DMX CHARTS

RDM Model ID: 0xD161

RDM Personality ID List

ID	DMX Mode	Footprint
1	STROBE	7CH
2	BASIC	13CH
3	STANDARD 1	21CH
4	STANDARD 2	32CH
5	FX 1	29CH
6	FX 2	37CH
7	EXTENDED 1	47CH
8	EXTENDED 2	60CH

DMX BASIC MODES

PARAMETER	STROBE (7ch)	BASIC (13ch)
DIMMER	1	1
STROBE	2	2
STROBE DURATION	3	3
STROBE RATE	4	4
RED	-	5
GREEN	-	6
BLUE	-	7
WHITE	-	8
BEAM DIMMER	5	9
BEAM STROBE	-	10
BEAM STROBE DURATION	-	11
BEAM STROBE RATE	-	12
COLOR MACRO	6	-
CONTROL	7	13

NOTE
In these modes the Pixel engine is not allowed

DMX PIXEL MODES

	PARAMETER	STD 1 (21ch)	STD 2 (36ch)	FX 1 (32ch)	FX 2 (42ch)	EXT.1 (47ch)	EXT.2 (60ch)
MASTER	DIMMER	-	-	-	1	1	1
	DIMMER FINE	-	-	-	2	2	2
	STROBE	-	-	-	-	3	3
	STROBE DURATION	-	-	-	-	4	4
	STROBE RATE	-	-	-	-	5	5
ALL PLATE / TOP PLATE	DIMMER	1	1	1	3	6	6
	DIMMER FINE	2	2	2	4	7	7
	STROBE	3	3	3	5	8	8
	STROBE DURATION	-	4	4	6	9	9
	STROBE RATE	-	5	5	7	10	10
	RED	4	6	6	8	11	11
	RED FINE	5	7	7	9	12	12
	GREEN	6	8	8	10	13	13
	GREEN FINE	7	9	9	11	14	14
	BLUE	8	10	10	12	15	15
	BLUE FINE	9	11	11	13	16	16
	WHITE	10	12	12	14	17	17
	WHITE FINE	11	13	13	15	18	18
BOTTOM PLATE	DIMMER	-	14	-	-	-	19
	DIMMER FINE	-	15	-	-	-	20
	STROBE	-	16	-	-	-	21
	STROBE DURATION	-	17	-	-	-	22
	STROBE RATE	-	18	-	-	-	23
	RED	-	19	-	-	-	24
	RED FINE	-	20	-	-	-	25
	GREEN	-	21	-	-	-	26
	GREEN FINE	-	22	-	-	-	27
	BLUE	-	23	-	-	-	28
	BLUE FINE	-	24	-	-	-	29
	WHITE	-	25	-	-	-	30
	WHITE FINE	-	26	-	-	-	31
BEAM	BEAM DIMMER	12	27	14	16	19	32
	BEAM DIMMER FINE	13	28	15	17	20	33
	BEAM STROBE	14	29	16	18	21	34
	BEAM STROBE DURATION	15	30	17	19	22	35
	BEAM STROBE RATE	16	31	18	20	23	36

	PARAMETER	STD 1 (21ch)	STD 2 (36ch)	FX 1 (32ch)	FX 2 (42ch)	EXT.1 (47ch)	EXT.2 (60ch)
PLATE FX	PATTERN SELECTOR	-	-	19	21	24	37
	PATTERN SPEED	-	-	20	22	25	38
	PATTERN FADE	-	-	21	23	26	39
	PATTERN TRANSITION	-	-	22	24	27	40
	PATTERN XFADE	-	-	23	25	28	41
	DIMMER	-	-	24	26	29	42
	STROBE	-	-	25	27	30	43
	RED	-	-	26	28	31	44
	GREEN	-	-	27	29	32	45
	BLUE	-	-	28	30	33	46
	WHITE	-	-	29	31	34	47
BEAM FX	FX SELECTOR	-	-	-	32	35	48
	PATTERN SPEED	-	-	-	33	36	49
	PATTERN FADE	-	-	-	34	37	50
	PATTERN TRANSITION	-	-	-	35	38	51
	PATTERN XFADE	-	-	-	36	39	52
	BEAM DIMMER	-	-	-	37	40	53
	BEAM STROBE	-	-	-	38	41	54
COLORS	COLOR MACRO	-	-	-	39	42	55
	CCT	17	32	-	-	43	56
CROSSFADE	XFADE PROTOCOL	18	33	30	40	44	57
	XFADE TO PIXEL ENGINE	19	34	31	41	45	58
	XFADE WHITE TO COLOR	20	35	-	-	46	59
	CONTROL	21	36	32	42	47	60
	BEAM PIXELS If selected, beam main dimmer works as master	If selected on the menu, +12 dimmer channels					

PIXEL DEFINITION - RGBW PLATES

Fig. 09

PIXEL DEFINITION - WHITE BEAM

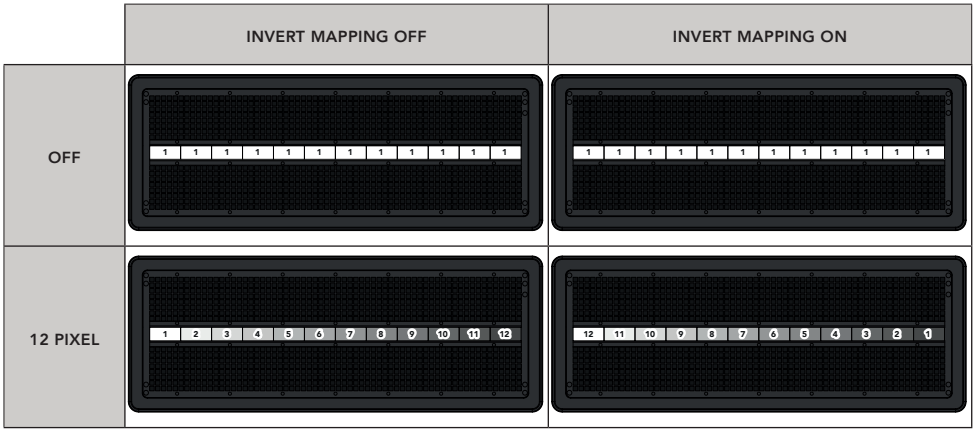

Fig. 10

CHANNEL DEFINITION

Dimmer

Function	8 bit value		16 bit value		Note
	From	To	From	To	
Dimmer	0	255	0	65535	Default @ 0 (Linear Dimmer 0 - 100%)

Strobe

Function	8 bit value		16 bit value		Note
	From	To	From	To	
Open	0	4	-	-	Default @ 255
Strobe (slow to fast)	5	44	-	-	
Open	45	46	-	-	
Pulse In (slow to fast)	47	86	-	-	
Open	87	88	-	-	
Pulse Out (slow to fast)	89	128	-	-	
Close	129	130	-	-	
Random (slow to fast)	131	170	-	-	Random flash on all fixture
Open	171	172	-	-	
Random single pixels (slow to fast)	173	212	-	-	Flash on random pixels
Open	213	214	-	-	
Spikers (slow to fast)	215	254	-	-	Flash on low light
Open	255	255	-	-	

Strobe Duration

Function	8 bit value		16 bit value		Note
	From	To	From	To	
0ms to 990ms	0	255	-	-	Default @ 0

Strobe Rate

Function	8 bit value		16 bit value		Note
	From	To	From	To	
Light off	0	5	-	-	Default @ 255
Slow (0,3Hz) to fast (25Hz)	6	250	-	-	
Open - 100% on	251	255	-	-	

Colors (RED - GREEN - BLUE - WHITE) - Foreground&Background RGBW

Function	8 bit value		16 bit value		Note
	From	To	From	To	
Color	0	255	0	65535	Linear 0 - 100% Default @ 255 (8bit) / 65535 (16bit)

CCT (2800K - 10000K)

Function		8 bit value		16 bit value		Note
CCT(K) From	CCT(K) To	From	To	From	To	
2800	2900	0	4	0	910	Default @ 0
2900	3000	4	7	910	1820	
3000	3100	7	11	1820	2731	
3100	3200	11	14	2731	3641	
3200	3300	14	18	3641	4551	
3300	3400	18	21	4551	5461	
3400	3500	21	25	5461	6371	
3500	3600	25	28	6371	7282	
3600	3700	28	32	7282	8192	
3700	3800	32	35	8192	9102	
3800	3900	35	39	9102	10012	
3900	4000	39	43	10012	10923	
4000	4100	43	46	10923	11833	
4100	4200	46	50	11833	12743	
4200	4300	50	53	12743	13653	
4300	4400	53	57	13653	14563	
4400	4500	57	60	14563	15474	
4500	4600	60	64	15474	16384	
4600	4700	64	67	16384	17294	
4700	4800	67	71	17294	18204	
4800	4900	71	74	18204	19114	
4900	5000	74	78	19114	20025	
5000	5100	78	81	20025	20935	
5100	5200	81	85	20935	21845	
5200	5300	85	89	21845	22755	
5300	5400	89	92	22755	23665	
5400	5500	92	96	23665	24576	
5500	5600	96	99	24576	25486	
5600	5700	99	103	25486	26396	
5700	5800	103	106	26396	27306	
5800	5900	106	110	27306	28216	
5900	6000	110	113	28216	29127	
6000	6100	113	117	29127	30037	
6100	6200	117	120	30037	30947	
6200	6300	120	124	30947	31857	
6300	6400	124	128	31857	32768	
6400	6500	128	131	32768	33678	
6500	6600	131	135	33678	34588	
6600	6700	135	138	34588	35498	
6700	6800	138	142	35498	36408	
6800	6900	142	145	36408	37319	
6900	7000	145	149	37319	38229	
7000	7100	149	152	38229	39139	
7100	7200	152	156	39139	40049	
7200	7300	156	159	40049	40959	
7300	7400	159	163	40959	41870	
7400	7500	163	166	41870	42780	
7500	7600	166	170	42780	43690	
7600	7700	170	174	43690	44600	
7700	7800	174	177	44600	45510	

CCT (2800K - 10000K)

Function		8 bit value		16 bit value		Note
CCT(K) From	CCT(K) To	From	To	From	To	
7800	7900	177	181	45510	46421	
7900	8000	181	184	46421	47331	
8000	8100	184	188	47331	48241	
8100	8200	188	191	48241	49151	
8200	8300	191	195	49151	50061	
8300	8400	195	198	50061	50972	
8400	8500	198	202	50972	51882	
8500	8600	202	205	51882	52792	
8600	8700	205	209	52792	53702	
8700	8800	209	213	53702	54613	
8800	8900	213	216	54613	55523	
8900	9000	216	220	55523	56433	
9000	9100	220	223	56433	57343	
9100	9200	223	227	57343	58253	
9200	9300	227	230	58253	59164	
9300	9400	230	234	59164	60074	
9400	9500	234	237	60074	60984	
9500	9600	237	241	60984	61894	
9600	9700	241	244	61894	62804	
9700	9800	244	248	62804	63715	
9800	9900	248	251	63715	64625	
9900	10000	251	255	64625	65535	

Crossfade Hierarchy	
Following order must be read from bottom to top. First Level is CCT, Second level is Color Mix, Third level is Pixel Engine (ETH1 in case of double Protocol used), Fourth level is Pixel Engine (ETH2)	
ETH1 to ETH2	Fixture must be running a Pixel Engine using two protocols (Pixel Address -> Artnet+sAcn) Crossfade is inhibited in any other case.
Color to Pixel Engine	Fixture must be running a Pixel Engine. Pixel Engine is allocated on separated DMX Address. Crossfade is inhibited in any other case.
CCT to Color Mix	Crossfade running on Fixture Engine. Crossfades from CCT to Color Mix level. FXs and Tour FXs are running on Color Mix level.

Crossfade from ETH1 to ETH2

Function	8 bit value		16 bit value		Note
	From	To	From	To	
Linear Crossfade	0	255	0	65535	Default @ 0 Crossfade from Pixel Engine running on first ETH protocol to second Pixel Engine running on second ETH protocol

Crossfade from Color to Pixel Engine

Function	8 bit value		16 bit value		Note
	From	To	From	To	
Linear Crossfade	0	255	0	65535	Default @ 0 Crossfade from Color Layer to Pixel Engine

Crossfade from CCT to ColorMix

Function	8 bit value		16 bit value		Note
	From	To	From	To	
Linear Crossfade	0	255	0	65535	Default @ 255 Crossfade from CCT Layer to ColorMix

Color Macro

Function	8 bit value		16 bit value		Note
	From	To	From	To	
No Function	0	1	-	-	Default @ 0
RED	2	3	-	-	
GREEN	4	5	-	-	
BLUE	6	7	-	-	
CYAN	8	9	-	-	
MAGENTA	10	11	-	-	
YELLOW	12	13	-	-	
DIRTY WHITE	14	15	-	-	
ALICE BLLUE	16	17	-	-	
CONGO BLUE	18	19	-	-	
DARK STEEL BLUE	20	21	-	-	
DEEP LAVENDER	22	23	-	-	
LILAC TING	24	25	-	-	
DAYLIGHT BLUE	26	27	-	-	
FLAME RED	28	29	-	-	
BASTARD AMBER	30	31	-	-	
DEEP ORANGE	32	33	-	-	
PALE GOLD	34	35	-	-	
APRICOT	36	37	-	-	
BRIGHT BLUE	38	39	-	-	
PRIMARY GREEN	40	41	-	-	
SPECIAL LAVENDER	42	43	-	-	
PALE LAVENDER	44	45	-	-	
DEEP GOLDEN AMBER	46	47	-	-	
MEDIUM BLUE	48	49	-	-	
BRIGHT PINK	50	51	-	-	
MAUVE	52	53	-	-	
DARK GREEN	54	55	-	-	
LEE GREEN	56	57	-	-	
DARK BLUE	58	59	-	-	
LIGHT BLUE	60	61	-	-	
STEEL BLUE	62	63	-	-	
MEDIUM BLUE-GREEN	64	65	-	-	
PEACOCK BLUE	66	67	-	-	
MAGENTA	68	69	-	-	
DARK PINK	70	71	-	-	
MIDDLE ROSE	72	73	-	-	
LIGHT SALMON	74	75	-	-	
ENGLISH ROSE	76	77	-	-	
LIGHT ROSE	78	79	-	-	
ORANGE	80	81	-	-	
DEEP AMBER	82	83	-	-	
STRAW	84	85	-	-	
LIGHT AMBER	86	87	-	-	
SPRING YELLOW	88	89	-	-	
DARK YELLOW GREEN	90	91	-	-	

Color Macro

Function	8 bit value		16 bit value		Note
	From	To	From	To	
JUST BLUE	92	93	-	-	
SKY BLUE	94	95	-	-	
LAVENDER	96	97	-	-	
LIGHT LAVENDER	98	99	-	-	
PINK CARNATION	100	101	-	-	
MEDIUM PINK	102	103	-	-	
LIGHT PINK	104	105	-	-	
SUNSET RED	106	107	-	-	
DARK AMBER	108	109	-	-	
GOLD AMBER	110	111	-	-	
MEDIUM AMBER	112	113	-	-	
FIRE	114	115	-	-	
SURPRISE PEACH	116	117	-	-	
STRAW TINT	118	119	-	-	
MEDIUM YELLOW	120	121	-	-	
LEE MINUS GREEN	122	123	-	-	
PALE GOLD	124	125	-	-	
ORANGE	126	127	-	-	
DEEP STRAW	128	129	-	-	
ROSE PURPLE	130	131	-	-	
DEEP PURPLE	132	133	-	-	
SOFT GREEN	134	135	-	-	
Reserved for future use	136	209	-	-	
2700K	210	211	-	-	
2800K	212	213	-	-	
3000K	214	215	-	-	
3200K	216	217	-	-	
3400K	218	219	-	-	
3600K	220	221	-	-	
3800K	222	223	-	-	
4000K	224	225	-	-	
4200K	226	227	-	-	
4400K	228	229	-	-	
4600K	230	231	-	-	
4800K	232	233	-	-	
5000K	234	235	-	-	
5200K	236	237	-	-	
5400K	238	239	-	-	
5600K	240	241	-	-	
6000K	242	243	-	-	
6500K	244	245	-	-	
7000K	246	247	-	-	
8000K	248	249	-	-	
9000K	250	251	-	-	
10000K	252	253	-	-	
FULL ON	254	255	-	-	

Pattern Selector (RGBW PLATE)

Function	8 bit value		16 bit value		Note
	From	To	From	To	
No pattern	0	9	-	-	Default @ 0
Pattern 1	10	14	-	-	
Pattern 2	15	19	-	-	
Pattern 3	20	24	-	-	
Pattern 4	25	29	-	-	
Pattern 5	30	34	-	-	
Pattern 6	35	39	-	-	
Pattern 7	40	44	-	-	
Pattern 8	45	49	-	-	
Pattern 9	50	54	-	-	
Pattern 10	55	59	-	-	
Pattern 11	60	64	-	-	
Pattern 12	65	69	-	-	
Pattern 13	70	74	-	-	
Pattern 14	75	79	-	-	
Pattern 15	80	84	-	-	
Pattern 16	85	89	-	-	
Pattern 17	90	94	-	-	
Pattern 18	95	99	-	-	
Pattern 19	100	104	-	-	
Pattern 20	105	109	-	-	
Pattern 21	110	114	-	-	
Pattern 22	115	119	-	-	
Pattern 23	120	124	-	-	
Pattern 24	125	129	-	-	
Pattern 25	130	134	-	-	
Pattern 26	135	139	-	-	
Pattern 27	140	144	-	-	
Pattern 28	145	149	-	-	
Pattern 29	150	154	-	-	
Pattern 30	155	159	-	-	
Pattern 31	160	164	-	-	
Pattern 32	165	169	-	-	
Pattern 33	170	174	-	-	
Pattern 34	175	179	-	-	
Pattern 35	180	184	-	-	
Pattern 36	185	189	-	-	
Pattern 37	190	194	-	-	
RESERVED	195	255	-	-	

Pattern Selector (WHITE BEAM)

Function	8 bit value		16 bit value		Note
	From	To	From	To	
No pattern	0	9	-	-	Default @ 0
Pattern 1	10	14	-	-	
Pattern 2	15	19	-	-	
Pattern 3	20	24	-	-	
Pattern 4	25	29	-	-	
Pattern 5	30	34	-	-	
Pattern 6	35	39	-	-	
Pattern 7	40	44	-	-	
Pattern 8	45	49	-	-	
Pattern 9	50	54	-	-	
Pattern 10	55	59	-	-	
Pattern 11	60	64	-	-	
Pattern 12	65	69	-	-	
Pattern 13	70	74	-	-	
Pattern 14	75	79	-	-	
Pattern 15	80	84	-	-	
Pattern 16	85	89	-	-	
Pattern 17	90	94	-	-	
Pattern 18	95	99	-	-	
Pattern 19	100	104	-	-	
Pattern 20	105	109	-	-	
Pattern 21	110	114	-	-	
Pattern 22	115	119	-	-	
Pattern 23	120	124	-	-	
Pattern 24	125	129	-	-	
Pattern 25	130	134	-	-	
Pattern 26	135	139	-	-	
Pattern 27	140	144	-	-	
Pattern 28	145	149	-	-	
Pattern 29	150	154	-	-	
Pattern 30	155	159	-	-	
Pattern 31	160	164	-	-	
Pattern 32	165	169	-	-	
Pattern 33	170	174	-	-	
Pattern 34	175	179	-	-	
Pattern 35	180	184	-	-	
Pattern 36	185	189	-	-	
Pattern 37	190	194	-	-	
RESERVED	195	255	-	-	

Pattern Speed

Function	8 bit value		16 bit value		Note
	From	To	From	To	
Indexing	0	127	-	-	Default @ 0
CW from fast to slow	128	190	-	-	
Stop	191	192	-	-	
CCW from slow to fast	193	255	-	-	

Pattern Fade

Function	8 bit value		16 bit value		Note
	From	To	From	To	
0% - 100% (From 0 ms to 5000 ms)	0	255	-	-	Default @ 0 Defines the fade time of the LEDs involved in an effect. For example, if the channel is set to 1 second and a random pixel effect is running, the pixels that go from on to off will take 1 second to fade out.

Pattern Transition

Function	8 bit value		16 bit value		Note
	From	To	From	To	
No fade	0	0	-	-	Default @ 0 Defines the fade time for transitioning between effects on the involved LEDs. For example, if the channel is set to 1 second and there is a change from one effect to another, such as from a random pixel effect to another, the transition will take 1 second to complete with a fade.
0% - 100% (From 0 ms to 5000 ms)	1	255	-	-	

Pattern Xfade

Function	8 bit value		16 bit value		Note
	From	To	From	To	
FX opacity 0%	0	0	-	-	Default @ 0 When set to 0, pixel effects are not visible, and the background/main color is displayed solidly. At a value of 255, the pixel effect is fully overlaid. Adjusting the value between 0 and 255 will gradually increase the visibility of the pixel effect over the background color.
Fx opacity 0% - 100%	1	255	-	-	

Control Channel

Function		8 bit value		16 bit value		Note
		From	To	From	To	
No Function / Safe		0	1	-	-	Default @ 0
DISPLAY	ON	2	3	-	-	Hold 3s to take function
	10s	4	5	-	-	
	20s	6	7	-	-	
	30s	8	9	-	-	
FLIP DISPLAY	ON	10	11	-	-	
	OFF	12	13	-	-	
KEY LOCK	ON	14	15	-	-	
	OFF	16	17	-	-	
DIMMER CURVE PLATE	LINEAR	18	19	-	-	
	S-CURVE	20	21	-	-	
	SQUARE LAW	22	23	-	-	
	INVERSE SQUARE LAW	24	25	-	-	
	HIGH RES@LOW	26	27	-	-	
DIMMER SPEED PLATE	AUTO	28	29	-	-	
	FAST	30	31	-	-	
	MEDIUM	32	33	-	-	
	SLOW	34	35	-	-	
	OFF	36	37	-	-	
DIMMER	FADE OFF END	38	39	-	-	
	SNAP OFF END	40	41	-	-	
SPEKTRA CALIBRATION	ON	42	43	-	-	
	PURE COLORS	44	45	-	-	
	OFF	46	47	-	-	
LED MODE	HIGH QUALITY	48	49	-	-	
	HIGH BRIGHTNESS	50	51	-	-	
WHITE POINT	3200K	52	53	-	-	
	4000K	54	55	-	-	
	5600K	56	57	-	-	
	6000K	58	59	-	-	
	8000K	60	61			
	OFF	62	63	-	-	
LED FREQUENCY	1000Hz	64	65	-	-	
	2000HZ	66	67	-	-	
	4000HZ	68	69	-	-	
	6000HZ	70	71	-	-	
	10KHz	72	73	-	-	
	25KHZ	74	75	-	-	
DMX FAULT	HOLD	76	77	-	-	
	BLACKOUT	78	79	-	-	
	STAND ALONE	80	81	-	-	
	EMERGENCY	82	83	-	-	
INVERT MAPPING	OFF	84	85	-	-	
	INVERT PLATE	86	87	-	-	
	INVERT BEAM	88	89	-	-	
	INVERT ALL	90	91	-	-	

Control Channel

Function		8 bit value		16 bit value		Note
		From	To	From	To	
STANDALONE	MASTER	92	93	-	-	
	MASTER NO DMX	94	95	-	-	
	SLAVE	96	97	-	-	
	TOUR FX	98	99	-	-	
	HSI	100	101	-	-	
	FIXED COLORS	102	103	-	-	
	WHITE PRESETS	104	105	-	-	
	COLOR MACRO	106	107	-	-	
	MANUAL COLORS	108	109	-	-	
FAN MODE	CO AUTO	110	111	-	-	
	CO HIGH	112	113	-	-	
	CO SILENT 1	114	115	-	-	
	CO SILENT 2	116	117	-	-	
	CO OFF	118	119	-	-	
	DO AUTO	120	121	-	-	
	DO HIGH	122	123	-	-	
	DO SILENT 1	124	125	-	-	
	DO SILENT 2	126	127	-	-	
	DO OFF	128	129	-	-	
CROSSFADE TO PIXEL ENGINE TYPE	OFF	130	131	-	-	
	FOLLOW DIMMER SPEED PLATE	132	133	-	-	
DIMMER CURVE BEAM	LINEAR	134	135	-	-	
	S-CURVE	136	137	-	-	
	SQUARE LAW	138	139	-	-	
	INVERSE SQUARE LAW	140	141	-	-	
	HIGH RES@LOW	142	143	-	-	
DIMMER SPEED BEAM	AUTO	144	145	-	-	
	FAST	146	147	-	-	
	MEDIUM	148	149	-	-	
		150	151	-	-	
	OFF	152	153	-	-	
TUNGSTEN EMULATION	ON	154	155	-	-	
	OFF	156	157	-	-	
Reserved		158	249	-	-	
Reset dimmer setting to defaults		250	251	-	-	
Reset all channel controlled		252	253	-	-	
Reserved		254	255	-	-	