MAC Aura FX Guide

This guide gives details of the effects available on the FX selection DMX channels 15 and 17 in the MAC Aura™.

Aura Sync

**Dimmer sync**

<table>
<thead>
<tr>
<th>DMX values</th>
<th>10 - 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
<td>4</td>
</tr>
<tr>
<td>Input parameters</td>
<td>Dimmer</td>
</tr>
<tr>
<td>Output parameters</td>
<td>Dimmer Aura</td>
</tr>
<tr>
<td>Priority</td>
<td>Overrides any other dimmer Aura DMX input value</td>
</tr>
</tbody>
</table>

**Details**
- Any dimmer settings from the Beam are applied to the Aura section of the fixture.
- Beam and Aura act in perfect sync and all fades, dimming smoothing, curves, tracking, etc. are applied to both sections.

**Strobe sync**

<table>
<thead>
<tr>
<th>DMX values</th>
<th>13 - 15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
<td>5</td>
</tr>
<tr>
<td>Input parameters</td>
<td>Strobe</td>
</tr>
<tr>
<td>Output parameters</td>
<td>Strobe Aura</td>
</tr>
<tr>
<td>Priority</td>
<td>Overrides any other strobe Aura DMX input value</td>
</tr>
</tbody>
</table>

**Details**
- Any strobe settings from the Beam are applied to the Aura section of the fixture.
- Beam and Aura act in perfect sync, and all shutter functions such as random and pulsing FX stay synchronized.
### Dimmer + strobe sync

DMX values: 16 - 18  
Percent: 6 - 7  
Input parameters: Dimmer, strobe  
Output parameters: Dimmer Aura, strobe Aura  
Priority: Overrides any other dimmer Aura and strobe Aura DMX input values

**Details**
- Any dimmer and/or strobe settings from the Beam are applied to the Aura section of the fixture.
- Beam and Aura act in perfect sync.
- All dimmer functions such as fades, dimming smoothing, curves, tracking, etc. and all shutter functions such as random and pulsing FX stay synchronized.

### Aura color sync

DMX values: 19 - 21  
Percent: 8  
Input parameters: Red, green, blue, color wheel  
Output parameters: Red Aura, green Aura, blue Aura, color wheel Aura  
Priority: Overrides any other Aura color DMX input values

**Details**
- Any color (RGB or color wheel) settings from the Beam are applied to the Aura section of the fixture.
- Beam and Aura act in perfect sync and all fades, dimming smoothing, curves, tracking, etc. are applied to both sections. Color wheel scrolls are synchronized.

### Aura all sync

DMX values: 22 - 24  
Percent: 9  
Input parameters: Dimmer, strobe, red, green, blue, color wheel  
Output parameters: Dimmer Aura, strobe Aura, red Aura, green Aura, blue Aura, color wheel Aura  
Priority: Overrides any other Aura DMX input values

**Details**
- Any dimmer, strobe and color (RGB or color wheel) settings from the Beam are applied to the Aura section of the fixture.
- All Aura parameters are synchronized to Beam parameters.
Intensity FX

Aura strobe delay

DMX values 40 - 42
Percent 16
Input parameters Strobe
Output parameters Strobe Aura
Priority Overrides any other Aura strobe DMX input values
FX Adjust Delays Aura strobe trigger
Action is synchronized, with shift from just after Beam trigger to just before Beam trigger

Details
- Strobe Aura is synchronized with the Beam strobe cycle.
- FX Adjust shifts the strobe trigger time for the Aura channel. The time base for this shift is determined by the cycle from the strobe channel. FX Adjust always shifts the trigger point relatively within the cycle, so trigger time is not an absolute time.
- All internal strobe FX are used. For example, on Random Strobe the Aura will trigger with the delay determined by the FX Adjust channel, or a ramp effect will start with a delay on the Aura section but follow exactly the same curve etc. as the Beam.

Strobe alternate single

DMX values 43 - 45
Percent 17
Input parameters Strobe, strobe Aura
Output parameters Strobe, strobe Aura
FX Adjust Speed

Details
- Strobe flash bounces from Beam to Aura
- Beam flash – Off - Aura flash- Off

Strobe alternate dual

DMX values 46 - 48
Percent 18
Input parameters Strobe, strobe Aura
Output parameters Strobe, strobe Aura
FX Adjust Speed

Details
- Strobe flash bounces from Beam to Aura and performs two flashes each time
- Beam flash – Off - Beam flash – Off - Aura flash- Off - Aura flash- Off
### Strobe alternate triple

<table>
<thead>
<tr>
<th>DMX values</th>
<th>49 - 51</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
<td>19 - 20</td>
</tr>
<tr>
<td>Input parameters</td>
<td>Strobe, strobe Aura</td>
</tr>
<tr>
<td>Output parameters</td>
<td>Strobe, strobe Aura</td>
</tr>
<tr>
<td>FX Adjust</td>
<td>Speed</td>
</tr>
</tbody>
</table>

**Details**
- Strobe flash bounces from Beam to Aura and performs three flashes each time

### Three-step strobe

<table>
<thead>
<tr>
<th>DMX values</th>
<th>52 - 54</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
<td>21</td>
</tr>
<tr>
<td>Input parameters</td>
<td>Strobe, strobe Aura</td>
</tr>
<tr>
<td>Output parameters</td>
<td>Strobe, strobe Aura</td>
</tr>
<tr>
<td>FX Adjust</td>
<td>Speed</td>
</tr>
</tbody>
</table>

**Details**
- Strobe performs a Beam, Aura, Off cycle
- Beam Flash – Off – Aura Flash – Off – Off – Off

### Aura ramp, Beam flash

<table>
<thead>
<tr>
<th>DMX values</th>
<th>64 - 66</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
<td>25</td>
</tr>
<tr>
<td>Input parameters</td>
<td>Dimmer, dimmer Aura</td>
</tr>
<tr>
<td>Output parameters</td>
<td>Dimmer, dimmer Aura</td>
</tr>
<tr>
<td>Priority</td>
<td>Overrides strobe channels</td>
</tr>
<tr>
<td></td>
<td>Dimmer sets Beam flash intensity</td>
</tr>
<tr>
<td>FX Adjust</td>
<td>Speed</td>
</tr>
</tbody>
</table>

**Details**
- Fixture starts with Aura and Beam both dimmed to zero.
- Aura dimmer ramps to level.
- Aura dimmer snaps to zero and Beam performs one single strobe flash at the same time.
Beam ramp, Aura flash

DMX values 67 - 69
Percent 26 - 27
Input parameters Dimmer, dimmer Aura
Output parameters Dimmer, dimmer Aura
Priority Overrides strobe channels
Aura dimmer sets Aura flash intensity
FX Adjust Speed

Details
- Fixture starts with Aura and Beam both dimmed to zero.
- Beam dimmer ramps to level.
- Beam dimmer snaps to zero and Aura performs one single strobe flash at the same time.

Color FX

Aura color offset

DMX values 100 - 102
Percent 39
Input parameters Red, green, blue, color wheel
Output parameters Red Aura, green Aura, blue Aura, color wheel Aura
Priority Overrides any other Aura color DMX input values
FX Adjust Shifts color from 0 to 359°

Details
- The degree value of Aura color in the color circle can be set to a constant offset from Beam color so that it always stays in perfect sync to the Beam Color and is directly linked to whatever Beam color is currently mixed.
- The Beam color RGB value (from RGB or the color wheel) is used as an input to determine the current color position. Aura is then shifted around on the color circle within the same saturation range.

Example of 180° offset visualized on the color circle:

http://www.colorjack.com/sphere/
**Hue shimmer**

DMX values 109 - 111  
Percent 43  
Input parameters Red, green, blue, color wheel  
Output parameters Red, green, blue  
FX Adjust Random time and hue variation  

**Details**  
- RGB or color wheel value of the Beam are converted to hue and saturation.  
- FX alternates in random time and with random amount from existing color hue.  
- FX Adjust increases time and deviation to make the effect visibly stronger or weaker.  
- The FX performs fades between the random points.  
- Maximum hue deviation is +/- 180° on color circle.

**Saturation shimmer**

DMX values 112 - 114  
Percent 44  
Input parameters Red, green, blue, color wheel  
Output parameters Red, green, blue  
FX Adjust Random time and saturation variation  

**Details**  
- RGB or color wheel value of the Beam are converted to hue and saturation.  
- FX alternates in random time and with random amount from existing color saturation.  
- FX Adjust increases time and deviation to make the effect visibly stronger or weaker.  
- The FX performs fades between the random points.

**Color strobe**

DMX values 127 - 129  
Percent 50  
Input parameters Strobe, red, green, blue, color wheel  
Output parameters Strobe, red, green, blue  

**Details**  
- This effect creates a solid colored beam that flashes to an alternate color instead of performing an intensity cycle. There is no intensity strobe with this effect, instead the cycle alternates between a main and a strobe color. The strobe channel of the fixture gives speed control including all ramps, random settings, pulses, etc.  
- The alternate color is set as an absolute using the color wheel.
**Color offset strobe**

DMX values 130 - 132  
Percent 51  
Input parameters Strobe, red, green, blue, color wheel  
Output parameters Strobe, red, green, blue  
FX Adjust Shifts color from 0 to 359 degrees

**Details**

- This effect creates a solid colored beam that flashes to an alternate color instead of performing an intensity cycle. There is no intensity strobe with this effect, instead the cycle alternates between a main and a strobe color. The strobe channel of the fixture gives speed control including all ramps, random settings, pulses, etc.
- The alternate color is set relative to the main color using a color circle degree offset as with the “Aura color offset” effect.

**Aura color strobe**

DMX values 133 - 135  
Percent 52  
Input parameters Strobe Aura, red Aura, green Aura, blue Aura, color wheel Aura  
Output parameters Strobe Aura, red Aura, green Aura, blue Aura

**Details**

- This effect creates a solid colored Aura that flashes to an alternate color instead of performing an intensity cycle. There is no intensity strobe with this effect, instead the cycle alternates between a main and a strobe color. The Aura’s strobe channel is used for speed control including all ramps, random settings, pulses, etc.
- The alternate color is set as an absolute using the color wheel.

**Color offset strobe**

DMX values 136 - 138  
Percent 53  
Input parameters Strobe Aura, red Aura, green Aura, blue Aura, color wheel Aura  
Output parameters Strobe Aura, red Aura, green Aura, blue Aura  
FX Adjust Shifts color from 0 to 359 degrees

**Details**

- This effect creates a solid colored Aura that flashes to an alternate color instead of performing an intensity cycle. There is no intensity strobe with this effect, instead the cycle alternates between a main and a strobe color. The strobe channel of the fixture is used for speed control including all ramps, random settings, pulses, etc.
- The alternate color is set relative to the main color using a color circle degree offset as with the “Aura color offset” effect.
**Color spikes**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMX values</td>
<td>139 - 141</td>
</tr>
<tr>
<td>Percent</td>
<td>54 - 55</td>
</tr>
<tr>
<td>Input parameters</td>
<td>Red, green, blue</td>
</tr>
<tr>
<td>Output parameters</td>
<td>Red, green, blue</td>
</tr>
<tr>
<td>FX Adjust</td>
<td>Random hue deviation time and amount</td>
</tr>
</tbody>
</table>

**Details**
- RGB or color wheel values of the Beam are converted to hue and saturation.
- Whenever the incoming color value receives changes that fade, the hue value alternates randomly up and down with a random time. FX Adjust increases both random time and amount of deviation.
- During color fades from a lighting console, this gives a color “flicker” with controllable strength that can be controlled.
- As soon as the incoming values stop changing, the FX stops and the fixture assumes the correct color.

**Zoom FX**

**Color zoom ramp in**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMX values</td>
<td>160 - 162</td>
</tr>
<tr>
<td>Percent</td>
<td>63</td>
</tr>
<tr>
<td>Input parameters</td>
<td>Red, green, blue, color wheel, zoom</td>
</tr>
<tr>
<td>Output parameters</td>
<td>Red, green, blue, zoom</td>
</tr>
<tr>
<td>Priority</td>
<td>Zoom value is used to set base level</td>
</tr>
<tr>
<td>FX Adjust</td>
<td>Speed</td>
</tr>
</tbody>
</table>

**Details**
- Zoom fades from current zoom value to minimum zoom.
- At the same time color fades from current RGB values to color wheel value.
- Both snap back to their start values together.

**Color zoom ramp out**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMX values</td>
<td>163 - 165</td>
</tr>
<tr>
<td>Percent</td>
<td>64</td>
</tr>
<tr>
<td>Input parameters</td>
<td>Red, green, blue, color wheel, zoom</td>
</tr>
<tr>
<td>Output parameters</td>
<td>Red, green, blue, zoom</td>
</tr>
<tr>
<td>Priority</td>
<td>Zoom value is used to set base level</td>
</tr>
<tr>
<td>FX Adjust</td>
<td>Speed</td>
</tr>
</tbody>
</table>

**Details**
- Zoom fades from current zoom value to maximum zoom.
- At the same time color fades from current RGB values to color wheel value.
- Both snap back to their start values together.
**Color zoom fade in**

DMX values 166 - 168  
Percent 65  
Input parameters Red, green, blue, color wheel, zoom  
Output parameters Red, green, blue, zoom  
Priority Zoom value is used to set base level  
FX Adjust Speed

**Details**
- Zoom fades from current zoom value to maximum zoom and back.
- At the same time color fades from current RGB values to color wheel value and back to RGB values.

**Color zoom fade out**

DMX values 169 - 171  
Percent 66  
Input parameters Red, green, blue, color wheel, zoom  
Output parameters Red, green, blue, zoom  
Priority Zoom value is used to set base level  
FX Adjust Speed

**Details**
- Zoom fades from current zoom value to minimum zoom and back.
- At the same time color fades from current RGB values to color wheel value and back to RGB values.

**Zoom ramp up**

DMX values 175 - 177  
Percent 69  
Input parameters Zoom  
Output parameters Zoom  
Priority Zoom value is used to set base level  
FX Adjust Speed

**Details**
- Zoom ramps up from minimum zoom to base level.
- FX Adjust sets speed.
Zoom ramp down

DMX values 178 - 180
Percent 70
Input parameters Zoom
Output parameters Zoom
Priority Zoom value is used to set base level
FX Adjust Speed

Details
- Zoom ramps down from base level to minimum zoom.
- FX Adjust sets speed.