

WONDER (FPR)

DMX PROTOCOL

38 CHANNELS MODE

1 PAN msb
 2 PAN lsb
 3 TILT msb
 4 TILT lsb
 5 SPEED MOVEMENT
 6 PAN FPR
 7 SHUTTER
 8 DIMMER
 9 **RED** CENTER
 10 **GREEN** CENTER
 11 **BLUE** CENTER
 12 **WHITE** CENTER
 13 **RED** SECTOR 1
 14 **GREEN** SECTOR 1
 15 **BLUE** SECTOR 1
 16 **WHITE** SECTOR 1
 17 **RED** SECTOR 2
 18 **GREEN** SECTOR 2
 19 **BLUE** SECTOR 2
 20 **WHITE** SECTOR 2
 21 **RED** SECTOR 3
 22 **GREEN** SECTOR 3
 23 **BLUE** SECTOR 3
 24 **WHITE** SECTOR 3
 25 WHITE PREPROGRAMMED
 26 CTC
 27 MACROS
 28 MACROS SPEED CONTROL
 29 FUNCTIONS
 30 ZOOM CENTRE / GLOBAL ZOOM
 31 ZOOM SECTORS
 32 ZOOM MODE
 33 SERVICE
 34 RESET
 35 SHUTTER CENTER
 36 SHUTTER SECTOR 1
 37 SHUTTER SECTOR 2
 38 SHUTTER SECTOR 3

34 CHANNELS MODE

1 PAN msb
 2 PAN lsb
 3 TILT msb
 4 TILT lsb
 5 SPEED MOVEMENT
 6 PAN FPR
 7 SHUTTER
 8 DIMMER
 9 **RED** CENTER
 10 **GREEN** CENTER
 11 **BLUE** CENTER
 12 **WHITE** CENTER
 13 **RED** SECTOR 1
 14 **GREEN** SECTOR 1
 15 **BLUE** SECTOR 1
 16 **WHITE** SECTOR 1
 17 **RED** SECTOR 2
 18 **GREEN** SECTOR 2
 19 **BLUE** SECTOR 2
 20 **WHITE** SECTOR 2
 21 **RED** SECTOR 3
 22 **GREEN** SECTOR 3
 23 **BLUE** SECTOR 3
 24 **WHITE** SECTOR 3
 25 WHITE PREPROGRAMMED
 26 CTC
 27 MACROS
 28 MACROS SPEED CONTROL
 29 FUNCTIONS
 30 ZOOM CENTRE / GLOBAL ZOOM
 31 ZOOM SECTORS
 32 ZOOM MODE
 33 SERVICE
 34 RESET

20 CHANNELS MODE

1 PAN msb
 2 PAN lsb
 3 TILT msb
 4 TILT lsb
 5 SPEED MOVEMENT
 6 PAN FPR
 7 NO FUNCTION
 8 SHUTTER
 9 DIMMER
 10 **RED**
 11 **GREEN**
 12 **BLUE**
 13 **WHITE**
 14 WHITE PREPROGRAMMED
 15 CTC
 16 MACROS
 17 FUNCTIONS
 18 ZOOM
 19 MACROS SPEED CONTROL
 20 RESET

DMX CHANNEL	1	Parameter: PAN msb
DMX CHANNEL	2	Parameter: PAN lsb

DMX CHANNEL	3	Parameter: TILT msb
DMX CHANNEL	4	Parameter: TILT lsb

DMX CHANNEL	5	Parameter: SPEED MOVEMENT
DMX value	Function	
000-010	Standard	
011-025	Fast movement	
026-127	Vector mode from fast to slow	
128-247	Variable time reaction to dmx signal (fast to slow)	
248-255	Silent movement	

DMX CHANNEL	6	Parameter: PAN FAR
DMX value	Function	
000-010	Position mode 540° (standard path)	
011-020	Position mode 360° (1 turn)	
021-030	Position mode 720° (2 turns)	
031-040	Position mode 1080° (3 turns)	
041-050	Position mode 1440° (4 turns)	
051-060	Position mode 1800° (5 turns)	
061-070	Position mode 2160° (6 turns)	
071-080	Position mode 2520° (7 turns)	
081-090	Position mode 2880° (8 turns)	
091-100	Position mode 3240° (9 turns)	
101-110	Position mode 3600° (10 turns)	
111-120	Position mode 360° smart path	
121-182	Forward spin rotation speed from max to min	
183-193	Stop	
194-255	Reverse spin rotation speed from min to max	

DMX CHANNEL	7	Parameter: SHUTTER
DMX value	Function	
000-009	Black-out	
010-019	Open	
020-029	Black-out	
030-034	Strobe speed 1 (1 flash/sec)	
035-039	Strobe speed 2 (2 flash/sec)	
040-044	Strobe speed 3 (3 flash/sec)	
045-049	Strobe speed 4 (4 flash/sec)	
050-054	Strobe speed 5 (5 flash/sec)	
055-059	Strobe speed 6 (6 flash/sec)	
060-064	Strobe speed 7 (7 flash/sec)	
065-069	Strobe speed 8 (8 flash/sec)	
070-074	Strobe speed 9 (10 flash/sec)	
075-079	Strobe speed 10 (12 flash/sec)	
080-084	Strobe speed 11 (14 flash/sec)	
085-089	Strobe speed 12 (16 flash/sec)	
090-094	Strobe speed 13 (18 flash/sec)	
095-099	Strobe speed 14 (20 flash/sec)	
100-104	Strobe speed 15 (22 flash/sec)	
105-109	Strobe speed 16 (25 flash/sec)	
110-114	Strobe speed 17 (30 flash/sec)	
115-119	Strobe speed 18 (35 flash/sec)	
120-149	Pulse UP (42.6s-120ms)	
150-179	Pulse DOWN (42.6s-120ms)	
180-184	Random strobe effect (all zones together) (dimmer, red, green, blue, white, macros channels active)	
185-189	Full independent random strobe effect (all zones together) (dimmer, red, green, blue, white, macros channels disabled)	
190-194	Random zone strobe effect	
195-199	Random zone + random strobe effect	
200-214	Strobe effect centre zone from min to max	
215-229	Strobe effect perimeter zones from min to max	
230-255	Open	

DMX CHANNEL	8	Parameter: DIMMER
DMX value	Function	
000-255	Proportional dimmer	

DMX CHANNEL	9	Parameter: RED CENTRE
DMX CHANNEL	10	Parameter: GREEN CENTRE
DMX CHANNEL	11	Parameter: BLUE CENTRE
DMX CHANNEL	12	Parameter: WHITE CENTRE
DMX CHANNEL	13	Parameter: RED SECTOR 1
DMX CHANNEL	14	Parameter: GREEN SECTOR 1
DMX CHANNEL	15	Parameter: BLUE SECTOR 1
DMX CHANNEL	16	Parameter: WHITE SECTOR 1
DMX CHANNEL	17	Parameter: RED SECTOR 2
DMX CHANNEL	18	Parameter: GREEN SECTOR 2
DMX CHANNEL	19	Parameter: BLUE SECTOR 2
DMX CHANNEL	20	Parameter: WHITE SECTOR 2
DMX CHANNEL	21	Parameter: RED SECTOR 3
DMX CHANNEL	22	Parameter: GREEN SECTOR 3
DMX CHANNEL	23	Parameter: BLUE SECTOR 3
DMX CHANNEL	24	Parameter: WHITE SECTOR 3
DMX value	Function	
000-255	Proportional colour	

DMX CHANNEL	25	Parameter: WHITE PREPROGRAMMED (White at diff. temperature)
DMX value	Function	
000-055	No function	
056-105	Full (red-green-blue at full)	
106-155	White DTS	
156-205	Custom White Create (RGB levels selectable by DMX)	
206-255	White CTC (channel 26 CTC enabled)	

DMX CHANNEL	26	Parameter: CTC (Colour Temperature Correction)
IF CHANNEL 25 WHITE PREPROGRAMMED = WHITE CTC (DMX range value 206-255)		
DMX value	Function	
000-255	Linear control temperature correction	
	<u>WONDER:</u>	<u>WONDER CT:</u>
	000 = 2700°K	000 = 2700°K
	255 = 8000°K	255 = 6500°K

DMX CHANNEL	27	Parameter: MACROS
DMX value	Function	
000-014	No function	
015-024	Macro 1 (static)	
025-034	Macro 2 (static)	
035-044	Macro 3 (static)	
045-054	Macro 4 (static)	
055-064	Macro 5 (static)	
065-074	Macro 6 (static)	
075-084	Macro 7 (static)	
085-094	Macro 8 (static)	
095-104	Macro 9 (static)	
105-114	Macro 10 (static)	
115-124	Macro 11 (static)	
125-134	Macro 12 (static)	
135-144	Macro 13 (static)	
145-154	Macro 14 (static)	
155-164	Macro 15 (static)	
165-174	Macro 16 (static)	
175-184	Rainbow Effect	(speed by channel 28)
185-189	Dynamic Effect 1 (circle)	(speed by channel 28)
190-194	Dynamic Effect 2 (blue & white)	(speed by channel 28)
195-199	Dynamic Effect 3 (red & white)	(speed by channel 28)
200-204	Dynamic Effect 4 (blue & red)	(speed by channel 28)
205-209	Dynamic Effect 5 (random full rgbw)	(speed by channel 28)
210-214	Dynamic Effect 6 (random yellow)	(speed by channel 28)
215-219	Dynamic Effect 7 (random cyan)	(speed by channel 28)
220-224	Dynamic Effect 8 (random magenta)	(speed by channel 28)
225-229	Dynamic Effect 9 (random green)	(speed by channel 28)
230-234	Dynamic Effect 10 (random red)	(speed by channel 28)
235-239	Dynamic Effect 11 (random blue)	(speed by channel 28)
240-244	Dynamic Effect 12 (random general)	(speed by channel 28)
245-249	Dynamic Effect 13 (not used)	(speed by channel 28)
250-255	Dynamic Effect 14 (not used)	(speed by channel 28)

DMX CHANNEL	28	Parameter: MACROS/SCENES SPEED CONTROL
Active only if MACROS channel 27 between DMX values 175-255		
DMX value	Function	
000-014	Speed 1	(10 X)
015-029	Speed 2	(8 X)
030-044	Speed 3	(6 X)
045-059	Speed 4	(5 X)
060-074	Speed 5	(4 X)
075-089	Speed 6	(3.5 X)
090-104	Speed 7	(3 X)
105-119	Speed 8	(2.5 X)
120-134	Speed 9	(2 X)
135-149	Speed 10	(1.5 X)
150-164	Speed 11	(1 X)
165-179	Speed 12	(0.8 X)
180-194	Speed 13	(0.5 X)
195-209	Speed 14	(0.2 X)
210-224	Speed 15	(0.1 X)
225-239	Speed 16	(0.03 X)
240-255	Speed 17	(0.01 X)

DMX CHANNEL	29	Parameter: FUNCTIONS (Recall,Create,Store Custom White)
IF CHANNEL 25 WHITE PREPROGRAMMED = CUSTOM WHITE (DMX range value 156-205)		
DMX value	Function	
000-079	Custom White Recall	
080-160	Custom White Create (Enable Custom White Creation)	
161-255	Custom White Store (Store the Custom White created)	

DMX CHANNEL	30	Parameter: ZOOM CENTRE / GLOBAL ZOOM
IF CHANNEL 32 ZOOM MODE = INDEPENDENT ZOOM CONTROL (Dmx range value 000-127)		
DMX value	Function	
000-255	ZOOM CENTRE linear control from Narrow to Wide(4°-50°)	

IF CHANNEL 32 ZOOM MODE = GLOBAL ZOOM CONTROL (Dmx range value 128-255)		
DMX value	Function	
000-255	GLOBAL ZOOM (Zoom Centre + Zoom Sectors) linear control from Narrow to Wide(8°-50°)	

DMX CHANNEL	31	Parameter: ZOOM SECTORS
IF CHANNEL 32 ZOOM MODE = INDEPENDENT ZOOM CONTROL (Dmx range value 000-127)		
DMX value	Function	
000-255	ZOOM SECTORS linear control from Narrow to Wide(8°-50°)	

IF CHANNEL 32 ZOOM MODE = GLOBAL ZOOM CONTROL (Dmx range value 128-255)		
DMX value	Function	
000-255	No Function	

DMX CHANNEL	32	Parameter: ZOOM MODE
DMX value	Function	
000-127	Independent Zoom cotrol: Zoom Centre Ch30 and Zoom Sectors Ch31 enabled	
128-255	Global Zoom control on Ch30 enabled; Zoom Sectors Ch31 disabled	

DMX CHANNEL	33	Parameter: SERVICE
To activate following functions, stop in DMX value for at least 5 seconds. FUNCTION channel ch29 must be at range 161-255. WHITE PREPROGRAMMED channel ch25 must be at range 000-055. Corresponding DISPLAY MENU settings, will be overwritten.		
DMX value	Function	
000-014	No Function	
015-024	SMOOTH OFF	
025-034	SMOOTH 4	
035-044	SMOOTH 8	
045-054	SMOOTH 15	
055-064	SMOOTH 20	
065-074	GAMMA CORRECTION 2.0	
075-084	GAMMA CORRECTION LINEAR	
085-094	OUTPUT FREQUENCY 610 Hz	
095-104	OUTPUT FREQUENCY 1500 Hz	
105-114	OUTPUT FREQUENCY 3000 Hz	
115-124	OUTPUT FREQUENCY 6000 Hz	
125-134	OUTPUT FREQUENCY 9000 Hz	
135-144	BOOST ON	
145-154	BOOST OFF	
155-164	WIRELESS ON	
165-174	WIRELESS UNLINK	
175-184	WIRELESS OFF	
185-194	PAN NORMAL	
195-204	PAN REVERSE	
205-214	TILT NORMAL	
215-224	TILT REVERSE	
225-234	GLOBAL RGBW	
235-244	Fans Speed Studio Mode	
245-255	Fans Speed Live Mode	

DMX CHANNEL	34	Parameter: RESET
DMX value	Function	
000-015	No Function	
016-075	PAN-TILT reset	
076-135	ZOOM CENTER reset	
136-200	ZOOM SECTORS reset	
201-239	ZOOM CENTER + ZOOM SECTORS reset	
240-255	TOTAL reset	

DMX CHANNEL	35	Parameter: SHUTTER CENTER
	36	Parameter: SHUTTER SECTOR 1
	37	Parameter: SHUTTER SECTOR 2
	38	Parameter: SHUTTER SECTOR 3
DMX value	Function	
000-009	Black-out	
010-019	Open	
020-029	Black-out	
030-034	Strobe speed 1 (1 flash/sec)	
035-039	Strobe speed 2 (2 flash/sec)	
040-044	Strobe speed 3 (3 flash/sec)	
045-049	Strobe speed 4 (4 flash/sec)	
050-054	Strobe speed 5 (5 flash/sec)	
055-059	Strobe speed 6 (6 flash/sec)	
060-064	Strobe speed 7 (7 flash/sec)	
065-069	Strobe speed 8 (8 flash/sec)	
070-074	Strobe speed 9 (10 flash/sec)	
075-079	Strobe speed 10 (12 flash/sec)	
080-084	Strobe speed 11 (14 flash/sec)	
085-089	Strobe speed 12 (16 flash/sec)	
090-094	Strobe speed 13 (18 flash/sec)	
095-099	Strobe speed 14 (20 flash/sec)	
100-104	Strobe speed 15 (22 flash/sec)	
105-109	Strobe speed 16 (25 flash/sec)	
110-114	Strobe speed 17 (30 flash/sec)	
115-119	Strobe speed 18 (35 flash/sec)	
120-179	Black-out	
180-184	Random strobe	
185-255	Open	