

DMX1TR - TCP-IP CONTROL COMMANDS

WRITE DMX DATA OUT

Sets a full DMX frame of 512 DMX output channels to the values defined by the DataBytes

CommandByte	DataBytes	Comment
0xA0	dd dd dd	dd = the level value (0 - 255) for each of the 512 DMX channels The 0xA0 CommandByte must be followed by exactly 512 DataBytes

Examples

0xA0 0xFF 0xFF 0x00 0x00 0x7F 0x7F (and 506 more **0x00** DataBytes)

This data sequence will set Ch 1 and 2 to 100% (255), channel 3 and 4 to 0%, channel 5 and 6 to 50% (127) and all the rest of the channels to 0%

DMX1TR - TCP-IP CONTROL COMMANDS

WRITE DMX DATA BLOCK

Sets a defined range of DMX output channels to the values determined by the DataBytes.

The range is defined by means of a base channel followed by a given number of channels.

As 1 DataByte can only hold values up to 256, the channel values are represented by 2 Bytes, which calculated together binary, will set the channel number. The first Byte being 0x00 for the 1 to 255 channel range or 0x01 for 256 to 512 channel range (in programming slang this is called the **Most Significant Byte**). The second Byte being 1 to 255 (the **Least Significant Byte**) indicating channel 1 to 255 or 256 to 512 depending on the value of the MSB byte

CommandByte	DataBytes	Comment
0xAB	bh bl ch cl dd ...	bh = the MSB of the base channel (0x00 or 0x01) bl = the LSB of the base channel (0x01 to 0xFF) ch = the MSB of the number of channels ((0x00 or 0x01) cl = the LSB of the number of channels (0x01 to 0xFF) dd = the level value (0 - 256) for each of the channels in the selected range The amount of DataBytes dd must be matching with the ch cl parameters

Examples

Example1

0xAB 0x00 0x64 0x00 0x0A 0x14 0x28 0x3C 0x50 0x64 0x78 0x8C 0x0A 0xB4 0xC8

This data sequence will set DMX levels for a group of 10 channels (**0x0A**) starting at channel 100, the base channel (**0x64**). The DMX levels will be 20, 40, 60, 80, 100, 120, 140, 160, 180, 200

Example2

0xAB 0x01 0x0E 0x00 0x05 0xFF 0x8C 0x0A 0xB4 0xFF

This data sequence will set DMX levels for a group of 5 channels (**0x05**) starting at channel 270, the base channel (**0x01 + 0E**). The DMX levels will be 255, 140, 160, 180, 255

DMX1TR - TCP-IP CONTROL COMMANDS

BOX RESET

Resets the DMX1TR and stops DMX output. Merged channels are un-merged. Transmission of incoming DMX to the user program is stopped.

CommandByte	DataBytes	Comment
0x84		

DMX1TR - TCP-IP CONTROL COMMANDS

FREEZE DMX OUT

Stops the DMX1TR from updating its data from the network, WRITE commands will be ignored. The current DMX levels will be “frozen”. The DMX1TR will however continue sending these levels out.

CommandByte	DataBytes	Comment
0xA2		Sending this command to an already an already “freezed” DMX1TR has no effect. !The MERGE command will be ignored

UNFREEZE DMX OUT

Resumes the DMX1TR from updating its data from the network, after a FREEZE command has

CommandByte	DataBytes	Comment
0xA3		Sending this command to an already a “non-freezed” DMX1TR has no effect.

DMX1TR - TCP-IP CONTROL COMMANDS

CLEAR DMX OUT

Sets all DMX channels to 0% (0x00) until a new WRITE command is received.

CommandByte	DataBytes	Comment
0xA4		Merged channels are not effected, and will keep transmitting their received values.

DMX1TR - TCP-IP CONTROL COMMANDS

START DMX IN

Starts sending the DMX data received on the DMX1TR input to the controlling application

CommandByte	DataBytes	Comment
0xA5		Sending this command to a DMX1TR that is already send its data has no effect.

STOP DMX IN

Stops sending the DMX data received on the DMX1TR input to the controlling application

CommandByte	DataBytes	Comment
0xA7		Sending this command to a DMX1TR that is not sending its data has no effect.

DMX1TR - TCP-IP CONTROL COMMANDS

MERGE CHANNEL

Configures the DMX1TR to merge incoming values to the outgoing data stream. The level-value of the given channel will be read from the received DMX Input and copied to the DMX output

The DMX1TR will keep copying the incoming channel value to the output until an UNMERGE CHANNEL command for the specified channel is received

Multiple channels can be merged simultaneously. Separate commands must be sent for each individual channel.

As 1 DataByte can only hold values up to 256, the channel values are represented by 2 Bytes, which calculated together binary, will set the channel number. The first Byte being 0x00 for the 1 to 255 channel range or 0x01 for 256 to 512 channel range (in programming slang this is called the **Most Significant Byte**). The second Byte being 1 to 255 (the **Least Significant Byte**) indicating channel 1 to 255 or 256 to 512 depending on the value of the MSB byte.

CommandByte	DataBytes	Comment
0xA8	ch cl	ch = the MSB of the channel to be merged (0x00 or 0x01) cl = the LSB of the channel to be merged (0x01 to 0xFF)

Examples

0xA8 0x00 0x64

This data sequence will configure the DMX1TR to copy the value from the incoming channel 100 to the outgoing channel 100 (0x64).

Example2

0xA8 0x01 0x0E

This data sequence will configure the DMX1TR to copy the value from the incoming channel 270 to the outgoing channel 270 (0x01 + 0x0E).

UNMERGE CHANNEL

Cancels the merge setting for the given channel

CommandByte	DataBytes	Comment
0xA9	ch cl	

DMX1TR - TCP-IP CONTROL COMMANDS

READ DMX IN

Up on receiving this command the DMX1TR will return a data packet reporting the current values of all 512 incoming DMX channels

CommandByte	DataBytes	Comment
0xAA		The DMX1TR will answer with a data packet consisting of 513 bytes. 0xA6 dd dd dd ... dd = the level value (0 - 255) for each of the 512 DMX channels