**Redbyte Design** is an Australian based company that is dedicated to designing high-quality video equipment for the digital age. Setting a precedence in quality, cost-efficient broadcasting equipment, Redbyte prides itself on our ability to design for the future. Already, we have high-quality digital video equipment being used by some of the world’s leading television stations. We are striving to create new and innovative broadcasting equipment that will set the standard for the way in which we view television.

**DECIMATOR-QUAD**
Miniature 3G/HD-SDI Quad-Split with SD-SDI and Composite Outputs

**PRODUCT FEATURES**
- Low cost miniature 3G/HD-SDI 4 to 1 Quad Split or Down-converter with 4 to 1 input multiplexer.
- Your choice of either a NTSC or PAL output
- Linked SD-SDI and Composite outputs
- 4 x 3G/HD-SDI inputs with auto detection (26 Formats supported in total)
- Each quadrant is independent of the others, allowing any 3G/HD/SD format of any frame rate to be displayed simultaneously
- Variable aspect ratios per quadrant
- All 4 inputs can be displayed simultaneously on a single output.

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>VIDEO FORMATS</th>
<th>3G: SMPTE 424M@2.97 and 2.967Gb/s</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1080i@60/59.94/50Hz</td>
</tr>
<tr>
<td></td>
<td>1080i@60/59.94/50Hz</td>
</tr>
<tr>
<td></td>
<td>1080p@29.97/25/24.387Hz</td>
</tr>
<tr>
<td></td>
<td>720p@60/59.94/50/30/29.97/25/24.387Hz</td>
</tr>
<tr>
<td>SD: SMPTE 259M@270Mb/s</td>
<td>625/50</td>
</tr>
<tr>
<td></td>
<td>525/59.94</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MENU OPTIONS</th>
<th>Input status for all 4 inputs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Output format</td>
</tr>
<tr>
<td></td>
<td>Full screen enable</td>
</tr>
<tr>
<td></td>
<td>Full screen input select</td>
</tr>
<tr>
<td></td>
<td>Output aspect and type of 16:9 or 4:3 at either 90 or 100% of screen size</td>
</tr>
<tr>
<td></td>
<td>Individual aspect format for each input of Same as output, Letter-box or Pillar-box</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OUTS</th>
<th>1 x 10-bit SD-SDI Re-clocked</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Composite (PAL or NTSC)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LED STATUS</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Signal lock and rate</td>
</tr>
</tbody>
</table>

| DIMENSIONS | 3.7" x 3.7" x 0.9" or (94mm x 94mm x 23mm) |

<table>
<thead>
<tr>
<th>POWER</th>
<th>+5V to +20V DC, 5 Watts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Positive Centre Pin</td>
</tr>
</tbody>
</table>

**DECIMATOR**
EXTREMELY LOW COST MINIATURE 3G/HD to NTSC/PAL DOWN-CONVERTER with ARC and SD PASS-THROUGH

**PRODUCT FEATURES**
- Your choice of either a NTSC or PAL output
- Auto detects 3G, HD or SD (26 Formats in total and can handle switching of synchronous sources
- Low latency 3G/HD to SD Down-conversion with ARC (Aspect Ratio Conversion) of:
  - 16:9 to 16:9 Anamorphic
  - 16:9 to 4:3 Letterbox
  - 16:9 to 4:3 Centre Cut (Crop to 4:3)
- SD Pass-through
- Full 10-bit data path and multipoint interpolation
- 3G/HD-SDI Active Loop-Through Output.
- 16 times over-sampling for Composite Output
- External Dipswitch Configuration
- Locking DC Power Socket
- Mounting Bracket included

**SPECIFICATIONS**

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</tr>
<tr>
<td></td>
<td>720p@60/59.94/50/30/29.97/25/24/23.98Hz</td>
</tr>
<tr>
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</tr>
<tr>
<td></td>
<td>525/59.94</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DIP SWITCH CONTROLS</th>
<th>NTSC or PAL Selection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SD Pedestal</td>
</tr>
<tr>
<td></td>
<td>Crop 16:9 to 4:3</td>
</tr>
<tr>
<td></td>
<td>16:9 or 4:3 Aspect Selection</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OUTPUTS</th>
<th>1 x 3G/HD-SDI Active Loop-Through</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Composite (PAL or NTSC)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LED STATUS</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Signal Lock</td>
</tr>
</tbody>
</table>

| DIMENSIONS | 3" x 2.8" x 0.9" or (78mm x 71mm x 23mm) |

<table>
<thead>
<tr>
<th>POWER</th>
<th>+5V to +20V DC, 4 Watts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Positive Centre Pin</td>
</tr>
</tbody>
</table>
3G-TPG
3G/HD/SD-SDI TEST PATTERN GENERATOR

54 TEST PATTERNS

- 3G-SDI, HD-SDI or SD-SDI Output (26 Formats in total)
- 54 Test Patterns including Luma and Chroma Zoneplates.
- Up to 20 characters of on-screen text
- EDH (Error Detection and Handling for SD)
- High quality stainless steel case
- Superior quality 3G rated US made Bomar connectors
- Low Power operation from either +5V DC mains or 3 x AA batteries (Operates up to 8 hours from 2500mAh NiMH)

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

TEST PATTERNS
SMPTE HD Bars, Bars 100/0/100/0, Bars 100/0/75/0, Bars 75/0/75/0,
- Bars 100% & Red, SMPTE EG 1 Bars, Path Equalizer & PLL, Square on 4:3
Mon., Square on 16:9 Mon., 5 Step Y Staircase, 5 Step UV Staircase,
- Y Sweep, UV Sweep, Multiburst, UV Multiburst, Y Ramp, UV Ramp, Pluge,
- Convergence, Tartan Bars, 1 Field in 8 White, White 100%, White 75%,
- Black, Red, Yellow, Green, Blue, Magenta, Cyan, Y Static X ZP/L, Y Static
X ZP/H, Y Static Y ZP, Y Moving Left X ZP, Y Moving Right X ZP, Y Moving
Up Y ZP, Y Moving Down Y ZP, Y Moving Up XY ZP, Y Moving Down XY ZP,
- Y Static C ZP, Y Moving In C ZP, Y Moving Out C ZP, UV Static X ZP/L,
- UV Static X ZP/H, UV Static Y ZP, UV Moving Left X ZP, UV Moving Right X
ZP, UV Moving Up Y ZP, UV Moving Down Y ZP, UV Moving Up XY ZP, UV Moving
Down XY ZP, UV Static C ZP, UV Moving In C ZP and UV Moving Out C ZP

POWER
- +5V DC, 1.8 Watts
- Positive Centre Pin

OUTPUTS
- 2 x 10-bit 4:2:2 3G/HD/SD-SDI

DIMENSIONS
2.58” x 4.86” x 0.94” or (65.5mm x 123.5mm x 24mm)

3G2SD
3G/HD to SD DOWN-CONVERTER with ARC and SD PASS-THROUGH

PRODUCT FEATURES
- All technical features of DECIMATOR
- 2 x SD-SDI outputs
- 8 Channels of Audio passed as 20 or 24-bit
- Selectable analog video from:
  - 3 x CVBS / YPbPr / RGB / CVBS & YC
- Safe Action, Title and Centre Cross Generator
- 32 Video Test Patterns, including 4 Moving and 4 Static Zoneplates

3G2SD-M
3G/HD to SD DOWN-CONVERTER with ARC or SD PASS-THROUGH and DE-EMBEDDED ANALOG or AES AUDIO

PRODUCT FEATURES
- All technical features of DECIMATOR
- Selectable audio output: AES or Analog with adjustable analog audio level
- Selectable analog video from:
  - 3 x CVBS / YPbPr / RGB / CVBS & YC
- Safe Action, Title and Centre Cross Generator
- 32 Video Test Patterns, including 4 Moving and 4 Static Zoneplates

3G12DAC
3G/HD-SDI to HD-Component or SD-SDI to Component/Composite DAC with DE-EMBEDDED ANALOG or AES AUDIO

PRODUCT FEATURES
- Down-Converts 3G-SDI to HD-Component (1080p to 1080i Interlacer)
- Converts HD-SDI to HD-Component
- Converts SD-SDI to SD-Component or SD-Composite
- Auto detects 3G, HD or SD (26 Formats in total) and can handle switching of synchronous sources
- On-screen display of input format
- 3G/HD/SDI Active Loop-through output
- Selectable audio output: AES or Analog with adjustable analog audio level
- Selectable analog video from: 3 x CVBS / YPbPr / RGB / CVBS & YC
- Safe Action, Title and Centre Cross Generator
- Tone / Broken Tone Audio Generator
- Locking DC Power Socket

SDADC
Analog Video (CVBS, Component or S-Video) and Audio (Balanced or Unbalanced) to SDI Converter

PRODUCT FEATURES
- High Quality Oversampling Video ADCs.
- Selectable Video input from:
  - Component (Y, Pb, Pr), Composite (CVBS), S-Video (Y, C)
- PAL or NTSC Auto Detection
- 2 x Balanced or Unbalanced Inputs via Phoenix Style connectors.
- An extensive selection of user controllable functions via an easy to use rotary encoder for menu selection. Leds and push buttons can then be used for status and control.
- Selectable Audio Levels from +4, 0, -2, -5, -7.78 (-10dBV), -8 or -10 dBu.
- Safe Action and Title Graticule Generator
- 32 Video Test Patterns, including 4 Moving and 4 Static Zoneplates
- Tone / Broken Tone Audio Generator
- Locking DC power socket