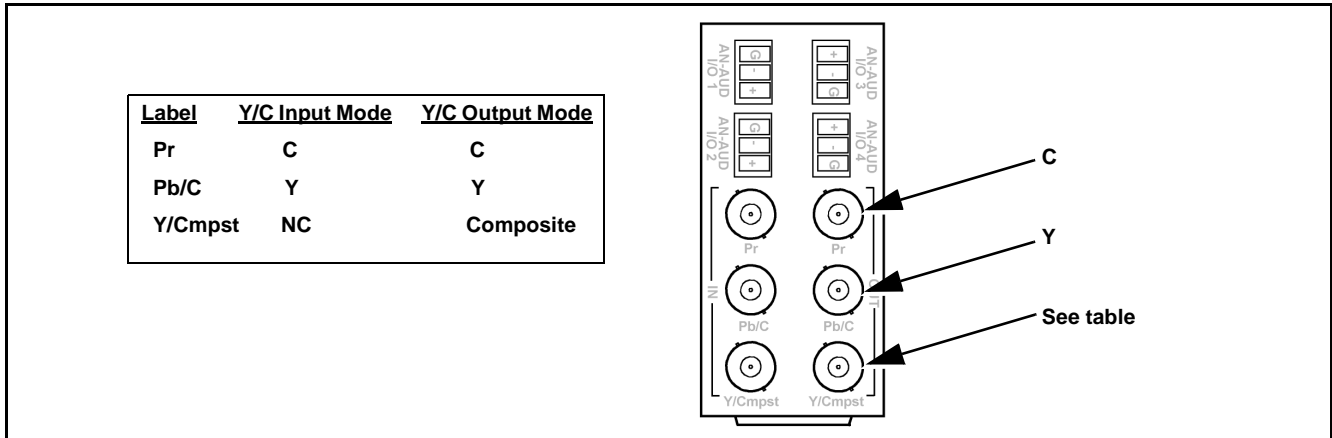
Option Code	Option Name	Description	Option I/O Diagram
<b>+ANVIO</b>	Universal Analog Video Inputs/Outputs	Provides an analog video input and output (CVBS, Y/C, component, RGB (sync on green))	
<b>+ANAVI</b>	Analog Audio and Universal Video Inputs	Provides an analog video input (CVBS, Y/C, component, RGB (sync on green)), and up to eight channels of balanced analog audio inputs	
<b>+ANAIO</b>	Analog Audio Inputs/Outputs	Provides up to eight channels (total) of balanced analog audio, with the eight channels selectable as input or output	 <p>* 8 max channels(total) between inputs and outputs</p>
<b>+ANAVO</b>	Analog Audio and Universal Video Outputs	Provides an analog video output (CVBS, Y/C, component, RGB (sync on green)), and up to eight channels of balanced analog audio outputs	

# Installation and Setup

## Installing a Rear Module

Refer to Chapter 2, “Installation and Setup” in the card’s Product Manual for descriptions and installation of Rear I/O Modules that support analog audio and/or video.

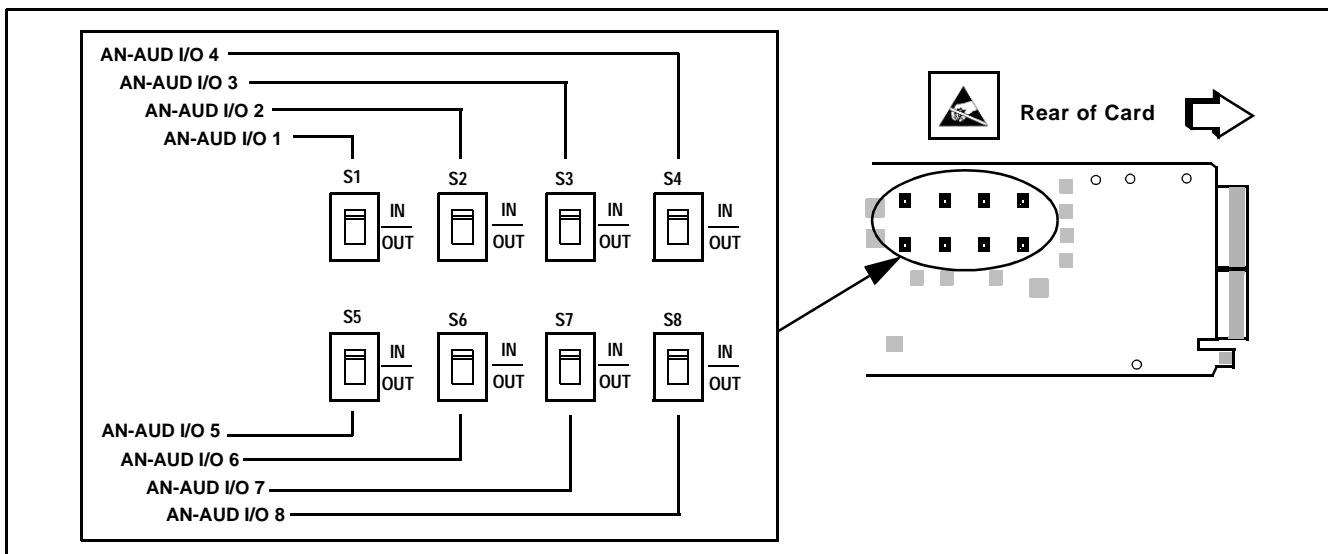
**Note:** When using Y/C (“S-video”) analog input or output, connections are as shown below and not as shown on label (which correspond to YPbPr and composite mode connections).



## Setting I/O Switches for Analog Audio (1-8) Ports

**Notes:** All switches are set as **inputs** as factory default.

Analog audio options provide for eight analog audio channel **IN** or **OUT**, with each channel configurable as an input or output using DIP switches **S1** thru **S8**). The switches are located on the option piggyback card as shown below. For port to be used as an **output**, set switch to the down position.


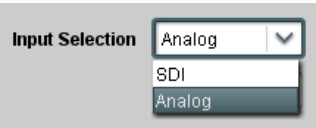
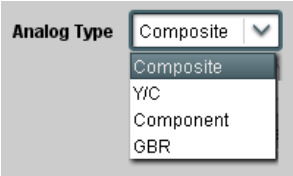
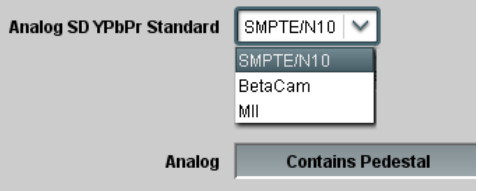


# Analog Video/Audio Controls and Examples

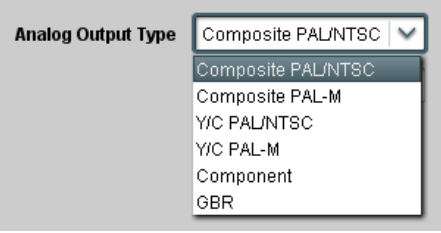


## Video Controls

Table 1 individually lists and describes typical analog **video** controls available using DashBoard™ for cards equipped with the +AN--- options.

**Table 1** +AN Option Video Controls List and Descriptions

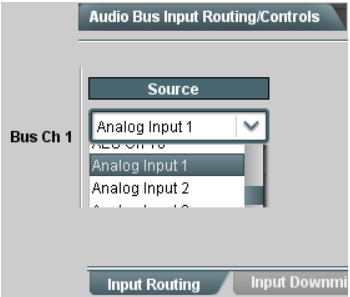
	<p>Provides controls to select from SDI or analog video inputs.</p>
<p>• <b>Input Video Select Control</b></p> 	<p>Sets the input video to exclusively use either of the two video inputs as shown.</p>
<p>• <b>Analog Video Input Type Control</b></p> 	<p>When receiving analog video input, sets the card to accept received input signal from choices shown.</p> <p><b>Note:</b> Input type must be appropriately set for the card to correctly process the received input.</p>
<p>• <b>SD Analog Input Signal Controls</b></p> 	<p>When receiving analog YPbPr SD video input, <b>Standard</b> drop-down sets the card input video type to accept received input signal from choices shown.</p> <p><b>Analog</b> button sets the card input to match analog source containing or not containing 7.5 IRE pedestal.</p> <p><b>Note:</b> Input type must be appropriately set for the card to correctly process the received input.</p>

**Table 1 +AN Option Video Controls List and Descriptions — continued**

<p style="text-align: center;"><b>Output Video</b></p>	<p>Provides controls to control analog video output as described below.</p>
<p><b>• Analog Video Output Type Control</b></p> 	<p>Sets the card analog video output from choices shown.</p> <p><b>Note:</b> PAL-M choices provide a PAL-M analog output derived from NTSC analog or North American SDI video inputs (i.e., 59.94 rate). PAL-M is basically an NTSC signal which uses a PAL color sub-carrier scheme. PAL-M output can only be derived from a 5994 (or related) signal. PAL SDI or analog inputs cannot be “cross-converted” to PAL-M.</p>
<p><b>• Analog Video Component Color Space Control</b></p> 	<p>When card is set to output component output, sets the card analog video output from choices shown.</p>
<p><b>• SD Analog Output Pedestal Insert Control</b></p> 	<ul style="list-style-type: none"> <li>• <b>On</b> adds 7.5 IRE pedestal to SD analog output video.</li> <li>• <b>Off</b> removes 7.5 IRE pedestal from SD analog output video.</li> </ul>

### Audio Controls

Analog audio inputs and outputs to and from the card are routed and controlled just like any other audio input/output used with the card.

<p>Analog audio <b>inputs</b> are routed into the card as a drop-down choice on the Input Routing <b>Source</b> selector for card bus channels 1-16.</p>		<p>Analog audio <b>outputs</b> are activated by applying a card PCM audio source to an analog output channel using the <b>Analog Audio Out</b> sub-tab on the card Output Audio Routing/Controls tab.</p>
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Refer to “Function Submenu List and Descriptions” in Chapter 3, Operating Instructions in the card Product Manual. Analog audio outputs can use as sources any PCM audio source within the card (including embedded, AES, and DSP source channels such as upmixed and loudness processed sources).





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