DMON-4S

Quad (3G/HD/SD)-SDI to HDMI Multiviewer and Converter

OPERATING MANUAL

Contents

Introduction

Thank you for purchasing the DMON-4S Quad (3G/HD/SD)-SDI to HDMI Multiviewer and Converter.

The DMON-4S is a truly portable converter, which incorporates our new easy to use LCD and button control system. This gives you easy access to all of the amazing features that have been unavailable without a computer until now. The days of having to play with complicated dip switches or having to carry around a computer to change a simple setting are gone.

The DMON-4S features 4 independent mini HDMI outputs that can each output any of the four (3G/HD/SD)-SDI inputs or a Quad-Split of all them.
For example you could use the unit to have:
- 4 independent SDI to HDMI converters
- 3 independent SDI to HDMI converters with a quad-split output
- 2 independent SDI to 2 x HDMI converters with loop through
- A single SDI or Quad-Split to 4 x HDMI outputs

The DMON-4S also features the following:
- Each quadrant is independent of the others, allowing any 3G/HD/SD format of any frame rate to be displayed simultaneously
- Low latency buffering for each input allowing non-synchronous inputs
- Selectable Quad-Split output format
- Variable aspect ratios per quadrant
- Inputs 2 and 4 can be individually changed to output active loop copies of inputs 1 and 2 respectively
- Quad-Split mode allows selection of audio from any input

This unit also includes:
- USB port for control and firmware updates
- Heavy duty metal box
- New Metal Thread Locking DC Power Socket
- Power Supply, HDMI Cable and USB Cable

Main Menus

Upon power up the unit will start in the Main Menu pointing to Input Status.
The Main Menus are:

1. Input Status
2. Control
3. Multi-Viewer
4. M.V. Routing
5. Setup

Press the < and > buttons to move left or right through the menus.
To enter into a menu press the ENTER button.

Notes:

1. Defaults are highlighted in yellow.
2. When an option is changed, a highlighted S will appear in the top right of the LCD screen and will disappear when the options are saved after 10 seconds. Avoid powering down the unit during this time.
3. You can always return to the Main Menu by pressing the BACK button twice.
4. As you move through the menus changing parameters, they will be instantly applied to the output signal.

Input Status: (Has no SUB-MENUs)

`1:3G 1080p59.94`	←Current format on SDI Input 1
`2:HD 720p50`	←Current format on SDI Input 2
`3:SD 480i59.94`	←Current format on SDI Input 3
`4:HD 1080i59.94`	←Current format on SDI Input 4

Control: (Has SUB-MENUs)

`Control`	←Main Menu
`HDMI Out1 Type`	←Sub Menu
`HDMI RGB444 2C`	←Parameter Window

When highlighted in the Main Menu, press the ENTER button to enter this sub-menu.
Press the < and > buttons to move left or right respectively through the 12 menus below and press the BACK button to go back to the Main Menu when finished.
The current value for each Sub Menu is shown in the Parameter Window.

1. Control / HDMI Out1 Type (Parameter)
This is the current HDMI output type for output 1.
When the sub menu is highlighted, press ENTER to toggle through the following types:

1.) DVI RGB444   ←DVI-D RGB 4:4:4
2.) HDMI RGB444 2C   ←HDMI RGB 4:4:4 with 2-Channels of Audio
3.) HDMI YCbCr444 2C   ←HDMI YCbCr 4:4:4 with 2-Channels of Audio
4.) HDMI YCbCr422 2C   ←HDMI YCbCr 4:2:2 with 2-Channels of Audio
5.) HDMI RGB444 8C   ←HDMI RGB 4:4:4 with 8-Channels of Audio
6.) HDMI YCbCr444 8C   ←HDMI YCbCr 4:4:4 with 8-Channels of Audio
7.) HDMI YCbCr422 8C   ←HDMI YCbCr 4:2:2 with 8-Channels of Audio

2. Control / HDMI Out2 Type (Parameter)
This is the current HDMI output type for output 2.
This sub menu operates the same as Control / HDMI Out1 Type.

3. Control / HDMI Out3 Type (Parameter)
This is the current HDMI output type for output 3.
This sub menu operates the same as Control / HDMI Out1 Type.

4. Control / HDMI Out4 Type (Parameter)
This is the current HDMI output type for output 4.
This sub menu operates the same as Control / HDMI Out1 Type.

5. Control / HDMI Out1 Source (Parameter)
This is the current source for HDMI output 1.
When the sub menu is highlighted, press ENTER to toggle through the following sources:
    1.) Input 1
    2.) Input 2
    3.) Input 3
    4.) Input 4
    5.) Multi-View

6. Control / HDMI Out2 Source (Parameter)
This is the current source for HDMI output 2.
This sub menu operates the same as Control / HDMI Out1 Source.

7. Control / HDMI Out3 Source (Parameter)
This is the current source for HDMI output 3.
This sub menu operates the same as Control / HDMI Out1 Source.

8. Control / HDMI Out4 Source (Parameter)
This is the current source for HDMI output 4.
This sub menu operates the same as Control / HDMI Out1 Source.

9. Control / Loop 2 Enable (Parameter)
This enables a loop through copy of input 1 on BNC 2.
When the sub menu is highlighted, press ENTER to toggle through the following selections:
    1.) No
    2.) Yes

10. Control / Loop 4 Enable (Parameter)
This enables a loop through copy of input 3 on BNC 4.
When the sub menu is highlighted, press ENTER to toggle through the following selections:
    1.) No
    2.) Yes

11. Control / LCD OFF TIME (Parameter)
This is time taken for the LCD light to turn off after the last button press.
When the sub menu is highlighted, press ENTER to toggle through the following times:
    1.) 5 seconds
    2.) 15 seconds
    3.) 30 seconds
    4.) 1 minute
    5.) 5 minutes
    6.) 10 minutes
    7.) 30 minutes
    8.) Never

12. Control / BACK2STATUS TIME (Parameter)
This is time before the main menu is returned to Input Status after the last button press.
When the sub menu is highlighted, press ENTER to toggle through the following times:
    1.) 5 seconds
    2.) 15 seconds
    3.) 30 seconds
    4.) 1 minute
    5.) 5 minutes

6.) 10 minutes
7.) 30 minutes
8.) Never

Multi-Viewer: (Has SUB-MENUs)

```
Multi-Viewer        ←Main Menu
MV Audio Source     ←Sub Menu
Input 1             ←Parameter Window
```

When highlighted in the Main Menu, press the ENTER button to enter this sub-menu.
Press the < and > buttons to move left or right respectively through the 10 menus below and press
the BACK button to go back to the Main Menu when finished.
The current value for each Sub Menu is shown in the Parameter Window.

1. Multi-Viewer / MV Audio Source (Parameter)
This selects which input the audio is extracted from for the Multi-Viewer output.
When the sub menu is highlighted, press ENTER to toggle through the following sources:
1.) Input 1
2.) Input 2
3.) Input 3
4.) Input 4

2. Multi-Viewer / MV Format (Parameter)
This is the current output format for the Multi-Viewer.
When the sub menu is highlighted, press the ENTER button to enter this sub-menu.
Press the < and > buttons to move left or right through the 21 video formats listed below and the
BACK button to leave this SUB-MENU.

1. SD 720x487i59.94	10. HD 1920x1080p25	17. HD 1280x720p29.97
2. SD 720x576i50	11. HD 1920x1080p24	18. HD 1280x720p25
5. HD 1920x1080i60	12. HD 1920x1080p23.98	19. 3G 1920x1080p60
6. HD 1920x1080i59.94	13. HD 1280x720p60	20. 3G 1920x1080p59.94
7. HD 1920x1080i50	14. HD 1280x720p59.94	21. 3G 1920x1080p50
8. HD 1920x1080p30	15. HD 1280x720p50	
9. HD 1920x1080p29.97	16. HD 1280x720p30	

3. Multi-Viewer / MV Reference (Parameter)
This is reference for the Multi-Viewer.
When the sub menu is highlighted, press ENTER to toggle through the following sources:
1.) Input 1
2.) Input 2
3.) Input 3
4.) Input 4
5.) Free-Run

4. Multi-Viewer / MV Asp,Size&Bord (Parameter)
This sets the output aspect, size and border for the Multi-Viewer.
When the sub menu is highlighted, press ENTER to toggle through the following sources:
1.) 16:9 100% No Bdr
2.) 16:9 100% Border
3.) 16:9 90% No Bdr
4.) 16:9 90% Border
5.) 4:3 100% No Bdr
6.) 4:3 100% Border
7.) 4:3 90% No Bdr
8.) 4:3 90% Border

5. <u>Multi-Viewer</u> / <u>Quad 1 Aspect</u> (Parameter)
This is the aspect for quadrant 1.
When the sub menu is highlighted, press ENTER to toggle through the following aspects:
1.) <mark>Input = Output</mark>
2.) Letter/Pillar bx
3.) Centre Cut

6. <u>Multi-Viewer</u> / <u>Quad 2 Aspect</u> (Parameter)
This is the aspect for quadrant 2.
When the sub menu is highlighted, press ENTER to toggle through the following aspects:
1.) <mark>Input = Output</mark>
2.) Letter/Pillar bx
3.) Centre Cut

7. <u>Multi-Viewer</u> / <u>Quad 3 Aspect</u> (Parameter)
This is the aspect for quadrant 3.
When the sub menu is highlighted, press ENTER to toggle through the following aspects:
1.) <mark>Input = Output</mark>
2.) Letter/Pillar bx
3.) Centre Cut

8. <u>Multi-Viewer</u> / <u>Quad 4 Aspect</u> (Parameter)
This is the aspect for quadrant 4.
When the sub menu is highlighted, press ENTER to toggle through the following aspects:
1.) <mark>Input = Output</mark>
2.) Letter/Pillar bx
3.) Centre Cut

9. <u>Multi-Viewer</u> / <u>Border Colour</u> (Parameter)
This is border colour for the Multi-Viewer.
When the sub menu is highlighted, press ENTER to toggle through the following colours:
1.) <mark>Black</mark>
2.) Blue
3.) Green
4.) Cyan
5.) Red
6.) Magenta
7.) Yellow
8.) White

10. <u>Multi-Viewer</u> / <u>No Signal Colour</u> (Parameter)
This is the no signal colour for the Multi-Viewer.
When the sub menu is highlighted, press ENTER to toggle through the following colours:
1.) <mark>Black</mark>
2.) Blue
3.) Green
4.) Cyan
5.) Red
6.) Magenta
7.) Yellow
8.) White

M.V. (Multi-Viewer) Routing: (Has SUB-MENUs)

```
M.V. Routing        ←Main Menu
MV Audio Source     ←Sub Menu
Input 1             ←Parameter Window
```

When highlighted in the Main Menu, press the ENTER button to enter this sub-menu.
Press the < and > buttons to move left or right respectively through the 4 menus below and press the BACK button to go back to the Main Menu when finished.
The current value for each Sub Menu is shown in the Parameter Window.

1. M.V. Routing / Quad 1 Source (Parameter)
This is the input source for quadrant 1.
When the sub menu is highlighted, press ENTER to toggle through the following sources:
- 1.) Input 1
- 2.) Input 2
- 3.) Input 3
- 4.) Input 4

2. M.V. Routing / Quad 1 Source (Parameter)
This is the input source for quadrant 2.
When the sub menu is highlighted, press ENTER to toggle through the following sources:
- 1.) Input 1
- 2.) Input 2
- 3.) Input 3
- 4.) Input 4

3. M.V. Routing / Quad 1 Source (Parameter)
This is the input source for quadrant 3.
When the sub menu is highlighted, press ENTER to toggle through the following sources:
- 1.) Input 1
- 2.) Input 2
- 3.) Input 3
- 4.) Input 4

4. M.V. Routing / Quad 1 Source (Parameter)
This is the input source for quadrant 4.
When the sub menu is highlighted, press ENTER to toggle through the following sources:
- 1.) Input 1
- 2.) Input 2
- 3.) Input 3
- 4.) Input 4

Setup: (Has SUB-MENUs)

```
Setup               ←Main Menu
LOAD DEFAULTS       ←Sub Menu
                    ←Parameter Window
```

When highlighted in the Main Menu, press the ENTER button to enter this sub-menu.
Press the < and > buttons to move left or right respectively through the 1 menus below and press the BACK button to go back to the Main Menu when finished.
The current value for each Sub Menu is shown in the Parameter Window.

1. SETUP / LOAD DEFAULTS (Action)
When highlighted in the Menu Window, press the ENTER button to load the default settings. The device will be reset to the Main Menu Input Status.

Menu Tree

- Input Status
- Control
  1. HDMI Out1 Type
     a. DVI RGB444
     b. <mark>HDMI RGB444 2C</mark>
     c. HDMI YCbCr444 2C
     d. HDMI YCbCr422 2C
     e. HDMI RGB444 8C
     f. HDMI YCbCr444 8C
     g. HDMI YCbCr422 8C
  2. HDMI Out2 Type
     a. DVI RGB444
     b. <mark>HDMI RGB444 2C</mark>
     c. HDMI YCbCr444 2C
     d. HDMI YCbCr422 2C
     e. HDMI RGB444 8C
     f. HDMI YCbCr444 8C
     g. HDMI YCbCr422 8C
  3. HDMI Out3 Type
     a. DVI RGB444
     b. <mark>HDMI RGB444 2C</mark>
     c. HDMI YCbCr444 2C
     d. HDMI YCbCr422 2C
     e. HDMI RGB444 8C
     f. HDMI YCbCr444 8C
     g. HDMI YCbCr422 8C
  4. HDMI Out4 Type
     a. DVI RGB444
     b. <mark>HDMI RGB444 2C</mark>
     c. HDMI YCbCr444 2C
     d. HDMI YCbCr422 2C
     e. HDMI RGB444 8C
     f. HDMI YCbCr444 8C
     g. HDMI YCbCr422 8C
  5. HDMI Out1 Source
     a. Input 1
     b. Input 2
     c. Input 3
     d. Input 4
     e. <mark>Multi-View</mark>
  6. HDMI Out2 Source
     a. Input 1
     b. Input 2
     c. Input 3
     d. Input 4
     e. <mark>Multi-View</mark>
  7. HDMI Out3 Source
     a. Input 1
     b. Input 2
     c. Input 3
     d. Input 4
     e. <mark>Multi-View</mark>
  8. HDMI Out4 Source
     a. Input 1
     b. Input 2
     c. Input 3
     d. Input 4
     e. <mark>Multi-View</mark>
  9. Loop 2 Enable
     a. <mark>No</mark>
     b. Yes
  10. Loop 4 Enable
     a. <mark>No</mark>
     b. Yes
  11. LCD Off Time
     a. 5 Seconds
     b. 15 seconds
     c. 30 seconds
     d. 1 minute
     e. 5 minutes
     f. 10 minutes
     g. 30 minutes
     h. <mark>Never</mark>
  12. BACK2STATUS TIME
     a. 5 Seconds
     b. 15 seconds
     c. 30 seconds
     d. <mark>1 minute</mark>
     e. 5 minutes
     f. 10 minutes
     g. 30 minutes
     h. Never

- Multi-Viewer
    1. MV Audio Source
        a. **Input 1**
        b. Input 2
        c. Input 3
        d. Input 4
    2. MV Format
        a. SD 480i59.94
        b. SD 576i50
        c. HD 1080i60
        d. **HD 1080i59.94**
        e. HD 1080i50
        f. HD 1080p30
        g. HD 1080p29.97
        h. HD 1080p25
        i. HD 1080p24
        j. HD 1080p23.98
        k. HD 720p60
        l. HD 720p59.94
        m. HD 720p50
        n. HD 720p30
        o. HD 720p29.97
        p. HD 720p25
        q. 3G 1080p60
        r. 3G 1080p59.94
        s. 3G 1080p50
    3. MV Reference
        a. Input 1
        b. Input 2
        c. Input 3
        d. Input 4
        e. **Free-Run**
    4. MV Asp,Size&Bord
        a. 16:9 100% No Bdr
        b. **16:9 100% Border**
        c. 16:9 90% No Bdr
        d. 16:9 90% Border
        e. 4:3 100% No Bdr
        f. 4:3 100% Border
        g. 4:3 90% No Bdr
        h. 4:3 90% Border
    5. Quad 1 Aspect
        a. **Input = Output**
        b. Letter/Pillar bx
    6. Centre Cut Quad 2 Aspect
        a. **Input = Output**
        b. Letter/Pillar bx
        c. Centre Cut
    7. Quad 3 Aspect
        a. **Input = Output**
        b. Letter/Pillar bx
        c. Centre Cut
    8. Quad 4 Aspect
        a. **Input = Output**
        b. Letter/Pillar bx
        c. Centre Cut
    9. Border Colour
        a. **Black**
        b. Blue
        c. Green
        d. Cyan
        e. Red
        f. Magenta
        g. Yellow
        h. White
    10. No Signal Colour
        a. **Black**
        b. Blue
        c. Green
        d. Cyan
        e. Red
        f. Magenta
        g. Yellow
        h. White
- M.V.(Multi-Viewer) Routing
    1. Quad 1 Source
        a. **Input 1**
        b. Input 2
        c. Input 3
        d. Input 4
    2. Quad 2 Source
        a. Input 1
        b. **Input 2**
        c. Input 3
        d. Input 4
    3. Quad 3 Source
        a. Input 1
        b. Input 2
        c. **Input 3**
        d. Input 4
    4. Quad 4 Source
        a. Input 1
        b. Input 2
        c. Input 3
        d. **Input 4**
- Setup
    1. LOAD DEFAULTS

SERVICE WARRANTY

Decimator Design warrants that this product will be free from defects in materials and workmanship for a period of 12 months from the date of purchase. If this product proves to be defective within this warranty period, Decimator Design, at its discretion, will either repair the defective product without charge for parts and labour, or will provide a replacement product in exchange for the defective product.

In order to service under this warranty, you the Customer, must notify Decimator Design of the defect before the expiration of the warranty period and make suitable arrangements for the performance of service. The Customer shall be responsible for packaging and shipping the defective product to a designated service centre nominated by Decimator Design, with shipping charges prepaid. Decimator Design shall pay for the return of the product to the Customer if the shipment is to a location within the country in which the Decimator Design service centre is located. The Customer shall be responsible for paying all shipping charges, insurance, duties, taxes, and any other charges for products returned to any other location.

This warranty shall not apply to any defect, failure or damage caused by improper use or improper or inadequate maintenance and care. Decimator Design shall not be obligated to furnish service under this warranty a) to repair damage resulting from attempts by personnel other than Decimator Design representatives to install, repair or service the product, b) to repair damage resulting from improper use or connection to incompatible equipment, c) to repair any damage or malfunction caused by the use of non-Decimator Design parts or supplies, or d) to service a product that has been modified or integrated with other products when the effect of such a modification or integration increases the time of difficulty of servicing the product.