

DCO-1741/1781

2/4 AES audio change-over with silent switch option



The DCO-1741/1781 is a 2/4 AES change-over. The switch is performed electronically by an internal router. In the event of a power failure, the signal is protected by the relays fitted on the rear module, maintaining the integrity of the selected signal at the output. The DCO card allows switching as a regular router, or alternatively the module can perform an audio silent switch between sources using the silent switch option (software option).

Input selection can be performed manually or automatically. In automatic mode, the card will perform input selection based on internal signal analysis with alarm parameters, and the status of the inputs. In manual mode, channel selection can be undertaken from the Densité Controller,

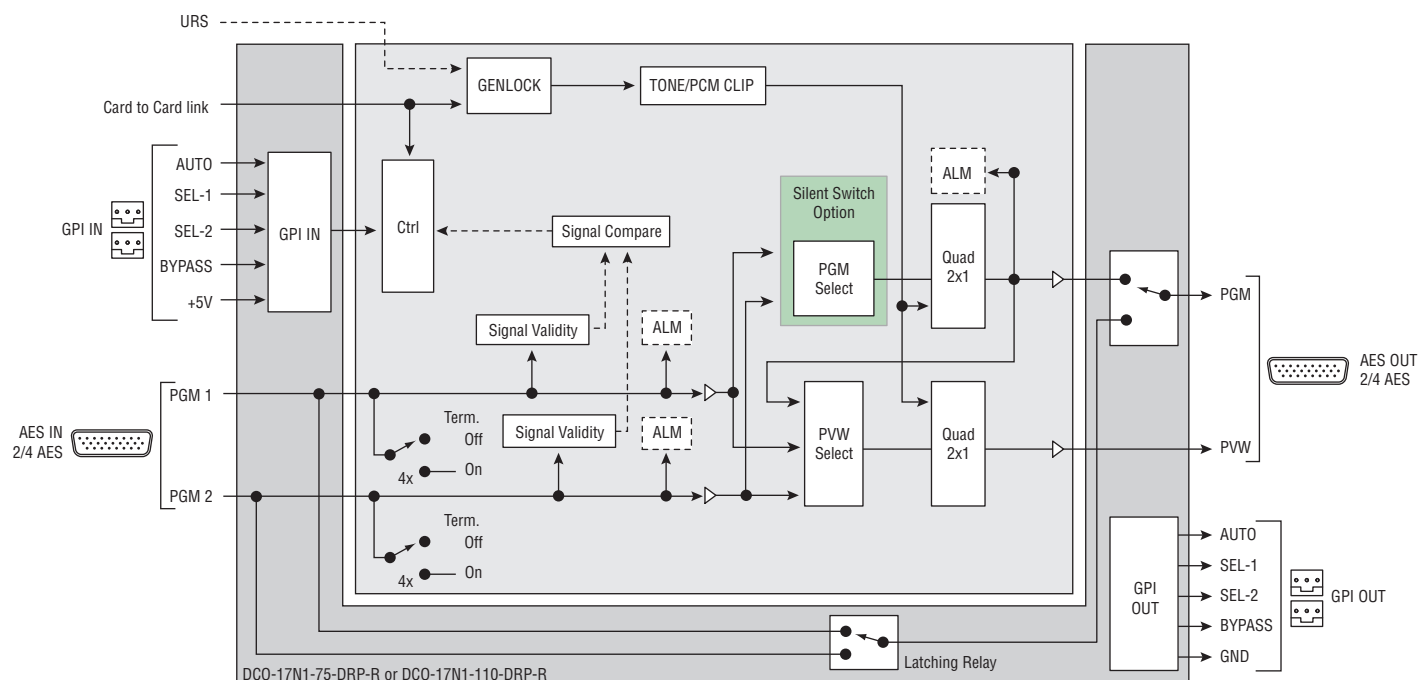
the iControl software or simply by using a GPI. A GPI can be connected to an automation system or another device to control input selection. The GPI outputs give status of the selected source, and this can be used to trigger Tallies.

The card provides audio level metering so that an operator can remotely and effectively monitor the signal path using Miranda's iControl facility monitoring and control system.

Finally, the DCO cards can work in conjunction with the HCO-1821 (HD/SD/ASI change-over). In multiple card operation, the DCO can operate in "audio follow video" mode where the video and audio change-overs are seen as a unique 2x1 switching system using the card-to-card link.

KEY FEATURES AND BENEFITS

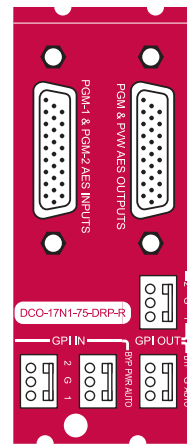
- > Up to 4 AES on each input
- > Electronic switching with relay backup (on rear module)
- > Automatic mode using internal signal analysis with alarm parameters
- > Manual change over by local frame controller, iControl, iControl Solo or GPI
- > Alarm reporting to iControl facility monitoring and control system
- > GPI in & out (IN 1, IN2, AUTO, BYPASS)
- > Optional silent switch function
- > Frame reference input
- > Audio level meter streaming
- > Emergency audio tone
- > Can slave on the HCO-1821 video change-over



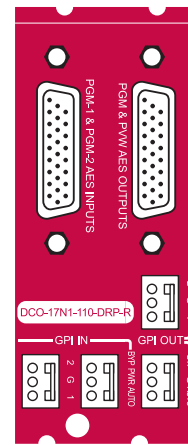
DCO-1741/1781 Functional Block Diagram



Card streams video thumbnail and ALM via IP



DCO-17N1-75-DRP-R



DCO-17N1-110-DRP-R

TECHNICAL SPECIFICATIONS

AUDIO INPUTS (4 AES per input)

Sampling freq.: 48 kHz \pm 100 ppm
 Quantization: 16 to 24 BITS
 All A inputs must be synchronized with each other.
 All B inputs must be synchronized with each other.

AES3

Level: 0.2 to 7 Vp-p
 Impedance: Transformer balanced
 110 ohm (bypass off)
 >5 kohm (bypass on)

AES3-id

Level: 0.2 to 2 Vp-p
 Impedance: 75 ohm (bypass off)
 >5 kohm (bypass on)
 Return loss: >15 dB up to 12 MHz

AUDIO OUTPUT (4 AES)

Sampling freq.: 48 kHz \pm 100 ppm
 AES3
 Level: 4 Vp-p
 Impedance: 110 ohm balanced

AES3-id

Level: 1 Vp-p
 Impedance: 75 ohm
 Return loss: >15 dB up to 12 MHz

REFERENCE INPUT

Signal: URS for Densité

PROCESSING PERFORMANCE

Quantization: 24 bits
 Sampling: 48 KHz, synchronous
 Number of channels: 8
 Latency: 3 audio samples
 40 ns (direct mode)

MISCELLANEOUS

Tone generator: 1 kHz sine wave interrupted on left channels (250 ms / 3 s) EBU R49
 Emergency audio clip: storage provided for one or two files, with a total duration from 11.3 s (for stereo signal sampled at 48 kHz) to 45s (for mono signal sampled at 24 kHz)

ELECTRICAL

Power: 10 W



ORDERING INFORMATION

Densité 2 frame

DCO-1741 2 AES audio change-over with optional silent switch
 DCO-1781 4 AES audio change-over with optional silent switch
 DCO-17N1-75-DRP-R Double rear connector panel, unbalanced audio w/relay
 DCO-17N1-110-DRP-R Double rear connector panel, balanced audio w/relay

Densité 3 frame

DCO-1741-3RU 2 AES audio change-over with optional silent switch (including 3RU adaptor)
 DCO-1781-3RU 4 AES audio change-over with optional silent switch (including 3RU adaptor)
 DCO-17N1-75-DRP-R-3RU Double rear connector panel, unbalanced audio w/relay (including 3RU adaptor)
 DCO-17N1-110-DRP-R-3RU Double rear connector panel, balanced audio w/relay (including 3RU adaptor)

Options

DCO-17NN-OPT-SS Silent switch option for DCO-1741 or DCO-1781
 BOC-DA26-8BNC-1 75 ohm digital audio breakout cable

Remote control

iControl, iControl Solo, RCP-200 *

* For full list of supported cards, visit <http://www.miranda.com/RCP-200>