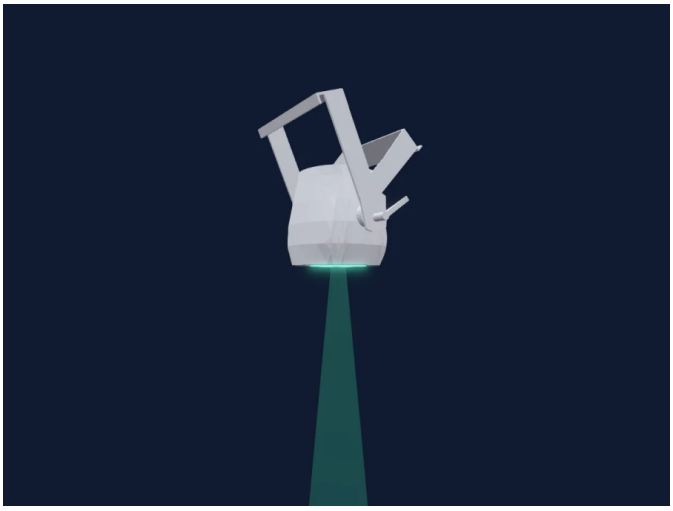
Starway

ASTRA 105 HDL



Manufacturer	**Starway**
Type	**PAR**
DMX modes	**10**
DMX footprint	**1, 3, 4, 13, 14, 16, 18 channels**
Beam angle	**11°**
Size (W × H × D)	**251 × 211 × 226 mm**
GDTF fixture type	**659DCA9F-9227-4F1F-A6B0-21…**

Controls

CMY colour mixing · Extra LED colours · RGB colour mixing · Colour temperature · Colour wheel · Strobe · Dimmer

Safety-relevant functions

Strobe

DMX modes

Dimmer 1CH	1 ch
Dimmer + CCT 3CH	3 ch
RGB 3CH	3 ch
RGBL 4CH	4 ch
CMY 8Bit 13CH	13 ch
RGBL 8Bit 14CH	14 ch
RGBW 8Bit 14CH	14 ch
CMY 16Bit 16CH	16 ch
RGBL 16Bit 18CH	18 ch
RGBW 16Bit 18CH	18 ch

Dimmer 1CH

1 channel

Ch	Function	Default	DMX values
1	Dimmer	0	0–24 0% Dim 25–50 10% Dim 51–76 20% Dim 77–101 30% DIm 102–127 40% Dim 128–153 50% Dim 154–178 60% Dim 179–204 70% Dim 205–229 80% Dim 230–254 90% Dim 255–255 100% Dim

Dimmer + CCT 3CH

3 channels

Ch	Function	Default	DMX values
1	Dimmer	0	0–24 0% Dim 25–50 10% Dim 51–76 20% Dim 77–101 30% DIm 102–127 40% Dim 128–153 50% Dim 154–178 60% Dim 179–204 70% Dim 205–229 80% Dim 230–254 90% Dim 255–255 100% Dim
2	Dimmer Fine	0	Fine byte of Dimmer
3	C TO	0	0–27 1800K to 2700K 28–37 2700K to 3000K 38–43 3000K to 3200K 44–68 3200K to 4000K 69–83 4000K to 4500K 84–99 4500K to 5000K 100–118 5000K to 5600K 119–146 5600K to 6500K 147–192 6500K to 8000K 193–255 8000K to 10000K

RGB 3CH

3 channels

Ch	Function	Default	DMX values
1	Red	255	
2	Green	255	
3	Blue	255	

RGBL 4CH

4 channels

Ch	Function	Default	DMX values
1	Red	255	
2	Green	255	
3	Blue	255	
4	Color Add GY	255	

CMY 8Bit 13CH

13 channels

Ch	Function	Default	DMX values
1	Dimmer	0	0–24 0% Dim 25–50 10% Dim 51–76 20% Dim 77–101 30% DIm 102–127 40% Dim 128–153 50% Dim 154–178 60% Dim 179–204 70% Dim 205–229 80% Dim 230–254 90% Dim 255–255 100% Dim
2	Dimmer Fine	0	Fine byte of Dimmer
3	Shutter / Strobe	15	0–9 Closed 10–19 Open1 20–67 Min Strobe 68–68 Max Strobe 69–79 Open2 80–127 Min Pulse 128–128 Max Pulse 129–139 Open3 140–187 Min Random 188–188 Max Random 189–255 Open4
4	Cyan	0	
5	Magenta	0	
6	Yellow	0	
7	C TO	0	0–27 1800K to 2700K 28–37 2700K to 3000K 38–43 3000K to 3200K 44–68 3200K to 4000K 69–83 4000K to 4500K 84–99 4500K to 5000K 100–118 5000K to 5600K 119–146 5600K to 6500K 147–192 6500K to 8000K 193–255 8000K to 10000K
8	Tint	0	
9	Crossfade	0	0–254 100% COLOR MIX 255–255 100% CCT WHITE Channel
10	Color Macro1	0	0–10 Reserved 11–12 Tungsten emulation 3200K 13–14 Tungsten emulation 4000k 15–16 Tungsten emulation 4500k 17–250 Virtual color wheel 251–253 Rotation between 12 to 250 254–255 Color rotation backward
11	Color Macro1Rate	0	0–254 Fade/Speed from fast 255–255 Fade/Speed from slow
12	Dimmer Mode	0	0–20 Default unit setting 21–40 Dim0 41–60 Dim1 61–80 Dim2 81–100 Dim3 101–255 Dim4

CMY 8Bit 13CH (continued)

Ch	Function	Default	DMX values
13	Control1	0	0–4 No function 5–39 Reserved 40–44 Fan OFF (Hold 3s) 45–49 Fan Quiet(Hold 3s) 50–54 Fan Auto (Hold 3s) 55–59 Fan High (Hold 3s) 60–64 Linear Dimmer Curve (hold 3s) 65–69 Square Dimmer Curve (hold 3s) 70–74 Inv-Square Dimmer Curve (hold 3s) 75–79 S - Dimmer Curve (hold 3s) 80–84 Fast Dim disable (hold 3s) 85–89 Fast dim enable (hold 3s) 90–94 900 Hz (hold 3s) 95–99 1000 Hz (hold 3s) 100–104 1100 Hz (hold 3s) 105–109 1200 Hz (hold 3s) 110–114 1300 Hz (hold 3s) 115–119 1400 Hz (hold 3s) 120–124 1500 Hz (hold 3s) 125–129 2500 Hz (hold 3s) 130–134 4000 Hz (hold 3s) 135–139 5000 Hz (hold 3s) 140–144 10000 Hz (hold 3s) 145–149 15000 Hz (hold 3s) 150–154 20000 Hz (hold 3s) 155–159 25000 Hz (hold 3s) 160–255 Reserved

RGBL 8Bit 14CH

14 channels

Ch	Function	Default	DMX values
1	Dimmer	0	0–24 0% Dim 25–50 10% Dim 51–76 20% Dim 77–101 30% DIm 102–127 40% Dim 128–153 50% Dim 154–178 60% Dim 179–204 70% Dim 205–229 80% Dim 230–254 90% Dim 255–255 100% Dim
2	Dimmer Fine	0	Fine byte of Dimmer
3	Shutter / Strobe	15	0–9 Closed 10–19 Open1 20–67 Min Strobe 68–68 Max Strobe 69–79 Open2 80–127 Min Pulse 128–128 Max Pulse 129–139 Open3 140–187 Min Random 188–188 Max Random 189–255 Open4
4	Red	255	
5	Green	255	
6	Blue	255	
7	Color Add GY	255	

RGBL 8Bit 14CH (continued)

Ch	Function	Default	DMX values
8	C TO	0	0–27 1800K to 2700K 28–37 2700K to 3000K 38–43 3000K to 3200K 44–68 3200K to 4000K 69–83 4000K to 4500K 84–99 4500K to 5000K 100–118 5000K to 5600K 119–146 5600K to 6500K 147–192 6500K to 8000K 193–255 8000K to 10000K
9	Tint	0	
10	Crossfade	0	0–254 100% COLOR MIX 255–255 100% CCT WHITE Channel
11	Color Macro1	0	0–10 Reserved 11–12 Tungsten emulation 3200K 13–14 Tungsten emulation 4000k 15–16 Tungsten emulation 4500k 17–250 Virtual color wheel 251–253 Rotation between 12 to 250 254–255 Color rotation backward
12	Color Macro1Rate	0	0–254 Fade/Speed from fast 255–255 Fade/Speed from slow
13	Dimmer Mode	0	0–20 Default unit setting 21–40 Dim0 41–60 Dim1 61–80 Dim2 81–100 Dim3 101–255 Dim4
14	Control1	0	0–4 No function 5–39 Reserved 40–44 Fan OFF (Hold 3s) 45–49 Fan Quiet(Hold 3s) 50–54 Fan Auto (Hold 3s) 55–59 Fan High (Hold 3s) 60–64 Linear Dimmer Curve (hold 3s) 65–69 Square Dimmer Curve (hold 3s) 70–74 Inv-Square Dimmer Curve (hold 3s) 75–79 S - Dimmer Curve (hold 3s) 80–84 Fast Dim disable (hold 3s) 85–89 Fast dim enable (hold 3s) 90–94 900 Hz (hold 3s) 95–99 1000 Hz (hold 3s) 100–104 1100 Hz (hold 3s) 105–109 1200 Hz (hold 3s) 110–114 1300 Hz (hold 3s) 115–119 1400 Hz (hold 3s) 120–124 1500 Hz (hold 3s) 125–129 2500 Hz (hold 3s) 130–134 4000 Hz (hold 3s) 135–139 5000 Hz (hold 3s) 140–144 10000 Hz (hold 3s) 145–149 15000 Hz (hold 3s) 150–154 20000 Hz (hold 3s) 155–159 25000 Hz (hold 3s) 160–255 Reserved

RGBW 8Bit 14CH

14 channels

Ch	Function	Default	DMX values
1	Dimmer	0	0–24 0% Dim 25–50 10% Dim 51–76 20% Dim 77–101 30% DIm 102–127 40% Dim 128–153 50% Dim 154–178 60% Dim 179–204 70% Dim 205–229 80% Dim 230–254 90% Dim 255–255 100% Dim
2	Dimmer Fine	0	Fine byte of Dimmer
3	Shutter / Strobe	15	0–9 Closed 10–19 Open1 20–67 Min Strobe 68–68 Max Strobe 69–79 Open2 80–127 Min Pulse 128–128 Max Pulse 129–139 Open3 140–187 Min Random 188–188 Max Random 189–255 Open4
4	Red	255	
5	Green	255	
6	Blue	255	
7	White	255	
8	C TO	0	0–27 1800K to 2700K 28–37 2700K to 3000K 38–43 3000K to 3200K 44–68 3200K to 4000K 69–83 4000K to 4500K 84–99 4500K to 5000K 100–118 5000K to 5600K 119–146 5600K to 6500K 147–192 6500K to 8000K 193–255 8000K to 10000K
9	Tint	0	
10	Crossfade	0	0–254 100% COLOR MIX 255–255 100% CCT WHITE Channel
11	Color Macro1	0	0–10 Reserved 11–12 Tungsten emulation 3200K 13–14 Tungsten emulation 4000k 15–16 Tungsten emulation 4500k 17–250 Virtual color wheel 251–253 Rotation between 12 to 250 254–255 Color rotation backward
12	Color Macro1Rate	0	0–254 Fade/Speed from fast 255–255 Fade/Speed from slow
13	Dimmer Mode	0	0–20 Default unit setting 21–40 Dim0 41–60 Dim1 61–80 Dim2 81–100 Dim3 101–255 Dim4

RGBW 8Bit 14CH (continued)

Ch	Function	Default	DMX values
14	Control1	0	0–4 No function 5–39 Reserved 40–44 Fan OFF (Hold 3s) 45–49 Fan Quiet(Hold 3s) 50–54 Fan Auto (Hold 3s) 55–59 Fan High (Hold 3s) 60–64 Linear Dimmer Curve (hold 3s) 65–69 Square Dimmer Curve (hold 3s) 70–74 Inv-Square Dimmer Curve (hold 3s) 75–79 S - Dimmer Curve (hold 3s) 80–84 Fast Dim disable (hold 3s) 85–89 Fast dim enable (hold 3s) 90–94 900 Hz (hold 3s) 95–99 1000 Hz (hold 3s) 100–104 1100 Hz (hold 3s) 105–109 1200 Hz (hold 3s) 110–114 1300 Hz (hold 3s) 115–119 1400 Hz (hold 3s) 120–124 1500 Hz (hold 3s) 125–129 2500 Hz (hold 3s) 130–134 4000 Hz (hold 3s) 135–139 5000 Hz (hold 3s) 140–144 10000 Hz (hold 3s) 145–149 15000 Hz (hold 3s) 150–154 20000 Hz (hold 3s) 155–159 25000 Hz (hold 3s) 160–255 Reserved

CMY 16Bit 16CH

16 channels

Ch	Function	Default	DMX values
1	Dimmer	0	0–24 0% Dim 25–50 10% Dim 51–76 20% Dim 77–101 30% DIm 102–127 40% Dim 128–153 50% Dim 154–178 60% Dim 179–204 70% Dim 205–229 80% Dim 230–254 90% Dim 255–255 100% Dim
2	Dimmer Fine	0	Fine byte of Dimmer
3	Shutter / Strobe	15	0–9 Closed 10–19 Open1 20–67 Min Strobe 68–68 Max Strobe 69–79 Open2 80–127 Min Pulse 128–128 Max Pulse 129–139 Open3 140–187 Min Random 188–188 Max Random 189–255 Open4
4	Cyan	0	
5	Cyan Fine	0	Fine byte of Cyan
6	Magenta	0	
7	Magenta Fine	0	Fine byte of Magenta
8	Yellow	0	

CMY 16Bit 16CH (continued)

Ch	Function	Default	DMX values
9	Yellow Fine	0	Fine byte of Yellow
10	C TO	0	0–27 1800K to 2700K 28–37 2700K to 3000K 38–43 3000K to 3200K 44–68 3200K to 4000K 69–83 4000K to 4500K 84–99 4500K to 5000K 100–118 5000K to 5600K 119–146 5600K to 6500K 147–192 6500K to 8000K 193–255 8000K to 10000K
11	Tint	0	
12	Crossfade	0	0–254 100% COLOR MIX 255–255 100% CCT WHITE Channel
13	Color Macro1	0	0–10 Reserved 11–12 Tungsten emulation 3200K 13–14 Tungsten emulation 4000k 15–16 Tungsten emulation 4500k 17–250 Virtual color wheel 251–253 Rotation between 12 to 250 254–255 Color rotation backward
14	Color Macro1Rate	0	0–254 Fade/Speed from fast 255–255 Fade/Speed from slow
15	Dimmer Mode	0	0–20 Default unit setting 21–40 Dim0 41–60 Dim1 61–80 Dim2 81–100 Dim3 101–255 Dim4
16	Control1	0	0–4 No function 5–39 Reserved 40–44 Fan OFF (Hold 3s) 45–49 Fan Quiet(Hold 3s) 50–54 Fan Auto (Hold 3s) 55–59 Fan High (Hold 3s) 60–64 Linear Dimmer Curve (hold 3s) 65–69 Square Dimmer Curve (hold 3s) 70–74 Inv-Square Dimmer Curve (hold 3s) 75–79 S - Dimmer Curve (hold 3s) 80–84 Fast Dim disable (hold 3s) 85–89 Fast dim enable (hold 3s) 90–94 900 Hz (hold 3s) 95–99 1000 Hz (hold 3s) 100–104 1100 Hz (hold 3s) 105–109 1200 Hz (hold 3s) 110–114 1300 Hz (hold 3s) 115–119 1400 Hz (hold 3s) 120–124 1500 Hz (hold 3s) 125–129 2500 Hz (hold 3s) 130–134 4000 Hz (hold 3s) 135–139 5000 Hz (hold 3s) 140–144 10000 Hz (hold 3s) 145–149 15000 Hz (hold 3s) 150–154 20000 Hz (hold 3s) 155–159 25000 Hz (hold 3s) 160–255 Reserved

RGBL 16Bit 18CH

18 channels

Ch	Function	Default	DMX values
1	Dimmer	0	0–24 0% Dim 25–50 10% Dim 51–76 20% Dim 77–101 30% DIm 102–127 40% Dim 128–153 50% Dim 154–178 60% Dim 179–204 70% Dim 205–229 80% Dim 230–254 90% Dim 255–255 100% Dim
2	Dimmer Fine	0	Fine byte of Dimmer
3	Shutter / Strobe	15	0–9 Closed 10–19 Open1 20–67 Min Strobe 68–68 Max Strobe 69–79 Open2 80–127 Min Pulse 128–128 Max Pulse 129–139 Open3 140–187 Min Random 188–188 Max Random 189–255 Open4
4	Red	255	
5	Red Fine	255	Fine byte of Red
6	Green	255	
7	Green Fine	255	Fine byte of Green
8	Blue	255	
9	Blue Fine	255	Fine byte of Blue
10	Color Add GY	255	
11	Color Add GY Fine	255	Fine byte of Color Add GY
12	C TO	0	0–27 1800K to 2700K 28–37 2700K to 3000K 38–43 3000K to 3200K 44–68 3200K to 4000K 69–83 4000K to 4500K 84–99 4500K to 5000K 100–118 5000K to 5600K 119–146 5600K to 6500K 147–192 6500K to 8000K 193–255 8000K to 10000K
13	Tint	0	
14	Crossfade	0	0–254 100% COLOR MIX 255–255 100% CCT WHITE Channel
15	Color Macro1	0	0–10 Reserved 11–12 Tungsten emulation 3200K 13–14 Tungsten emulation 4000k 15–16 Tungsten emulation 4500k 17–250 Virtual color wheel 251–253 Rotation between 12 to 250 254–255 Color rotation backward
16	Color Macro1Rate	0	0–254 Fade/Speed from fast 255–255 Fade/Speed from slow

RGBL 16Bit 18CH (continued)

Ch	Function	Default	DMX values
17	Dimmer Mode	0	0–20 Default unit setting 21–40 Dim0 41–60 Dim1 61–80 Dim2 81–100 Dim3 101–255 Dim4
18	Control1	0	0–4 No function 5–39 Reserved 40–44 Fan OFF (Hold 3s) 45–49 Fan Quiet(Hold 3s) 50–54 Fan Auto (Hold 3s) 55–59 Fan High (Hold 3s) 60–64 Linear Dimmer Curve (hold 3s) 65–69 Square Dimmer Curve (hold 3s) 70–74 Inv-Square Dimmer Curve (hold 3s) 75–79 S - Dimmer Curve (hold 3s) 80–84 Fast Dim disable (hold 3s) 85–89 Fast dim enable (hold 3s) 90–94 900 Hz (hold 3s) 95–99 1000 Hz (hold 3s) 100–104 1100 Hz (hold 3s) 105–109 1200 Hz (hold 3s) 110–114 1300 Hz (hold 3s) 115–119 1400 Hz (hold 3s) 120–124 1500 Hz (hold 3s) 125–129 2500 Hz (hold 3s) 130–134 4000 Hz (hold 3s) 135–139 5000 Hz (hold 3s) 140–144 10000 Hz (hold 3s) 145–149 15000 Hz (hold 3s) 150–154 20000 Hz (hold 3s) 155–159 25000 Hz (hold 3s) 160–255 Reserved

RGBW 16Bit 18CH

18 channels

Ch	Function	Default	DMX values
1	Dimmer	0	0–24 0% Dim 25–50 10% Dim 51–76 20% Dim 77–101 30% DIm 102–127 40% Dim 128–153 50% Dim 154–178 60% Dim 179–204 70% Dim 205–229 80% Dim 230–254 90% Dim 255–255 100% Dim
2	Dimmer Fine	0	Fine byte of Dimmer
3	Shutter / Strobe	15	0–9 Closed 10–19 Open1 20–67 Min Strobe 68–68 Max Strobe 69–79 Open2 80–127 Min Pulse 128–128 Max Pulse 129–139 Open3 140–187 Min Random 188–188 Max Random 189–255 Open4

RGBW 16Bit 18CH (continued)

Ch	Function	Default	DMX values
4	Red	255	
5	Red Fine	255	Fine byte of Red
6	Green	255	
7	Green Fine	255	Fine byte of Green
8	Blue	255	
9	Blue Fine	255	Fine byte of Blue
10	White	255	
11	White Fine	255	Fine byte of White
12	C TO	0	0–27 1800K to 2700K 28–37 2700K to 3000K 38–43 3000K to 3200K 44–68 3200K to 4000K 69–83 4000K to 4500K 84–99 4500K to 5000K 100–118 5000K to 5600K 119–146 5600K to 6500K 147–192 6500K to 8000K 193–255 8000K to 10000K
13	Tint	0	
14	Crossfade	0	0–254 100% COLOR MIX 255–255 100% CCT WHITE Channel
15	Color Macro1	0	0–10 Reserved 11–12 Tungsten emulation 3200K 13–14 Tungsten emulation 4000k 15–16 Tungsten emulation 4500k 17–250 Virtual color wheel 251–253 Rotation between 12 to 250 254–255 Color rotation backward
16	Color Macro1Rate	0	0–254 Fade/Speed from fast 255–255 Fade/Speed from slow
17	Dimmer Mode	0	0–20 Default unit setting 21–40 Dim0 41–60 Dim1 61–80 Dim2 81–100 Dim3 101–255 Dim4

RGBW 16Bit 18CH (continued)

Ch	Function	Default	DMX values
18	Control1	0	0–4 No function 5–39 Reserved 40–44 Fan OFF (Hold 3s) 45–49 Fan Quiet(Hold 3s) 50–54 Fan Auto (Hold 3s) 55–59 Fan High (Hold 3s) 60–64 Linear Dimmer Curve (hold 3s) 65–69 Square Dimmer Curve (hold 3s) 70–74 Inv-Square Dimmer Curve (hold 3s) 75–79 S - Dimmer Curve (hold 3s) 80–84 Fast Dim disable (hold 3s) 85–89 Fast dim enable (hold 3s) 90–94 900 Hz (hold 3s) 95–99 1000 Hz (hold 3s) 100–104 1100 Hz (hold 3s) 105–109 1200 Hz (hold 3s) 110–114 1300 Hz (hold 3s) 115–119 1400 Hz (hold 3s) 120–124 1500 Hz (hold 3s) 125–129 2500 Hz (hold 3s) 130–134 4000 Hz (hold 3s) 135–139 5000 Hz (hold 3s) 140–144 10000 Hz (hold 3s) 145–149 15000 Hz (hold 3s) 150–154 20000 Hz (hold 3s) 155–159 25000 Hz (hold 3s) 160–255 Reserved