

Register NAME	MODBUS Register	Register VALUE	NEW REAL VALUE	NEW VALUE	DATA TYPE	DO WRITE
CONVERTER STATUS						
DIP SWITCH	3x10100 4x10100 I:10099	65,0x0041 B:00 41			UINT16 R/O	
Returns the current setting of the Dip switches. For ULTRA SLIM IOs The current value of the DIP switches: Bit 0: DIP Switch 1 (=0:OFF, =1:ON) Bit 1: DIP Switch 2 (=0:OFF, =1:ON) Bit 2: DIP Switch 3 (=0:OFF, =1:ON) Bit 3: DIP Switch 4 (=0:OFF, =1:ON) For BIG IOs: The current value of the DIP switches: Bit 0: DIP Switch 1 (=0:OFF, =1:ON) Bit 1: DIP Switch 2 (=0:OFF, =1:ON) Bit 2: DIP Switch 3 (=0:OFF, =1:ON) Bit 3: DIP Switch 4 (=0:OFF, =1:ON) Bit 4: DIP Switch 5 (=0:OFF, =1:ON) Bit 5: DIP Switch 6 (=0:OFF, =1:ON) Bit 6: DIP Switch 7 (=0:OFF, =1:ON) Bit 7: DIP Switch 8 (=0:OFF, =1:ON)						
PRODUCT DATA						
HW_GROUP	3x65201 4x65201 I:65200	16384,0x4000 B:40 00			UINT16 R/O	
This is the group of hardware of the current product						
SW_GROUP	3x65202 4x65202 I:65201	32783,0x800F B:80 0F			UINT16 R/O	
This is the group of software of the current product						
SW_VERSION	3x65203 4x65203 I:65202	4608,0x1200 B:12 00			UINT16 R/O	
SW VERSION:1.2.0						
This is the current software version of the firmware						
SW_AUTHOR	3x65204 4x65204 I:65203	18771,0x4953 B:49 53			UINT16 R/O	
This is the current software author of the firmware						
MODBUS SETTINGS						
UNIT_ID	3x65222 4x65222 I:65221	1,0x0001 B:00 01			UINT16 R/O	

		UNIT ID:1				
If the host reads this register, the current defined unit ID is returned.						
FLASH UNIT_ID	3x65223 4x65223 I:65222	15,0x000F B:00 0F		27	UINT16 R/W	NO
		UNIT ID:15				
If the host reads this register, the current defined unit ID from the FLASH is returned. This UnitID is used if DIP switch for UnitID is set to 15						
HINT:This settings will be active after you repower or reset your device !!						
BAUD_RATE	3x65224 4x65224 I:65223	115200,0x0001C200 B:00 01 C2 00	57600	57600	UINT32 R/W	NO
		115200Bd		ENTER BAUD RATE		
This is the current configured baud rate in the FLASH For ULTRA SLIM IOs RESI-xxx-SIO: This baudrate is only used, if DIP switch mode DIP1=ON+DIP2=ON (BR) (default is 57600bd) For BIG IOs RESI-xxx-SIO: This baudrate is only used, if DIP switch mode DIP7=ON (PARAMETER) (default is 57600bd)						
Valid baud rates are: 300bd, 600bd, 900bd, 1200bd, 2400bd, 4800bd, 9600bd, 19200bd, 38400bd, 57600bd, 115200bd, 128000bd 230400bd, 250000bd, 256000bd						
HINT:This settings will be active after you repower or reset your device !!						
PARITY	3x65226 4x65226 I:65225	0,0x0000 B:00 00		1:EVENT PARITY	UINT16 R/W	NO
		NO PARITY		SELECT PARITY		
If the register is read out, the currently set parity of the serial interface is returned. Writing a value to this register will change the new parity in FLASH. This will only take effect after a restart of the module. This can be triggered by writing to the RESET SYSTEM register.						
Parity values are 0: no parity 1: even parity 2: odd parity						
STOP BITS	3x65227 4x65227 I:65226	1,0x0001 B:00 01		2:TWO STOPBITS	UINT16 R/W	NO
		ONE STOPBIT		SELECT STOPBITS		
If the register is read out, the currently set number of stop bits of the serial interface is returned. Writing a value to this register will change the new number of stop bits in the FLASH. This will only take effect after a restart of the module. This can be triggered by writing to the RESET SYSTEM register.						
Values for stop bits are 1: one stop bit 2: two stop bits						
MODBUS TIMING	3x65228 4x65228 I:65227	0,0x0000 B:00 00		10	UINT16 R/W	NO
		Actual timing:0ms				

If the host reads this register, the current defined timing for MODBUS telegrams is returned. This timing is a time in ms which extends the standard 1.5 character timeout between two consecutive bytes on the serial line.
If you write a new value to this register, the new settings are stored into the internal FLASH. Reboot the device to activate the new settings.

MODBUS WATCHDOG TIME	3x65229 4x65229 I:65228	0,0x0000 B:00 00		50	UINT16 R/W	YES
		Actual watchdog time in 1/100s:0 -> 0,0s				

Writing a value onto this register defines a new time for the internal communication watchdog timer. The value is a timespan in 1/100s.

=0: The communication watchdog is disabled

=1..65535: Communication watchdog will be triggered after x 1/100s pause on communication line

In case of an communication watchdog, the module sets all outputs to the states defined in the configuration output registers

Reading this register will return the current stored time from the internal FLASH

CPU DATA

SERIAL1	3x65521 4x65521 I:65520	49,0x0031 B:00 31			UINT16 R/O	
---------	-------------------------------	----------------------	--	--	---------------	--

Serial number of module as 96 bit unsigned integer number

SERIAL2	3x65522 4x65522 I:65521	62,0x003E B:00 3E			UINT16 R/O	
---------	-------------------------------	----------------------	--	--	---------------	--

SERIAL3	3x65523 4x65523 I:65522	21258,0x530A B:53 0A			UINT16 R/O	
---------	-------------------------------	-------------------------	--	--	---------------	--

SERIAL4	3x65524 4x65524 I:65523	18005,0x4655 B:46 55			UINT16 R/O	
---------	-------------------------------	-------------------------	--	--	---------------	--

SERIAL5	3x65525 4x65525 I:65524	12343,0x3037 B:30 37			UINT16 R/O	
---------	-------------------------------	-------------------------	--	--	---------------	--

SERIAL6	3x65526 4x65526 I:65525	8248,0x2038 B:20 38			UINT16 R/O	
---------	-------------------------------	------------------------	--	--	---------------	--

SERIAL:31003E000A53554637303820

Serial number of module as 96 bit unsigned integer number

CPU TEMPERATURE	3x65527 4x65527 I:65526	3865,0x0F19 B:0F 19			UINT16 R/O	
-----------------	-------------------------------	------------------------	--	--	---------------	--

Current internal temperature of CPU:38,7°C

Current internal temperature of CPU in ° Celsius multiplied by 10.

CPU VOLTAGE	3x65528 4x65528 I:65527	336,0x0150 B:01 50			UINT16 R/O	
-------------	-------------------------------	-----------------------	--	--	---------------	--

Current supply voltage of CPU:3,36V

Current internal supply voltage of CPU in Volt multiplied by 1000.

CPU BATTERY	3x65529 4x65529 I:65528	317,0x013D B:01 3D			UINT16 R/O	
Current battery voltage of CPU:3,17V						
Current internal backup battery voltage of CPU in Volt multiplied by 1000.						
CONVERTER STATUS						
CONVERTER STATUS	3x65534 4x65534 I:65533	0,0x0000 B:00 00			UINT16 R/O	
Current status of the converter						
FACTORY RESET	3x65535 4x65535 I:65534	0,0x0000 B:00 00		1:PERFORM FACTORY RESET	UINT16 R/W	NO
Performs a factory reset of all internal saved parameters						
SOFTWARE RESET						
RESET	1x65536 2x65536 I:65535	0,0x00 B:00		N/A:NO CHANGE	BIT R/W	NO
Performs a software reset, whenever 1 is written to this register. If the host writes to this register 1, the module executes a soft reset (reboot).						
RESET	3x65536 4x65535 I:65535	0,0x0000 B:00 00		N/A:NO CHANGE	UINT16 R/W	NO
Performs a software reset, whenever 1 is written to this register. If the host writes to this register 1, the module executes a soft reset (reboot).						

Command NAME	ASCII command type	ASCII command structure	NEW REAL VALUE	NEW VALUE	DATA TYPE	DO WRITE
ASCII COMMANDS						
HEART BEAT	ASCII READ COMMAND	#HB<CR> Result: #HB<CR>			ASCII	
	TX	#1,HB<CR>				
	RX	#1,HB<CR>				
Sends an Heartbeat to test the communication						
GET VERSION	ASCII READ COMMAND	#VERSION<CR> Result: #VERSION:<VersionHi>,<VersionMed>,<VersionLo><CR>			ASCII	
	TX	#1,VERSION<CR>				
	RX	#1,VERSION:1.2.00<CR>				
		Current SW version:1.2.00				
Returns the version number of the module VersionHi: Version number high (1..255) VersionMed: Version number medium (1..255) VersionLo: Version number low (1..255)						
GET TYPE	ASCII READ COMMAND	#TYPE<CR> Result: #TYPE:<Type><CR>			ASCII	
	TX	#1,TYPE<CR>				
	RX	#1,TYPE:RESI-16RO-SIO<CR>				
		Current module type:RESI-16RO-SIO				
Returns the current module type						
GET FEATURES	ASCII READ COMMAND	#FTRS<CR> Result: #FTRS:<Type><CR>			ASCII	
	TX	#1,FTRS<CR>				
	RX	#1,FTRS:RESI-16RO-SIO,16RO<CR>				
		Current module type:RESI-16RO-SIO				
Returns the current module features						
GET OWNER	ASCII READ COMMAND	#OWNER<CR> Result: #OWNER:<Owner><CR>			ASCII	
	TX	#1,OWNER<CR>				
	RX	#1,OWNER:RESI<CR>				
		Current owner:RESI				
Returns the current owner of the module						

GET CREATOR	ASCII READ COMMAND	#CREATOR<CR> Result: #CREATOR:<Creator><CR>	ASCII	
	TX	#1,CREATOR<CR>		
	RX	#1,CREATOR:DI HC SIGL,MSC<CR>		
		Current creator:DI HC SIGL,MSC		
Returns the current creator of the module				
GET COPYRIGHT	ASCII READ COMMAND	#COPYRIGHT<CR> Result: #COPYRIGHT:<Copyright><CR>	ASCII	
	TX	#1,COPYRIGHT<CR>		
	RX	#1,COPYRIGHT:2015-23 BY RESI AND DI HC SIGL,MSC WWW.RESI.CC<CR>		
		Current copyright:2015-23 BY RESI AND DI HC SIGL,MSC WWW.RESI.CC		
Returns the current copyright of the module				
GET SERIAL NUMBER	ASCII READ COMMAND	#SN<CR> Result: #SN:<Serial><CR>	ASCII	
	TX	#1,SN<CR>		
	RX	#1,SN:31003E000A53554637303820<CR>		
		Current serial number:31003E000A53554637303820		
Returns the current serial number of the module				
GET INTERNAL STATUS	ASCII READ COMMAND	#INTSTAT<CR> Result: #INTSTAT:<Status><CR>	ASCII	
	TX	#1,INTSTAT<CR>		
	RX	#1,INTSTAT:I2C1:0,I2C2:0,FRAM:28<CR>		
Returns the device specific internal status				
GET DIP SWITCH	ASCII READ COMMAND	#GDIP<CR> Result: #GDIP:<DIPSwitchDec>,<DIPSwitchHex><CR>	ASCII	
	TX	#1,GDIP<CR>		
	RX	#1,GDIP:65,0x41<CR>		
		Current DIP SWITCH settings:0100.0001		
Returns the current setting of the Dip switches as decimal number and as hexadecimal number.				
DIPSwitchDec DIPSwitchHex The current value of the DIP switches: Bit 0: DIP Switch 1 (=0:OFF, =1:ON) Bit 1: DIP Switch 2 (=0:OFF, =1:ON) Bit 2: DIP Switch 3 (=0:OFF, =1:ON) Bit 3: DIP Switch 4 (=0:OFF, =1:ON) Bit 4: DIP Switch 5, if available (=0:OFF, =1:ON) Bit 5: DIP Switch 6, if available (=0:OFF, =1:ON) Bit 6: DIP Switch 7, if available (=0:OFF, =1:ON) Bit 7: DIP Switch 8, if available (=0:OFF, =1:ON)				
ASCII COMMANDS				

SET MODBUS ADDRESS	ASCII WRITE COMMAND	#SMBADR:<UNITID> <CR> Result: #OK<CR>	ASCII	NO
	UNITID	123		
	TX	#1,SMBADR:123 <CR>		
	RX	N/A		
<p>Redefines the unit ID of the module. This change will affect the MODBUS/RTU communication immediately. As a Unit IO you can use the values 0dec to 255dec.</p> <p>HINT: The new settings are activated after a system reboot or power off on cycle!</p>				
SET MODBUS BAUDRATE	ASCII WRITE COMMAND	#SMBBAUD:<BAUD> <CR> Result: #OK<CR>	ASCII	NO
	BAUD	128000:128000BD		
	TX	#1,SMBBAUD:128000 <CR>		
	RX	N/A		
<p>Sets a new baud rate in the FLASH For ULTRA SLIM IOs RESI-xxx-SIO: This baudrate is only used, if DIP switch mode DIP1=ON+DIP2=ON (BR) (default is 57600bd) For BIG IOs RESI-xxx-SIO: This baudrate is only used, if DIP switch mode DIP7=ON (PARAMETER) (default is 57600bd) The following baudrates are allowed: 300bd, 600bd, 900bd, 1200bd, 2400bd, 4800bd, 9600bd, 19200bd, 38400bd, 57600bd, 115200bd, 128000bd 230400bd, 250000bd, 256000bd</p> <p>HINT: The new setup parameters will be active after a restart of the module.</p>				
SET MODBUS PARITY	ASCII WRITE COMMAND	#SMBPAR:<PARITY> <CR> Result: #OK<CR>	ASCII	NO
	PARITY	ODD:ODD PARITY		
	TX	#1,SMBPAR:ODD <CR>		
	RX	N/A		
<p>Sets a new parity for the serial interface. MBParity: NONE: no parity EVEN: even parity ODD: odd parity</p> <p>HINT: The new setup parameters will be active after a restart of the module.</p>				
SET MODBUS STOPS	ASCII WRITE COMMAND	#SMBSTOP:<STOPBIT> <CR> Result: #OK<CR>	ASCII	NO
	STOPBIT	TWO:TWO STOPBITS		
	TX	#1,SMBSTOP:TWO <CR>		
	RX	N/A		

Sets a new amount of stop bits for the serial interface.

MBStops

ONE: one stop bit

TWO: two stop bits

HINT: The new setup parameters will be active after a restart of the module.

SET MODBUS PARAMS	ASCII WRITE COMMAND	#SMBPARAMS:<UNITID>,<BAUD>,<PARITY>,<STOPBIT> <CR> Result: #OK <CR>	ASCII	NO
	UNITID	3		
	BAUD	115200:115200BD		
	PARITY	EVEN:EVEN PARITY		
	STOPBIT	TWO:TWO STOPBITS		
	TX	#1,SMBPARAMS:3,115200,EVEN,TWO <CR>		
	RX	N/A		

Sets all parameters for serial interface

GET MODBUS ADDRESS	ASCII READ COMMAND	#GMBADR <CR> Result: #GMBADR:<MBUnitDec>,<MBFLASHDec>,<MBUnitHex>,<MBFLASHHex> <CR>	ASCII	
	TX	#1,GMBADR <CR>		
	RX	#1,GMBADR:1,15,0x1,0xF <CR>		
		Current MODBUS unit ID:1,15,0x1,0xF		

Shows the current used MODBUS/RTU or ASCII unit address and shows also the stored unit address in the FLASH memory, which is only used if the DIP switch for the bus address is set to 0.

MBUnitDec,MBUnitHex

The current used MODBUS/RTU unit or ASCII address for communication

MBFLASHDec,MBFLASHHex

The internal stored MODBUS/RTU unit address or ASCII address from the FLASH memory, if the DIP switch DIP3 is OFF.

GET MODBUS BAUDRATE	ASCII READ COMMAND	#GMBBAUD <CR> Result: #GMBBAUD:<BaudRate> <CR>	ASCII	
	TX	#1,GMBBAUD <CR>		
	RX	#1,GMBBAUD:115200,0x1C200 <CR>		
		Current baudrate:115200,0x1C200		

This is the current configured baud rate in the FLASH

For ULTRA SLIM IOs RESI-xxx-SIO: This baudrate is only used, if DIP switch mode DIP1=ON+DIP2=ON (BR) (default is 57600bd)

For BIG IOs RESI-xxx-SIO: This baudrate is only used, if DIP switch mode DIP7=ON (PARAMETER) (default is 57600bd)

The following baudrates are allowed:

300bd, 600bd, 900bd, 1200bd, 2400bd, 4800bd,
9600bd, 19200bd, 38400bd, 57600bd, 115200bd, 128000bd
230400bd, 250000bd, 256000bd

GET MODBUS PARITY	ASCII READ COMMAND	#GMBPAR <CR> Result: #GMBPAR:<MBParity> <CR>	ASCII	
	TX	#1,GMBPAR <CR>		
	RX	#1,GMBPAR:NONE <CR>		

		Current parity:NONE		
Shows the current configured parity of the serial interface. MBParity NONE: no parity EVEN: even parity ODD: odd parity				
GET MODBUS STOP	ASCII READ COMMAND	#GMBSTOP<CR> Result: #GMBSTOP:<MBStop> <CR>	ASCII	
	TX	#1,GMBSTOP<CR>		
	RX	#1,GMBPAR:ONE<CR>		
		Current stopbit(s):ONE		
Shows the current configured parity of the serial interface. MBParity NONE: no parity EVEN: even parity ODD: odd parity				
GET MODBUS PARAMS	ASCII READ COMMAND	#GMBPARAMS<CR> Result: #GMBPARAMS:<MBUnitDec>,<MBFLASHDec>,<MBUnitHex>,<MBFLASHHex>,<MBBaudrateDec>,<MBBaudrateHex>,<MBParity>,<MBStops> <CR>	ASCII	
	TX	#1,GMBPARAMS<CR>		
	RX	#1,GMBADR:1,0x1,15,0xF,115200,0x1C200,NONE,ONE<CR>		
		Current MODBUS unit ID used:1		
		Current MODBUS unit ID in FLASH:15		
		Current baudrate in FLASH:115200		
		Current parity in FLASH:NONE		
		Current stopbit(s) in FLASH:ONE		
Returns the complete settings for serial interface				
ASCII COMMANDS				
RESET	ASCII WRITE COMMAND	#RST<CR> Result: #OK<CR>	ASCII	NO
	TX	#1,RST<CR>		
	RX	N/A		
Executes a software reset (Reboot) of the module.				
FACTORY RESET	ASCII WRITE COMMAND	#FRST<CR> Result: #OK<CR>	ASCII	NO
	TX	#1,FRST<CR>		
	RX	N/A		
Performs a factory reset of all internal saved parameters				
SET MODBUS WATCHDOG TIMER	ASCII WRITE COMMAND	#SMBWATCHDOG:<WDTIME> <CR> Result: #OK<CR>	ASCII	YES

	WDTIME	100		
	TX	#1,SMBWATCHDOG:100<CR>		
	RX	#1,OK<CR>		
Enables or disables the WATCHDOG Timer for the IO module. WDTIME: 1..65535: Time for Watchdog in 1/100s =0: Watchdog is deactivated HINT: The Watchdog is internally handled every 100ms. If the IO module receives no valid frame within this time period, the outputs are set to predefined values!				
GET MODBUS WATCHDOG TIMER	ASCII READ COMMAND	#GMBWATCHDOG<CR> Result: #GMBWATCHDOG:<WDTIME> <CR>	ASCII	
	TX	#1,GMBWATCHDOG<CR>		
	RX	#1,GMBWATCHDOG:100,0x64<CR>		
		Current watchdog time:100 -> 10,0s		
Shows the actual configured time for the telegram watchdog function of the IO module. WDTIME: 1..65535: Time for Watchdog in 1/100s =0: Watchdog is deactivated HINT: The Watchdog is internally handled every 100ms. If the IO module receives no valid frame within this time period, the outputs are set to predefined values!				
CPU PARAMETERS				
GET CPU VOLTAGE	ASCII READ COMMAND	#GCPUTEMP<CR> Result: #GCPUTEMP:<CPUTemp> <CR>	ASCII	
	TX	#1,GCPUTEMP<CR>		
	RX	#1,GCPUTEMP:38.7842<CR>		
		Current internal temperature of CPU:38.7842°C		
Current internal temperature of CPU in ° Celsius.				
GET CPU VOLTAGE	ASCII READ COMMAND	#GCPUVOLT<CR> Result: #GCPUVOLT:<CPUVoltage> <CR>	ASCII	
	TX	#1,GCPUVOLT<CR>		
	RX	#1,GCPUVOLT:3.3632<CR>		
		Current supply voltage of CPU:3.3632V		
Current internal supply voltage of CPU in Volt.				
GET CPU BATTERY	ASCII READ COMMAND	#GCPUBACK<CR> Result: #GCPUBACK:<CPUBackupVoltage> <CR>	ASCII	
	TX	#1,GCPUBACK<CR>		
	RX	#1,GCPUBATT:3.1793<CR>		
		Current backup voltage of CPU:3.1793V		
Current internal backup capacitor voltage of CPU in Volt.				

Register NAME Command NAME	MODBUS Register ASCII Command	Register VALUE ASCII Command	NEW REAL VALUE	NEW VALUE	DATA TYPE	DO WRITE
LED GROUPs:STATUS of FADING						
LED GROUP1 IS FADING	1x00001 2x00001 I:0	0,0x00 B:00			BIT R/O	
LED1:Current fading state of group:0=NO FADING						
Is currently a fading in the LED group LED1 active =0:no fading is active =1:Fading is active						
LED GROUP2 IS FADING	1x00002 2x00002 I:1	0,0x00 B:00			BIT R/O	
LED2:Current fading state of group:0=NO FADING						
LED GROUP3 IS FADING	1x00003 2x00003 I:2	0,0x00 B:00			BIT R/O	
LED3:Current fading state of group:0=NO FADING						
LED GROUP4 IS FADING	1x00004 2x00004 I:3	0,0x00 B:00			BIT R/O	
LED4:Current fading state of group:0=NO FADING						
LED GROUPs:IS LED GROUP ON						
LED GROUP1 IS ON	1x00001 2x00001 I:0	0,0x00 B:00			BIT R/O	
LED1:Current fading state of group:0=NO FADING						
Is currently one of the three channels of the LED group on (CLOx>0) =0:no all three channels are OFF (=0) =1:Yes, at least one channel is ON (>0)						
LED GROUP2 IS ON	1x00002 2x00002 I:1	0,0x00 B:00			BIT R/O	
LED2:Current fading state of group:0=NO FADING						
LED GROUP3 IS ON	1x00003 2x00003 I:2	0,0x00 B:00			BIT R/O	
LED3:Current fading state of group:0=NO FADING						
LED GROUP4 IS ON	1x00004 2x00004 I:3	0,0x00 B:00			BIT R/O	
LED4:Current fading state of group:0=NO FADING						

LED OUTPUTS						
LED1:OUTPUT A: LO1	3x00001 4x00001 I:0	0,0x0000 B:00 00	410	10,0	UINT16 R/W	YES
		LED1:Current brightness setpoint for PWM output A: 0->0,00%				
Current set point of LED group LEDx PWM output y. 0..4095 or 0x000...0xFFFF for 0% to 100% brightness						
If you write onto this register, you define a new set point value for the PWM output						
LED1:OUTPUT B: LO2	3x00002 4x00002 I:1	4095,0x0FFF B:0F FF	410	10,0	UINT16 R/W	YES
		LED1:Current brightness setpoint for PWM output B: 4095->100,00%				
LED1:OUTPUT C: LO3	3x00003 4x00003 I:2	38,0x0026 B:00 26	410	10,0	UINT16 R/W	YES
		LED1:Current brightness setpoint for PWM output C: 38->0,93%				
LED2:OUTPUT A: LO4	3x00004 4x00004 I:3	0,0x0000 B:00 00	410	10,0	UINT16 R/W	YES
		LED2:Current brightness setpoint for PWM output A: 0->0,00%				
LED2:OUTPUT B: LO5	3x00005 4x00005 I:4	0,0x0000 B:00 00	410	10,0	UINT16 R/W	YES
		LED2:Current brightness setpoint for PWM output B: 0->0,00%				
LED2:OUTPUT C: LO6	3x00006 4x00006 I:5	0,0x0000 B:00 00	410	10,0	UINT16 R/W	YES
		LED2:Current brightness setpoint for PWM output C: 0->0,00%				
LED3:OUTPUT A: LO7	3x00007 4x00007 I:6	0,0x0000 B:00 00	410	10,0	UINT16 R/W	YES
		LED3:Current brightness setpoint for PWM output A: 0->0,00%				
LED3:OUTPUT B: LO8	3x00008 4x00008 I:7	0,0x0000 B:00 00	410	10,0	UINT16 R/W	YES
		LED3:Current brightness setpoint for PWM output B: 0->0,00%				
LED3:OUTPUT C: LO9	3x00009 4x00009 I:8	0,0x0000 B:00 00	410	10,0	UINT16 R/W	YES
		LED3:Current brightness setpoint for PWM output C: 0->0,00%				
LED4:OUTPUT A: LO10	3x00010 4x00010 I:9	0,0x0000 B:00 00	410	10,0	UINT16 R/W	YES
		LED4:Current brightness setpoint for PWM output A: 0->0,00%				

LED4:OUTPUT B: LO11	3x00011 4x00011 I:10	0,0x0000 B:00 00	410	10,0	UINT16 R/W	YES
LED4:Current brightness setpoint for PWM output B: 0->0,00%						
LED4:OUTPUT C: LO12	3x00012 4x00012 I:11	0,0x0000 B:00 00	410	10,0	UINT16 R/W	YES
LED4:Current brightness setpoint for PWM output C: 0->0,00%						
LED GROUPS:MODES						
LED GROUP LED1: MODE	3x00013 4x00013 I:12	1,0x0001 B:00 01		1:ON	UINT16 R/W	YES
LED1:Current mode for group: 1:ON						
<p>Current mode of LED group LED1</p> <p>=0:OFF: It does not matter which values are stored in the set point registers for the outputs A, B and C, the real output values of the LED group are always 0.</p> <p>=1:ON: The module outputs immediately the values of the three set point registers LOx A, LOx B and LOx C to the three PWM outputs.</p> <p>=2:FLASH: For the defined time span MINTIMEx in 1/10s all three outputs of the LED group are set to the set point values LOx A, LOx B and LOx C. Then the three outputs are set to 0 for the timespan defined in the register MAXTIMEx in 1/10s. This cycle is repeated endlessly.</p> <p>=3: FADE: if you write a new value into one of the three output set point registers LOx A, LOx B or LOx C, the system increments/decrements every 1/100s the current output values with the value FADESPEEDx to the new setpoint values, until the output registers CLOx A=LOx A and CLOx B=LOx B and CLOx C=LOx C. The fadespeed is defined in steps per 1/100s.</p> <p>=4:RANDOM: In this mode the module dices after a random time span in the range of MINTIMEx and MAXTIMEx in seconds three new random values for the registers RLOx A, RLOx B and RLOx C. This rules are used: New diced value for RLOx is between 0 and LOxThen the module fades with the defined FADESPEEDx to the new dimming values RLOx.</p> <p>=5: SEQUENCE: Every channel flashes sequentially for MINTIMEx 1/10s. In between the module switches off all three outputs for MAXTIMEx in 1/10s. If you write onto this register, you define a new mode for this LED group.</p> <p>=6: HSV EFFECTS:This mode activates the HSV effects defined with the HSV MODE registers and HSV EFFECT settings</p>						
LED GROUP LED2: MODE	3x00014 4x00014 I:13	1,0x0001 B:00 01		1:ON	UINT16 R/W	YES
LED2:Current mode for group: 1:ON						
LED GROUP LED3: MODE	3x00015 4x00015 I:14	1,0x0001 B:00 01		1:ON	UINT16 R/W	YES
LED3:Current mode for group: 1:ON						
LED GROUP LED4: MODE	3x00016 4x00016 I:15	1,0x0001 B:00 01		1:ON	UINT16 R/W	YES
LED4:Current mode for group: 1:ON						
LED GROUPS:FADING SPEED						
LED GROUP LED1: FADE SPEED	3x00017 4x00017 I:16	10,0x000A B:00 0A		10	UINT16 R/W	YES
LED1:Current fading speed for group: 1,00s						

Current dimming or fading speed for the outputs in mode FADE and RANDOM in steps per 1/100s. The smallest value is 1.
 Every 1/100s the system add/subtracts this FADESPEED1 value from the three outputs CLO1, CLO2 and CLO3.
 So the value 1 means, that with a start value of 0 and a new end value of 4095, the fade up process will last for 40.95 seconds.
 This is the slowest fading speed of the module.
 A value of 4095 or more defines the fastest fade speed. After 1/100s the new value will be valid.

If you write on this register, you will redefine the FADESPEED1

LED GROUP LED2: FADE SPEED	3x00018 4x00018 I:17	10,0x000A B:00 0A	10	UINT16 R/W	YES
LED2:Current fading speed for group: 1,00s					
LED GROUP LED3: FADE SPEED	3x00019 4x00019 I:18	10,0x000A B:00 0A	10	UINT16 R/W	YES
LED3:Current fading speed for group: 1,00s					
LED GROUP LED4: FADE SPEED	3x00020 4x00020 I:19	10,0x000A B:00 0A	10	UINT16 R/W	YES
LED4:Current fading speed for group: 1,00s					

LED GROUPS:TIMINGS

LED GROUP LED1: MINTIME	3x00021 4x00021 I:20	10,0x000A B:00 0A	10	UINT16 R/W	YES
LED1:Current minimum time for group: 1,00s					

For the mode FLASH and SEQUENCE this value means the ON time of the flashing or sequence cycle in 1/10s.
 For the mode RANDOM this value defines the minimum time span for a new dicing cycle. The dicing cycle dices new random values for the registers RLO1, RLO2 and RLO3 and fades to this new brightness values. The time span is defined in seconds.

If you write to this register, you will redefine this value.

LED GROUP LED2: MINTIME	3x00022 4x00022 I:21	10,0x000A B:00 0A	10	UINT16 R/W	YES
LED2:Current minimum time for group: 1,00s					
LED GROUP LED3: MINTIME	3x00023 4x00023 I:22	10,0x000A B:00 0A	10	UINT16 R/W	YES
LED3:Current minimum time for group: 1,00s					
LED GROUP LED4: MINTIME	3x00024 4x00024 I:23	10,0x000A B:00 0A	10	UINT16 R/W	YES
LED4:Current minimum time for group: 1,00s					
LED GROUP LED1: MAXTIME	3x00025 4x00025 I:24	10,0x000A B:00 0A	10	UINT16 R/W	YES
LED1:Current maximum time for group: 1,00s					

For the mode FLASH and SEQUENCE this value means the OFF time of the flashing or sequence cycle in 1/10s.
 For the mode RANDOM this value defines the maximum time span for a new dicing cycle.
 The dicing cycle dices new random values for the registers RLO1, RLO2 and RLO3
 and fades to this new brightness values. The time span is defined in seconds.

If you write to this register, you will redefine this value.

LED GROUP LED2: MAXTIME	3x00026 4x00026 I:25	10,0x000A B:00 0A		10	UINT16 R/W	YES
LED2:Current maximum time for group: 1,00s						
LED GROUP LED3: MAXTIME	3x00027 4x00027 I:26	10,0x000A B:00 0A		10	UINT16 R/W	YES
LED3:Current maximum time for group: 1,00s						
LED GROUP LED4: MAXTIME	3x00028 4x00028 I:27	10,0x000A B:00 0A		10	UINT16 R/W	YES
LED4:Current maximum time for group: 1,00s						
LED GROUPS: FADING STATE						
LED GROUP LED1: IS FADING	3x00029 4x00029 I:28	0,0x0000 B:00 00			UINT16 R/O	
LED1:Current fading state of group:0=NO FADING						
Is currently a fading in the LED group LED1 active =0:no fading is active =1:Fading is active						
LED GROUP LED2: IS FADING	3x00030 4x00030 I:29	0,0x0000 B:00 00			UINT16 R/O	
LED2:Current fading state of group:0=NO FADING						
LED GROUP LED3: IS FADING	3x00031 4x00031 I:30	0,0x0000 B:00 00			UINT16 R/O	
LED3:Current fading state of group:0=NO FADING						
LED GROUP LED4: IS FADING	3x00032 4x00032 I:31	0,0x0000 B:00 00			UINT16 R/O	
LED4:Current fading state of group:0=NO FADING						
LED GROUPS: IS GROUP ON						
LED GROUP LED1: IS ON	3x00033 4x00033 I:32	6,0x0006 B:00 06			UINT16 R/O	
LED1:Current ON state of group:6=LO1 OFF - LO2 ON - LO3 ON						

Is currently one of the three channels of the LED group on (CLOx>0)

Every Bit stands for one of the three LED OUTPUTS of the group

Bit 0: =0:LO0 is OFF (output=0), =1:LO0 is ON (output>0)

Bit 1: =0:LO1 is OFF (output=0), =1:LO1 is ON (output>0)

Bit 2: =0:LO2 is OFF (output=0), =1:LO2 is ON (output>0)

LED GROUP LED2: IS ON	3x00034 4x00034 I:33	0,0x0000 B:00 00			UINT16 R/O	
LED2:Current ON state of group:0=LO1 OFF - LO2 OFF - LO3 OFF						
LED GROUP LED3: IS ON	3x00035 4x00035 I:34	0,0x0000 B:00 00			UINT16 R/O	
LED2:Current ON state of group:0=LO1 OFF - LO2 OFF - LO3 OFF						
LED GROUP LED4: IS ON	3x00036 4x00036 I:35	0,0x0000 B:00 00			UINT16 R/O	
LED2:Current ON state of group:0=LO1 OFF - LO2 OFF - LO3 OFF						
LED CURRENT OUTPUTS						
LED1:OUTPUT A: CLO1	3x00037 4x00037 I:36	0,0x0000 B:00 00			UINT16 R/O	
LED1:Current brightness for PWM output A: 0->0,00%						
The real value on the LED PWM output LEDx channel y including dimming and the current mode. 0..4095 or 0x000...0xFFFF for 0% to 100% brightness						
LED1:OUTPUT B: CLO2	3x00038 4x00038 I:37	4095,0x0FFF B:0F FF			UINT16 R/O	
LED1:Current brightness for PWM output B: 4095->100,00%						
LED1:OUTPUT C: CLO3	3x00039 4x00039 I:38	38,0x0026 B:00 26			UINT16 R/O	
LED1:Current brightness for PWM output C: 38->0,93%						
LED2:OUTPUT A: CLO4	3x00040 4x00040 I:39	0,0x0000 B:00 00			UINT16 R/O	
LED2:Current brightness for PWM output A: 0->0,00%						
LED2:OUTPUT B: CLO5	3x00041 4x00041 I:40	0,0x0000 B:00 00			UINT16 R/O	
LED2:Current brightness for PWM output B: 0->0,00%						
LED2:OUTPUT C: CLO6	3x00042 4x00042 I:41	0,0x0000 B:00 00			UINT16 R/O	
LED2:Current brightness for PWM output C: 0->0,00%						

LED3:OUTPUT A: CLO7	3x00043 4x00043 I:42	0,0x0000 B:00 00			UINT16 R/O	
LED3:Current brightness for PWM output A: 0->0,00%						
LED3:OUTPUT B: CLO8	3x00044 4x00044 I:43	0,0x0000 B:00 00			UINT16 R/O	
LED3:Current brightness for PWM output B: 0->0,00%						
LED3:OUTPUT C: CLO9	3x00045 4x00045 I:44	0,0x0000 B:00 00			UINT16 R/O	
LED3:Current brightness for PWM output C: 0->0,00%						
LED4:OUTPUT A: CLO10	3x00046 4x00046 I:45	0,0x0000 B:00 00			UINT16 R/O	
LED4:Current brightness for PWM output A: 0->0,00%						
LED4:OUTPUT B: CLO11	3x00047 4x00047 I:46	0,0x0000 B:00 00			UINT16 R/O	
LED4:Current brightness for PWM output B: 0->0,00%						
LED4:OUTPUT C: CLO12	3x00048 4x00048 I:47	0,0x0000 B:00 00			UINT16 R/O	
LED4:Current brightness for PWM output C: 0->0,00%						
LED RANDOM VALUES						
LED1:OUTPUT A: RLO1	3x00049 4x00049 I:48	0,0x0000 B:00 00			UINT16 R/O	
LED1:Last diced random value for output A: 0->0,00%						
The last diced random number for the LED PWM output LEDx channel y in mode RANDOM. 0..4095 or 0x000...0xFFFF for 0% to 100% brightness						
LED1:OUTPUT B: RLO2	3x00050 4x00050 I:49	0,0x0000 B:00 00			UINT16 R/O	
LED1:Last diced random value for output B: 0->0,00%						
LED1:OUTPUT C: RLO3	3x00051 4x00051 I:50	0,0x0000 B:00 00			UINT16 R/O	
LED1:Last diced random value for output C: 0->0,00%						
LED2:OUTPUT A: RLO4	3x00052 4x00052 I:51	0,0x0000 B:00 00			UINT16 R/O	
LED2:Last diced random value for output A: 0->0,00%						

LED2:OUTPUT B: RLO5	3x00053 4x00053 I:52	0,0x0000 B:00 00			UINT16 R/O	
		LED2:Last diced random value for output B: 0->0,00%				
LED2:OUTPUT C: RLO6	3x00054 4x00054 I:53	0,0x0000 B:00 00			UINT16 R/O	
		LED2:Last diced random value for output C: 0->0,00%				
LED3:OUTPUT A: RLO7	3x00055 4x00055 I:54	0,0x0000 B:00 00			UINT16 R/O	
		LED3:Last diced random value for output A: 0->0,00%				
LED3:OUTPUT B: RLO8	3x00056 4x00056 I:55	0,0x0000 B:00 00			UINT16 R/O	
		LED3:Last diced random value for output B: 0->0,00%				
LED3:OUTPUT C: RLO9	3x00057 4x00057 I:56	0,0x0000 B:00 00			UINT16 R/O	
		LED3:Last diced random value for output C: 0->0,00%				
LED4:OUTPUT A: RLO10	3x00058 4x00058 I:57	0,0x0000 B:00 00			UINT16 R/O	
		LED4:Last diced random value for output A: 0->0,00%				
LED4:OUTPUT B: RLO11	3x00059 4x00059 I:58	0,0x0000 B:00 00			UINT16 R/O	
		LED4:Last diced random value for output B: 0->0,00%				
LED4:OUTPUT C: RLO12	3x00060 4x00060 I:59	0,0x0000 B:00 00			UINT16 R/O	
		LED4:Last diced random value for output C: 0->0,00%				

Register NAME Command NAME	MODBUS Register ASCII Command	Register VALUE ASCII Command	NEW REAL VALUE	NEW VALUE	DATA TYPE	DO WRITE
LED OUTPUTS: RGB SETPOINTS						
LED1:OUTPUT A:RGB RED LO1	3x01001 4x01001 l:1000	0,0x0000 B:00 00	1000	10,0	UINT16 R/W	YES
LED1:Current RGB RED setpoint for PWM output A: 0,00% -> 0						
Current RGB RED set point of LED group LEDx PWM output 1. 0...10000 for 0% to 100.00% RGB RED in %*100 If you write onto this register, you define a new RGB RED set point value for the PWM output						
LED1:OUTPUT B:RGB GREEN LO2	3x01002 4x01002 l:1001	10000,0x2710 B:27 10	1000	10,0	UINT16 R/W	YES
LED1:Current RGB GREEN setpoint for PWM output B: 100,00% -> 4095						
Current RGB GREEN set point of LED group LEDx PWM output 2. 0...10000 for 0% to 100.00% RGB GREEN in %*100 If you write onto this register, you define a new RGB GREEN set point value for the PWM output						
LED1:OUTPUT C:RGB BLUE LO3	3x01003 4x01003 l:1002	94,0x005E B:00 5E	1000	10,0	UINT16 R/W	YES
LED1:Current RGB BLUE setpoint for PWM output C: 0,94% -> 38						
Current RGB BLUE set point of LED group LEDx PWM output 3. 0...10000 for 0% to 100.00% RGB BLUE in %*100 If you write onto this register, you define a new RGB BLUE set point value for the PWM output						
LED2:OUTPUT A:RGB RED LO4	3x01004 4x01004 l:1003	0,0x0000 B:00 00	1000	10,0	UINT16 R/W	YES
LED2:Current RGB RED setpoint for PWM output A: 0,00% -> 0						
LED2:OUTPUT B:RGB GREEN LO5	3x01005 4x01005 l:1004	0,0x0000 B:00 00	1000	10,0	UINT16 R/W	YES
LED2:Current RGB GREEN setpoint for PWM output B: 0,00% -> 0						
LED2:OUTPUT C:RGB BLUE LO6	3x01006 4x01006 l:1005	0,0x0000 B:00 00	1000	10,0	UINT16 R/W	YES
LED2:Current RGB BLUE setpoint for PWM output C: 0,00% -> 0						
LED3:OUTPUT A:RGB RED LO7	3x01007 4x01007 l:1006	0,0x0000 B:00 00	1000	10,0	UINT16 R/W	YES
LED3:Current RGB RED setpoint for PWM output A: 0,00% -> 0						

LED3:OUTPUT B:RGB GREEN LO8	3x01008 4x01008 I:1007	0,0x0000 B:00 00	1000	10,0	UINT16 R/W	YES
LED3:Current RGB GREEN setpoint for PWM output B: 0,00% -> 0						
LED3:OUTPUT C:RGB BLUE LO9	3x01009 4x01009 I:1008	0,0x0000 B:00 00	1000	10,0	UINT16 R/W	YES
LED3:Current RGB BLUE setpoint for PWM output C: 0,00% -> 0						
LED4:OUTPUT A:RGB RED LO10	3x01010 4x01010 I:1009	0,0x0000 B:00 00	1000	10,0	UINT16 R/W	YES
LED4:Current RGB RED setpoint for PWM output A: 0,00% -> 0						
LED4:OUTPUT B:RGB GREEN LO11	3x01011 4x01011 I:1010	0,0x0000 B:00 00	1000	10,0	UINT16 R/W	YES
LED4:Current RGB GREEN setpoint for PWM output B: 0,00% -> 0						
LED4:OUTPUT C:RGB BLUE LO12	3x01012 4x01012 I:1011	0,0x0000 B:00 00	1000	10,0	UINT16 R/W	YES
LED4:Current RGB BLUE setpoint for PWM output C: 0,00% -> 0						
LED OUTPUTS: HSV SETPOINTS						
LED1:OUTPUT A:HSV HUE LO1-LO3	3x01013 4x01013 I:1012	12056,0x2F18 B:2F 18	36000	360,0	UINT16 R/W	YES
LED1:Current HSV HUE setpoint for PWM outputs A-C: 120,56°						
Current HSV HUE set point of LED group LEDx PWM outputs 1-3. 0...36000 for 0° to 360.00° for hue in degrees*100						
If you write onto this register, you define a new HSV HUE set point value for the PWM outputs 1-3						
LED1:OUTPUT B:HSV SATURATION LO1-LO3	3x01014 4x01014 I:1013	10000,0x2710 B:27 10	10000	100,0	UINT16 R/W	YES
LED1:Current HSV SATURATION setpoint for PWM outputs A-C: 100,00%						
Current HSV SATURATION set point of LED group LEDx PWM outputs 1-3. 0...10000 for 0% to 100.00% for saturation in percent*100						
If you write onto this register, you define a new HSV SATURATION set point value for the PWM outputs 1-3						
LED1:OUTPUT C:HSV VALUE LO1-LO3	3x01015 4x01015 I:1014	10000,0x2710 B:27 10	10000	100,0	UINT16 R/W	YES
LED1:Current HSV VALUE setpoint for PWM outputs A-C: 100,00%						
Current HSV VALUE set point of LED group LEDx PWM outputs 1-3. 0...10000 for 0% to 100.00% for value in percent*100						
If you write onto this register, you define a new HSV VALUE set point value for the PWM outputs 1-3						

LED2:OUTPUT A:HSV HUE LO4-LO6	3x01016 4x01016 I:1015	0,0x0000 B:00 00	36000	360,0	UINT16 R/W	YES
LED2:Current HSV HUE setpoint for PWM outputs A-C: 0,00°						
LED2:OUTPUT B:HSV SATURATION LO4-LO6	3x01017 4x01017 I:1016	0,0x0000 B:00 00	10000	100,0	UINT16 R/W	YES
LED2:Current HSV SATURATION setpoint for PWM outputs A-C: 0,00%						
LED2:OUTPUT C:HSV VALUE LO4-LO6	3x01018 4x01018 I:1017	0,0x0000 B:00 00	10000	100,0	UINT16 R/W	YES
LED2:Current HSV VALUE setpoint for PWM outputs A-C: 0,00%						
LED3:OUTPUT A:HSV HUE LO7-LO9	3x01019 4x01019 I:1018	0,0x0000 B:00 00	36000	360,0	UINT16 R/W	YES
LED3:Current HSV HUE setpoint for PWM outputs A-C: 0,00°						
LED3:OUTPUT B:HSV SATURATION LO7-LO9	3x01020 4x01020 I:1019	0,0x0000 B:00 00	10000	100,0	UINT16 R/W	YES
LED3:Current HSV SATURATION setpoint for PWM outputs A-C: 0,00%						
LED3:OUTPUT C:HSV VALUE LO7-LO9	3x01021 4x01021 I:1020	0,0x0000 B:00 00	10000	100,0	UINT16 R/W	YES
LED3:Current HSV VALUE setpoint for PWM outputs A-C: 0,00%						
LED4:OUTPUT A:HSV HUE LO10-LO12	3x01022 4x01022 I:1021	0,0x0000 B:00 00	36000	360,0	UINT16 R/W	YES
LED4:Current HSV HUE setpoint for PWM outputs A-C: 0,00°						
LED4:OUTPUT B:HSV SATURATION LO10-LO12	3x01023 4x01023 I:1022	0,0x0000 B:00 00	10000	100,0	UINT16 R/W	YES
LED4:Current HSV SATURATION setpoint for PWM outputs A-C: 0,00%						
LED4:OUTPUT C:HSV VALUE LO10-LO12	3x01024 4x01024 I:1023	0,0x0000 B:00 00	10000	100,0	UINT16 R/W	YES
LED4:Current HSV VALUE setpoint for PWM outputs A-C: 0,00%						
LED OUTPUTS: RGB SETPOINTS						
LED1:OUTPUT A:RGB RED LO1	3x02001 4x02001 I:2000	0,0x00000000 B:00 00 00 00	1000	10,0	UINT32 R/W	YES
LED1:Current RGB RED setpoint for PWM output A: 0,000% -> 0						

Current RGB RED set point of LED group LEDx PWM output 1.

0...100000 for 0% to 100.000% RGB RED in %*1000

If you write onto this register, you define a new RGB RED set point value for the PWM output

LED1:OUTPUT B:RGB GREEN LO2	3x02003 4x02003 I:2002	100000,0x000186A0 B:00 01 86 A0	10000	10,0	UINT32 R/W	YES
LED1:Current RGB GREEN setpoint for PWM output B: 1,000% -> 4095						

Current RGB GREEN set point of LED group LEDx PWM output 2.

0...100000 for 0% to 100.000% RGB GREEN in %*1000

If you write onto this register, you define a new RGB GREEN set point value for the PWM output

LED1:OUTPUT C:RGB BLUE LO3	3x02005 4x02005 I:2004	944,0x000003B0 B:00 00 03 B0	10000	10,0	UINT32 R/W	YES
LED1:Current RGB BLUE setpoint for PWM output C: 0,009% -> 39						

Current RGB BLUE set point of LED group LEDx PWM output 3.

0...100000 for 0% to 100.000% RGB BLUE in %*1000

If you write onto this register, you define a new RGB BLUE set point value for the PWM output

LED2:OUTPUT A:RGB RED LO4	3x02007 4x02007 I:2006	0,0x00000000 B:00 00 00 00	10000	10,0	UINT32 R/W	YES
LED2:Current RGB RED setpoint for PWM output A: 0,000% -> 0						
LED2:OUTPUT B:RGB GREEN LO5	3x02009 4x02009 I:2008	0,0x00000000 B:00 00 00 00	10000	10,0	UINT32 R/W	YES
LED2:Current RGB GREEN setpoint for PWM output B: 0,000% -> 0						
LED2:OUTPUT C:RGB BLUE LO6	3x02011 4x02011 I:2010	0,0x00000000 B:00 00 00 00	10000	10,0	UINT32 R/W	YES
LED2:Current RGB BLUE setpoint for PWM output C: 0,000% -> 0						
LED3:OUTPUT A:RGB RED LO7	3x02013 4x02013 I:2012	0,0x00000000 B:00 00 00 00	10000	10,0	UINT32 R/W	YES
LED3:Current RGB RED setpoint for PWM output A: 0,000% -> 0						
LED3:OUTPUT B:RGB GREEN LO8	3x02015 4x02015 I:2014	0,0x00000000 B:00 00 00 00	10000	10,0	UINT32 R/W	YES
LED3:Current RGB GREEN setpoint for PWM output B: 0,000% -> 0						
LED3:OUTPUT C:RGB BLUE LO9	3x02017 4x02017 I:2016	0,0x00000000 B:00 00 00 00	10000	10,0	UINT32 R/W	YES
LED3:Current RGB BLUE setpoint for PWM output C: 0,000% -> 0						

LED4:OUTPUT A:RGB RED LO10	3x02019 4x02019 I:2018	0,0x00000000 B:00 00 00 00	10000	10,0	UINT32 R/W	YES
LED4:Current RGB RED setpoint for PWM output A: 0,000% -> 0						
LED4:OUTPUT B:RGB GREEN LO11	3x02021 4x02021 I:2020	0,0x00000000 B:00 00 00 00	10000	10,0	UINT32 R/W	YES
LED4:Current RGB GREEN setpoint for PWM output B: 0,000% -> 0						
LED4:OUTPUT C:RGB BLUE LO12	3x02023 4x02023 I:2022	0,0x00000000 B:00 00 00 00	10000	10,0	UINT32 R/W	YES
LED4:Current RGB BLUE setpoint for PWM output C: 0,000% -> 0						
LED OUTPUTS: HSV SETPOINTS						
LED1:OUTPUT A:HSV HUE LO1-LO3	3x02025 4x02025 I:2024	120567000,0x072FB4D8 B:07 2F B4 D8	360000000	360,0	UINT32 R/W	YES
LED1:Current HSV HUE setpoint for PWM outputs A-C: 120,567000°						
Current HSV HUE set point of LED group LEDx PWM outputs 1-3. 0...360000000 for 0° to 360.000000° for hue in degrees*1000000						
If you write onto this register, you define a new HSV HUE set point value for the PWM outputs 1-3						
LED1:OUTPUT B:HSV SATURATION LO1-LO3	3x02027 4x02027 I:2026	100000000,0x05F5E100 B:05 F5 E1 00	100000000	100,0	UINT32 R/W	YES
LED1:Current HSV SATURATION setpoint for PWM outputs A-C: 100,000000%						
Current HSV SATURATION set point of LED group LEDx PWM outputs 1-3. 0...100000000 for 0% to 100.000000% for saturation in percent*1000000						
If you write onto this register, you define a new HSV SATURATION set point value for the PWM outputs 1-3						
LED1:OUTPUT C:HSV VALUE LO1-LO3	3x02029 4x02029 I:2028	100000000,0x05F5E100 B:05 F5 E1 00	100000000	100,0	UINT32 R/W	YES
LED1:Current HSV VALUE setpoint for PWM outputs A-C: 100,000000%						
Current HSV VALUE set point of LED group LEDx PWM outputs 1-3. 0...100000000 for 0% to 100.000000% for value in percent*1000000						
If you write onto this register, you define a new HSV VALUE set point value for the PWM outputs 1-3						
LED2:OUTPUT A:HSV HUE LO4-LO6	3x02031 4x02031 I:2030	0,0x00000000 B:00 00 00 00	360000000	360,0	UINT32 R/W	YES
LED2:Current HSV HUE setpoint for PWM outputs A-C: 0,000000°						
LED2:OUTPUT B:HSV SATURATION LO4-LO6	3x02033 4x02033 I:2032	0,0x00000000 B:00 00 00 00	100000000	100,0	UINT32 R/W	YES
LED2:Current HSV SATURATION setpoint for PWM outputs A-C: 0,000000%						

LED2:OUTPUT C:HSV VALUE LO4-LO6	3x02035 4x02035 I:2034	0,0x00000000 B:00 00 00 00	100000000	100,0	UINT32 R/W	YES
LED2:Current HSV VALUE setpoint for PWM outputs A-C: 0,000000%						
LED3:OUTPUT A:HSV HUE LO7-LO9	3x02037 4x02037 I:2036	0,0x00000000 B:00 00 00 00	360000000	360,0	UINT32 R/W	YES
LED3:Current HSV HUE setpoint for PWM outputs A-C: 0,000000°						
LED3:OUTPUT B:HSV SATURATION LO7-LO9	3x02039 4x02039 I:2038	0,0x00000000 B:00 00 00 00	100000000	100,0	UINT32 R/W	YES
LED3:Current HSV SATURATION setpoint for PWM outputs A-C: 0,000000%						
LED3:OUTPUT C:HSV VALUE LO7-LO9	3x02041 4x02041 I:2040	0,0x00000000 B:00 00 00 00	100000000	100,0	UINT32 R/W	YES
LED3:Current HSV VALUE setpoint for PWM outputs A-C: 0,000000%						
LED4:OUTPUT A:HSV HUE LO10-LO12	3x02043 4x02043 I:2042	0,0x00000000 B:00 00 00 00	360000000	360,0	UINT32 R/W	YES
LED4:Current HSV HUE setpoint for PWM outputs A-C: 0,000000°						
LED4:OUTPUT B:HSV SATURATION LO10-LO12	3x02045 4x02045 I:2044	0,0x00000000 B:00 00 00 00	100000000	100,0	UINT32 R/W	YES
LED4:Current HSV SATURATION setpoint for PWM outputs A-C: 0,000000%						
LED4:OUTPUT C:HSV VALUE LO10-LO12	3x02047 4x02047 I:2046	0,0x00000000 B:00 00 00 00	100000000	100,0	UINT32 R/W	YES
LED4:Current HSV VALUE setpoint for PWM outputs A-C: 0,000000%						
LED OUTPUTS: RGB SETPOINTS						
LED1:OUTPUT A:RGB RED LO1	3x03001 4x03001 I:3000	0,0x00000000 B:00 00 00 00	1000	10,0	UINT32R R/W	YES
LED1:Current RGB RED setpoint for PWM output A: 0,000% -> 0						
Current RGB RED set point of LED group LEDx PWM output 1. 0...100000 for 0% to 100.000% RGB RED in %*1000						
If you write onto this register, you define a new RGB RED set point value for the PWM output						
LED1:OUTPUT B:RGB GREEN LO2	3x03003 4x03003 I:3002	100000,0x000186A0 B:86 A0 00 01	10000	10,0	UINT32R R/W	YES
LED1:Current RGB GREEN setpoint for PWM output B: 1,000% -> 4095						

Current RGB GREEN set point of LED group LEDx PWM output 2.
0...100000 for 0% to 100.000% RGB GREEN in %*1000

If you write onto this register, you define a new RGB GREEN set point value for the PWM output

LED1:OUTPUT C:RGB BLUE LO3	3x03005 4x03005 I:3004	944,0x000003B0 B:03 B0 00 00	10000	10,0	UINT32R R/W	YES
LED1:Current RGB BLUE setpoint for PWM output C: 0,009% -> 39						

Current RGB BLUE set point of LED group LEDx PWM output 3.
0...100000 for 0% to 100.000% RGB BLUE in %*1000

If you write onto this register, you define a new RGB BLUE set point value for the PWM output

LED2:OUTPUT A:RGB RED LO4	3x03007 4x03007 I:3006	0,0x00000000 B:00 00 00 00	10000	10,0	UINT32R R/W	YES
LED2:Current RGB RED setpoint for PWM output A: 0,000% -> 0						
LED2:OUTPUT B:RGB GREEN LO5	3x03009 4x03009 I:3008	0,0x00000000 B:00 00 00 00	10000	10,0	UINT32R R/W	YES
LED2:Current RGB GREEN setpoint for PWM output B: 0,000% -> 0						
LED2:OUTPUT C:RGB BLUE LO6	3x03011 4x03011 I:3010	0,0x00000000 B:00 00 00 00	10000	10,0	UINT32R R/W	YES
LED2:Current RGB BLUE setpoint for PWM output C: 0,000% -> 0						
LED3:OUTPUT A:RGB RED LO7	3x03013 4x03013 I:3012	0,0x00000000 B:00 00 00 00	10000	10,0	UINT32R R/W	YES
LED3:Current RGB RED setpoint for PWM output A: 0,000% -> 0						
LED3:OUTPUT B:RGB GREEN LO8	3x03015 4x03015 I:3014	0,0x00000000 B:00 00 00 00	10000	10,0	UINT32R R/W	YES
LED3:Current RGB GREEN setpoint for PWM output B: 0,000% -> 0						
LED3:OUTPUT C:RGB BLUE LO9	3x03017 4x03017 I:3016	0,0x00000000 B:00 00 00 00	10000	10,0	UINT32R R/W	YES
LED3:Current RGB BLUE setpoint for PWM output C: 0,000% -> 0						
LED4:OUTPUT A:RGB RED LO10	3x03019 4x03019 I:3018	0,0x00000000 B:00 00 00 00	10000	10,0	UINT32R R/W	YES
LED4:Current RGB RED setpoint for PWM output A: 0,000% -> 0						
LED4:OUTPUT B:RGB GREEN LO11	3x03021 4x03021 I:3020	0,0x00000000 B:00 00 00 00	10000	10,0	UINT32R R/W	YES
LED4:Current RGB GREEN setpoint for PWM output B: 0,000% -> 0						

LED4:OUTPUT C:RGB BLUE LO12	3x03023 4x03023 I:3022	0,0x00000000 B:00 00 00 00	10000	10,0	UINT32R R/W	YES
LED4:Current RGB BLUE setpoint for PWM output C: 0,000% -> 0						
LED OUTPUTS: HSV SETPOINTS						
LED1:OUTPUT A:HSV HUE LO1-LO3	3x03025 4x03025 I:3024	120567000,0x072FB4D8 B:B4 D8 07 2F	360000000	360,0	UINT32R R/W	YES
LED1:Current HSV HUE setpoint for PWM outputs A-C: 120,567000°						
Current HSV HUE set point of LED group LEDx PWM outputs 1-3. 0...360000000 for 0° to 360.000000° for hue in degrees*1000000						
If you write onto this register, you define a new HSV HUE set point value for the PWM outputs 1-3						
LED1:OUTPUT B:HSV SATURATION LO1-LO3	3x03027 4x03027 I:3026	100000000,0x05F5E100 B:E1 00 05 F5	100000000	100,0	UINT32R R/W	YES
LED1:Current HSV SATURATION setpoint for PWM outputs A-C: 100,000000%						
Current HSV SATURATION set point of LED group LEDx PWM outputs 1-3. 0...100000000 for 0% to 100.000000% for saturation in percent*1000000						
If you write onto this register, you define a new HSV SATURATION set point value for the PWM outputs 1-3						
LED1:OUTPUT C:HSV VALUE LO1-LO3	3x03029 4x03029 I:3028	100000000,0x05F5E100 B:E1 00 05 F5	100000000	100,0	UINT32R R/W	YES
LED1:Current HSV VALUE setpoint for PWM outputs A-C: 100,000000%						
Current HSV VALUE set point of LED group LEDx PWM outputs 1-3. 0...100000000 for 0% to 100.000000% for value in percent*1000000						
If you write onto this register, you define a new HSV VALUE set point value for the PWM outputs 1-3						
LED2:OUTPUT A:HSV HUE LO4-LO6	3x03031 4x03031 I:3030	0,0x00000000 B:00 00 00 00	360000000	360,0	UINT32R R/W	YES
LED2:Current HSV HUE setpoint for PWM outputs A-C: 0,000000°						
LED2:OUTPUT B:HSV SATURATION LO4-LO6	3x03033 4x03033 I:3032	0,0x00000000 B:00 00 00 00	100000000	100,0	UINT32R R/W	YES
LED2:Current HSV SATURATION setpoint for PWM outputs A-C: 0,000000%						
LED2:OUTPUT C:HSV VALUE LO4-LO6	3x03035 4x03035 I:3034	0,0x00000000 B:00 00 00 00	100000000	100,0	UINT32R R/W	YES
LED2:Current HSV VALUE setpoint for PWM outputs A-C: 0,000000%						
LED3:OUTPUT A:HSV HUE LO7-LO9	3x03037 4x03037 I:3036	0,0x00000000 B:00 00 00 00	360000000	360,0	UINT32R R/W	YES
LED3:Current HSV HUE setpoint for PWM outputs A-C: 0,000000°						

LED3:OUTPUT B:HSV SATURATION LO7-LO9	3x03039 4x03039 I:3038	0,0x00000000 B:00 00 00 00	100000000	100,0	UINT32R R/W	YES
LED3:Current HSV SATURATION setpoint for PWM outputs A-C: 0,000000%						
LED3:OUTPUT C:HSV VALUE LO7-LO9	3x03041 4x03041 I:3040	0,0x00000000 B:00 00 00 00	100000000	100,0	UINT32R R/W	YES
LED3:Current HSV VALUE setpoint for PWM outputs A-C: 0,000000%						
LED4:OUTPUT A:HSV HUE LO10-LO12	3x03043 4x03043 I:3042	0,0x00000000 B:00 00 00 00	360000000	360,0	UINT32R R/W	YES
LED4:Current HSV HUE setpoint for PWM outputs A-C: 0,000000°						
LED4:OUTPUT B:HSV SATURATION LO10-LO12	3x03045 4x03045 I:3044	0,0x00000000 B:00 00 00 00	100000000	100,0	UINT32R R/W	YES
LED4:Current HSV SATURATION setpoint for PWM outputs A-C: 0,000000%						
LED4:OUTPUT C:HSV VALUE LO10-LO12	3x03047 4x03047 I:3046	0,0x00000000 B:00 00 00 00	100000000	100,0	UINT32R R/W	YES
LED4:Current HSV VALUE setpoint for PWM outputs A-C: 0,000000%						
LED OUTPUTS: RGB SETPOINTS						
LED1:OUTPUT A:RGB RED LO1	3x04001 4x04001 I:4000	0.000000,0x00000000 B:00 00 00 00		10,0	FLOAT32 R/W	YES
LED1:Current RGB RED setpoint for PWM output A: 0,000000% -> 0						
Current RGB RED set point of LED group LEDx PWM output 1. 0% to 100% RGB RED						
If you write onto this register, you define a new RGB RED set point value for the PWM output						
LED1:OUTPUT B:RGB GREEN LO2	3x04003 4x04003 I:4002	100.000000,0x42C80000 B:42 C8 00 00		10,0	FLOAT32 R/W	YES
LED1:Current RGB GREEN setpoint for PWM output B: 100,000000% -> 4095						
Current RGB GREEN set point of LED group LEDx PWM output 2. 0% to 100% RGB GREEN						
If you write onto this register, you define a new RGB GREEN set point value for the PWM output						
LED1:OUTPUT C:RGB BLUE LO3	3x04005 4x04005 I:4004	0.944000,0x3F71A9FC B:3F 71 A9 FC		10,0	FLOAT32 R/W	YES
LED1:Current RGB BLUE setpoint for PWM output C: 0,944000% -> 39						
Current RGB BLUE set point of LED group LEDx PWM output 3. 0% to 100% RGB BLUE						
If you write onto this register, you define a new RGB BLUE set point value for the PWM output						

LED2:OUTPUT A:RGB RED LO4	3x04007 4x04007 I:4006	0.000000,0x00000000 B:00 00 00 00		10,0	FLOAT32 R/W	YES
LED2:Current RGB RED setpoint for PWM output A: 0,00000% -> 0						
LED2:OUTPUT B:RGB GREEN LO5	3x04009 4x04009 I:4008	0.000000,0x00000000 B:00 00 00 00		10,0	FLOAT32 R/W	YES
LED2:Current RGB GREEN setpoint for PWM output B: 0,00000% -> 0						
LED2:OUTPUT C:RGB BLUE LO6	3x04011 4x04011 I:4010	0.000000,0x00000000 B:00 00 00 00		10,0	FLOAT32 R/W	YES
LED2:Current RGB BLUE setpoint for PWM output C: 0,00000% -> 0						
LED3:OUTPUT A:RGB RED LO7	3x04013 4x04013 I:4012	0.000000,0x00000000 B:00 00 00 00		10,0	FLOAT32 R/W	YES
LED3:Current RGB RED setpoint for PWM output A: 0,00000% -> 0						
LED3:OUTPUT B:RGB GREEN LO8	3x04015 4x04015 I:4014	0.000000,0x00000000 B:00 00 00 00		10,0	FLOAT32 R/W	YES
LED3:Current RGB GREEN setpoint for PWM output B: 0,00000% -> 0						
LED3:OUTPUT C:RGB BLUE LO9	3x04017 4x04017 I:4016	0.000000,0x00000000 B:00 00 00 00		10,0	FLOAT32 R/W	YES
LED3:Current RGB BLUE setpoint for PWM output C: 0,00000% -> 0						
LED4:OUTPUT A:RGB RED LO10	3x04019 4x04019 I:4018	0.000000,0x00000000 B:00 00 00 00		10,0	FLOAT32 R/W	YES
LED4:Current RGB RED setpoint for PWM output A: 0,00000% -> 0						
LED4:OUTPUT B:RGB GREEN LO11	3x04021 4x04021 I:4020	0.000000,0x00000000 B:00 00 00 00		10,0	FLOAT32 R/W	YES
LED4:Current RGB GREEN setpoint for PWM output B: 0,00000% -> 0						
LED4:OUTPUT C:RGB BLUE LO12	3x04023 4x04023 I:4022	0.000000,0x00000000 B:00 00 00 00		10,0	FLOAT32 R/W	YES
LED4:Current RGB BLUE setpoint for PWM output C: 0,00000% -> 0						
LED OUTPUTS: HSV SETPOINTS						
LED1:OUTPUT A:HSV HUE LO1-LO3	3x04025 4x04025 I:4024	120.567001,0x42F1224E B:42 F1 22 4E		360,0	FLOAT32 R/W	YES
LED1:Current HSV HUE setpoint for PWM outputs A-C: 120,567001°						
Current HSV HUE set point of LED group LEDx PWM outputs 1-3. 0 to 360° for hue in degrees						
If you write onto this register, you define a new HSV HUE set point value for the PWM outputs 1-3						

LED1:OUTPUT B:HSV SATURATION LO1-LO3	3x04027 4x04027 I:4026	100.000000,0x42C80000 B:42 C8 00 00		100,0	FLOAT32 R/W	YES
LED1:Current HSV SATURATION setpoint for PWM outputs A-C: 100,000000%						
Current HSV SATURATION set point of LED group LEDx PWM outputs 1-3. 0% 100% for saturation in percent						
If you write onto this register, you define a new HSV SATURATION set point value for the PWM outputs 1-3						
LED1:OUTPUT C:HSV VALUE LO1-LO3	3x04029 4x04029 I:4028	100.000000,0x42C80000 B:42 C8 00 00		100,0	FLOAT32 R/W	YES
LED1:Current HSV VALUE setpoint for PWM outputs A-C: 100,000000%						
Current HSV VALUE set point of LED group LEDx PWM outputs 1-3. 0% to 100% for value in percent						
If you write onto this register, you define a new HSV VALUE set point value for the PWM outputs 1-3						
LED2:OUTPUT A:HSV HUE LO4-LO6	3x04031 4x04031 I:4030	0.000000,0x00000000 B:00 00 00 00		360,0	FLOAT32 R/W	YES
LED2:Current HSV HUE setpoint for PWM outputs A-C: 0,000000°						
LED2:OUTPUT B:HSV SATURATION LO4-LO6	3x04033 4x04033 I:4032	0.000000,0x00000000 B:00 00 00 00		100,0	FLOAT32 R/W	YES
LED2:Current HSV SATURATION setpoint for PWM outputs A-C: 0,000000%						
LED2:OUTPUT C:HSV VALUE LO4-LO6	3x04035 4x04035 I:4034	0.000000,0x00000000 B:00 00 00 00		100,0	FLOAT32 R/W	YES
LED2:Current HSV VALUE setpoint for PWM outputs A-C: 0,000000%						
LED3:OUTPUT A:HSV HUE LO7-LO9	3x04037 4x04037 I:4036	0.000000,0x00000000 B:00 00 00 00		360,0	FLOAT32 R/W	YES
LED3:Current HSV HUE setpoint for PWM outputs A-C: 0,000000°						
LED3:OUTPUT B:HSV SATURATION LO7-LO9	3x04039 4x04039 I:4038	0.000000,0x00000000 B:00 00 00 00		100,0	FLOAT32 R/W	YES
LED3:Current HSV SATURATION setpoint for PWM outputs A-C: 0,000000%						
LED3:OUTPUT C:HSV VALUE LO7-LO9	3x04041 4x04041 I:4040	0.000000,0x00000000 B:00 00 00 00		100,0	FLOAT32 R/W	YES
LED3:Current HSV VALUE setpoint for PWM outputs A-C: 0,000000%						
LED4:OUTPUT A:HSV HUE LO10-LO12	3x04043 4x04043 I:4042	0.000000,0x00000000 B:00 00 00 00		360,0	FLOAT32 R/W	YES
LED4:Current HSV HUE setpoint for PWM outputs A-C: 0,000000°						

LED4:OUTPUT B:HSV SATURATION LO10-LO12	3x04045 4x04045 I:4044	0.000000,0x00000000 B:00 00 00 00		100,0	FLOAT32 R/W	YES
LED4:Current HSV SATURATION setpoint for PWM outputs A-C: 0,000000%						
LED4:OUTPUT C:HSV VALUE LO10-LO12	3x04047 4x04047 I:4046	0.000000,0x00000000 B:00 00 00 00		100,0	FLOAT32 R/W	YES
LED4:Current HSV VALUE setpoint for PWM outputs A-C: 0,000000%						
LED OUTPUTS: RGB SETPOINTS						
LED1:OUTPUT A:RGB RED LO1	3x05001 4x05001 I:5000	0.000000,0x00000000 B:00 00 00 00		10,0	FLOAT32R R/W	YES
LED1:Current RGB RED setpoint for PWM output A: 0,000000% -> 0						
Current RGB RED set point of LED group LEDx PWM output 1. 0% to 100% RGB RED						
If you write onto this register, you define a new RGB RED set point value for the PWM output						
LED1:OUTPUT B:RGB GREEN LO2	3x05003 4x05003 I:5002	100.000000,0x42C80000 B:00 00 42 C8		10,0	FLOAT32R R/W	YES
LED1:Current RGB GREEN setpoint for PWM output B: 100,000000% -> 4095						
Current RGB GREEN set point of LED group LEDx PWM output 2. 0% to 100% RGB GREEN						
If you write onto this register, you define a new RGB GREEN set point value for the PWM output						
LED1:OUTPUT C:RGB BLUE LO3	3x05005 4x05005 I:5004	0.944000,0x3F71A9FC B:A9 FC 3F 71		10,0	FLOAT32R R/W	YES
LED1:Current RGB BLUE setpoint for PWM output C: 0,944000% -> 39						
Current RGB BLUE set point of LED group LEDx PWM output 3. 0% to 100% RGB BLUE						
If you write onto this register, you define a new RGB BLUE set point value for the PWM output						
LED2:OUTPUT A:RGB RED LO4	3x05007 4x05007 I:5006	0.000000,0x00000000 B:00 00 00 00		10,0	FLOAT32R R/W	YES
LED2:Current RGB RED setpoint for PWM output A: 0,000000% -> 0						
LED2:OUTPUT B:RGB GREEN LO5	3x05009 4x05009 I:5008	0.000000,0x00000000 B:00 00 00 00		10,0	FLOAT32R R/W	YES
LED2:Current RGB GREEN setpoint for PWM output B: 0,000000% -> 0						
LED2:OUTPUT C:RGB BLUE LO6	3x05011 4x05011 I:5010	0.000000,0x00000000 B:00 00 00 00		10,0	FLOAT32R R/W	YES
LED2:Current RGB BLUE setpoint for PWM output C: 0,000000% -> 0						

LED3:OUTPUT A:RGB RED LO7	3x05013 4x05013 I:5012	0.000000,0x00000000 B:00 00 00 00		10,0	FLOAT32R R/W	YES
LED3:Current RGB RED setpoint for PWM output A: 0,00000% -> 0						
LED3:OUTPUT B:RGB GREEN LO8	3x05015 4x05015 I:5014	0.000000,0x00000000 B:00 00 00 00		10,0	FLOAT32R R/W	YES
LED3:Current RGB GREEN setpoint for PWM output B: 0,00000% -> 0						
LED3:OUTPUT C:RGB BLUE LO9	3x05017 4x05017 I:5016	0.000000,0x00000000 B:00 00 00 00		10,0	FLOAT32R R/W	YES
LED3:Current RGB BLUE setpoint for PWM output C: 0,00000% -> 0						
LED4:OUTPUT A:RGB RED LO10	3x05019 4x05019 I:5018	0.000000,0x00000000 B:00 00 00 00		10,0	FLOAT32R R/W	YES
LED4:Current RGB RED setpoint for PWM output A: 0,00000% -> 0						
LED4:OUTPUT B:RGB GREEN LO11	3x05021 4x05021 I:5020	0.000000,0x00000000 B:00 00 00 00		10,0	FLOAT32R R/W	YES
LED4:Current RGB GREEN setpoint for PWM output B: 0,00000% -> 0						
LED4:OUTPUT C:RGB BLUE LO12	3x05023 4x05023 I:5022	0.000000,0x00000000 B:00 00 00 00		10,0	FLOAT32R R/W	YES
LED4:Current RGB BLUE setpoint for PWM output C: 0,00000% -> 0						
LED OUTPUTS: HSV SETPOINTS						
LED1:OUTPUT A:HSV HUE LO1-LO3	3x05025 4x05025 I:5024	120.567001,0x42F1224E B:22 4E 42 F1		360,0	FLOAT32R R/W	YES
LED1:Current HSV HUE setpoint for PWM outputs A-C: 120,567001°						
Current HSV HUE set point of LED group LEDx PWM outputs 1-3. 0 to 360° for hue in degrees						
If you write onto this register, you define a new HSV HUE set point value for the PWM outputs 1-3						
LED1:OUTPUT B:HSV SATURATION LO1-LO3	3x05027 4x05027 I:5026	100.000000,0x42C80000 B:00 00 42 C8		100,0	FLOAT32R R/W	YES
LED1:Current HSV SATURATION setpoint for PWM outputs A-C: 100,000000%						
Current HSV SATURATION set point of LED group LEDx PWM outputs 1-3. 0% 100% for saturation in percent						
If you write onto this register, you define a new HSV SATURATION set point value for the PWM outputs 1-3						
LED1:OUTPUT C:HSV VALUE LO1-LO3	3x05029 4x05029 I:5028	100.000000,0x42C80000 B:00 00 42 C8		100,0	FLOAT32R R/W	YES
LED1:Current HSV VALUE setpoint for PWM outputs A-C: 100,000000%						

Current HSV VALUE set point of LED group LEDx PWM outputs 1-3.

0% to 100% for value in percent

If you write onto this register, you define a new HSV VALUE set point value for the PWM outputs 1-3

LED2:OUTPUT A:HSV HUE LO4-LO6	3x05031 4x05031 I:5030	0.000000,0x00000000 B:00 00 00 00		360,0	FLOAT32R R/W	YES
LED2:Current HSV HUE setpoint for PWM outputs A-C: 0,000000°						
LED2:OUTPUT B:HSV SATURATION LO4-LO6	3x05033 4x05033 I:5032	0.000000,0x00000000 B:00 00 00 00		100,0	FLOAT32R R/W	YES
LED2:Current HSV SATURATION setpoint for PWM output B: 0,000000%						
LED2:OUTPUT C:HSV VALUE LO4-LO6	3x05035 4x05035 I:5034	0.000000,0x00000000 B:00 00 00 00		100,0	FLOAT32R R/W	YES
LED2:Current HSV VALUE setpoint for PWM output C: 0,000000%						
LED3:OUTPUT A:HSV HUE LO7-LO9	3x05037 4x05037 I:5036	0.000000,0x00000000 B:00 00 00 00		360,0	FLOAT32R R/W	YES
LED3:Current HSV HUE setpoint for PWM output A: 0,000000°						
LED3:OUTPUT B:HSV SATURATION LO7-LO9	3x05039 4x05039 I:5038	0.000000,0x00000000 B:00 00 00 00		100,0	FLOAT32R R/W	YES
LED3:Current HSV SATURATION setpoint for PWM output B: 0,000000%						
LED3:OUTPUT C:HSV VALUE LO7-LO9	3x05041 4x05041 I:5040	0.000000,0x00000000 B:00 00 00 00		100,0	FLOAT32R R/W	YES
LED3:Current HSV VALUE setpoint for PWM output C: 0,000000%						
LED4:OUTPUT A:HSV HUE LO10-LO12	3x05043 4x05043 I:5042	0.000000,0x00000000 B:00 00 00 00		360,0	FLOAT32R R/W	YES
LED4:Current HSV HUE setpoint for PWM output A: 0,000000°						
LED4:OUTPUT B:HSV SATURATION LO10-LO12	3x05045 4x05045 I:5044	0.000000,0x00000000 B:00 00 00 00		100,0	FLOAT32R R/W	YES
LED4:Current HSV SATURATION setpoint for PWM output B: 0,000000%						
LED4:OUTPUT C:HSV VALUE LO10-LO12	3x05047 4x05047 I:5046	0.000000,0x00000000 B:00 00 00 00		100,0	FLOAT32R R/W	YES
LED4:Current HSV VALUE setpoint for PWM output C: 0,000000%						

Register NAME Command NAME	MODBUS Register ASCII Command	Register VALUE ASCII Command	NEW REAL VALUE	NEW VALUE	DATA TYPE	DO WRITE
LED GROUPS:HSV EFFECTS LED GROUP 1						
LED GROUP LED1: HSV EFFECT MODE	3x10001 4x10001 I:10000	0,0x0000 B:00 00		0:UP	UINT16 R/W	YES
LED1:Current HSV effect mode: 0:UP						
The current HSV effect mode, only active if the MODE of the LED group is set to 6:HSV EFFECTS! =0:UP:increment of HUE/SATURATON or VALUE =1:DOWN:decrement of HUE/SATURATON or VALUE =2: UP/DOWN:alternate increment and decrement of HUE/SATURATON or VALUE						
LED GROUP LED1: HSV EFFECT HUE START	3x10002 4x10002 I:10001	0,0x0000 B:00 00	12000	120,00	UINT16 R/W	YES
LED1:Current HSV HUE start angle for PWM outputs A-C: 0,00°						
Current HUE start angle set point of LED group LEDx PWM outputs 1-3. 0...36000 for 0° to 360.00° for hue in degrees*100						
LED GROUP LED1: HSV EFFECT HUE END	3x10003 4x10003 I:10002	36000,0x8CA0 B:8C A0	24000	240,00	UINT16 R/W	YES
LED1:Current HSV HUE end angle for PWM outputs A-C: 360,00°						
Current HUE end angle set point of LED group LEDx PWM outputs 1-3. 0...36000 for 0° to 360.00° for hue in degrees*100						
LED GROUP LED1: HSV EFFECT HUE INC-DEC	3x10004 4x10004 I:10003	100,0x0064 B:00 64	1	0,001	UINT16 R/W	YES
LED1:Current HSV HUE inc/dec angle for PWM outputs A-C: 0,100°						
Current HUE increment-decrement angle set point of LED group LEDx PWM outputs 1-3. 0...65535 for 0° to 65,535° for hue in degrees*1000. This angle is added/subtracted every 5ms from the current HSV HUE angle depending on HSV EFFECT MODE setting						
LED GROUP LED1: HSV EFFECT SATURATION START	3x10005 4x10005 I:10004	10000,0x2710 B:27 10	10000	100,00	UINT16 R/W	YES
LED1:Current HSV SATURATION start percentage for PWM outputs A-C: 100,00%						
Current SATURATION start percentage set point of LED group LEDx PWM outputs 1-3. 0...10000 for 0% to 100.00% for saturation in percent*100						
LED GROUP LED1: HSV EFFECT SATURATION END	3x10006 4x10006 I:10005	10000,0x2710 B:27 10	10000	100,00	UINT16 R/W	YES
LED1:Current HSV SATURATION end percentage for PWM outputs A-C: 100,00%						
Current SATURATION end percentage set point of LED group LEDx PWM outputs 1-3. 0...10000 for 0% to 100.00% for saturation in percent*100						

LED GROUP LED1: HSV EFFECT SATURATION INC-DEC	3x10007 4x10007 I:10006	0,0x0000 B:00 00	1	0,001	UINT16 R/W	YES
LED1:Current HSV SATURATION inc/dec percentage for PWM outputs A-C: 0,000%						
Current saturation increment-decrement percentage set point of LED group LEDx PWM outputs 1-3. 0...65535 for 0% to 65,535% for saturation in percent*1000. This percent value is added/subtracted every 5ms from the current HSV SATURATION percentage depending on HSV EFFECT MODE setting						
LED GROUP LED1: HSV EFFECT VALUE START	3x10008 4x10008 I:10007	10000,0x2710 B:27 10	10000	100,00	UINT16 R/W	YES
LED1:Current HSV VALUE start percentage for PWM outputs A-C: 100,00%						
Current VALUE start percentage set point of LED group LEDx PWM outputs 1-3. 0...10000 for 0% to 100,00% for value in percent*100						
LED GROUP LED1: HSV EFFECT VALUE END	3x10009 4x10009 I:10008	10000,0x2710 B:27 10	10000	100,00	UINT16 R/W	YES
LED1:Current HSV VALUE end percentage for PWM outputs A-C: 100,00%						
Current VALUE end percentage set point of LED group LEDx PWM outputs 1-3. 0...10000 for 0% to 100,00% for value in percent*100						
LED GROUP LED1: HSV EFFECT VALUE INC-DEC	3x10010 4x10010 I:10009	0,0x0000 B:00 00	1	0,001	UINT16 R/W	YES
LED1:Current HSV VALUE inc/dec percentage for PWM outputs A-C: 0,000%						
Current value increment-decrement percentage set point of LED group LEDx PWM outputs 1-3. 0...65535 for 0% to 65,535% for value in percent*1000. This percent value is added/subtracted every 5ms from the current HSV VALUEpercentage depending on HSV EFFECT MODE setting						
LED GROUPS:HSV EFFECTS LED GROUP 2						
LED GROUP LED2: HSV EFFECT MODE	3x10011 4x10011 I:10010	0,0x0000 B:00 00		0:UP	UINT16 R/W	YES
LED2:Current HSV effect mode: 0:UP						
LED GROUP LED2: HSV EFFECT HUE START	3x10012 4x10012 I:10011	0,0x0000 B:00 00	12000	120,00	UINT16 R/W	YES
LED2:Current HSV HUE start angle for PWM outputs A-C: 0,00°						
LED GROUP LED2: HSV EFFECT HUE END	3x10013 4x10013 I:10012	36000,0x8CA0 B:8C A0	24000	240,00	UINT16 R/W	YES
LED2:Current HSV HUE end angle for PWM outputs A-C: 360,00°						
LED GROUP LED2: HSV EFFECT HUE INC-DEC	3x10014 4x10014 I:10013	100,0x0064 B:00 64	1	0,001	UINT16 R/W	YES
LED2:Current HSV HUE inc/dec angle for PWM outputs A-C: 0,100°						
LED GROUP LED2: HSV EFFECT SATURATION START	3x10015 4x10015 I:10014	10000,0x2710 B:27 10	10000	100,00	UINT16 R/W	YES
LED2:Current HSV SATURATION start percentage for PWM outputs A-C: 100,00%						

LED GROUP LED2: HSV EFFECT SATURATION END	3x10016 4x10016 I:10015	10000,0x2710 B:27 10	10000	100,00	UINT16 R/W	YES
LED2:Current HSV SATURATION end percentage for PWM outputs A-C: 100,00%						
LED GROUP LED2: HSV EFFECT SATURATION INC-DEC	3x10017 4x10017 I:10016	0,0x0000 B:00 00	1	0,001	UINT16 R/W	YES
LED2:Current HSV SATURATION inc/dec percentage for PWM outputs A-C: 0,000%						
LED GROUP LED2: HSV EFFECT VALUE START	3x10018 4x10018 I:10017	10000,0x2710 B:27 10	10000	100,00	UINT16 R/W	YES
LED2:Current HSV VALUE start percentage for PWM outputs A-C: 100,00%						
LED GROUP LED2: HSV EFFECT VALUE END	3x10019 4x10019 I:10018	10000,0x2710 B:27 10	10000	100,00	UINT16 R/W	YES
LED2:Current HSV VALUE end percentage for PWM outputs A-C: 100,00%						
LED GROUP LED2: HSV EFFECT VALUE INC-DEC	3x10020 4x10020 I:10019	0,0x0000 B:00 00	1	0,001	UINT16 R/W	YES
LED2:Current HSV VALUE inc/dec percentage for PWM outputs A-C: 0,000%						
LED GROUPS:HSV EFFECTS LED GROUP 3						
LED GROUP LED3: HSV EFFECT MODE	3x10021 4x10021 I:10020	0,0x0000 B:00 00		0:UP	UINT16 R/W	YES
LED3:Current HSV effect mode: 0:UP						
LED GROUP LED3: HSV EFFECT HUE START	3x10022 4x10022 I:10021	0,0x0000 B:00 00	12000	120,00	UINT16 R/W	YES
LED3:Current HSV HUE start angle for PWM outputs A-C: 0,00°						
LED GROUP LED3: HSV EFFECT HUE END	3x10023 4x10023 I:10022	36000,0x8CA0 B:8C A0	24000	240,00	UINT16 R/W	YES
LED3:Current HSV HUE end angle for PWM outputs A-C: 360,00°						
LED GROUP LED3: HSV EFFECT HUE INC-DEC	3x10024 4x10024 I:10023	100,0x0064 B:00 64	1	0,001	UINT16 R/W	YES
LED3:Current HSV HUE inc/dec angle for PWM outputs A-C: 0,100°						
LED GROUP LED3: HSV EFFECT SATURATION START	3x10025 4x10025 I:10024	10000,0x2710 B:27 10	10000	100,00	UINT16 R/W	YES
LED3:Current HSV SATURATION start percentage for PWM outputs A-C: 100,00%						
LED GROUP LED3: HSV EFFECT SATURATION END	3x10026 4x10026 I:10025	10000,0x2710 B:27 10	10000	100,00	UINT16 R/W	YES

		LED3:Current HSV SATURATION end percentage for PWM outputs A-C: 100,00%				
LED GROUP LED3: HSV EFFECT SATURATION INC-DEC	3x10027 4x10027 I:10026	0,0x0000 B:00 00	1	0,001	UINT16 R/W	YES
		LED3:Current HSV SATURATION inc/dec percentage for PWM outputs A-C: 0,000%				
LED GROUP LED3: HSV EFFECT VALUE START	3x10028 4x10028 I:10027	10000,0x2710 B:27 10	10000	100,00	UINT16 R/W	YES
		LED3:Current HSV VALUE start percentage for PWM outputs A-C: 100,00%				
LED GROUP LED3: HSV EFFECT VALUE END	3x10029 4x10029 I:10028	10000,0x2710 B:27 10	10000	100,00	UINT16 R/W	YES
		LED3:Current HSV VALUE end percentage for PWM outputs A-C: 100,00%				
LED GROUP LED3: HSV EFFECT VALUE INC-DEC	3x10030 4x10030 I:10029	0,0x0000 B:00 00	1	0,001	UINT16 R/W	YES
		LED3:Current HSV VALUE inc/dec percentage for PWM outputs A-C: 0,000%				
LED GROUPS:HSV EFFECTS LED GROUP 4						
LED GROUP LED4: HSV EFFECT MODE	3x10031 4x10031 I:10030	0,0x0000 B:00 00		0:UP	UINT16 R/W	YES
		LED4:Current HSV effect mode: 0:UP				
LED GROUP LED4: HSV EFFECT HUE START	3x10032 4x10032 I:10031	0,0x0000 B:00 00	12000	120,00	UINT16 R/W	YES
		LED4:Current HSV HUE start angle for PWM outputs A-C: 0,00°				
LED GROUP LED4: HSV EFFECT HUE END	3x10033 4x10033 I:10032	36000,0x8CA0 B:8C A0	24000	240,00	UINT16 R/W	YES
		LED4:Current HSV HUE end angle for PWM outputs A-C: 360,00°				
LED GROUP LED4: HSV EFFECT HUE INC-DEC	3x10034 4x10034 I:10033	100,0x0064 B:00 64	1	0,001	UINT16 R/W	YES
		LED4:Current HSV HUE inc/dec angle for PWM outputs A-C: 0,100°				
LED GROUP LED4: HSV EFFECT SATURATION START	3x10035 4x10035 I:10034	10000,0x2710 B:27 10	10000	100,00	UINT16 R/W	YES
		LED4:Current HSV SATURATION start percentage for PWM outputs A-C: 100,00%				
LED GROUP LED4: HSV EFFECT SATURATION END	3x10036 4x10036 I:10035	10000,0x2710 B:27 10	10000	100,00	UINT16 R/W	YES
		LED4:Current HSV SATURATION end percentage for PWM outputs A-C: 100,00%				

LED GROUP LED4: HSV EFFECT SATURATION INC-DEC	3x10037 4x10037 I:10036	0,0x0000 B:00 00	1	0,001	UINT16 R/W	YES
LED4:Current HSV SATURATION inc/dec percentage for PWM outputs A-C: 0,000%						
LED GROUP LED4: HSV EFFECT VALUE START	3x10038 4x10038 I:10037	10000,0x2710 B:27 10	10000	100,00	UINT16 R/W	YES
LED4:Current HSV VALUE start percentage for PWM outputs A-C: 100,00%						
LED GROUP LED4: HSV EFFECT VALUE END	3x10039 4x10039 I:10038	10000,0x2710 B:27 10	10000	100,00	UINT16 R/W	YES
LED4:Current HSV VALUE end percentage for PWM outputs A-C: 100,00%						
LED GROUP LED4: HSV EFFECT VALUE INC-DEC	3x10040 4x10040 I:10039	0,0x0000 B:00 00	1	0,001	UINT16 R/W	YES
LED4:Current HSV VALUE inc/dec percentage for PWM outputs A-C: 0,000%						
LED1:OUTPUT C:HSV VALUE LO3	3x10005 4x10005 I:10004	10000,0x2710 B:27 10	10000	100,0	UINT16 R/W	YES
LED1:Current HSV VALUE setpoint for PWM output C: 100,00%						
Current HSV VALUE set point of LED group LEDx PWM outputs 1-3. 0...10000 for 0% to 100.00% for value in percent*100						
If you write onto this register, you define a new HSV VALUE set point value for the PWM outputs 1-3						
LED GROUPS:HSV EFFECTS LED GROUP 1						
LED GROUP LED1: HSV EFFECT STATE	3x11001 4x11001 I:11000	0,0x0000 B:00 00			UINT16 R/O	
LED1:Current HSV effect state: 0						
The current HSV effect state						
LED GROUP LED1: HSV EFFECT HUE CURRENT	3x11002 4x11002 I:11001	0,0x0000 B:00 00			UINT16 R/O	
LED1:Current HSV HUE angle for PWM outputs A-C: 0,00°						
Current HUE angle of LED group LEDx PWM outputs 1-3. 0...36000 for 0° to 360.00° for hue in degrees*100						
LED GROUP LED1: HSV EFFECT SATURATION CURRENT	3x11003 4x11003 I:11002	10000,0x2710 B:27 10			UINT16 R/O	
LED1:Current HSV SATURATION percentage for PWM outputs A-C: 100,00%						
Current SATURATION percentage of LED group LEDx PWM outputs 1-3. 0...10000 for 0% to 100.00% for saturation in percent*100						

LED GROUP LED1: HSV EFFECT VALUE CURRENT	3x11004 4x11004 I:11003	10000,0x2710 B:27 10			UINT16 R/O	
LED1:Current HSV VALUE percentage for PWM outputs A-C: 100,00%						
Current VALUE percentage of LED group LEDx PWM outputs 1-3. 0...10000 for 0% to 100.00% for value in percent*100						
LED GROUPS:HSV EFFECTS LED GROUP 2						
LED GROUP LED2: HSV EFFECT STATE	3x11005 4x11005 I:11004	0,0x0000 B:00 00			UINT16 R/O	
LED2:Current HSV effect state: 0						
LED GROUP LED2: HSV EFFECT HUE CURRENT	3x11006 4x11006 I:11005	0,0x0000 B:00 00			UINT16 R/O	
LED2:Current HSV HUE angle for PWM outputs A-C: 0,00°						
LED GROUP LED2: HSV EFFECT SATURATION CURRENT	3x11007 4x11007 I:11006	10000,0x2710 B:27 10			UINT16 R/O	
LED2:Current HSV SATURATION percentage for PWM outputs A-C: 100,00%						
LED GROUP LED2: HSV EFFECT VALUE CURRENT	3x11008 4x11008 I:11007	10000,0x2710 B:27 10			UINT16 R/O	
LED2:Current HSV VALUE percentage for PWM outputs A-C: 100,00%						
LED GROUPS:HSV EFFECTS LED GROUP 3						
LED GROUP LED3: HSV EFFECT STATE	3x11009 4x11009 I:11008	0,0x0000 B:00 00			UINT16 R/O	
LED3:Current HSV effect state: 0						
LED GROUP LED3: HSV EFFECT HUE CURRENT	3x11010 4x11010 I:11009	0,0x0000 B:00 00			UINT16 R/O	
LED3:Current HSV HUE angle for PWM outputs A-C: 0,00°						
LED GROUP LED3: HSV EFFECT SATURATION CURRENT	3x11011 4x11011 I:11010	10000,0x2710 B:27 10			UINT16 R/O	
LED3:Current HSV SATURATION percentage for PWM outputs A-C: 100,00%						
LED GROUP LED3: HSV EFFECT VALUE CURRENT	3x11012 4x11012 I:11011	10000,0x2710 B:27 10			UINT16 R/O	
LED3:Current HSV VALUE percentage for PWM outputs A-C: 100,00%						
LED GROUPS:HSV EFFECTS LED GROUP 4						
LED GROUP LED4: HSV EFFECT STATE	3x11013 4x11013 I:11012	0,0x0000 B:00 00			UINT16 R/O	
LED4:Current HSV effect state: 0						

LED GROUP LED4: HSV EFFECT HUE CURRENT	3x11014 4x11014 I:11013	0,0x0000 B:00 00			UINT16 R/O	
LED4:Current HSV HUE angle for PWM outputs A-C: 0,00°						
LED GROUP LED4: HSV EFFECT SATURATION CURRENT	3x11015 4x11015 I:11014	10000,0x2710 B:27 10			UINT16 R/O	
LED4:Current HSV SATURATION percentage for PWM outputs A-C: 100,00%						
LED GROUP LED4: HSV EFFECT VALUE CURRENT	3x11016 4x11016 I:11015	10000,0x2710 B:27 10			UINT16 R/O	
LED4:Current HSV VALUE percentage for PWM outputs A-C: 100,00%						

Command NAME	ASCII command type	ASCII command structure	NEW REAL VALUE	NEW VALUE	DATA TYPE	DO WRITE
ASCII COMMANDS						
LED PWM OUTPUTS						
SET LED OUTPUTS	ASCII WRITE COMMAND	#SLOS:<PWMLO1>,<PWMLO2>,<PWMLO3>,<PWMLO4>,<PWMLO5>,<PWMLO6>,<PWMLO7>,<PWMLO8>,<PWMLO9>,<PWMLO10>,<PWMLO11>,<PWMLO12><CR> Result: #OK<CR>			ASCII	NO
	PWMLO1	100				
	PWMLO2	100				
	PWMLO3	100				
	PWMLO4	100				
	PWMLO5	100				
	PWMLO6	100				
	PWMLO7	100				
	PWMLO8	100				
	PWMLO9	100				
	PWMLO10	100				
	PWMLO11	100				
	PWMLO12	100				
	TX	#1,SLOS:100,100,100,100,100,100,100,100,100,100,100,100<CR>				
	RX	N/A				
Stores for all PWM outputs a new value PWMLOx into the set point register PWMLOx: the new set point value for the register LOx in the range of 0..4095 or 0x000 to 0xFFF						
SET OUTPUT LOx	ASCII WRITE COMMAND	#SLO<LONR>:<PWMVALUE><CR> Result: #OK<CR>			ASCII	NO
	LONR	1				
	PWMVALUE	100				
	TX	#1,SLO1:100<CR>				
	RX	N/A				
Stores the new value PWMValue into the set point register LOx. PWMValue: the new set point value for the register LOx in the range of 0..4095 or 0x000 to 0xFFF						
GET LED OUTPUTS	ASCII READ COMMAND	#GLOS<CR> Result: #GLOS:<LO1Dec>,<LO2Dec>,...,<LO12Dec>,<LO1Hex>,<LO2Hex>,...,<LO12Hex><CR>			ASCII	
	TX	#1,GLOS<CR>				
	RX	#1,GLOS:0,0,0,0,0,0,0,0,0,0,0x0,0x0,0x0,0x0,0x0,0x0,0x0,0x0,0x0,0x0,0x0,0x0,0x0<CR>				
		Current value of PWM output 1 LED1:A->0,00%				
		Current value of PWM output 2 LED1:B->0,00%				
		Current value of PWM output 3 LED1:C->0,00%				

		Current value of PWM output 4 LED2:A:0->0,00%		
		Current value of PWM output 5 LED2:B:0->0,00%		
		Current value of PWM output 6 LED2:C:0->0,00%		
		Current value of PWM output 7 LED3:A:0->0,00%		
		Current value of PWM output 8 LED3:B:0->0,00%		
		Current value of PWM output 9 LED3:C:0->0,00%		
		Current value of PWM output 10 LED4:A:0->0,00%		
		Current value of PWM output 11 LED4:B:0->0,00%		
		Current value of PWM output 12 LED4:C:0->0,00%		
Returns the current value of all set point values of the PWM outputs LO1-LO12 as decimal and hexadecimal number LOxDec,LOxHex: The current set point of the dimmable output x in the range of 0 to 4095 or 0x000 to 0xFFFF				
GET LED OUTPUT LOx	ASCII READ COMMAND	#GLO<LONR><CR> Result: #GLO<LONR>:<LOxDec>,<LOxHex><CR>	ASCII	
	LONR	1		
	TX	#1,GLO1<CR>		
	RX	#1,GLO1:0,0x0<CR>		
		Current value of PWM output 1:0->0,00%		
Returns the current set point value of the PWM output LOx as decimal and hexadecimal number LOxDec,LOxHex: The current set point of the dimmable output LOx in the range of 0 to 4095 or 0x000 to 0xFFFF				
SET MODES	ASCII WRITE COMMAND	#SMODES:<MODE1>,<MODE2>,<MODE3>,<MODE4><CR> Result: #OK<CR>	ASCII	NO
	MODE1	2:FLASH		
	MODE2	5:SEQUENCE		
	MODE3	6:HSV EFFECTS		
	MODE4	1:ON		
	TX	#1,SMODES:2,5,6,1<CR>		
	RX	N/A		
Sets the mode for the three LED outputs for one of the four LED groups LED1-LED4 to the new mode MODE1-MODE4. MODE1-4: The new mode for the LED module =0: OFF: All three outputs of the affected LED group are immediately switched to 0 =1: ON: All three outputs of the affected LED group are dimmed to the values LOx immediately =2: FLASH: All three outputs of the affected LED group flashes in the rhythm of the parameterized minimum and maximum times with the three set point values LOx. =3: FADE: All three outputs of the affected LED group fade with the current speed FADE SPEEDx to the new values LOx. =4: RANDOM: All three outputs of the affected LED group dices a random number for each channel in the range of 0 to LOx. Then the three outputs fade to the new values with the current FADE SPEEDx. After a random pause between the configured minimum and maximum time in seconds, this procedure will be repeated. =5: SEQUENCE: All three outputs of the affected LED group flashes successively with the three set points LOx. The three outputs are on for the time period MIN TIMEx in 1/10s. In between the three outputs are 0 for a time period MAXTIMEx in 1/10s. =6: HSV EFFECTS: The three LED outputs are used as RGB LEDs and will display the current configured HSV effect				
SET MODEx	ASCII WRITE COMMAND	#SMODE<LEDGROUP>:<MODE><CR> Result: #OK<CR>	ASCII	NO
	LEDGROUP	1		
	MODE	1:ON		
	TX	#1,SMODE1:1<CR>		
	RX	N/A		

Sets the mode for the three LED outputs for one of the four LED groups LEDGROUP to the new mode MODE.

MODE: The new mode for the LED module

=0: OFF: All three outputs of the affected LED group are immediately switched to 0

=1: ON: All three outputs of the affected LED group are dimmed to the values LOx immediately

=2: FLASH: All three outputs of the affected LED group flashes in the rhythm of the parameterized minimum and maximum times with the three set point values LOx.

=3: FADE: All three outputs of the affected LED group fade with the current speed FADE SPEEDx to the new values LOx.

=4: RANDOM: All three outputs of the affected LED group dices a random number for each channel in the range of 0 to LOx.

Then the three outputs fade to the new values with the current FADE SPEEDx. After a random pause between the configured minimum and maximum time in seconds, this procedure will be repeated.

=5: SEQUENCE: All three outputs of the affected LED group flashes successively with the three set points LOx. The three outputs are on for the time period MIN TIMEx in 1/10s.

In between the three outputs are 0 for a time period MAXTIMEx in 1/10s.

=6: HSV EFFECTS: The three LED outputs are used as RGB LEDs and will display the current configured HSV effect

GET MODES	ASCII READ COMMAND	#GMODES<CR> Result: #GMODES:<MODE1Dec>,<MODE2Dec>,<MODE3Dec>,<MODE4Dec>, <MODE1Hex>,<MODE2Hex>,<MODE3Hex>,<MODE4Hex><CR>	ASCII	
	TX	#1,GMODES<CR>		
	RX	#1,GMODES:6,1,1,1,0x6,0x1,0x1,0x1<CR>		
		Current mode for group 1:6:HSVEFFECTS		
		Current mode for group 2:1:ON		
		Current mode for group 3:1:ON		
		Current mode for group 4:1:ON		

Returns the current mode of the affected LED group LED1..LED4.

MODExDec,MODExHex: The current mode of the affected LED group.

=0: OFF: All three outputs of the affected LED group are immediately switched to 0

=1: ON: All three outputs of the affected LED group are dimmed to the values LOx immediately

=2: FLASH: All three outputs of the affected LED group flashes in the rhythm of the parameterized minimum and maximum times with the three set point values LOx.

=3: FADE: All three outputs of the affected LED group fade with the current speed FADE SPEEDx to the new values LOx.

=4: RANDOM: All three outputs of the affected LED group dices a random number for each channel in the range of 0 to LOx.

Then the three outputs fade to the new values with the current FADE SPEEDx. After a random pause between the configured minimum and maximum time in seconds, this procedure will be repeated.

=5: SEQUENCE: All three outputs of the affected LED group flashes successively with the three set points LOx. The three outputs are on for the time period MIN TIMEx in 1/10s.

In between the three outputs are 0 for a time period MAXTIMEx in 1/10s.

=6: HSV EFFECTS: The three LED outputs are used as RGB LEDs and will display the current configured HSV effect

GET MODEx	ASCII READ COMMAND	#GMODE<LEDGROUP><CR> Result: #GMODE<LEDGROUP>:<MODEDec>,<MODEHex><CR>	ASCII	
	LEDGROUP	1		
	TX	#1,GMODE1<CR>		
	RX	#1,GMODE1:6,0x6<CR>		
		Current mode for group: 1:6:HSVEFFECTS		

Returns the current mode of the affected LED group LEDGROUP.

MODEDec,MODEHex: The current mode of the affected LED group.

=0: OFF: All three outputs of the affected LED group are immediately switched to 0

=1: ON: All three outputs of the affected LED group are dimmed to the values LOx immediately

=2: FLASH: All three outputs of the affected LED group flashes in the rhythm of the parameterized minimum and maximum times with the three set point values LOx.

=3: FADE: All three outputs of the affected LED group fade with the current speed FADE SPEEDx to the new values LOx.

=4: RANDOM: All three outputs of the affected LED group dices a random number for each channel in the range of 0 to LOx.

Then the three outputs fade to the new values with the current FADE SPEEDx. After a random pause between the configured minimum and maximum time in seconds, this procedure will be repeated.

=5: SEQUENCE: All three outputs of the affected LED group flashes successively with the three set points LOx. The three outputs are on for the time period MIN TIMEx in 1/10s.

In between the three outputs are 0 for a time period MAXTIMEx in 1/10s.

=6: HSV EFFECTS: The three LED outputs are used as RGB LEDs and will display the current configured HSV effect

SET FADES	ASCII WRITE COMMAND	#SFADES:<FADE1>,<FADE2>,<FADE3>,<FADE4><CR> Result: #OK<CR>	ASCII	NO
	FADE1	3		
	FADE2	3		
	FADE3	3		
	FADE4	3		
	TX	#1,SFADES:3,3,3,3<CR>		
	RX	N/A		
Sets the new fading speed for the fading in the two modes FADE and RANDOM for the all LED groups. FADEx: The new speed for fading in steps per 1/100s.				
SET FADEx	ASCII WRITE COMMAND	#SFADE<LEDGROUP>:<FADE><CR> Result: #OK<CR>	ASCII	NO
	LEDGROUP	1		
	FADE	3		
	TX	#1,SFADE1:3<CR>		
	RX	N/A		
Sets the new fading speed for the fading in the two modes FADE and RANDOM for the affected LED group LEDGROUP. FADE: The new speed for fading in steps per 1/100s.				
GET FADES	ASCII READ COMMAND	#GFADES<CR> Result: #GFADES:<FADE1Dec>,<FADE2Dec>,<FADE3Dec>,<FADE4Dec>, <FADE1Hex>,<FADE2Hex>,<FADE3Hex>,<FADE4Hex><CR>	ASCII	
	TX	#1,GFADES<CR>		
	RX	#1,GFADES:10,10,10,10,0xA,0xA,0xA,0xA<CR>		
		Current fade for group 1:10		
		Current fade for group 2:10		
		Current fade for group 3:10		
		Current fade for group 4:10		
Returns the current fade speed for all LED groups in steps per 1/100s. FADExDec, FADExHex: The current fade speed in steps per 1/100s.				
GET FADEx	ASCII READ COMMAND	#GFADE<LEDGROUP><CR> Result: #GFADE<LEDGROUP>:<FADEDec>,<FADEHex><CR>	ASCII	
	LEDGROUP	1		
	TX	#1,GFADE1<CR>		
	RX	#1,GFADE1:10,0xA<CR>		
		Current fade for group: 1:10		
Returns the current fade speed for then LED group LEDGROUP in steps per 1/100s. FADEDec, FADEHex: The current fade speed in steps per 1/100s.				
GET FADINGS	ASCII READ COMMAND	#GFADINGS<CR> Result: #GFADINGS:<ISFADING1Dec>,<ISFADING2Dec>,<ISFADING3Dec>,<ISFADING4Dec>, <ISFADING1Hex>,<ISFADING2Hex>,<ISFADING3Hex>,<ISFADING4Hex><CR>	ASCII	
	TX	#1,GFADINGS<CR>		
	RX	#1,GFADINGS:0,0,0,0,0x0,0x0,0x0,0x0<CR>		

		Actual state of fading for group 1:NO FADING		
		Actual state of fading for group 2:NO FADING		
		Actual state of fading for group 3:NO FADING		
		Actual state of fading for group 4:NO FADING		
Returns the current fade state for all LED groups. ISFADINGxDec, ISFADINGxHex: The current fade state of the LED group. =0: No fading active, =1: Fading is active				
GET FADINGx	ASCII READ COMMAND	#GFADING<LEDGROUP> <CR> Result: #GFADING<LEDGROUP>:<ISFADINGDec>,<ISFADINGHex> <CR>	ASCII	
	LEDGROUP	1		
	TX	#1,GFADING1<CR>		
	RX	#1,GFADING1:0,0x0<CR>		
		Current fade for group: 1:0		
Returns the current fade state for LED group LEDGROUP. ISFADINGDec, ISFADINGHex: The current fade state of the LED group. =0: No fading active, =1: Fading is active				
SET MIN TIMES	ASCII WRITE COMMAND	#SMINTS:<MINTIME1>,<MINTIME2>,<MINTIME3>,<MINTIME4> <CR> Result: #OK<CR>	ASCII	NO
	MINTIME1	10		
	MINTIME2	10		
	MINTIME3	10		
	MINTIME4	10		
	TX	#1,SMINTS:10,10,10,10<CR>		
	RX	N/A		
Sets the new minimum time for all LED group. This time is used in the three modes FLASH, RANDOM and SEQUENCE. MINTIMEx: The new value for the minimum time. In the modes FLASH and SEQUENCE, this time defines the ON time span of the three outputs with the three values LOx. The OFF time span with the three values 0 is defined with the MAXTIME parameter. The parameter specifies a time in 1/10s. In the mode RANDOM this time defines the minimum time span between two random value changes. The parameter specifies a time span in seconds.				
SET MIN TIMEx	ASCII WRITE COMMAND	#SMINT<LEDGROUP>:<MINTIME> <CR> Result: #OK<CR>	ASCII	NO
	LEDGROUP	1		
	MINTIME	10		
	TX	#1,SMINT1:10<CR>		
	RX	N/A		
Sets the new minimum time for the LED group LEDGROUP. This time is used in the three modes FLASH, RANDOM and SEQUENCE. MINTIME: The new value for the minimum time. In the modes FLASH and SEQUENCE, this time defines the ON time span of the three outputs with the three values LOx. The OFF time span with the three values 0 is defined with the MAXTIME parameter. The parameter specifies a time in 1/10s. In the mode RANDOM this time defines the minimum time span between two random value changes. The parameter specifies a time span in seconds.				

GET MIN TIMES	ASCII READ COMMAND	#GMINTS<CR> Result: #GMINTS:<MINTIME1Dec>,<MINTIME2Dec>,<MINTIME3Dec>,<MINTIME4Dec>, <MINTIME1Hex>,<MINTIME2Hex>,<MINTIME3Hex>,<MINTIME4Hex><CR>	ASCII	
	TX	#1,GMINTS<CR>		
	RX	#1,GMINTS:10,10,10,10,0xA,0xA,0xA,0xA<CR>		
		Current minimum time for group 1: 1,00s		
		Current minimum time for group 2: 1,00s		
		Current minimum time for group 3: 1,00s		
		Current minimum time for group 4: 1,00s		
Returns the current defined minimum time of all LED groups. MINTIMExDec,MINTIMExHex: The current value for the minimum time. In the modes FLASH and SEQUENCE in 1/10s In the mode RANDOM in seconds.				
GET MIN TIMEx	ASCII READ COMMAND	#GMINT<LEDGROUP><CR> Result: #GMINT<LEDGROUP>:<MINTIMEDec>,<MINTIMEHex><CR>	ASCII	
	LEDGROUP	1		
	TX	#1,GMINT1<CR>		
	RX	#1,GMINT1:10,0xA<CR>		
		Current minimum time for group 1: 1,00s		
Returns the current defined minimum time of the affected LED group LEDGROUP. MINTIMEDec,MINTIMEHex: The current value for the minimum time. In the modes FLASH and SEQUENCE in 1/10s In the mode RANDOM in seconds.				
SET MAX TIMES	ASCII WRITE COMMAND	#SMAXTS:<MAXTIME1>,<MAXTIME2>,<MAXTIME3>,<MAXTIME4><CR> Result: #OK<CR>	ASCII	NO
	MAXTIME1	10		
	MAXTIME2	10		
	MAXTIME3	10		
	MAXTIME4	10		
	TX	#1,SMAXTS:10,10,10,10<CR>		
	RX	N/A		
Sets the new maximum time for all LED groups. This time is used in the three modes FLASH, RANDOM and SEQUENCE. MAXTIME: The new value for the maximum time. In the modes FLASH and SEQUENCE, this time defines the OFF time span of the three outputs with the three values LOx. The OFF time span with the three values LOx is defined with the MINTIME parameter. The parameter specifies a time in 1/10s. In the mode RANDOM this time defines the minimum time span between two random value changes. The parameter specifies a time span in seconds.				
SET MAX TIMEx	ASCII WRITE COMMAND	#SMAXT<LEDGROUP>:<MAXTIME><CR> Result: #OK<CR>	ASCII	NO
	LEDGROUP	1		
	MAXTIME	10		
	TX	#1,SMAXT1:10<CR>		

	RX	N/A		
Sets the new maximum time for the LED group LEDGROUP. This time is used in the three modes FLASH, RANDOM and SEQUENCE. MAXTIME: The new value for the maximum time. In the modes FLASH and SEQUENCE, this time defines the OFF time span of the three outputs with the three values LOx. The OFF time span with the three values LOx is defined with the MINTIME parameter. The parameter specifies a time in 1/10s. In the mode RANDOM this time defines the minimum time span between two random value changes. The parameter specifies a time span in seconds.				
GET MAX TIMES	ASCII READ COMMAND	#GMAXTS<CR> Result: #GMAXTS:<MAXTIME1Dec>,<MAXTIME2Dec>,<MAXTIME3Dec>,<MAXTIME4Dec>, <MAXTIME1Hex>,<MAXTIME2Hex>,<MAXTIME3Hex>,<MAXTIME4Hex><CR>	ASCII	
	TX	#1,GMAXTS<CR>		
	RX	#1,GMAXTS:10,10,10,10,0xA,0xA,0xA,0xA<CR>		
		Current maximum time for group 1: 1,00s		
		Current maximum time for group 2: 1,00s		
		Current maximum time for group 3: 1,00s		
		Current maximum time for group 4: 1,00s		
Returns the current defined maximum time of all LED groups. MAXTIMExDec,MAXTIMExHex: The current value for the maximum time. In the modes FLASH and SEQUENCE in 1/10s In the mode RANDOM in seconds.				
GET MAX TIMEx	ASCII READ COMMAND	#GMAXT<LEDGROUP><CR> Result: #GMAXT<LEDGROUP>:<MAXTIMExDec>,<MAXTIMExHex><CR>	ASCII	
	LEDGROUP	1		
	TX	#1,GMAXT1<CR>		
	RX	#1,GMAXT1:10,0xA<CR>		
		Current maximum time for group 1: 1,00s		
Returns the current defined maximum time of the affected LED group LEDGROUP. MAXTIMExDec,MAXTIMExHex: The current value for the maximum time. In the modes FLASH and SEQUENCE in 1/10s In the mode RANDOM in seconds.				
SET TIMES	ASCII WRITE COMMAND	#STIMES:<MINTIME1>,<MAXTIME1>,<MINTIME2>,<MAXTIME2>,<MINTIME3>,<MAXTIME3>,<MINTIME4>,<MAXTIME4><CR> Result: #OK<CR>	ASCII	NO
	MINTIME1	10		
	MAXTIME1	20		
	MINTIME2	10		
	MAXTIME2	20		
	MINTIME3	10		
	MAXTIME3	20		
	MINTIME4	10		
	MAXTIME4	20		
	TX	#1,STIMES:10,20,10,20,10,20,10,20<CR>		
	RX	N/A		

Sets the new minimum and maximum times for all LED groups for the three modes FLASH, RANDOM and SEQUENCE.

MINTIME: The new value for the minimum time.

In the modes FLASH and SEQUENCE, this time defines the ON time span of the three outputs with the three values LOx.

The OFF time span with the three values 0 is defined with the MAXTIME parameter.

The parameter specifies a time in 1/10s.

In the mode RANDOM this time defines the minimum time span between two random value changes.

The parameter specifies a time span in seconds.

MAXTIME: The new value for the maximum time.

In the modes FLASH and SEQUENCE, this time defines the OFF time span of the three outputs with the three values LOx.

The OFF time span with the three values LOx is defined with the MINTIME parameter.

The parameter specifies a time in 1/10s.

In the mode RANDOM this time defines the minimum time span between two random value changes.

The parameter specifies a time span in seconds.

SET TIME _x	ASCII WRITE COMMAND	#STIME<LEDGROUP>:<MINTIME>,<MAXTIME><CR> Result: #OK<CR>	ASCII	NO
	LEDGROUP	1		
	MINTIME	10		
	MAXTIME	11		
	TX	#1,STIME1:10,11<CR>		
	RX	N/A		

Sets the new minimum and maximum times for the LED group LEDGROUP for the three modes FLASH, RANDOM and SEQUENCE.

MINTIME: The new value for the minimum time.

In the modes FLASH and SEQUENCE, this time defines the ON time span of the three outputs with the three values LOx.

The OFF time span with the three values 0 is defined with the MAXTIME parameter.

The parameter specifies a time in 1/10s.

In the mode RANDOM this time defines the minimum time span between two random value changes.

The parameter specifies a time span in seconds.

MAXTIME: The new value for the maximum time.

In the modes FLASH and SEQUENCE, this time defines the OFF time span of the three outputs with the three values LOx.

The OFF time span with the three values LOx is defined with the MINTIME parameter.

The parameter specifies a time in 1/10s.

In the mode RANDOM this time defines the minimum time span between two random value changes.

The parameter specifies a time span in seconds.

GET TIMES	ASCII READ COMMAND	#GTIMES<CR> Result: #GTIMES:<MINTIME1Dec>,<MAXTIME1Dec>,<MINTIME2Dec>,<MAXTIME2Dec>, <MINTIME3Dec>,<MAXTIME3Dec>,<MINTIME4Dec>,<MAXTIME4Dec>, <MINTIME1Hex>,<MAXTIME1Hex>,<MINTIME2Hex>,<MAXTIME2Hex>, <MINTIME3Hex>,<MAXTIME3Hex>,<MINTIME4Hex>,<MAXTIME4Hex><CR>	ASCII	
	TX	#1,GTIMES<CR>		
	RX	#1,GTIMES:10,10,10,10,10,10,10,10,0xA,0xA,0xA,0xA,0xA,0xA,0xA,0xA<CR>		
		Current minimum time for group 1: 1,00s		
		Current maximum time for group 1: 1,00s		
		Current minimum time for group 2: 1,00s		
		Current maximum time for group 2: 1,00s		
		Current minimum time for group 3: 1,00s		

		Current maximum time for group 3: 1,00s		
		Current minimum time for group 4: 1,00s		
		Current maximum time for group 4: 1,00s		
Returns the current minimum and maximum times of all LED groups. MINTIMEHex, MINTIMEHex: The current value for the minimum time. In the modes FLASH and SEQUENCE in 1/10s. In the mode RANDOM in seconds. MAXTIMEHex, MAXTIMEHex: The current value for the maximum time. In the modes FLASH and SEQUENCE in 1/10s. In the mode RANDOM in seconds.				
GET TIMEx	ASCII READ COMMAND	#GTIME<LEDGROUP><CR> Result: #GTIME<LEDGROUP>:<MINTIMEDec>,<MAXTIMEDec>,<MINTIMEHex>,<MAXTIMEHex><CR>	ASCII	
	LEDGROUP	1		
	TX	#1,GTIME1<CR>		
	RX	#1,GTIME1:10,10,0xA,0xA<CR>		
		Current minimum time for group 1: 1,00s		
		Current maximum time for group 1: 1,00s		
Returns the current minimum and maximum times of the LED group LEDGROUP . MINTIMEDec, MINTIMEHex: The current value for the minimum time. In the modes FLASH and SEQUENCE in 1/10s. In the mode RANDOM in seconds. MAXTIMEDec, MAXTIMEHex: The current value for the maximum time. In the modes FLASH and SEQUENCE in 1/10s. In the mode RANDOM in seconds.				
SET ALLx	ASCII WRITE COMMAND	#SALL<LEDNR>:<MODE>,<LOA>,<LOB>,<LOC>, <MINTIME>,<MAXTIME>,<FADE><CR> Result: #OK<CR>	ASCII	NO
	LEDGROUP	1		
	MODE	4:RANDOM		
	LOA	500		
	LOB	300		
	LOC	200		
	MINTIME	10		
	MAXTIME	11		
	FADE	3		
	TX	#1,SALL<LEDNR>:4,500,300,200,10,11,3<CR>		
	RX	N/A		

Sets all values for one LED group LEDGROUP with one command.
 MODE: The new mode for the affected LED group
 =0: OFF: All three outputs of the affected LED group are immediately switched to 0
 =1: ON: All three outputs of the affected LED group are dimmed to the values LOx immediately
 =2: FLASH: All three outputs of the affected LED group flashes in the rhythm of the parameterized minimum and maximum times with the three set point values LOx.
 =3: FADE: All three outputs of the affected LED group fade with the current speed FADE SPEED to the new values LOx.
 =4: RANDOM: All three outputs of the affected LED group dices a random number for each channel in the range of 0 to LOx.
 Then the three outputs fade to the new values with the current FADE SPEED.
 After a random pause between the configured minimum and maximum time in seconds, this procedure will be repeated.
 =5: SEQUENCE: All three outputs of the affected LED group flashes successively with the three set points LOx.
 The three outputs are on for the time period MIN TIME in 1/10s.
 In between the three outputs are 0 for a time period MAXTIME in 1/10s.

LOA: The new value of the PWM output LO A in the range of 0..4095 or 0x000 to 0xFFFF
 LOB: The new value of the PWM output LO B in the range of 0..4095 or 0x000 to 0xFFFF
 LOC: The new value of the PWM output LO C in the range of 0..4095 or 0x000 to 0xFFFF

MINTIME: The new value for the minimum time.
 In the modes FLASH and SEQUENCE, this time defines the ON time span of the three outputs with the three values LOx.
 The OFF time span with the three values 0 is defined with the MAXTIME parameter. The parameter specifies a time in 1/10s.
 In the mode RANDOM this time defines the minimum time span between two random value changes.
 The parameter specifies a time span in seconds.

MAXTIME: The new value for the maximum time.
 In the modes FLASH and SEQUENCE, this time defines the OFF time span of the three outputs with the three values LOx.
 The ON time span with the three values LOx is defined with the MAXTIME parameter. The parameter specifies a time in 1/10s.
 In the mode RANDOM this time defines the minimum time span between two random value changes. The parameter specifies a time span in seconds.

FADEx:The new speed for fading in steps per 1/100s.

GET ALLx	ASCII READ COMMAND	#GALL<LEDGROUP> <CR> Result: #GALL<LEDGROUP>:<MODEDec>,<LOADec>,<LOBDec>,<LOCDec>, <MINTIMEDec>,<MAXTIMEDec>,<FADEDec>, <CLOADec>,<CLOBDec>,<CLOCDec>,<RLOADec>,<RLOBDec>,<RLOCDec>, <MODEHex>,<LOAHex>,<LOBHex>,<LOCHex>, <MINTIMEHex>,<MAXTIMEHex>,<FADEHex>, <CLOAHex>,<CLOBHex>,<CLOCHex>,<RLOAHex>,<RLOBHex>,<RLOCHex>,<CR>	ASCII	
	LEDGROUP	1		
	TX	#1,GALL1<CR>		
	RX	#1,GALL1:6,0,0,0,10,10,10,2600,4095,0,0,0,0,0x6,0x0,0x0,0x0,0xA,0xA,0xA,0xA28,0xFFFF,0x0,0x0,0x0,0x0 <CR>		
		Current mode for group: 1:6:HSVEFFECs		
		Current value of PWM output A:0->0,00%		
		Current value of PWM output B:0->0,00%		
		Current value of PWM output C:0->0,00%		
		Current minimum time for group 1: 1,00s		
		Current maximum time for group 1: 1,00s		
		Current fade for group: 1:10		
		Current real output value of PWM output A:2600->63,49%		
		Current real output value of PWM output B:4095->100,00%		

		Current real output value of PWM output C:0->0,00%		
		Current random output value of PWM output A:0->0,00%		
		Current random output value of PWM output B:0->0,00%		
		Current random output value of PWM output C:0->0,00%		
Returns the current values of one LED group LEDGROUP in one answer.				
MODEDec,MODEHex: The new mode for the affected LED group. See MODE description ion command GALL				
LOADec,LOAHex: The new value of the PWM output LO A in the range of 0..4095 or 0x000 to 0xFF				
LOBDec,LOBHex: The new value of the PWM output LO B in the range of 0..4095 or 0x000 to 0xFF				
LOCDec,LOCHex: The new value of the PWM output LO C in the range of 0..4095 or 0x000 to 0xFF				
MINTIMEDec,MINTIMEHex: The new value for the minimum time.				
In the modes FLASH and SEQUENCE, this time defines the ON time span of the three outputs with the three values LOx. The OFF time span with the three values 0 is defined with the MAXTIME parameter.				
The parameter specifies a time in 1/10s.				
In the mode RANDOM this time defines the minimum time span between two random value changes. The parameter specifies a time span in seconds.				
MAXTIMEDec,MAXTIMEHex: The new value for the maximum time.				
In the modes FLASH and SEQUENCE, this time defines the OFF time span of the three outputs with the three values LOx. The ON time span with the three values LOx is defined with the MINTIME parameter.				
The parameter specifies a time in 1/10s.				
In the mode RANDOM this time defines the minimum time span between two random value changes. The parameter specifies a time span in seconds.				
FADEDec,FADEHex: The new speed for fading in steps per 1/100s.				
CLOADec,CLOAHex: The current output value of the output A in the range of 0 to 4095 or 0x000 to 0xFF including dimming and mode information.				
CLOBDec,CLOBHex: The current output value of the output B in the range of 0 to 4095 or 0x000 to 0xFF including dimming and mode information.				
CLOCDec,CLOCHex: The current output value of the output C in the range of 0 to 4095 or 0x000 to 0xFF including dimming and mode information.				
RLOADec,RLOAHex: The last diced value in mode RANDOM for output A in the range of 0 to 4095 or 0x000 to 0xFF.				
RLOBDec,RLOBHex: The last diced value in mode RANDOM for output B in the range of 0 to 4095 or 0x000 to 0xFF.				
RLOCDec,RLOCHex: The last diced value in mode RANDOM for output C in the range of 0 to 4095 or 0x000 to 0xFF.				
GET CURRENT LOS	ASCII READ COMMAND	#GCLOS<CR> Result: #GCLOS:<CLO1Dec>,<CLO2Dec>,...,<CLO12Dec>, <CLO1Hex>,<CLO2Hex>,...,<CLO12Hex><CR>	ASCII	
	TX	#1,GCLOS<CR>		
	RX	#1,GCLOS:2436,4095,0,0,0,0,0,0,0,0,0,0,0,0,0x984,0xFF,0x0,0x0,0x0,0x0,0x0,0x0,0x0,0x0,0x0,0x0,0x0<CR>		
		Current real output of PWM output 1:2436-> 59,49%		
		Current real output of PWM output 2:4095-> 100,00%		
		Current real output of PWM output 3:0->0,00%		
		Current real output of PWM output 4:0->0,00%		
		Current real output of PWM output 5:0->0,00%		
		Current real output of PWM output 6:0->0,00%		
		Current real output of PWM output 7:0->0,00%		
		Current real output of PWM output 8:0->0,00%		
		Current real output of PWM output 9:0->0,00%		
		Current real output of PWM output 10:0->0,00%		
		Current real output of PWM output 11:0->0,00%		
		Current real output of PWM output 12:0->0,00%		
Returns all current values of all outputs Ox on the LED module				
.CLOxDec,CLOxHex: The real value of the output Ox in the range of 0 to 4095 or 0x000 to 0xFF, including all fading and all modes.				

GET CURRENT LOx	ASCII READ COMMAND	#GCLO<LONR><CR> Result: #GCLO<LONR>:<CLOxDec>,<CLOxHex><CR>	ASCII	
	LONR	1		
	TX	#1,GCLO1<CR>		
	RX	#1,GCLO1:2347,0x92B<CR>		
		Current real output of PWM output 1:2347->57,31%		
Returns the current value of the output channel LONR. CLOxDec,CLOxHex: The real value of the output Ox in the range of 0 to 4095 or 0x000 to 0xFFFF, including all fading and all modes.				
GET RANDOM LOS	ASCII READ COMMAND	#GRLOS<CR> Result: #GRLOS:<RLO1Dec>,<RLO2Dec>,...,<RLO12Dec>, <RLO1Hex>,<RLO2Hex>,...,<RLO12Hex><CR>	ASCII	
	TX	#1,GRLOS<CR>		
	RX	#1,GRLOS:0,0,0,0,0,0,0,0,0,0,0,0,0x0,0x0,0x0,0x0,0x0,0x0,0x0,0x0,0x0,0x0,0x0,0x0<CR>		
		Current random output of PWM output 1:0->0,00%		
		Current random output of PWM output 2:0->0,00%		
		Current random output of PWM output 3:0->0,00%		
		Current random output of PWM output 4:0->0,00%		
		Current random output of PWM output 5:0->0,00%		
		Current random output of PWM output 6:0->0,00%		
		Current random output of PWM output 7:0->0,00%		
		Current random output of PWM output 8:0->0,00%		
		Current random output of PWM output 9:0->0,00%		
		Current random output of PWM output 10:0->0,00%		
		Current random output of PWM output 11:0->0,00%		
		Current random output of PWM output 12:0->0,00%		
Returns the last diced values for the outputs O1, O2 up to O12 in mode RANDOM. RLOxDec,RLOxHex: The last diced number in mode RANDOM for output x in the range of 0 to 4095 or 0x000 to 0xFFFF				
GET RANDOM LOx	ASCII READ COMMAND	#GRLO<LONR><CR> Result: #GRLO<LONR>:<RLOxDec>,<RLOxHex><CR>	ASCII	
	LONR	1		
	TX	#1,GRLO1<CR>		
	RX	#1,GRLO1:0,0x0<CR>		
		Current random output of PWM output 1:0->0,00%		
Returns the last diced values for the output channel LONR in mode RANDOM. RLOxDec,RLOxHex: The last diced number in mode RANDOM for output Ox in the range of 0 to 4095 or 0x000 to 0xFFFF.				
LED PWM OUTPUTS in HSV color MODEL				
SET HSV LEDGROUPS	ASCII WRITE COMMAND	#SHSVS:<HUE1>,<SATURATION1>,<VALUE1>, <HUE2>,<SATURATION2>,<VALUE2>, <HUE3>,<SATURATION3>,<VALUE3>, <HUE4>,<SATURATION4>,<VALUE4><CR> Result: #OK<CR>	ASCII	YES
	HUE1	120,000		
	SATURATION1	100,000		

	VALUE1	20,550		
	HUE2	120,000		
	SATURATION2	100,000		
	VALUE2	20,550		
	HUE3	120,000		
	SATURATION3	100,000		
	VALUE3	20,550		
	HUE4	120,000		
	SATURATION4	100,000		
	VALUE4	20,550		
	TX	#1,SHSVS:120,100,20.55,120,100,20.55,120,100,20.55,120,100,20.55 <CR>		
	RX	#1,OK<CR>		
Sets new HSV values for all LED groups using the HSV color model. HUEx: The actual hue between 0 and 360.0 degree for LED group x. SATURATIONx:The actual saturation between 0 and 100.0% for LED group x. VALUEx:The actual value between 0 and 100.0% for LED group x.				
SET HSV LEDGROUPx	ASCII WRITE COMMAND	#SHSV<LEDGROUP>:<HUE>,<SATURATION>,<VALUE><CR> Result: #OK<CR>	ASCII	YES
	LEDGROUP	1		
	HUE	120,000		
	SATURATION	100,000		
	VALUE	20,550		
	TX	#1,SHSV1:120,100,20.55 <CR>		
	RX	#1,OK<CR>		
Sets new HSV values for the LED group LEDGROUP using the HSV color model. HUE: The actual hue between 0 and 360.0 degree. SATURATION:The actual saturation between 0 and 100.0% VALUE:The actual value between 0 and 100.0%				
GET CURRENT HSV LEDGROUPS	ASCII READ COMMAND	#GCHSVS<CR> Result: #GCHSVS:<CHUE1DbI>,<CSATURATION1DbI>,<CVALUE1DbI>, <CHUE2DbI>,<CSATURATION2DbI>,<CVALUE2DbI>, <CHUE3DbI>,<CSATURATION3DbI>,<CVALUE3DbI>, <CHUE4DbI>,<CSATURATION4DbI>,<CVALUE4DbI><CR>	ASCII	
	TX	#1,GCHSVS<CR>		
	RX	#1,GCHSVS:89.304,100.000,100.000,0.000,0.000,0.000,0.000,0.000,0.000,0.000,0.000,0.000<CR>		
		PWM group 1:current real HSV HUE output 89.304°		
		PWM group 1:current real HSV SATURATION output 100.000%		
		PWM group 1:current real HSV VALUE output 100.000%		
		PWM group 2:current real HSV HUE output 0.000°		
		PWM group 2:current real HSV SATURATION output 0.000%		
		PWM group 2:current real HSV VALUE output 0.000%		
		PWM group 3:current real HSV HUE output 0.000°		
		PWM group 3:current real HSV SATURATION output 0.000%		
		PWM group 3:current real HSV VALUE output 0.000%		
		PWM group 4:current real HSV HUE output 0.000°		

		PWM group 4:current real HSV SATURATION output 0.000%		
		PWM group 4:current real HSV VALUE output 0.000%		
Returns the current HSV values of all LED groups for the HSV color model. CHUEXDbI: The actual hue between 0 and 360.0 degree for LED group x. CSATURATIONXDbI:The actual saturation between 0 and 100.0% for LED group x CVALUEXDbI:The actual value between 0 and 100.0% for LED group x				
GET CURRENT HSV LEDGROUPx	ASCII READ COMMAND	#GCHSV<LEDGROUP><CR> Result: #GCHSV<LEDGROUP>:<CHUEDbI>,<CSATURATIONDbI>,<CVALUEDbI><CR>	ASCII	
	LEDGROUP	1		
	TX	#1,GCHSV1<CR>		
	RX	#1,GCHSV1:90.608,100.000,100.000<CR>		
		Current real HSV HUE output of PWM group 1: 90.608°		
		Current real HSV SATURATION output of PWM group 1: 100.000%		
		Current real HSV VALUE output of PWM group 1: 100.000%		
Returns the current HSV values of the LED group LEDGROUP for the HSV color model. CHUEDbI: The actual hue between 0 and 360.0 degree. CSATURATIONDbI:The actual saturation between 0 and 100.0% CVALUEDbI:The actual value between 0 and 100.0%				
LED PWM OUTPUTS in RGB color MODEL				
SET RGB LEDGROUPS	ASCII WRITE COMMAND	#SRGBS:<RED1>,<GREEN1>,<BLUE1>, <RED2>,<GREEN2>,<BLUE2>, <RED3>,<GREEN3>,<BLUE3>, <RED4>,<GREEN4>,<BLUE4><CR> Result: #OK<CR>	ASCII	YES
	RED1	100,000		
	GREEN1	80,000		
	BLUE1	20,000		
	RED2	100,000		
	GREEN2	80,000		
	BLUE2	20,000		
	RED3	100,000		
	GREEN3	80,000		
	BLUE3	20,000		
	RED4	100,000		
	GREEN4	80,000		
	BLUE4	20,000		
	TX	#1,SRGBS:100,80,20,100,80,20,100,80,20,100,80,20<CR>		
	RX	#1,OK<CR>		
Sets new RGB values for all LED groups using the RGB color model. REDx: The actual RED between 0 and 100.0% for LED group x. GREENx: The actual GREEN between 0 and 100.0% for LED group x. BLUEx: The actual BLUE between 0 and 100.0% for LED group x.				
SET RGB LEDGROUPx	ASCII WRITE COMMAND	#SRGB<LEDGROUP>:<RED>,<GREEN>,<BLUE><CR> Result: #OK<CR>	ASCII	YES
	LEDGROUP	1		

	RED	100,000		
	GREEN	80,000		
	BLUE	20,000		
	TX	#1,SRGB1:100,80,20<CR>		
	RX	#1,OK<CR>		
Sets new RGB values for LED group LEDGORUP using the RGB color model. RED: The actual RED between 0 and 100.0% GREEN: The actual GREEN between 0 and 100.0% BLUE: The actual BLUE between 0 and 100.0%				
GET CURRENT RGB LEDGROUPS	ASCII READ COMMAND	#GCRGBS<CR> Result: #GCRGBS:<CRED1DbI>,<CGREEN1DbI>,<CBLUE1DbI>, <CRED2DbI>,<CGREEN2DbI>,<CBLUE2DbI>, <CRED3DbI>,<CGREEN3DbI>,<CBLUE3DbI>, <CRED4DbI>,<CGREEN4DbI>,<CBLUE4DbI><CR>	ASCII	
	TX	#1,GCRGBS<CR>		
	RX	#1,GCRGBS:46.813,100.000,0.000,0.000,0.000,0.000,0.000,0.000,0.000,0.000,0.000,0.000,0.000,0.000,0.000,0.000<CR>		
		PWM group 1:current real RGB RED output 46.813%		
		PWM group 1:current real RGB GREEN output 100.000%		
		PWM group 1:current real RGB BLUE output 0.000%		
		PWM group 2:current real RGB RED output 0.000%		
		PWM group 2:current real RGB GREEN output 0.000%		
		PWM group 2:current real RGB BLUE output 0.000%		
		PWM group 3:current real RGB RED output 0.000%		
		PWM group 3:current real RGB GREEN output 0.000%		
		PWM group 3:current real RGB BLUE output 0.000%		
		PWM group 4:current real RGB RED output 0.000%		
		PWM group 4:current real RGB GREEN output 0.000%		
		PWM group 4:current real RGB BLUE output 0.000%		
Returns the current RGB values of all LED groups for the RGB color model. CREDxDbI: The actual RED part between 0 and 100.0% for LED group x CGREENxDbI:The actual GREEN part between 0 and 100.0% for LED group x CBLUExDbI:The actual BLUE part between 0 and 100.0% for LED group x				
GET CURRENT RGB LEDGROUPx	ASCII READ COMMAND	#GCRGB<LEDGROUP><CR> Result: #GCRGB<LEDGROUP>:<CREDDbI>,<CGREENDbI>,<CBLUEDbI><CR>	ASCII	
	LEDGROUP	1		
	TX	#1,GCRGB1<CR>		
	RX	#1,GCRGB1:42.662,100.000,0.000<CR>		
		Current real RGB RED output of PWM group 1: 42.662%		
		Current real RGB GREEN output of PWM group 1: 100.000%		
		Current real RGB BLUE output of PWM group 1: 0.000%		
Returns the current RGB values of LED group LEDGROUP for the RGB color model. CREDDbI: The actual RED part between 0 and 100.0% CGREENDbI:The actual GREEN part between 0 and 100.0% CBLUEDbI:The actual BLUE part between 0 and 100.0%				
LED HSV EFFECTS				

SET HSV EFFECT ON ALL LEDGROUPS	ASCII WRITE COMMAND	#SHSVEFFALL:<MODE>,<HUEStart>,<HUEEnd>,<HUEIncDec>,<SATURATIONStart>,<SATURATIONEnd>,<SATURATIONIncDec>,<VALUEStart>,<VALUEEnd>,<VALUEIncDec><CR> Result: #OK<CR>	ASCII	YES
	MODE	2:UP-DOWN		
	HUEStart	0,000		
	HUEEnd	20,000		
	HUEIncDec	1,00000		
	SATURATIONStart	100,000		
	SATURATIONEnd	100,000		
	SATURATIONIncDec	0,000		
	VALUEStart	0,000		
	VALUEEnd	100,000		
	VALUEIncDec	5,000		
	TX	#1,SHSVEFFALL:2,0,20,1,100,100,0,0,100,5<CR>		
	RX	#1,OK<CR>		
<p>Sets a new HSV effect for all LED groups for the HSV color model. This HSV effect starts the HSV effects on all LED groups synchronously. Therefore the MODE of all LED groups is set to 6:HSV EFFECTS to ensure a synched start. The HSV effect will increment or decrement the current HSV values every 5ms. So a HSV start angle of 0° and an end angle of 360° with an increment value of 0.1° will output the complete color circle on the LED group</p> <p>MODEDec: The current HSV effect mode =0:UP:increment of HUE/SATURATON or VALUE =1:DOWN:decrement of HUE/SATURATON or VALUE =2: UP/DOWN:alternate increment and decrement of HUE/SATURATON or VALUE HUECurrentDbI: The actual calculated hue between 0 and 360.0 degree HUEStartDbI: The start angle for hue effect between 0 and 360.0 degree HUEEndDbI: The end angle for hue effect between 0 and 360.0 degree HUEIncDecDbI: The increment/decrement angle for hue effect between 0 and 360.0 degree. This value is added or subtracted every 5ms from current hue value, depending on MODE setting.</p> <p>SATURATIONCurrentDbI: The actual calculated saturation between 0 and 100.0% SATURATIONStartDbI: The start percentage for saturation effect between 0 and 100.0% SATURATIONEndDbI: The end percentage for saturation effect between 0 and 100.0% SATURATIONIncDecDbI: The increment/decrement percentage for saturation effect between 0 and 100.0%. This value is added or subtracted every 5ms from current saturation value, depending on MODE setting.</p> <p>VALUECurrentDbI: The actual calculated value between 0 and 100.0% VALUEStartDbI: The start percentage for value effect between 0 and 100.0% VALUEEndDbI: The end percentage for value effect between 0 and 100.0% VALUEIncDecDbI: The increment/decrement percentage for value effect between 0 and 100.0%. This value is added or subtracted every 5ms from current value value, depending on MODE setting.</p>				
SET HSV EFFECT LEDGROUPx	ASCII WRITE COMMAND	#SHSVEFF<LEDGROUP>:<MODE>,<HUEStart>,<HUEEnd>,<HUEIncDec>,<SATURATIONStart>,<SATURATIONEnd>,<SATURATIONIncDec>,<VALUEStart>,<VALUEEnd>,<VALUEIncDec><CR> Result: #OK<CR>	ASCII	NO

	LEDGROUP	1		
	MODE	0:UP		
	HUEStart	0,000		
	HUEEnd	360,000		
	HUEIncDec	0,00010		
	SATURATIONStart	100,000		
	SATURATIONEnd	100,000		
	SATURATIONIncDec	0,000		
	VALUEStart	100,000		
	VALUEEnd	100,000		
	VALUEIncDec	0,000		
	TX	#1,SHSVEFF1:0,0,360,0.0001,100,100,0,100,100,0<CR>		
	RX	#1,OK<CR>		
<p>Sets a new HSV effect for LED group LEDGROUP for the HSV color model. This HSV effect starts, when the MODE of the LED group is set to 6:HSV EFFECTS The HSV effect will increment or decrement the current HSV values every 5ms. So a HSV start angle of 0° and an end angle of 360° with an increment value of 0.1° will output the complete color circle on the LED group</p> <p>MODEDec:The current HSV effect mode =0:UP:increment of HUE/SATURATON or VALUE =1:DOWN:decrement of HUE/SATURATON or VALUE =2: UP/DOWN:alternate increment and decrement of HUE/SATURATON or VALUE HUECurrentDbI: The actual calculated hue between 0 and 360.0 degree HUEStartDbI: The start angle for hue effect between 0 and 360.0 degree HUEEndDbI: The end angle for hue effect between 0 and 360.0 degree HUEIncDecDbI: The increment/decrement angle for hue effect between 0 and 360.0 degree. This value is added or subtracted every 5ms from current hue value, depending on MODE setting.</p> <p>SATURATIONCurrentDbI: The actual calculated saturation between 0 and 100.0% SATURATIONStartDbI: The start percentage for saturation effect between 0 and 100.0% SATURATIONEndDbI: The end percentage for saturation effect between 0 and 100.0% SATURATIONIncDecDbI: The increment/decrement percentage for saturation effect between 0 and 100.0%. This value is added or subtracted every 5ms from current saturation value, depending on MODE setting.</p> <p>VALUECurrentDbI: The actual calculated value between 0 and 100.0% VALUEStartDbI: The start percentage for value effect between 0 and 100.0% VALUEEndDbI: The end percentage for value effect between 0 and 100.0% VALUEIncDecDbI: The increment/decrement percentage for value effect between 0 and 100.0%. This value is added or subtracted every 5ms from current value value, depending on MODE setting.</p>				
GET HSV EFFECT LEDGROUPx	ASCII READ COMMAND	#GHSVEFF<LEDGROUP><CR> Result: #GHSVEFF<LEDGROUP>:<MODEDec>, <HUECurrentDbI>,<HUEStartDbI>,<HUEEndDbI>,<HUEIncDecDbI>, <SATURATIONCurrentDbI>,<SATURATIONStartDbI>,<SATURATIONEndDbI>, <SATURATIONIncDecDbI>, <VALUECurrentDbI>,<VALUEStartDbI>,<VALUEEndDbI>,<VALUEIncDecDbI>, <CR>	ASCII	
	LEDGROUP	1		
	TX	#1,GHSVEFF1<CR>		

	RX	#1,GHSVEFF1:0,96.0000,0.0000,360.0000,0.1000,100.0000,100.0000,100.0000,0.0000,100.0000,100.0000,100.0000,0.0000,<CR>		
		PWM group 1:HSV effect current mode 0:UP		
		PWM group 1:HSV effect HUE current 96.0000°		
		PWM group 1:HSV effect HUE start 0.0000°		
		PWM group 1:HSV effect HUE end 360.0000°		
		PWM group 1:HSV effect HUE increment/decrement 0.1000°		
		PWM group 1:HSV effect SATURATION current 100.0000%		
		PWM group 1:HSV effect SATURATION start 100.0000%		
		PWM group 1:HSV effect SATURATION end 100.0000%		
		PWM group 1:HSV effect SATURATION increment/decrement 0.0000%		
		PWM group 1:HSV effect VALUE current 100.0000%		
		PWM group 1:HSV effect VALUE start 100.0000%		
		PWM group 1:HSV effect VALUE end 100.0000%		
		PWM group 1:HSV effect VALUE increment/decrement 0.0000%		

Returns the current HSV effect settings for LED group LEDGROUP for the HSV color model.

MODEDec:The current effect mode

=0:UP:increment of HUE/SATURATON or VALUE

=1:DOWN:decrement of HUE/SATURATON or VALUE

=2: UP/DOWN:alternate increment and decrement of HUE/SATURATON or VALUE

HUECurrentDbI: The actual calculated hue between 0 and 360.0 degree

HUEStartDbI: The start angle for hue effect between 0 and 360.0 degree

HUEEndDbI: The end angle for hue effect between 0 and 360.0 degree

HUEIncDecDbI: The increment/decrement angle for hue effect between 0 and 360.0 degree.

This value is added or subtracted every 5ms from current hue value, depending on MODE setting.

SATURATIONCurrentDbI: The actual calculated saturation between 0 and 100.0%

SATURATIONStartDbI: The start percentage for saturation effect between 0 and 100.0%

SATURATIONEndDbI: The end percentage for saturation effect between 0 and 100.0%

SATURATIONIncDecDbI: The increment/decrement percentage for saturation effect between 0 and 100.0%.

This value is added or subtracted every 5ms from current saturation value, depending on MODE setting.

VALUECurrentDbI: The actual calculated value between 0 and 100.0%

VALUEStartDbI: The start percentage for value effect between 0 and 100.0%

VALUEEndDbI: The end percentage for value effect between 0 and 100.0%

VALUEIncDecDbI: The increment/decrement percentage for value effect between 0 and 100.0%.

This value is added or subtracted every 5ms from current value value, depending on MODE setting.