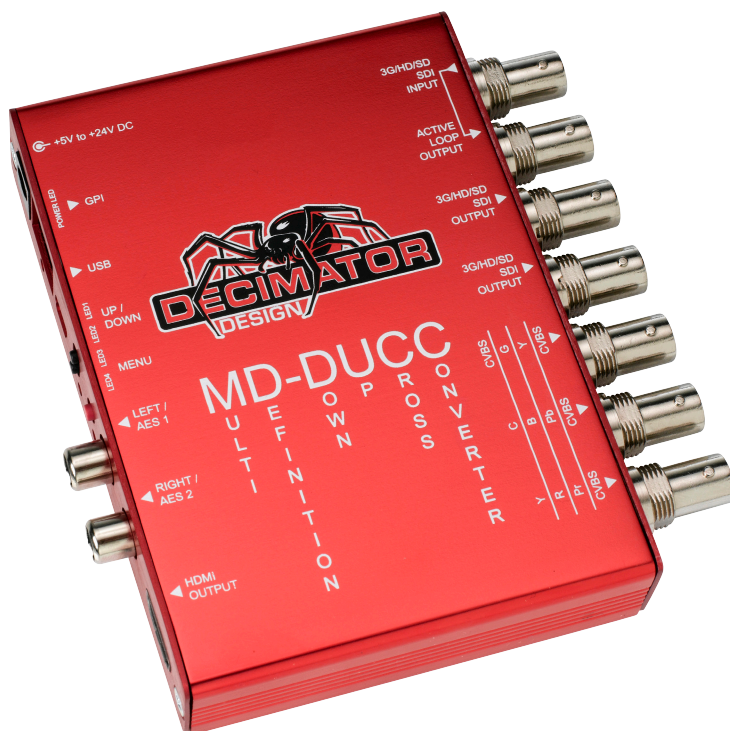


MD-DUCC

MULTI-DEFINITION DOWN UP CROSS CONVERTER
(3G/HD/SD)-SDI to (3G/HD/SD)-SDI, HDMI and Analogue Video with
2 x AES/EBU and 2 x Analogue Audio Outputs

PRODUCT FEATURES

- Auto detects 3G, HD or SD (26 Formats in total)
- Full 10-bit data path and multipoint interpolation
- Professional motion-adaptive de-interlacing
- True Down Up Cross conversion, allowing the conversion between any of the supported formats. Simply select the output format you require, no matter what the input format is
- Complete 16:9, 14:9 and 4:3 Aspect ratio conversion support, with individual selection for HD to HD, HD to SD, SD to HD and SD to SD conversions
- Full 16-Channel Audio metering with:
 - Any of the 4 audio groups individually selectable
 - Vertical or Horizontal Bars
 - AES, VU, Extended VU, BBC, EBU, DIN and NORDIC Scales
 - Bar & Float, Bar only or Float only
 - Transparency adjustment
 - Separate Bar and Float Ballistics control
 - Adjustable Reference level
 - Red, Yellow and Green Range adjustment
 - Bar thickness adjustment
 - Margin adjustment
- Adjustable Graticules Generator with:
 - Separate enables for Safe Action, Safe Title and Centre Cross
 - Adjustable position for either Safe Action or Safe Title
 - Adjustable colours for Safe Action, Safe Title and Centre Cross
- Text Overlays with:
 - Adjustable Foreground and Background colours
 - Adjustable 16 character text
 - Current input format status
- HDMI output
- Selectable analogue video output from either:
 - 3 x CVBS out / YPbPr out / RGB out / CVBS & YC out
- 2 x (3G/HD/SD)-SDI 10-bit outputs with audio from input automatically delayed and passed



- GPI on RJ-45 for Tallies
- 3G/HD/SD-SDI Active Loop-Through Output
- De-Embedded audio can be output on 2 x RCA connectors as either AES or Analogue with adjustable analogue audio level
- LEDs for status and buttons for basic configuration
- USB port for control and firmware updates
- Locking DC Power Socket
- The following is also included with the unit:
 - Power Supply, HDMI Cable, USB Cable and Mounting Bracket

SPECIFICATIONS

VIDEO FORMATS	3G:SMPTE 424M@2.97 and 2.967Gb/s • 1080p@60/59.94/50Hz HD:SMPTE 292M/274M/296M@1.485 and 1.435Gb/s • 1080i@60/59.94/50Hz • 1080p/psf@30/29.97/25/24/23.98Hz • 720p@60/59.94/50/30/29.97/25/24/23.98Hz SD:SMPTE 259M@270Mb/s • 625i50 • 525i59.94	CONTROLS	• HDMI format type • Analogue Video format type • Output format • Aspect conversion type for HD to HD, HD to SD, SD to HD and SD to SD conversions. • On-Screen Overlays Enables • Basic Audio Meter control • Basic Graticule Enables
INPUTS	• (3G/HD/SD)-SDI 10-bit • Conditional Maximum Equalization cable length of 400M for SDI, 200M for HD-SDI and 100M 3G-SDI using Belden 1694A	OUTPUTS	• HDMI • 1 x (3G/HD/SD)-SDI Active Loop-Through • 2 x (3G/HD/SD)-SDI 10-bit Outputs • (3 x CVBS) / (Y, Pb, Pr) / (G, B, R) / (CVBS, Y & C) • AES 1 / Unbalanced Analogue Audio - Left • AES 2 / Unbalanced Analogue Audio - Right
LED STATUS	• Power • Signal Lock	DIMENSIONS	90mm x 123mm x 23mm (3.5" x 4.8" x 0.9")
POWER	• +5V to +24V DC, ~5 Watts • Positive Centre Pin		