

Imagination Technologies SPDIF Input Controllers

The Imagination Technologies SPDIF Input controller contains the following controls:

- name='IEC958 Capture Mask',index=0

This control returns a mask that shows which of the IEC958 status bits can be read using the 'IEC958 Capture Default' control.

- name='IEC958 Capture Default',index=0

This control returns the status bits contained within the SPDIF stream that is being received. The 'IEC958 Capture Mask' shows which bits can be read from this control.

- name='SPDIF In Multi Frequency Acquire',index=0
- name='SPDIF In Multi Frequency Acquire',index=1
- name='SPDIF In Multi Frequency Acquire',index=2
- name='SPDIF In Multi Frequency Acquire',index=3

This control is used to attempt acquisition of up to four different sample rates. The active rate can be obtained by reading the 'SPDIF In Lock Frequency' control.

When the value of this control is set to {0,0,0,0}, the rate given to hw_params will determine the single rate the block will capture. Else, the rate given to hw_params will be ignored, and the block will attempt capture for each of the four sample rates set here.

If less than four rates are required, the same rate can be specified more than once

- name='SPDIF In Lock Frequency',index=0

This control returns the active capture rate, or 0 if a lock has not been acquired

- name='SPDIF In Lock TRK',index=0

This control is used to modify the locking/jitter rejection characteristics of the block. Larger values increase the locking range, but reduce jitter rejection.

- name='SPDIF In Lock Acquire Threshold',index=0

This control is used to change the threshold at which a lock is acquired.

- name='SPDIF In Lock Release Threshold',index=0

This control is used to change the threshold at which a lock is released.