MD-DUCC
FIRMWARE VERSION 1.7 SETTINGS

The latest USB Control Software and Specifications for this product can be downloaded at:
www.decimator.com/specs

POWER LED
Green = Menu Value are displayed on LED 1 to 4
Red = Menu Number

Press the Red button to toggle between Menu Number and Value.
Press the Up and Down buttons to change the either the menu number or setting.
Any changes made to the menu values will cause the Power LED to begin flashing. After 5 seconds of no further changes the settings will be saved and the Power LED will stop flashing.

Defaults are highlighted in Yellow.

MENU REFERENCE INDEX

LED 1	LED 2	LED 3	LED 4	Menu Number	Description
Off	Off	Off	Off	0	Input Status
Off	Off	Off	Green	1	HDMI Output Type
Off	Off	Green	Off	2	Analogue Video Output
Off	Off	Green	Green	3	Audio Output Type
Off	Green	Off	Off	4	Audio Output Group/Pair
Off	Green	Off	Green	5	3G-SDI Output Format
Off	Green	Green	Off	6	Scaling Enable
Off	Green	Green	Green	7	Scaled Output Format
Green	Off	Off	Off	8	SD to SD Aspect
Green	Off	Off	Green	9	SD to HD Aspect
Green	Off	Green	Off	10	HD to SD Aspect
Green	Off	Green	Green	11	HD to HD Aspect
Green	Green	Off	Off	12	Recognise 1080i as 1080psf
Green	Green	Off	Green	13	Horizontal Flip Enable
Green	Green	Green	Off	14	Vertical Flip Enable
Green	Green	Green	Green	15	On Screen Format Enable
Off	Off	Off	Red	16	Safe Action Graticule Enable
Off	Off	Red	Off	17	Safe Title Graticule Enable
Off	Off	Red	Red	18	Centre Cross Enable
Off	Red	Off	Off	19	Text Overlay Enable
Off	Red	Off	Red	20	Audio Meter Group 1 Enable
Off	Red	Red	Off	21	Audio Meter Group 2 Enable
Off	Red	Red	Red	22	Audio Meter Group 3 Enable
Red	Off	Off	Off	23	Audio Meter Group 4 Enable
Red	Off	Off	Red	24	Audio Meter Style
Red	Off	Red	Off	25	Audio Meter Reference Level
Red	Off	Red	Red	26	Audio Bar Scale
Red	Red	Off	Off	27	Pedestal Enable
Red	Red	Off	Red	28	Analogue Audio Reference Level
Red	Red	Red	Off	29	Load Defaults
Red	Red	Red	Red	30	Auto Save

MENU = 0. (LED 1 = Off, LED 2 = Off, LED 3 = Off, LED 4 = Off)

Input Status (Button is disabled)

		LED Status			
LED	**Description**	**Off**	**Green**	**Red**	**Orange**
1	Input Format Detect	None	SD	HD	3G

MENU = 1. (LED 1 = Off, LED 2 = Off, LED 3 = Off, LED 4 = Green)

HDMI Output Type

LED 1	LED 2	LED 3	LED 4	Output
Off	Off	Off	Off	DVI RGB 4:4:4, No audio is passed
Off	Off	Off	Green	HDMI RGB 4:4:4, 2 Audio channels passed
Off	Off	Green	Off	HDMI YCbCr 4:4:4, 2 Audio channels passed
Off	Off	Green	Green	HDMI YCbCr 4:2:2, 2 Audio channels passed
Off	Green	Off	Off	HDMI RGB 4:4:4, 8 Audio channels passed
Off	Green	Off	Green	HDMI YCbCr 4:4:4, 8 Audio channels passed
Off	Green	Green	Off	HDMI YCbCr 4:2:2, 8 Audio channels passed

MENU = 2. (LED 1 = Off, LED 2 = Off, LED 3 = Green, LED 4 = Off)

Analogue Video Output

		LED Status			
LED	**Description**	**Off**	**Green**	**Red**	**Orange**
1		CVBS CVBS CVBS	Y Pb Pr	G B R	CVBS C Y

LED 2, 3 and 4 are off.

Please note:

1. Composite outputs will default to component (Y, Pb, Pr) when the output format is not 487i or 576i.
2. 3G formats cannot be output on the Analogue Video output

MENU = 3. (LED 1 = Off, LED 2 = Off, LED 3 = Green, LED 4 = Green)

Audio Output Type

		LED Status	
LED	**Description**	**Off**	**Green**
1	Audio Output	Analogue	AES/EBU

LED 2, 3 and 4 are off.

MENU = 4 (LED 1 = Off, LED 2 = Green, LED 3 = Off, LED 4 = Off)

Audio Output Group/Pair

LED 1	LED 2	LED 3	LED 4	Selected Audio Group/Pair to De-embed
Off	Off	Off	Off	Group 1 Pair 1
Off	Off	Off	Green	Group 1 Pair 2
Off	Off	Green	Off	Group 2 Pair 1
Off	Off	Green	Green	Group 2 Pair 2
Off	Green	Off	Off	Group 3 Pair 1
Off	Green	Off	Green	Group 3 Pair 2
Off	Green	Green	Off	Group 4 Pair 1
Off	Green	Green	Green	Group 4 Pair 2

MENU = 5. (LED 1 = Off, LED 2 = Green, LED 3 = Off, LED 4 = Green)

3G-SDI Output Format

		LED Status	
LED	**Description**	**Off**	**Green**
1	3G-SDI Output Format	Level A	Level B

MENU = 6. (LED 1 = Off, LED 2 = Green, LED 3 = Green, LED 4 = Off)

Scaling Enable

LED 1 is Green when enabled, otherwise off when disabled. LED 2, 3 and 4 are off.

MENU = 7. (LED 1 = Off, LED 2 = Green, LED 3 = Green, LED 4 = Green)

Scaled Output Format

LED 1	LED 2	LED 3	LED 4	Scaled Output Format
Off	Off	Off	Off	1. SD 720x487i59.94
Off	Off	Off	Green	2. SD 720x576i50
Off	Off	Green	Off	3. HD 1920x1080i60
Off	Off	Green	Green	4. HD 1920x1080i59.94
Off	Green	Off	Off	5. HD 1920x1080i50
Off	Green	Off	Green	6. HD 1920x1080psf30
Off	Green	Green	Off	7. HD 1920x1080psf29.97
Off	Green	Green	Green	8. HD 1920x1080psf25
Green	Off	Off	Off	9. HD 1920x1080psf24
Green	Off	Off	Green	10. HD 1920x1080psf23.98
Green	Off	Green	Off	11. HD 1920x1080p30
Green	Off	Green	Green	12. HD 1920x1080p29.97
Green	Green	Off	Off	13. HD 1920x1080p25
Green	Green	Off	Green	14. HD 1920x1080p24
Green	Green	Green	Off	15. HD 1920x1080p23.98
Green	Green	Green	Green	16. HD 1280x720p60
Off	Off	Off	Red	17. HD 1280x720p59.94
Off	Off	Red	Off	18. HD 1280x720p50
Off	Off	Red	Red	19. HD 1280x720p30
Off	Red	Off	Off	20. HD 1280x720p29.97
Off	Red	Off	Red	21. HD 1280x720p25
Off	Red	Red	Off	22. HD 1280x720p24
Off	Red	Red	Red	23. HD 1280x720p23.98
Red	Off	Off	Off	24. 3G 1920x1080p60
Red	Off	Off	Red	25. 3G 1920x1080p59.94
Red	Off	Red	Off	26. 3G 1920x1080p50

MENU = 8. (LED 1 = Green, LED 2 = Off, LED 3 = Off, LED 4 = Off)

SD to SD Aspect

LED 1	LED 2	LED 3	LED 4	Output
Off	Off	Off	Off	1. ANAMORPHIC
Off	Off	Off	Green	2. IN=16:9 FS,OUT=14:9 with 16:9 LB
Off	Off	Green	Off	3. IN=16:9 FS,OUT=4:3 with 16:9 LB
Off	Off	Green	Green	4. IN=16:9 FS,OUT=14:9 with 16:9 CC
Off	Green	Off	Off	5. IN=16:9 FS,OUT=4:3 with 16:9 CC
Off	Green	Off	Green	6. IN=16:9 with 14:9 PB,OUT=4:3 with 14:9 LB
Off	Green	Green	Off	7. IN=16:9 with 14:9 PB,OUT=4:3 with 14:9 CC
Off	Green	Green	Green	8. IN=16:9 with 14:9 PB,OUT=16:9 with 14:9 ZM
Green	Off	Off	Off	9. IN=16:9 with 4:3 PB,OUT=14:9 with 4:3 PB
Green	Off	Off	Green	10. IN=16:9 with 4:3 PB,OUT=16:9 with 4:3 ZM
Green	Off	Green	Off	11. IN=16:9 with 4:3 PB,OUT=14:9 with 4:3 ZM
Green	Off	Green	Green	12. IN=14:9 FS,OUT=16:9 with 14:9 PB
Green	Green	Off	Off	13. IN=14:9 FS,OUT=4:3 with 14:9 LB
Green	Green	Off	Green	14. IN=14:9 FS,OUT=4:3 with 14:9 CC
Green	Green	Green	Off	15. IN=14:9 FS,OUT=16:9 with 14:9 ZM
Green	Green	Green	Green	16. IN=14:9 with 4:3 PB,OUT=16:9 with 4:3 PB
Off	Off	Off	Red	17. IN=14:9 with 4:3 PB,OUT=16:9 with 4:3 ZM
Off	Off	Red	Off	18. IN=14:9 with 4:3 PB,OUT=14:9 with 4:3 ZM
Off	Off	Red	Red	19. IN=14:9 with 16:9 LB,OUT=4:3 with 16:9 LB
Off	Red	Off	Off	20. IN=14:9 with 16:9 LB,OUT=14:9 with 16:9 CC
Off	Red	Off	Red	21. IN=14:9 with 16:9 LB,OUT=4:3 with 16:9 CC
Off	Red	Red	Off	22. IN=4:3 FS,OUT=16:9 with 4:3 PB
Off	Red	Red	Red	23. IN=4:3 FS,OUT=14:9 with 4:3 PB
Red	Off	Off	Off	24. IN=4:3 FS,OUT=16:9 with 4:3 ZM
Red	Off	Off	Red	25. IN=4:3 FS,OUT=14:9 with 4:3 ZM
Red	Off	Red	Off	26. IN=4:3 with 16:9 LB,OUT=14:9 with 16:9 LB
Red	Off	Red	Red	27. IN=4:3 with 16:9 LB,OUT=14:9 with 16:9 CC
Red	Red	Off	Off	28. IN=4:3 with 16:9 LB,OUT=4:3 with 16:9 CC
Red	Red	Off	Red	29. IN=4:3 with 14:9 LB,OUT=16:9 with 14:9 PB
Red	Red	Red	Off	30. IN=4:3 with 14:9 LB,OUT=4:3 with 14:9 CC
Red	Red	Red	Red	31. IN=4:3 with 14:9 LB,OUT=16:9 with 14:9 ZM

MENU = 9. (LED 1 = Green, LED 2 = Off, LED 3 = Off, LED 4 = Green)

SD to HD Aspect

LED 1	LED 2	LED 3	LED 4	Output
Off	Off	Off	Off	1. ANAMORPHIC
Off	Off	Off	Green	2. IN=16:9 with 14:9 PB,OUT=16:9 with 14:9 ZM
Off	Off	Green	Off	3. IN=16:9 with 4:3 PB,OUT=16:9 with 4:3 ZM
Off	Off	Green	Green	4. IN=14:9 FS,OUT=16:9 with 14:9 PB
Off	Green	Off	Off	5. IN=14:9 FS,OUT=16:9 with 14:9 ZM
Off	Green	Off	Green	6. IN=14:9 with 4:3 PB,OUT=16:9 with 4:3 PB
Off	Green	Green	Off	7. IN=14:9 with 4:3 PB,OUT=16:9 with 4:3 ZM
Off	Green	Green	Green	8. IN=4:3 FS,OUT=16:9 with 4:3 PB
Green	Off	Off	Off	9. IN=4:3 FS,OUT=16:9 with 4:3 ZM
Green	Off	Off	Green	10. IN=4:3 with 14:9 LB,OUT=16:9 with 14:9 PB
Green	Off	Green	Off	11. IN=4:3 with 14:9 LB,OUT=16:9 with 14:9 ZM

MENU = 10. (LED 1 = Green, LED 2 = Off, LED 3 = Green, LED 4 = Off)

HD to SD Aspect

LED 1	LED 2	LED 3	LED 4	Output
Off	Off	Off	Off	1. ANAMORPHIC
Off	Off	Off	Green	2. IN=16:9 FS,OUT=14:9 with 16:9 LB
Off	Off	Green	Off	3. IN=16:9 FS,OUT=4:3 with 16:9 LB
Off	Off	Green	Green	4. IN=16:9 FS,OUT=14:9 with 16:9 CC
Off	Green	Off	Off	5. IN=16:9 FS,OUT=4:3 with 16:9 CC
Off	Green	Off	Green	6. IN=16:9 with 14:9 PB,OUT=4:3 with 14:9 LB
Off	Green	Green	Off	7. IN=16:9 with 14:9 PB,OUT=4:3 with 14:9 CC
Off	Green	Green	Green	8. IN=16:9 with 14:9 PB,OUT=16:9 with 14:9 ZM
Green	Off	Off	Off	9. IN=16:9 with 4:3 PB,OUT=14:9 with 4:3 PB
Green	Off	Off	Green	10. IN=16:9 with 4:3 PB,OUT=16:9 with 4:3 ZM
Green	Off	Green	Off	11. IN=16:9 with 4:3 PB,OUT=14:9 with 4:3 ZM

MENU = 11. (LED 1 = Green, LED 2 = Off, LED 3 = Green, LED 4 = Green)

HD to HD Aspect

LED 1	LED 2	LED 3	LED 4	Output
Off	Off	Off	Off	1. ANAMORPHIC
Off	Off	Off	Green	2. IN=16:9 with 14:9 PB,OUT=16:9 with 14:9 ZM
Off	Off	Green	Off	3. IN=16:9 with 4:3 PB,OUT=16:9 with 4:3 ZM

MENU = 12. (LED 1 = Green, LED 2 = Green, LED 3 = Off, LED 4 = Off)

Recognise 1080i as 1080psf

LED 1 is Green when enabled, otherwise off when disabled. LED 2, 3 and 4 are off.

MENU = 13. (LED 1 = Green, LED 2 = Green, LED 3 = Off, LED 4 = Green)

Horizontal Flip Enable

LED 1 is Green when enabled, otherwise off when disabled. LED 2, 3 and 4 are off.

MENU = 14. (LED 1 = Green, LED 2 = Green, LED 3 = Green, LED 4 = Off)

Vertical Flip Enable

LED 1 is Green when enabled, otherwise off when disabled. LED 2, 3 and 4 are off.

MENU = 15. (LED 1 = Green, LED 2 = Green, LED 3 = Green, LED 4 = Green)

On Screen Format Enable

		LED Status		
LED	Description	Off	Green	Red
1	On Screen Format	Off	On for 5 seconds	Always on

LED 2, 3 and 4 are off.

MENU = 16. (LED 1 = Off, LED 2 = Off, LED 3 = Off, LED 4 = Red)

Safe Action Graticule Enable

LED 1 is Green when enabled, otherwise off when disabled. LED 2, 3 and 4 are off.

MENU = 17. (LED 1 = Off, LED 2 = Off, LED 3 = Red, LED 4 = Off)

Safe Title Graticule Enable

LED 1 is Green when enabled, otherwise off when disabled. LED 2, 3 and 4 are off.

MENU = 18. (LED 1 = Off, LED 2 = Off, LED 3 = Red, LED 4 = Red)

Centre Cross Enable

LED 1 is Green when enabled, otherwise off when disabled. LED 2, 3 and 4 are off.

MENU = 19. (LED 1 = Off, LED 2 = Red, LED 3 = Off, LED 4 = Off)

Text Overlay Enable

LED 1 is Green when enabled, otherwise off when disabled. LED 2, 3 and 4 are off.

MENU = 20. (LED 1 = Off, LED 2 = Red, LED 3 = Off, LED 4 = Red)

Audio Meter Group 1 Enable

LED 1 is Green when enabled, otherwise off when disabled. LED 2, 3 and 4 are off.

MENU = 21. (LED 1 = Off, LED 2 = Red, LED 3 = Red, LED 4 = Off)

Audio Meter Group 2 Enable

LED 1 is Green when enabled, otherwise off when disabled. LED 2, 3 and 4 are off.

MENU = 22. (LED 1 = Off, LED 2 = Red, LED 3 = Red, LED 4 = Red)

Audio Meter Group 3 Enable

LED 1 is Green when enabled, otherwise off when disabled. LED 2, 3 and 4 are off.

MENU = 23. (LED 1 = Red, LED 2 = Off, LED 3 = Off, LED 4 = Off)

Audio Meter Group 4 Enable

LED 1 is Green when enabled, otherwise off when disabled. LED 2, 3 and 4 are off.

MENU = 24. (LED 1 = Red, LED 2 = Off, LED 3 = Off, LED 4 = Red)

Audio Meter Style

LED 1	LED 2	LED 3	LED 4	Style
Off	Off	Green	Green	Vertical Bar and Float
Off	Off	Off	Green	Vertical Bar
Off	Off	Green	Off	Vertical Float
Off	Off	Red	Red	Horizontal Bar and Float
Off	Off	Off	Red	Horizontal Bar
Off	Off	Red	Off	Horizontal Float

MENU = 25. (LED 1 = Red, LED 2 = Off, LED 3 = Red, LED 4 = Off)

Audio Meter Reference Level

		LED Status		
LED	Description	Off	Green	Red
1	Reference Level	-20dBFS	-18dBFS	-15dBFS

LED 2, 3 and 4 are off.

MENU = 26. (LED 1 = Red, LED 2 = Off, LED 3 = Red, LED 4 = Red)

Audio Bar Scale

LED 1	LED 2	LED 3	LED 4	Reference Level
Off	Off	Off	Off	AES/EBU
Off	Off	Off	Green	VU
Off	Off	Green	Off	Extended VU
Off	Off	Green	Green	BBC (IEC 2a)
Off	Green	Off	Off	EBU (IEC 2b)
Off	Green	Off	Green	DIN (IEC 2b)
Off	Green	Green	Off	NORDIC (IEC 2b)

MENU = 27. (LED 1 = Red, LED 2 = Red, LED 3 = Off, LED 4 = Off)

Pedestal Enable

LED 1 is Green when enabled, otherwise off when disabled. LED 2, 3 and 4 are off.

MENU = 28. (LED 1 = Red, LED 2 = Red, LED 3 = Off, LED 4 = Red)

Analogue Audio Reference Level

LED 1	LED 2	LED 3	LED 4	Output
Off	Off	Off	Off	-10dBu
Off	Off	Off	Green	-8 dBu
Off	Off	Green	Off	-7.781513 dBU or -10dBV
Off	Off	Green	Green	-5 dBu
Off	Green	Off	Off	-2 dBu
Off	Green	Off	Green	0 dBu
Off	Green	Green	Off	+4 dBu
Off	Green	Green	Green	+6 dBu

MENU = 29. (LED 1 = Red, LED 2 = Red, LED 3 = Red, LED 4 = Off)

Load Defaults

MENU = 30. (LED 1 = Red, LED 2 = Red, LED 3 = Red, LED 4 = Red)

Auto Save

LED 1 is Green when enabled, otherwise off when disabled. LED 2, 3 and 4 are off.

GPI (General Purpose Inputs)

Configuration 1 (Tallies)

PIN	NAME	DESCRIPTION
1	GREEN_TALLY_EN	Ground pin to enable Green Block Tally
2	RED_TALLY_EN	Ground pin to enable Red Block Tally
3	BLUE_TALLY_EN	Ground pin to enable Blue Block Tally
4	RX+	RS422/RS485 Positive Receive Pin
5	RX-	RS422/RS485 Negative Receive Pin
6	GREEN_BORDER_EN	Ground pin to enable Green Border
7	RED_BORDER_EN	Ground pin to enable Red Border
8	GROUND	Use as reference ground.

Notes:

1. The border will be Yellow when both GREEN_BORDER_EN and RED_BORDER_EN are enabled.
2. The border will end at the Safe Action Graticule, adjust this to move it in or out.

SERVICE WARRANTY

Decimator Design warrants that this product will be free from defects in materials and workmanship for a period of 36 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.