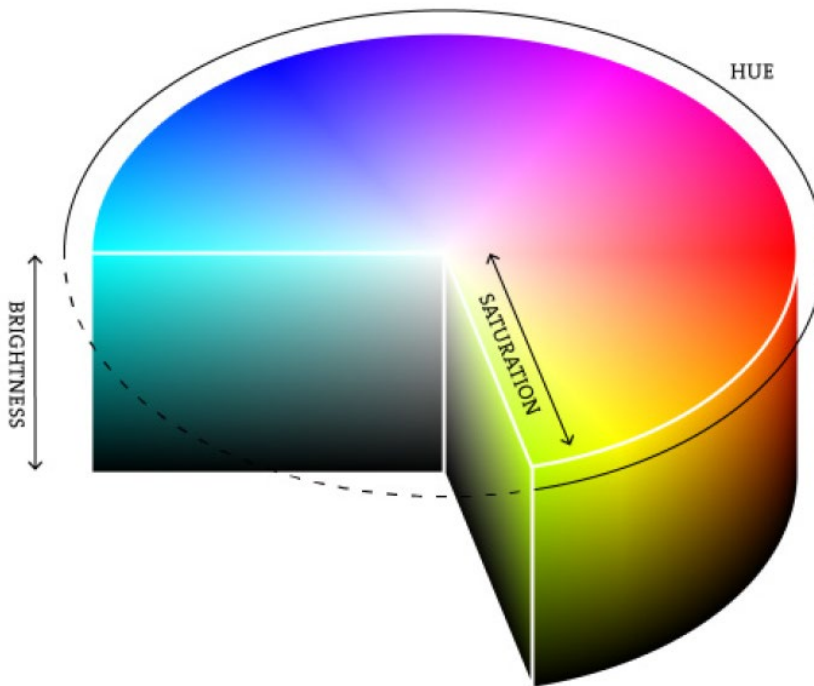


## OPERATING MODES

The projector has 4 operating modes: Raw Mode, HSV, RGB emulation and CMY emulation. Raw Mode enables specific control of each color. HSV Mode is based on a complex algorithm for a new type of management of both color and white light. In this mode, the CRI is kept constantly above 97 CRI, irrespective of colour temperature. HSV mode has the following characteristics:



## DMX MODES

DMX Mode	Parameter	Color Control Mode	RAW Mode
Basic RGB	14	RGB	Not available
Basic HSV	14	HSV	Not available
Extended RGB	27	RGB	CCMode RAW
Extended HSV	27	HSV	CCMode RAW

## BASIC MODE

DMX	RGB	HSV	Note
1	Red	Hue	
2	Green	Hue fine	
3	Blue	Saturation	
4	CTO	CTO	Filter or White mode available
5	Macro colors	Macro colors	
6	Strobe	Strobe	
7	Dimmer	Dimmer	
8	Dimmer fine	Dimmer fine	
9	DUMMY	DUMMY	
10	Fan Speed	Fan Speed	
11	Tint	Tint	
12	Function	Function	
13	Reset	Reset	
14	Frequency	Frequency	

**Note:** With Basic mode selected is not possible to control the singles LEDs colour values of fixture (RAW mode).

# Orkis CYC

## DMX Channels

RGB	HSV	DMX Default	DMX value	Function
1	-	000	000 - 255	<b>RED</b> Linear 0 – 100%
2	-	000	000 - 255	<b>GREEN</b> Linear 0 – 100%
3	-	000	000 - 255	<b>BLUE</b> Linear 0 to 100%
-	1	000	000 - 255	<b>HUE</b> Target point color in Hue Saturation Value
-	2	000	000 - 255	<b>HUE FINE:</b> setting
-	3	000	000 - 255	<b>SATURATION:</b> Linear It ranges from 100% (pure color) to 0% (white)
4	4	000		<b>CTO</b> from 8000K to 2500K
			000	OFF
			001...	8000 K
			... 047 ...	7000 K
			... 093 ...	6000 K
			... 112 ...	5600 K
			... 139 ...	5000 K
			... 186 ...	4000 K
			... 222 ...	3200 K
			... 245 ...	2700 K
255	2500 K			
5	5	000	000 - 255	<b>MACRO COLORS</b> channels details at page 15.
6	6	104		<b>STROBE</b>
			000 - 003	Light OFF
			004 - 103	Strobe linear from slow (1Hz) to fast (16Hz)
			104 - 107	Light ON
			108 - 207	Pulsation linear from slow (0.5 Hz) to fast (25 Hz)
			208 - 212	Light ON
			213 - 225	Random Slow Strobe
			226 - 238	Random Medium Strobe
			239 - 251	Random Fast Strobe
			252 - 255	Light ON

# Orkis CYC

## DMX Channels

RGB	HSV	DMX Default	DMX value	Function
7	7	000	000 - 255	<b>DIMMER</b> Linear 0 to 100%
8	8	000	000 - 255	<b>DIMMER FINE</b> Fine Dimmer positioning
9	9			<b>DUMMY</b>
10	10	000		<b>FAN SPEED</b>
			000 – 250	Linear speed from max to min
			251 – 255	Fanless
11	11	128		<b>TINT</b>
			000 - 127	Linear Tint setting: Define point correction from Magenta (0 Bit) to OFF
			128	Tint adjustment
			129 - 255	"Linear Tint setting: Define the target point correction from OFF to Green (255 bit)."

# Orkis CYC

## DMX Channels

RGB	HSV	DMX Default	DMX value	Function	
12	12	000		<b>FUNCTION</b> The function is enable passing through the unused range and then selecting the required function level. It will be activated after 5 seconds.	
			000 - 011	Unused range	
			012 - 037	Reserved	
			038 - 042	Linear ( <b>Default</b> )	Refer to page 14
			043 - 047	Square	
			048 - 052	Smooth Square	
			053 - 057	S Curve	
			058 - 062	Raw color channels gamma 1	
			063 - 067	Raw color channels gamma 1.5	Refer to page 14
			068 - 072	Raw color channels gamma 2.2 ( <b>Default</b> )	
			073 - 077	Halogen mode disabled ( <b>Default</b> )	
			078 - 082	Halogen mode 1, 750W lamp emulation	
			083 - 087	Halogen mode 2, 1000W lamp emulation	
			088 - 092	Halogen mode 3, 1200W lamp emulation	
			093 - 097	Halogen mode 4, 2000W lamp emulation	
			098 - 102	Halogen mode 5, 2500W lamp emulation	
			103 - 105	Reserved	
			106 - 108	CCMOD: RAW ( <b>Default</b> )	
			109 - 111	CCMOD: RGB or HSV	
			115 - 117	Reserved	
			118 - 122	Reserved	
			123	CTO Filter ( <b>Default</b> )	
			124	CTO White	
			125	Reserved	
			126 - 127	Gamut Adaptation Relative	
			128 - 129	Gamut Adaptation Absolute	
			130 - 133	Reserved	
			134	RGB Color Space Native	
			135	RGB Color Space sRGB	
			136 - 163	Reserved	
			164	Base frequency=1000Hz	
			165	Base frequency=1500Hz ( <b>Default</b> )	
			166	Base frequency=2400Hz	
			167	Base frequency=3700Hz	
			168	Base frequency=5600Hz	
			169	Base frequency=9400Hz	
			170	Base frequency=15100Hz	
			171	Base frequency=21400Hz	
			172	Base frequency=31000Hz	
			173	Base frequency=43700Hz	
			174 - 175	Output Mode Standard	
			176 - 177	Output Mode Silent	
			178 - 179	Output Mode Fanless	
			180 - 181	Output Mode DMX	
			182 - 199	Reserved	
			200 - 231	16 Digital Filters	
			232 - 250	Reserved	
			251 - 255	Default function recall	
				<b>Note:</b> all the functions are non-volatile settings. It means that the configuration remains active after power off.	

# Orkis CYC

## DMX Channels

RGB	HSV	DMX Default	DMX value	Function
13	13	000		<b>RESET</b>
			000 - 025	Unused range
			026 - 255	To reset the fixture completely, need to pass through the unused levels range and stay in that range for 5 seconds.
14	14	000		<b>FREQUENCY</b>
			000 - 255	Fine adjusting of frequency base value selected with Function parameter (number 12) - Details of values at page 17.

### EXTENDED MODE

DMX	RGB (/CMY)	HSV	Note
1	Red	Red	Active in RAW mode only
2	Red fine	Red fine	Active in RAW mode only
3	PC Amber	PC Amber	Active in RAW mode only
4	PC Amber fine	PC Amber fine	Active in RAW mode only
5	PC Green	PC Green	Active in RAW mode only
6	PC Green fine	PC Green fine	Active in RAW mode only
7	Green	Green	Active in RAW mode only
8	Green fine	Green fine	Active in RAW mode only
9	Cyan	Cyan	Active in RAW mode only
10	Cyan fine	Cyan fine	Active in RAW mode only
11	Blu	Blu	Active in RAW mode only
12	Blu fine	Blu fine	Active in RAW mode only
13	CTO	CTO	In RAW mode, only the White mode is available. when the Halogen mode is selected, the CTO parameter is disabled.
14	Macro colors	Macro Colors	
15	Strobe	Strobe	
16	Dimmer	Dimmer	
17	Dimmer fine	Dimmer fine	
18	Red	Hue	
19	Green	Hue fine	
20	Blue	Saturation	
21	DUMMY	DUMMY	
22	DUMMY	DUMMY	
23	Fan Speed	Fan Speed	
24	Tint	Tint	Not available in RAW mode
25	Function	Function	
26	Reset	Reset	
27	Frequency	Frequency	

# Orkis CYC

## DMX Channels

RGB	HSV	DMX value	DMX value	Function
1	1	000	000 - 255	RED Linear 0 – 100%
2	2	000	000 - 255	RED FINE
3	3	000	000 - 255	AMBER Linear 0 – 100%
4	4	000	000 - 255	AMBER FINE
5	5	000	000 - 255	LIME Linear 0 – 100%
6	6	000	000 - 255	LIME FINE
7	7	000	000 - 255	GREEN Linear 0 – 100%
8	8	000	000 - 255	GREEN FINE
9	9	000	000 - 255	CYAN Linear 0 – 100%
10	10	000	000 - 255	CYAN FINE
11	11	000	000 - 255	BLUE Linear 0 – 100%
12	12	000	000 - 255	BLUE FINE
13	13	000		<b>CTO</b> Colour Temperature linear from 8000K to 2500K
			000	OFF
			001	8000 K
			047	7000 K
			093	6000 K
			112	5600 K
			116	5500 K
			139	5000 K
			176	4200 K
			186	4000 K
			197	3750 K
			223	3200 K
			227	3100 K
			232	3000 K
241	2800 K			
246	2700 K			
255	2500 K			



# Orkis CYC

## DMX Channels

RGB	HSV	DMX value	DMX value	Function
14	14	000	000 - 255	<b>MACRO COLOR</b> details at page 15.
15	15	104		<b>STROBE</b>
			000 - 003	Light OFF
			004 - 103	Strobe at linearly variable frequency from low (1Hz) to fast (16Hz)
			104 - 107	Light ON
			108 - 207	Pulsation at linearly variable speed from slow (0.5 Hz) to fast (25 Hz)
			208 - 212	Light ON
			213 - 225	Random Slow Strobe
			226 - 238	Random Medium Strobe
			239 - 251	Random Fast Strobe
	252 - 255	Light ON		
16	16	000	000 - 255	<b>DIMMER</b> Linear 0 to 100%
17	17	000	000 - 255	<b>DIMMER FINE</b>

# Orkis CYC

## DMX Channels

RGB	HSV	DMX value	DMX value	Function
18	□	000	000 - 255	<b>RED</b> Linear 0 to 100%
19	□	000	000 - 255	<b>GREEN</b> Linear 0 to 100%
20	□	000	000 - 255	<b>BLUE</b> Linear 0 to 100%
-	18	000	000 - 255	<b>HUE</b> Target point color in the Hue Saturation Value (range from 0° (Red) to 360°)
-	19	000	000 - 255	<b>HUE FINE</b>
-	20	000	000 - 255	<b>SATURATION:</b> Linear It ranges from 100% (pure color) to 0% (white)
21	21			<b>DUMMY</b>
22	22			<b>DUMMY</b>
23	23	000		<b>FAN SPEED</b>
			000 – 250	Linear speed from max to min
			251 – 255	Fanless
24	24	128		<b>TINT</b>
			000 - 127	Linear Tint setting: Define point correction from Magenta (0 Bit) to OFF
			128	Tint adjustment
			129 - 255	Linear Tint setting: Define the target point correction from OFF to Green (255 bit)."

# Orkis CYC

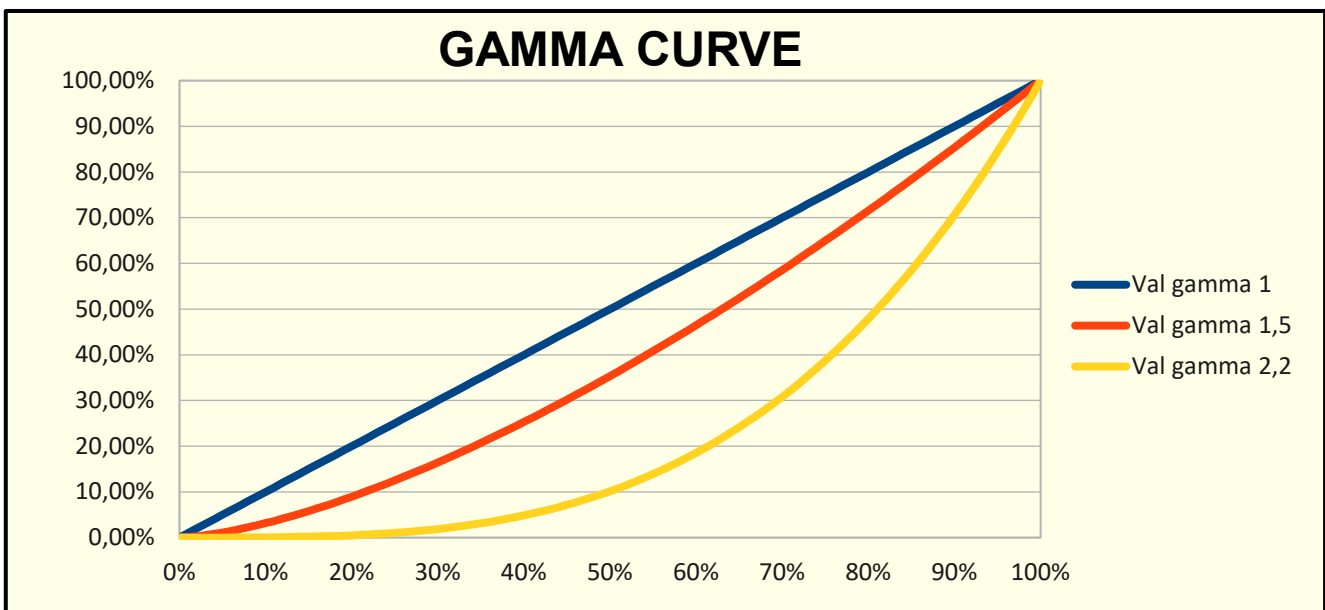
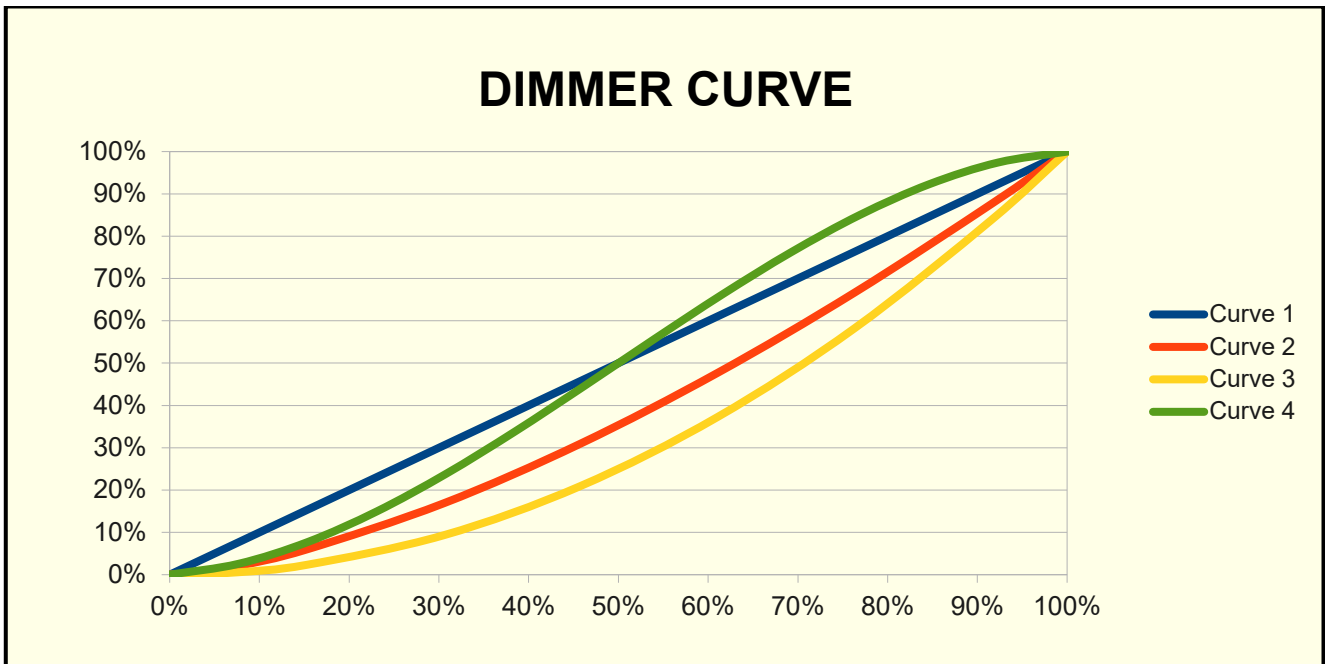
## DMX Channels

RGB	HSV	DMX value	DMX value	Function
25	25	000		<b>FUNCTION</b> The function is enable passing through the unused range and then selecting the required function level. It will be activated after 5 seconds; All the functions are non-volatile settings. It means that the configuration setting remains active after power off.
			000 - 011	Unused range
			012 - 037	Reserved
			038 - 042	Linear ( <b>Default</b> )
			043 - 047	Square
			048 - 052	Smooth Square
			053 - 057	S Curve
			058 - 062	Raw color channels gamma 1 -
			063 - 067	Raw color channels gamma 1.5
			068 - 072	Raw color channels gamma 2.2 ( <b>Default</b> )
			073 - 077	Halogen mode disabled ( <b>Default</b> )
			078 - 082	Halogen mode 1, 750W
			083 - 087	Halogen mode 2, 1000W
			088 - 092	Halogen mode 3, 1200W
			093 - 097	Halogen mode 4, 2000W
			098 - 102	Halogen mode 5, 2500W
			103 - 105	Reserved
			106 - 108	CCMOD: RAW ( <b>Default</b> )
			109 - 111	CCMOD: RGB (or HSV) mode
			115 - 117	<i>Reserved</i>
			118 - 122	<i>Reserved</i>
			123	CTO Filter ( <b>Default</b> )
			124	CTO White
			125 - 163	Reserved
			126 - 127	Gamut Adaptation Relative
			128 - 129	Gamut Adaptation Absolute
			130 - 133	Reserved
			134	RGB Color Space Native
			135	RGB Color Space sRGB
			136 - 163	Reserved
			164	Base frequency=1000Hz
			165	Base frequency=1500Hz ( <b>Default</b> )
			166	Base frequency=2400Hz
			167	Base frequency=3700Hz
			168	Base frequency=5600Hz
			169	Base frequency=9400Hz
			170	Base frequency=15100Hz
			171	Base frequency=21400Hz
			172	Base frequency=31000Hz
			173	Base frequency=43700Hz
			174 - 175	Output Mode Standard
			176 - 177	Output Mode Silent
			178 - 179	Output Mode Fanless
			180 - 181	Output Mode DMX
			182 - 199	Reserved
200 - 231	16 Digital Filters			
232 - 250	Reserved			
251 - 255	Default function recall			

# Orkis CYC

## DMX Channels

RGB	HSV	DMX value	DMX value	Function
26	26	000		<b>RESET</b>
			000 - 025	Unused range
			026 - 255	To reset the fixture completely, need to pass through the unused levels range and stay in that range for 5 seconds.
27	27	000	000 - 255	<b>FREQUENCY</b> Fine adjusting of frequency base value selected with Function parameter (number 12) - Details of values at page 17.



### Macro Color Library

DMX Value	LEE Filter references	Description
000 – 009	None	None
010 – 011	004	4 Med Bast Amber
012 – 013	009	Pale Amber Gold
014 – 015	-	<i>Reserved</i>
016 – 017	017	Surprise Peach
018 – 019	019	Fire
020 – 021	021	Gold Amber
022 – 023	026	Bright red
024 – 025	029	Plasa Red
026 – 027	035	Light Pink
028 – 029	058	Lavender
030 – 031	068	Sky Blue
032 – 033	071	Tokyo Blue
034 – 035	075	Evening Blue
036 – 037	079	Just Blue
038 – 039	088	Lime Green
040 – 041	090	Dark Yellow/Green
042 – 043	-	<i>Reserved</i>
044 – 045	-	<i>Reserved</i>
046 – 047	-	<i>Reserved</i>
048 – 049	103	Straw
050 – 051	-	<i>Reserved</i>
052 – 053	-	<i>Reserved</i>
054 – 055	106	Primary Red
056 – 057	108	English Rose
058 – 059	111	Dark Pink
060 – 061	113	Magenta
062 – 063	115	Peacock Blue
064 – 065	116	Med Blue-Green
066 – 067	117	Steel Blue
068 – 069	118	Light Blue
070 – 071	119	Dark Blue
072 – 073	-	<i>Reserved</i>
074 – 075	121	Lee Green
076 – 077	122	Fern Green
078 – 079	124	Dark Green
080 – 081	127	Smokey Pink
082 – 083	128	Bright Pink
084 – 085	131	Marine Blue
086 – 087	132	Med Blue
088 – 089	134	Golden Amber
090 – 091	135	Dip Golden Amber
092 – 093	136	Pale Lavender
094 – 095	137	Spec Lavender
096 – 097	138	Pale Green
098 – 099	139	Primary Green
100 – 101	141	Bright Blue
102 – 103	143	Pale Navy Blue

# Orkis CYC

## DMX Channels

DMX Value	LEE Filter references	Description
104 – 105	147	Apricot
106 – 107	152	Pale Gold
108 – 109	154	Pale Rose
110 – 111	157	Pink
112 – 113	158	Deep Orange
114 – 115	161	Slate Blue
116 – 117	162	Bastard Amber
118 – 119	-	<i>Reserved</i>
120 – 121	165	Daylight Blue
122 – 123	169	Lilac Tint
124 – 125	170	Deep Lavender
126 – 127	172	Lagoon Blue
128 – 129	174	Dk Steel Blue
130 – 131	-	<i>Reserved</i>
132 – 133	180	Dark Lavendar
134 – 135	-	<i>Reserved</i>
136 – 137	182	Light Red
138 – 139	197	Alice Blue
140 – 141	200	Double C.T. Blue
142 – 143	201	Full C.T. Blue
144 – 145	202	1/2 C.T. Blue
146 – 147	203	1/4 C.T. Blue
148 – 149	204	Full C.T. Orange
150 – 151	205	1/2 C.T. Orange
152 – 153	206	1/4 C.T. Orange
154 – 155	241	Lee Fluor 5700K
156 – 157	242	Lee Fluor 4300K
158 – 159	247	Lee Minus Green
160 – 161	248	1/2 Minus Green
162 – 163	281	3/4 C.T. Blue
164 – 165	285	3/4 C.T. Orange
166 – 167	328	Follies Pink
168 – 169	352	Glacier Blue
170 – 171	353	Lighter Blue
172 – 173	363	Special Medium Blue
174 – 175	706	King Fals Lavender
176 – 177	711	Cold Blue
178 – 179	724	Ocean Blue
180 – 181	728	Steel Green
182 – 183	747	Easy White
184 – 185	778	Millenium Gold
186 – 187	793	Vanity Fair
188 – 189	R05	Rose Tint (ROSCO)
190 – 255	-	Reserved

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## DMX Channels

### Frequency parameter levels

Base Frequency setting	Value at 128 bit	Min value at 0 bit	Max value at 255 bit
1000 Hz	<b>1000 Hz</b>	744 Hz	1254 Hz
1500 Hz ( <b>Default</b> )	<b>1500 Hz</b>	1244 Hz	1754 Hz
2400 Hz	<b>2400 Hz</b>	1760 Hz	3035 Hz
3700 Hz	<b>3700 Hz</b>	3060 Hz	4335 Hz
5600 Hz	<b>5600 Hz</b>	4320 Hz	6870 Hz
9400 Hz	<b>9400 Hz</b>	6840 Hz	11940 Hz
15100 Hz	<b>15100 Hz</b>	11900 Hz	18275 Hz
21400 Hz	<b>21400 Hz</b>	18200 Hz	24575 Hz
31000 Hz	<b>31000 Hz</b>	24600 Hz	37350 Hz
43700 Hz	<b>43700 Hz</b>	37300 Hz	50050 Hz