



VERSION 8.0.1.XXX - DEVELOPED BY: AVOLITES MEDIA LTD. POWERED BY: SALVATION (TM)  
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GREG, ADAM, OLIE, ALL AT AVOLITES AND YOU. SPECIAL THANKS MARK CALVERT. LETS ROCK!

# Lighting Console Control

## VERSION 8.X

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with Additions by Dave Green & Ciaran Abrams

## **Lighting Console Control**

The interface to your Lighting Console is configured through the System Settings menu (click the System Settings button in the top-level menu window).

ArtNet Adaptor – select which physical network adaptors we are using for the ArtNet inputs and outputs. The system IP address in windows needs to be set to a valid ArtNet range, usually 2.0.0.x where x is a unique number for each system in the network.

CITP Adaptor - select which physical network adaptors we are using to send commands to and from a CITP compatible lighting console to Ai. CITP is used to pass media thumbnail images back to the lighting console.

ArtNet control type – Lighting desk - use a standard desk / AI remote (now called V7 UI Control) select when using multiple servers in a master slave configuration.

Master or Slave mode - Master mode allows you to control multiple servers together from this server – one server will control all of the others. Slave mode is used when this server is to be controlled by another server (the Master).

## **ArtNet/DMX control**

Setting up a lighting console to control Ai

The console will need a personality for the Ai server – you can patch as an active fixture (uses CITP to retrieve thumbnails of the media clips) or a normal fixture (no thumbnails).

If using Active Fixture, on the Ai System Settings menu click CITP initialise (wait), the Ai server should then be visible on the lighting console as an active fixture.

(if not you may need to restart the Ai software or the lighting desk, for further assistance please contact Avolites Media support team)

On Avolites consoles, the Ai Server is then controlled using the Attribute Editor window.

## **ArtNet parameters**

For a complete list of ArtNet Channel definitions please see below.

In summary the parameters are:

Folder/file selections (may be numeric, alphanumeric or ID numbers)

In/out points

Play mode/speed

Rotation xyz

Image size/position/aspect

Movement speed (smoothing)

Intensity

RGB (multiply values, e.g. 0 remove all red 255=full red)

Strobe

Colour fx – sets blend mode

Visual fx – selects SVFX. extra user effects may be stored in Distrib/modules/svfx. 2 parameters. (FX opacity must be up to show fx)

Keystone

The 80 channel mode adds the following controls:

Additional 14 params for fx1

Fx2 effect and 16 params

MTC- set timecode offset for trigger

Xfade period/mode sets xfade for layer

Aspect mode – old aspect mode from v5 software.

100 channel mode adds the following:

Hue, saturation, contrast

Colour adjust – sets how RGB works – if 0, works as above. If 1, multiplies up to 50% then adds colour in above that ie 0=no red 50%=100% red in media 100%=add red

By expanding the ArtNet window to the right, you can link ArtNet channels to other Ai parameters using the blue nodes to enable further controls.

You can also insert a module into the Node Based windows such as Network/Artnet Input Small which will allow you to route custom parameters from your lighting console to any control parameter of Ai.

# ArtNET / DMX Channel Definitions

An Ai server has three modes of operation on Artnet / DMX:

- 40 channel (compatible with Catalyst),
- 80 channel
- 100 channel.

Each layer has its own settings for Artnet. So it is possible to configure each layer independently.

## 40 channel personality

Ch	Func	Description	Range	Default	Value Details	Notes
0	Library Folder	Selects Media Sub Folder	0..255	0	Setting both Folder and File to 0 will clear all content on layers	System Settings/Triggering Method – sets whether this parameter selects Numeric Folder, Alpha Numeric Folder or Roller Cue (selects Media Bank)
1	Library File	Selects Media File	0..255	0	Setting both Folder and File to 0 will clear all content on layers	System Settings/Triggering Method – sets whether this parameter selects Numeric File, Alpha Numeric File or Roller Cue (selects Media from roller cue)
2	Hi In Point	In Point of Media in Frames	0..65535	0	Frame no of in point in media file	IN MTC PLAY MODE becomes backward offset in frames
3	Lo In Point					
4	Hi Out Point	Out Point of Media in Frames	0..65535	65535	Frame no of in point in media file	IN MTC PLAY MODE becomes forward offset in frames
5	Lo Out Point					
6	Play Mode		0..45	2	0 = PLAY_MODE_IN_FRAME 1 = PLAY_MODE_OUT_FRAME 2 = PLAY_MODE_LOOP_FORWARD 3 = PLAY_MODE_LOOP_REVERSE 4 = PLAY_MODE_ONCE_FORWARD 5 = PLAY_MODE_ONCE_REVERSE 6 = PLAY_MODE_STOP 7 = PLAY_MODE_PAUSE 8 = PLAY_MODE_BOUNCE 9 = PLAY_MODE_SWITCH_ON_FRAME 10 = PLAY_MODE_LOOP_FORWARD_IG0 11 = PLAY_MODE_LOOP_REVERSE_IG0 12 = PLAY_MODE_ONCE_FORWARD_IG0 13 = PLAY_MODE_ONCE_REVERSE_IG0 15 = PLAY_MODE_BOUNCE_IG0 20 = PLAY_MODE_MTC 40 = PLAY_MODE_LOOP_FORWARD_RTIG0 41 = PLAY_MODE_LOOP_REVERSE_RTIG0 42 = PLAY_MODE_ONCE_FORWARD_RTIG0 43 = PLAY_MODE_ONCE_REVERSE_RTIG0 45 = PLAY_MODE_BOUNCE_RTIG0	

7	Play Speed	Media Play Speed	0..255	127	0 = 100% play speed 1..127 = 1%..100% play speed 128..255 = 100%..1000% play speed	
8	Hi X Rotation	X Axis Rotation of Media	0..65535	32767	0..16383 = auto rotate ACW 0 = fast..16383 = stop 16384..32767 = manual rotate ACW 32768..49150 = manual rotate CW 49151..65535 = auto rotate CW 49150 = stop..65535 = fast	
9	Lo X Rotation					
10	Hi Y Rotation	Y Axis Rotation of Media	0..65535	32767	0..16383 = auto rotate ACW 0 = fast..16383 = stop 16384..32767 = manual rotate ACW 32768..49150 = manual rotate CW 49151..65535 = auto rotate CW 49150 = stop..65535 = fast	
11	Lo Y Rotation					
12	Hi Z Rotation	Z Axis Rotation of Media	0..65535	32767	0..16383 = auto rotate ACW 0 = fast..16383 = stop 16384..32767 = manual rotate ACW 32768..49150 = manual rotate CW 49151..65535 = auto rotate CW 49150 = stop..65535 = fast	
13	Lo Z Rotation					
14	Hi Image Size	Image Size of Media	0..65535	32767	0..32767 = 0 = very small, 32767 = normal size 32768..65535 = 32678 = normal size, 65535 = very large	
15	Lo Image Size					
16	Hi X Position	X Axis Position of Media	0..65535	32767	0..32767 = 0 = far left, 32767 = centre 32768..65535 = 32678 = centre, 65535 = far right	
17	Lo X Position					
18	Hi Y Position	Y Axis Position of Media	0..65535	32767	0..32767 = 0 = far bottom, 32767 = centre 32768..65535 = 32678 = centre, 65535 = far top	
19	Lo Y Position					
20	Aspect Ratio	Aspect Ratio of Media	0..255	0	0..127 = 0 = normal, 127 = squash vertical 127..255 = 128 = squash horizontal, 255 = normal	
21	Movement Speed		0..255	0	1/10ths of a second for smoothing of movement parameters, such as position X & Y, Image Size & Aspect Ratio	
22	Intensity	Layer intensity	0..255	255	Adjusts layer Intensity	
23	Red Param	Red Colour Adjust	0..255	255	0..255 Multiply media Red channel by 0..100%	If Colour Adjust Mode is set to 1 then this changes functionality so that 0..127 = multiply by 0..100% & 128..255 adds colour into the channel
24	Green Param	Green Colour Adjust	0..255	255	0..255 Multiply media Green channel by 0..100%	If Colour Adjust Mode is set to 1 then this changes functionality so that 0..127 = multiply by 0..100% & 128..255 adds colour into the channel
25	Blue Param	Blue Colour Adjust	0..255	255	0..255 Multiply media Blue channel by 0..100%	If Colour Adjust Mode is set to 1 then this changes functionality so that 0..127 = multiply by 0..100% & 128..255 adds colour into the channel

26	Strobe	Strobe	0..255	0	0..63 Square wave adjustable period 64..127 Single Frame, adjustable period 128..191 Random, adjustable probability 192..255 Random, adjustable sustain
27	Trails	-	-	-	Future use
28	Colour FX	Colour Effect / Blend Mode	0..220	3	0 = Flat (RGB Adjust) 1 = Alpha HSC (on R G B Params) 2 = Alpha Blend 3 = Alpha Blend 4 = N.A.M (Non additive Mix) 5 = Luma 6 = Lighten 7 = Additive 8 = Difference (like photoshop) 9 = Wipe 10 = Multiply 11 = Darken 12 = Screen 13 = Subtract 14..200 = Transitions 200-220 = Colour Curves
29	Visual FX	Visual FX	0..255	0	0 = Off 1 = Infinite Black border 2 = Soft Edge Shutters 3 = Blur 4 = 4 Point Warp 5..255 = FFGL Effects
30	Visual FX P01	Visual FX Parameter 1	0..255	0	Visual FX Parameter 1
31	Visual FX P02	Visual FX Parameter 2	0..255	0	Visual FX Parameter 2
32	Keystone / Crop X1	Keystone / Crop X1	0..255	0	Keystone / Crop X1
33	Keystone / Crop Y1	Keystone / Crop Y1	0..255	0	Keystone / Crop Y1
34	Keystone / Crop X2	Keystone / Crop X2	0..255	0	Keystone / Crop X2
35	Keystone / Crop Y2	Keystone / Crop Y2	0..255	0	Keystone / Crop Y2
36	Keystone / Crop X3	Keystone / Crop X3	0..255	0	Keystone / Crop X3
37	Keystone / Crop Y3	Keystone / Crop Y3	0..255	0	Keystone / Crop Y3
38	Keystone / Crop X4	Keystone / Crop X4	0..255	0	Keystone / Crop X4
39	Keystone / Crop Y4	Keystone / Crop Y4	0..255	0	Keystone / Crop Y4

## 80 channel mode: additional channels

40	Visual FX Opacity	Visual FX Opacity	0..255	0	FX Opacity 0..100%	
41	Visual FX P03	Visual FX P03	0..255	0	Visual FX Parameter 3	
42	Visual FX P04	Visual FX P04	0..255	0	Visual FX Parameter 4	
43	Visual FX P05	Visual FX P05	0..255	0	Visual FX Parameter 5	
44	Visual FX P06	Visual FX P06	0..255	0	Visual FX Parameter 6	
45	Visual FX P07	Visual FX P07	0..255	0	Visual FX Parameter 7	
46	Visual FX P08	Visual FX P08	0..255	0	Visual FX Parameter 8	
47	Visual FX P09	Visual FX P09	0..255	0	Visual FX Parameter 9	
48	Visual FX P10	Visual FX P10	0..255	0	Visual FX Parameter 10	
49	Visual FX P11	Visual FX P11	0..255	0	Visual FX Parameter 11	
50	Visual FX P12	Visual FX P12	0..255	0	Visual FX Parameter 12	
51	Visual FX P13	Visual FX P13	0..255	0	Visual FX Parameter 13	
52	Visual FX P14	Visual FX P14	0..255	0	Visual FX Parameter 14	
53	Visual FX P15	Visual FX P15	0..255	0	Visual FX Parameter 15	
54	Visual FX P16	Visual FX P16	0..255	0	Visual FX Parameter 16	
55	Visual FX 2	Visual FX 2	0..255	0	0 = Off 1 = Infinite Black border 2 = Soft Edge Shutters 3 = Blur 4 = 4 Point Warp 5..255 = SVFX Effects see page Error: Reference source not found	
56	Visual FX 2 Opacity	Visual FX 2 Opacity	0..255	0	FX2 Opacity 0..100%	
57	Visual FX 2 P01	Visual FX 2 P01	0..255	0	Visual FX2 Parameter 1	
58	Visual FX 2 P02	Visual FX 2 P02	0..255	0	Visual FX2 Parameter 2	
59	Visual FX 2 P03	Visual FX 2 P03	0..255	0	Visual FX2 Parameter 3	
60	Visual FX 2 P04	Visual FX 2 P04	0..255	0	Visual FX2 Parameter 4	
61	Visual FX 2 P05	Visual FX 2 P05	0..255	0	Visual FX2 Parameter 5	
62	Visual FX 2 P06	Visual FX 2 P06	0..255	0	Visual FX2 Parameter 6	
63	Visual FX 2 P07	Visual FX 2 P07	0..255	0	Visual FX2 Parameter 7	
64	Visual FX 2 P08	Visual FX 2 P08	0..255	0	Visual FX2 Parameter 8	
65	Visual FX 2 P09	Visual FX 2 P09	0..255	0	Visual FX2 Parameter 9	
66	Visual FX 2 P10	Visual FX 2 P10	0..255	0	Visual FX2 Parameter 10	
67	Visual	Visual FX 2	0..255	0	Visual FX2 Parameter 11	

	FX 2 P11	P11				
68	Visual FX 2 P12	Visual FX 2 P12	0..255	0	Visual FX2 Parameter 12	
69	Visual FX 2 P13	Visual FX 2 P13	0..255	0	Visual FX2 Parameter 13	
70	Visual FX 2 P14	Visual FX 2 P14	0..255	0	Visual FX2 Parameter 14	
71	Visual FX 2 P15	Visual FX 2 P15	0..255	0	Visual FX2 Parameter 15	
72	Visual FX 2 P16	Visual FX 2 P16	0..255	0	Visual FX2 Parameter 16	
73	MTC Hour	MTC Hour	0..24	0	Midi Time Code Hour Offset to Media Start	
74	MTC Minute	MTC Minute	0..60	0	Midi Time Code Minute Offset to Media Start	
75	MTC Second	MTC Second	0..60	0	Midi Time Code Second Offset to Media Start	
76	MTC Frame	MTC Frame	0..60	0	Midi Time Code Frame Offset to Media Start	
77	Cross Fade Period	Cross Fade Period	0..255	0	Cross Fade (on a single layer) Period in 10 <sup>th</sup> 's of a second	
78	Cross Fade Mode	Cross Fade Mode	0..255	0	0 = Flat (RGB Adjust) 1 = Alpha HSC (on R G B Params) 2 = Alpha Blend 3 = Alpha Blend 4 = N.A.M (Non additive Mix) 5 = Luma 6 = Lighten 7 = Additive 8 = Difference (like photoshop) 9 = Wipe 10 = Multiply 11 = Darken 12 = Screen 13 = Subtract 14..200 = Transitions 200-220 = Colour Curves	
79	Aspect Mode	Aspect Mode	0..2	0	0 = Letterbox, 1 = Crop, 2 = Stretch	

## 100 channel mode: additional channels

80	Hue Adjust	Hue Adjust	0..255	0	Adjust Media Colour with Hue Adjust (0..360 degrees)	
81	Saturation Adjust	Saturation Adjust	0..255	0	0..127 = Grey through to full colour 128..255 = full colour through to over saturated	
82	Contrast Adjust	Contrast Adjust	0..255	0	0..127 = low contrast through to no contrast adjust 128..255 = no contrast adjust through to heavy contrast	
83	Colour Adjust Mode	Colour Adjust Mode	0..1	0	0 = R,G,B Params - 0..255 Multiply media Red channel by 0..100% 1 = R,G,B Params - 0..127 = multiply by 0..100% & 128..255 adds colour into the channel	
84	Custom	Custom	0	0		
85	Custom	Custom	0	0		
86	Custom	Custom	0	0		
87	Custom	Custom	0	0		
88	Custom	Custom	0	0		
89	Custom	Custom	0	0		
90	Custom	Custom	0	0		
91	Custom	Custom	0	0		
92	Custom	Custom	0	0		
93	Custom	Custom	0	0		
94	Custom	Custom	0	0		
95	Custom	Custom	0	0		
96	Custom	Custom	0	0		
97	Custom	Custom	0	0		
98	Custom	Custom	0	0		
99	Custom	Custom	0	0		