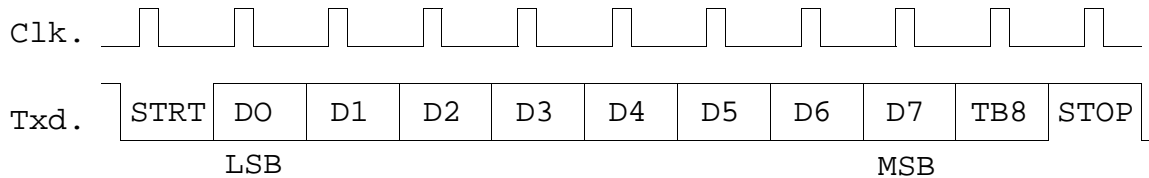


Martin Protocol:**MAC 500, version 1****19 sept 1997**

Hardware Protocol:

Hardware: SN75176 Transceiver (Texas) RS-485 Balanced

Baud rate:187.5 Khz. 11 bit frame UART



TB8: True = Address
False = Data

Software Protocol:

Address = 8 * (Unit DIP-switch address number - 1) + OFFSET

Effect	OFF-SET	Legal Data
MSB: Color 1 time	0	0..255, 0..25.5 Sec, 0 : BO while moving
LSB: Color 1		0..90, 20 = color 2 30 = color 3 40 = color 4 50 = color 5 60 = color 6 70 = color 7 80 = color 8 90 = color 9 0 = open 10 = color 1
MSB: Color 2 time	1	0..255, 0..25.5 Sec, 0 : BO while moving
LSB: Color 2		0..90, 20 = color 2 30 = color 3 40 = color 4 50 = color 5 60 = color 6 70 = color 7 80 = color 8 90 = color 9 0 = open 10 = color 1
MSB: Iris time	2	0..255 0..25.5 Sec
LSB: Iris		0..127, 0 = open
MSB: Iris pulse	3	bit 5-6 0 : Disable 32 : Opening 64 : Closing bit 0-4 0-31 : speed fast -> slow
LSB: Dimmer pulse		bit 5-6 0 : Disable 32 : Opening 64 : Closing bit 0-4 0-31 : speed fast -> slow
MSB: Pan MSB	4	0..255 128 = Neutral
LSB: Pan LSB		0..127 15 bit, 440 deg.

MSB: Tilt MSB LSB: Tilt LSB	5	0..255 128 = Neutral 0..88 15 bit, 306 deg.
MSB: Pan Time LSB: Fixed gobo	6	0..255, 0..25.5 Sec, 0 : BO while moving 0..90, 0 = open 10 = gobo 1 20 = gobo 2 30 = gobo 3 40 = gobo 4 50 = gobo 5 60 = gobo 6 70 = gobo 7 80 = gobo 8 90 = gobo 9
MSB: Tilt Time LSB: Rot. Gobo Selection Gobo shake (Fixed gobo)	7	0..255, 0..25.5 Sec, 0 : BO while moving Bit 0-2: 0 : Open Gobo 1 : Gobo1 2 : Gobo2 3 : Gobo3 4 : Gobo4 5 : Gobo5 Bit 3-6: 0..15, 0 = disable
MSB: Focus LSB: Random strobe / Random color	8	0..255 far -> near 127 = default 0 : Random strobe and random color off bit 0-2: 1 : Random strobe slow 2 : Random strobe medium 3 : Random strobe fast bit 3-5: 3 : Random color slow 4 : Random color medium 5 : Random color fast
MSB: Gobo Rota. Speed LSB: Boot Request Sequence Autodetect Enable	9	0..127, 0 = BO while changing gobo and indexing Request string: "MA500",0,0,0,0,0 Decimal values: 77,65,53,48,48,0,0,0,0,0 This channel is only used for special func- tions. For normal operation the value for this channel should be 0. Request string: "MA500",0,0,0,0,"A" Decimal values: 77,65,53,48,48,0,0,0,0,65

MSB: Focus time	10	0..255, 0..25.5 Sec
LSB: Color 1 / 2 Cont.rot. Dir.		0 : Disable bit 0 (1) : Color 1 CW bit 1 (2) : Color 1 CCW bit 2 (4) : Color 2 CW bit 3 (8) : Color 2 CCW
MSB: Color 1 Cont.rot. Speed	11	0..127 Fast->Slow
LSB: Color 2 Cont.rot. Speed		0..127 Fast->Slow
MSB: Dimmer	12	0..255, 0..100%, 0 : Default (Light Off)
LSB: Prism		0 : Disable bit 0 (1) : CW bit 1 (2) : CCW
MSB: Dimmer time	13	0..255, 0..25.5 Sec
LSB: Prism rot. Speed		0..127 Fast->Slow
MSB: Gobo Rotation Direction Gobo Index	14	253 : Stop 254 : Continuous Rotation CW 255 : Continuous Rotation CCW 0..199 : Index position - 3.6 deg/cnt
LSB:		0..127 : Index position - 0.028125 deg/cnt Default index at 100 0
MSB: Special Cmd.	15	<i>bit 0 (1) : Free</i> <i>bit 1 (2) : Free</i> <i>bit 2 (4) : Free</i> <i>bit 3 (8) : Free</i> <i>bit 4 (16) : Lamp Power OFF</i> <i>bit 5 (32) : Lamp Power ON</i> <i>bit 6 (64) : Reset Fixture</i> <i>bit 7 (128) : BO speed fixed gobo</i>
LSB: Strobe		0..63 Fast->Slow 0 = Disable

Note:MSB refers to Most Significant Byte

LSB refers to Least Significant Byte