

DMX512 Gateway

M/DMX512.1



Guangzhou Hedong Electronic CO., Ltd(HDL)

HDL KNX / EIB-BUS

(Intelligent Installation Systems)

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1- General

HDL KNX / EIB series DMX recorder modules are developed by

HDL. Using KNX/EIB BUS communicate with other KNX devices. The database needs to be downloaded to the dimmer actuator using ETS2 V1.3 or ETS 3.0, and the document descrips how to use these products. Our products use standard according to EMC, electrical safety, environmental conditions.

The DMX recorders are used to control some devices, such as:

- * Dimming
- * Relay
- * Motor
- * Curtain
- * Other Equipments

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1.1-Product Function



M/DMX512.1

The DMX Recorder there is 3 work modes:

• External record mode

The mode as a recorder, it can record some scenes, and then you can play the scenes by other devices after record.

The objectives are devices which have DMX input. You can control it by panel and other devices.

• DMX dimming (EIB to DMX)

The mode as a dimmer, it can control channel, scene and sequence.

- *** 48 channels
- *** 24 scenes
- *** 6 sequences

The objectives are the lights that controlled by DMX input signal.

• DMX to EIB

The mode as converters, can achieve the DMX signal to control EIB devices.

There are 48 channels at all, that is, it can control 48 objectives.

The objectives are dimming, relay and other devices.

2- Hardware

The technical properties of HDL KNX/EIB DMX Recorder's parameters set as following sections.

2.1- Technical data

Power supply

*Operating voltage(supply by the bus)	2130 V DC,
* Current consumption EIB / KNX(operate)	< 15 mA
* Current consumption EIB / KNX(standby)	< 5 mA
* Power consumption EIB / KNX(operate)	< 450 mW
* Power consumption EIB / KNX(standby)	< 150 mW

Output nominal values

* Type of Device	M/DMX512.1
* Number of contacts	1
* In rated current	6 A
* Power loss per device at max. load	2.7 W

Output life expectancy

* Mechanical Life	50years
* Electrical Life	20years

Output dimmer actuator without additional DC power

Connections

* EIB / KNX	Bus Connection Terminal
	0.8 mm Ø, single core
* Load circuits	Screw terminal with Slotted head
	0.24 mm ² multi- core
	0.46 mm ² single-core
* cable shoe	12 mm
* Tightening torque	Max. 0.8 Nm

Operating and display

* Red LED and EIB / KNX program button for assignment of the physical address

Temperature range	
* Operation	– 5 °C ~ + 45 °C
* Storage	– 25 °C ~ + 55 °C
* Transport	– 25 °C ~ + 70 °C
Environment conditions	
* humidity	max. 95 % Non-condensing

Appearance design

* Modular
* Type
* Dimensions (H x W x D)
Weight (unit kg)
Installation
Mounting position
Material and Colour
Standard and Safety
* LVD Standard
*EMC Standard
CE mark

DIN-Rail Modular installation M/DMX512.1 90 x 72 x 66 0.26 Use 35 mm mounting rail Electric dimmer box Plastic, Black Certificated EN60669-2-1, EN60669-1 EN50090-2-2

* In accordance with the EMC guideline and low voltage guideline **Pollutant**Comply with RoHS

Application table		
Туре	M/DMX. 1	
External record mode	24 programs	
DMX dimming (EIB to DMX)	48 channels	
DMX to EIB	48 channels	
Note: The programming requires the EIB	Software Tools ETS2	√1.3 or ETS3.0. If
use		
ETS2 V1.3, then import "*.vd2". If use ET	S3.0, then Import "*.vd	3

2.2- Dimension drawings and Wiring diagram



- 1-Label area
 2-Output DC24V
 3-KNX/EIB Bus Connector
 4-Programming button & Programming LED
 5- RJ45 Port
 6-Led state
 7- DMX output
 8-DMX input
- **Note:** a) Dimensions of the space to be provided for each device.
 - b) Dimensions and position of the means for supporting and fixing the DMX Recorder within this space
 - c) Minimum clearance between the various parts of the DMX Recorder and the surrounding parts where fitted
 - d) Minimum dimensions of ventilating opening, if needed, and their correct arrangement.

2.3- Maintenance and Cautions

*Please read this user manual carefully before any operation.

*Don't close to the interfering devices.

- *The site should be ventilated with good cooling environment.
- *Pay attention to damp proof, quakeproof and dustproof.
- *Avoid rain, other liquids or caustic gas.
- *Please contact professional maintenance staff or HDL service center for repair or fix.
- *Remove the dust regularly and do not wipe the unit with the volatile liquids like alcohol, gasoline, etc.
- *If damaged by damp or liquid, turn off it immediately.
- *Regularly check the circuitry and other related circuit or cables and replace the disqualified circuitry on time.
- *For security, each circuit to connect an MCB or fuse
- *Installation location should be well-ventilated, pay attention to moisture, shock, dust proof.

3- Software

HDL KNX/EIB DMX512 database use ETS3.0 to do the design. The device type is M/DMX512.1, and the database name is "DMX512 Gateway". All Interface and the functions Apply parameters please overview the following description of the paragraph. DMX512 Gateway has 3 work modes, External record mode , DMX dimming (EIB to DMX), DMX to EIB .The following paragraph will description of the work mode in detail.

3.1- Database functions Overview

The following table provides an overview of the functions and some parameters with the DMX Recorder:

M/DMX512	function	
Work mode		
	Change DMX input/output type	Y
	Read DMX input/output	Y
External record	DMX output type HDL Net DMX	Y
mode	DMX output type Art DMX	Y
	DMX output type DMX 1990	Y
	Play program mode	Y
	Record program mode	Y
	Delete program mode	Y
	DMX output type HDL Net DMX	Y
	DMX output type Art DMX	Y
DMX dimming	DMX output type DMX 1990	Y
(EIB to DMX)	Channel control(absolute/relative	Y
	dimming) (total 48 channels)	
	Scene control (total 24 scenes)	Y
	Sequence control (total 6	Y
	sequences)	
	DMX output type HDL Net DMX	Y
	DMX output type Art DMX	Y
DMX to EIB	DMX output type DMX 1990	Y
	Switch ON/OFF	
	Relative dimming	Y
	Absoluter dimming	Y

Table1: Database application overview.

3.2- Object/Association/Group address define

In following table, The objects is assigned to the some function of the channel output pages, If active some functions and the object will be valid. One or more group addresses can be assigned to a object. The association will connect group addresses to the object.

Table2: Overview the max. number of the objects, max. number ofassociations and max. number of the group addresses

Note: If you use ETS2V1.3, Please import "VD2", But if you use the ETS3.0, Please Import "VD3" to "VD3".

3.3- Function parameter "General"

1.1.5 I/DIX512.1		
General		General
Primac config DMX config Program config Program group A	Work mode select	External record mode
	Information of DMX shown below: DMX type:->HDLNet DMX>ArtNet DMX. ->DMX-1990. DMX universe:HDLNet DMX(1255), ArtNet DMX(0.255) DMX start address:1512	<-Note
	ОК	Cancel Default Info Help

Fig1: "General" parameter window

"In the parameter of the general windows can set the work mode.

DMX Recorder has 3 work modes.

---Work mode select

Options: external record mode DMX dimming (EIB to DMX) DMX to EIB

3.3.1 Function parameter "external record mode"

1.1.5 M/DMX512.1		
General IP/MAC config		General
DMX config Program config Program group A	Work mode select	External record mode
	Information of DMX shown below: DMX type:->HDLNet DMX>ArtNet DMX. ->DMX-ris90. DMX universe:HDLNet DMX[1255], ArtNet DMX[0255] DMX start address:1512	<-Note
	OK.	Cancel Default Info Help

Fig2: "external record mode" parameter window

When you select the different mode, you need set the different parameter. Follow will show you how to set the parameter.

• IP/MAC config

1.1.5 I/DIX512.1			×
General	IP	/MAC config	
DMX config Program config	IP address:		^
	Byte1	192	
	Byte2	168	
	Byte3	10	
	Byte4	2	
	Net MAC:		
	Byte1	72	
	Byte2	68	
	Byte3	76	
	Byte4	66	
	Byte5	88	
	Byte6	99	~
	, OK	Cancel Default Info Help	

Fig2.1: "IP/MAC config" parameter window

"In the parameter window can set the IP Address and Net MAC of the M/DMX512.

• DMX config

1.1.5 I/DIX 512.1			×
General IP/MAC config	D	IX config	
DMX config Program config	>>DMX input type(for record)	HDLNet DMX	
	HDLNet DMX input for universe(1255)	1	
	Change DMX input type via bus	Disable	
	Change Net DMX input universe via bus	Disable	
	Read DMX input type(0-HDLNet DMX,1-ArtNet DMX,2- DMX-1990)	Disable	
	Read Net DMX input universe from bus	Disable	
	>>DMX output type(for play)	HDLNet DMX	
	HDLNet DMX output for universe(1255)	1	
	Change DMX output type via bus	Disable 🗸	
	Change Net DMX output universe via bus	Disable	
	Read DMX output type(0-HDLNet DMX,1-ArtNet DMX,2- DMX-1990)	Disable	
	Read Net DMX output universe from bus	Disable	
	ОК	Cancel Default Info Help	



In the parameter window can set DMX Input type, Output type and the other parameters.

--- >>DMX input type (for record)

Options: HDLNet DMX

ArtNET DMX

DMX1990

The DMX input has 3 communication modes.

HDLNet DMX: it's belong to HDL protocol,

ArtNet DMX: it's an Ethernet protocol based on the TCP/IP protocol suite. **DMX1990:** standard DMX512 protocol.

According to need to choose communication mode. Now, Take the HDLNet DMX as an example.

--- HDLNet DMX input for universe (1...255)

Options: 1...255

Set the NO. for universe, the NO. is same to the object's universe. The range is 1 to 255.

--- Change DMX input type via bus

Options: Disable Enable

If choose the Enable, other devices on the bus can send telegram to change the DMX input type.

If you chose the Disable, you can't change the DMX input type by other devices.

--- Change NetDMX input universe via bus Options: Disable Enable

If choose the Enable, other devices on the bus can send telegram to change the DMX input universe.

If you chose the Disable, you can't change the universe via bus.

--- Read DMX input type(0-HDLNet DMX,1-ArtNetDMX 2-DMX-1990) Options: Disable Enable

If you choose the Enable, you can read the DMX input type by other devices.

If you set Disable, you can't read the DMX input type by other devices.

--- Read Net DMX input universe from bus

Options: Disable

Enable

If you chose the Enable, you can read the DMX input universe by other device.

If you set Disable, you can't read the DMX input universe by other device.

--- >>DMX Output type (for record)

The settings are same to the DMX Input type.

1.1.1 T/DTX512.1		
General IP/MAC config	Program	a config
DMX config Program config	Program mode	Play program mode 🛛 👻
Program group A Program group B	Change program mode via bus	Disable 💌
Program group C	Read program mode(0-Play mode,1-Record mode,2-Delete mode)	Disable 💌
	Enable program group A	Enable
	Enable program group B	Enable
	Enable program group C	Enable
	Play program after voltage recovery	Defined program
	Recovery to defined program NO.	Program No.1
	OK Cance	l <u>D</u> efault <u>I</u> nfo <u>H</u> elp

• Program config

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Fig2.3: "Program config" parameter window

The parameter window is set the

--- Program mode

Options: Play program mode

Record program mode

Delete program mode

The DMX Reader has 3 work modes, so you have to programming for these three modes.

--- Change program mode via bus Options: Disable

Enable

If choose the Enable, other devices on the bus can send telegram to change the program mode of the module.

If choose the Disable, there isn't the function.

--- Read program mode (0-play mode,1-Record mode,2-Delete mode) Options: Disable Enable

If choose the Enable, other devices on the bus can send telegram to read the program mode of the module. The telegram is 0 that the mode is play mode; the telegram is 1 that the mode is record mode; the telegram is 2 that is the mode is delete mode.

If choose the Disable, there isn't the function.

--- Enable program group A

Options: Disable

Enable

Set the enable of the program group A. If you choose the Enable, you can set the follow parameter.

Other program groups are same as program group A.

1.1.5 M/DMX512.1			
General IP/MAC config		Program group A	
DMX config Program config	Program group A-1	Program No.1	~
Program group A Program group B	Program group A-2	Program No.2	~
Program group L	Program group A-3	Program No.3	~
	Program group A-4	Program No.4	~
	Program group A-5	Program No.5	~
	Program group A-6	Program No.6	~
	Program group A-7	Program No.7	~
	Program group A-8	Program No.8	~
	Note:"1"-start,"0"-stop		
		OK Cancel Default Inf	• <u>H</u> elp

Fig2.4: "Program group A" parameter window

Each program group has 8 groups and each group can set one program, the program range is NO.1 to NO.50, and you can set invalid, too.

After that, you can use panel play this program. Of course, panel button's address must match with the program.

3.3.2 Function parameter "DMX dimming(EIB to DMX)"

General General IP/MAC config DMX config DMX config Dhannel config Channel 1 Channel 2 Channel 3 Channel 4 Information of DMX shown below: Channel 5 DMX type:>HDLNet DMX. ⇒ArtNet DMX. Channel 6 >DMX shown below: Channel 7 Channel 7 DMX universe:HDLNet DMX(1255), ArtNet DMX(1255), ArtNet	1.1.5 M/DMX512.1		Σ
Scene coning DMX start address: 1512 Scene N0.2 Scene N0.3 Scene N0.4 Scene N0.4 Scene N0.5 Scene N0.6	1.1.5 T/DIX512.1 General IP/MAC config DMX config DMX config Channel config Channel 1 Channel 1 Channel 3 Channel 3 Channel 4 Channel 5 Channel 5 Channel 8 Scene config Scene NO.1 Scene NO.3 Scene NO.3 Scene NO.4 Scene NO.6 Scene NO.6	Work mode select Information of DMX shown below: DMX type:>HDLNet DMX. >ArtNet DMX. >DMX-universe:HDLNet DMX[1255], ArtNet DMX:(0.255) DMX start address:1512	General
Scene N0.6 Sequence config Sequence 1	Scene ND.6 Sequence config Sequence 1		Carool Default loto Holo

Fig3: "external record mode" parameter window

When you select the mode, you need set the follow parameter.

• IP/MAC config

General		IP/MAC config	
IP/MAC config			
DMX config			
Channel config	IP address:		
Channel 1		100	
Channel 2	Byte1	192	¥
Channel 3		100	
Channel 4	Byte2	168	*
Channel 5		40	
Channel 6	Byte3	10	Ŷ
Channel 7		-	
Channel 8	Byte4	2	-
Scene config			
Scene NO.1	Net MAC:		
Scene NO.2		70	
Scene NO.3	Byte1	72	
Scene NO.4			
Scene NO.5	Byte2	68	
Scene NO.6			
Sequence config	Byte3	76	
Sequence 1			
	Byte4	66	\$
	Byte5	88	-
		-	
	Byte6	99	*
		·	
	1		

Fig3.1: "IP/MAC config" parameter window

"In the parameter window can set the IP Address and Net MAC.

DMX config

□ 1.1.5 I/DIX512.1			×
General IP/MAC config	D	MX config	
IP/MAC config Dharnel Contig Channel 2 Channel 3 Channel 4 Channel 5 Channel 6 Channel 6 Channel 7 Channel 8 Scene ND.1 Scene ND.1 Scene ND.2 Scene ND.3 Scene ND.4 Scene ND.4 Scene ND.5 Scene ND.6 Sequence config Sequence 1	>>DMX output type HDLNet DMX output for universe[1255) DMX output start address[1512] Change DMX output type via bus Change Net DMX output universe via bus Change DMX output start address via bus Read DMX output type[0HDLNet DMX,1-ArtNet DMX,2-DMX-1990] Read Net DMX output universe from bus Read DMX output start address from bus	HDLNet DMX V 1 1 Disable Disable Disable Disable Disable Disable V Disable V Disable V	
	ОК	Cancel Default Info Het	p ,

Fig3.2: "DMX config" parameter window

In the parameter window can set DMX Input type, Output type and the other parameters.

--- >>DMX output type Options: HDLNet DMX ArtNET DMX DMX1990

The DMX output has 3 communication modes. Now, Take the HDLNet DMX as an example.

--- HDLNet DMX output for universe (1...255)

HDL KNX / EIB – BUS

Options: 1...255

Set the NO. for universe, the NO. is same to the object's universe. The range is 1 to 255.

--- DMX output start address(1...512) Options: 1...512 Set the start address of DMX output. The range is 1 to 512.

--- Change DMX output type via bus Options: Disable

Enable

If choose the Enable, other devices on the bus can send telegram to change the DMX output type.

If you choose the Disable, you can't change the DMX output type by other devices

--- Change NetDMX output universe via bus Options: Disable Enable

If choose the Enable, other devices on the bus can send telegram to change the DMX output universe.

If you choose the Disable, you can't change the universe via bus.

--- Change DMX output start address via bus

Options: Disable Enable

If choose the Enable, other devices on the bus can send telegram to change the DMX output start address.

If you choose the Disable, you can't change the start address via bus.

--- Read DMX output type(0-HDLNet DMX,1-ArtNetDMX 2-DMX-1990) Options: Disable

Enable

If you choose the Enable, you can read the DMX output type by other devices.

If you set to Disable, you can't read the DMX output type by other devices.

--- Read Net DMX output universe from bus

Options: Disable Enable

If you chose the Enable, you can read the DMX output universe by other device.

If you set to Disable, you can't read the DMX output universe by other device.

--- Read Net DMX output start address from bus

Options: Disable

Enable

If you chose the Enable, you can read the DMX output start address by other device.

If you set to Disable, you can't read the DMX output start address by other device.

• Channel config

1.1.5 I/DIX512.1			
General IP/MAC config	Cha	annel config	
DMX config Channel config	Fade time for channel dimming([0%100%]/[0255s])	5	
Channel 1 Channel 2	Enable channel 18	Enable	
Channel 3 Channel 4 Channel 5	Enable channel 916	Disable	
Channel 5 Channel 6 Channel 7	Enable channel 1724	Disable	
Channel 8 Scene config	Enable channel 2532	Disable 🗸	
Scene NO.1 Scene NO.2	Enable channel 3340	Disable	
Scene ND.3 Scene ND.4	Enable channel 4148	Disable	
Scene NO.5 Scene NO.6			
Sequence config Sequence 1			
	ОК	Cancel Default Info	Help

Fig3.3: "Channel config" parameter window

In the parameter window can set the channel's parameter. There are 48 channels.

--- Fade time for channel dimming ((0%..100%)/(0...255S))

Options: 0...255

Set the time about bright from 0 to 100% is needed, time range is 0 to 255. --- Enable channel 1...8

Options: Disable

Enable

Set the enable of the channels 1to 8, if you set the enable, you can dimming the 1to 8 channels.

- ---Enable channel 9...16,
- ---Enable channel 17...24,
- ---Enable channel 25...32,
- ---Enable channel 33...40,
- ---Enable channel4 1...48,

The settings are all same to the 1 to 8.

• The channel's setting as follows.

DMX config Channel config	<u> </u>		Channel 1	
Channel 1				
Channel 2		The response of channel state	Invalid	*
Channel 3				
Channel 4		The status after voltage recovery	OFF	*
Channel 5				
Channel 6		Enable switch ON/OFF(1bit)	Enable	~
Channel 7				
Channel 8		Enable relative dimming(4bits)	Enable	*
Channel 41				
Channel 42		-Relative dimming saved as the brightness of switch	NO	*
Channel 43				
Channel 44		Enable absolute dimming(1byte)	Enable	~
Channel 45				
Channel 46		-Absolute dimming saved as the brightness of switch	NO	~
Channel 47				
Channel 48				
Scene config				
Scene NO.1				
Scene NO.2				
Scene NO.3				
Scene NO.4				
Scene NO.5				
Scene NO.6				
Sequence config				
Sequence 1	~			
]		

Fig3.4: "Channel config" parameter window

In the parameter windows of the "Channel N", you can set some common functions. Through functional selection and download the database to the device, and device will work in accordance with the selected function.

---The response of channel state

If the dimmer was controlled will be respone of the channel state. Options: **Invalid**

- 1 bit always respone
- 1 bit only changed
- 1 byte always respone
- 1 byte only changed

1 bit always response: it always respone,

If the channel is ON, then respone 1

- If the dimmer is OFF, respone 0
- 1 bit only changed: it will be respone when the dimmer state was changed
- 1 byte always respone: it always respone of the light level value.
- 1 byte only changed: it will be respone when the light value was changed.
- --- The Status after voltage recovery

Set the status of restore mode after power on for channel. Options: **Off**

Defined brightness value Last brightness value

Off: After power on and the channel's status is off.

Defined brightness value: After power on and the channel's status is defined brightness value

Last brightness value: After power on and the channel's status is last brightness value

---Enable switch ON/OFF(1bit)

Options: Disable

Enable

Set the enable of switch control. If you choose the enable, you can use other devices control the channel on or off.

---Enable relative dimming(4bits)

Options: Disable

Enable

Set the enable of relative dimming. If choose the Enable, allow to relative dimming, If you choose the disable ,not allow to relative dimming.

Note: Relative dimming fade time (brightness0%...100%/0..255s), the data length is 4bits

---Relative dimming saved as the brightness of switch

Options: YES

NO

Whether or not save the dimming brightness. If you choose the YES, the light will maintain this brightness the next time you open it. If you choose the NO, the light is not save the brightness.

---Enable absolute dimming

Options: Disable

Enable'

Set the enable of absolute dimming. If choose the Enable, allow to absolute dimming, If you choose the disable, not allow to absolute dimming.

Note:Ablolute dimming fade time(brightness0%...100%/0..255s),the data length is 1byte

---Absolute dimming saved as the brightness of switch

Options: YES NO Whether or not save the dimming brightness. If you choose the YES, the light will maintain this brightness the next time you open it. If you choose the NO, the light is not save the brightness.

|--|

1.1.5 M/DMX512.1		\mathbf{X}
General IP/MAC config	5	icene config
DMX config Channel config	Enable scene NO.16	Enable
Channel 1 Channel 2 Channel 3	Enable scene N0.712	Disable
Channel 4 Channel 5	Enable scene NO.1318	Disable
Channel 6 Channel 7	Enable scene NO.1924	Disable
Channel 8 Scene config	Call scene after voltage recovery	Invalid
Scene NU.1 Scene NO.2 Scene NO.3		
Scene N0.4 Scene N0.5		
Scene N0.6 Sequence config Sequence 1		
Sequence		
	ОК	Cancel Default Info Help

Fig3.5: "Scene config" parameter window

In the parameter window can set the scene's parameter. There are 24 scenes.

```
--- Enable scene1...6
```

Options: Disable

Enable

Set the enable of the scenes 1 to 8, if you set to the enable, you can control the 1 to 6 scenes.

- --- Enable scene 7...12
- --- Enable scene 13...18
- --- Enable scene 19...24

The settings are all same to the 1 to 6.

• The scene's setting as follows.

1.1.5 I/DIX512.1		6	×
General IP/MAC config	S	cene NO.1	
DMX config Channel config	Fade time for scene channel dimming[[0%100%]/[0255s]]	3	
Channel 1 Channel 2	Channel 1 brightness	10%	
Channel 3 Channel 4 Channel 5	Channel 2 brightness	90%	
Channel 6 Channel 7	Channel 3 brightness	50%(128)	
Channel 8 Scene config	Channel 4 brightness	Invalid	
Scene N0.1 Scene N0.2	Channel 5 brightness	Invalid	
Scene NU.3 Scene NO.4 Scene NO.5	Channel 5 brightness		
Scene ND.6 Sequence config	Channel 8 brightness	Invalid	
Sequence 1	Channel 9 brightness	Invalid	
	Channel 10 brightness	Invalid	
	Channel 11 brightness	Invalid	
			ש ר
	OK	Cancel Default Info Help	ן

Fig3.6: "Scene NO." parameter window

In the parameter window can set the scene's parameter. There are 24 scenes.

--- Fade time for scene channel dimming ((0%..100%)/(0...255S)) Options: 0...255

Set to the fade seconds in the brighter state. The range is 0 to 255.

--- Channel 1 brightness

Options: Invalid

0%(0)

.

100%(255)

There are 48 channels each scene. You can set the channels' brightness you needed. The brightness 's range is 0% to 100%.

--- Channel 2 brightness

.....

--- Channel 48 brightness

Setting the brightness's of the 48 channels.

eneral		Sequence config	
VMAL config MX config			
hannel config	Enable sequence 1	Enable	~
hannel 1			
hannel 2	Enable sequence 2	Disable	*
hannel 3			
hannel 4	Enable sequence 3	Disable	*
hannel 5			
hannel 6	Enable sequence 4	Disable	*
hannel 7			
hannel 8	Enable sequence 5	Disable	~
cene config			
cene NO.1	Enable sequence 6	Disable	~
cene NO.2			
cene NO.3	Call sequence after voltage recovery	Defined sequence	~
cene NO.4			
cene NO.5	Recovery to defined sequenc	Sequence 1	*
cene NO.6		-	
equence config			
equence 1			

• Sequence config



In the parameter window can set the sequence's parameter. There are 6 sequences.

--- Enable sequence 1

Options: Disable

Enable

Set the enable of the sequence 1 function. if you set to the enable, you can set the parameter of sequence.

--- Enable sequence 2

- --- Enable sequence 3
- --- Enable sequence 4
- --- Enable sequence5
- --- Enable sequence 6

The settings are all same to the sequence 1.

--- Call sequence after voltage recovery

Options: Invalid

Defined sequence

Last sequence

Which sequence should working after voltage recovery, you can set here.

Invalid: no working

Defined sequence: you can select one sequence for working after voltage recovery.

Last sequence: it should working the sequence before off power.

			•
General		Sequence 1	
IP/MAC config			
DMX config	Deerstop mode of the sequence 1	Start with "1" Stop with "0"	
Channel config	operator mode of the sequence i	Start with 1, Stop with 0	
Channel 1	Cautral mode of the communes 1	D.D	
Channel 2	Control mode of the sequence i	rwb	<u> </u>
Channel 3	During words of the company of t	Contr	
Channel 4	Huning mode or the sequence 1	Lycie	×
Channel 5		0	•
Channel 6	Runing time(U255 hours,Uh&Um-unlimited)	U	v
Channel 7			
Channel 8	Runing time(059 mins,0h&0m-unlimited)	U	*
Scene config			
Scene NO.1	Position after running time out	Invalid	*
Scene NO.2			
Scene NO.3	Total 24 steps, configuration as following:		
Scene NO.4			
Scene NO.5	>>Step 1 configuration	Scene NO.01	*
Scene NO.6			
Sequence config	Time for step 1 (065535s)	5	*
Sequence 1			
	Time for step 1 (0999ms)	0	*
	>>Step 2 configuration	Scene NO.02	*
	Time for step 2 (065535s)	5	<u>^</u>

• The sequence's setting as follows.



```
--- Operation mode of the sequence 1
 Set the operation mode.
 Options: Start with "1", Stop with "0"
         Start with "0", Stop with "1"
         Start with "1/0",can't stop
 Start with "1", Stop with "0": When receives ", then run sequence
 1, When receives 0, then stop sequence 1.
 Start with "0", Stop with "1": when receives 0, then run sequence 1,
 When receives 1, then stop sequence 1.
 Start with "1/0", can't stop: Both receive 1 or 0, start the sequence 1.
---Control mode of the sequence 1
 Set the control mode.
 Options: FWD
         REW
         Random
 FWD: Forward mode
 REW: Back work mode
 RANDOM: Random mode
---Running mode of the sequence 1
 Set the running mode
 Options: Single
         Cycle
 Single: Run only once.
 Cycle: Cycle run.
---Running time (0...255hours,0h&0m-unlimited)
```

Options: 0-255

---Running time(0...59mins, 0h&0m-unlimited) Set the sequence running time. The longest time is 59mins. Options: 0-59 Note: Unlimited when the time set to 0h&0m. ---Position after time out If the sequence running in Cycle mode, and is run time greater than zero, After time out, the sequence will back to this set position. Total 24steps, configuration as following: ---Step 1 configuration Options: invalid Scene NO.01 ... Scene NO.24 ---Time for step 1(0...65535s) Set the time for the step. The longest time is 65535s. ---Time for step 1(0...999ms) Set the time for the step. The longest time is 999ms.

Other steps setting are same as the step 1.

3.3.3 Function parameter "DMX to EIB"

1.1.5 I/DIX512.1		
General		General
DMX config DMX config DMX to EIB config	Work mode select	DMX to EIB
	Information of DMX shown below:	<-Note
	>DMX-trigge: yribertectonic: yrikter brink: >DMX-trigge: DMX universe:HDLNet DMX(1255), ArtNet	
	DMX(U.200) DMX start address:1512	
	ОК	Cancel Default Info Help

Fig4: "DMX to EIB" parameter window

When you select the mode, you need set the follow parameter.

•	IP/MAC	config
---	--------	--------

1.1.5 T/DTX 512.1			
General IR/MAC config	IP/I	MAC config	
DMX config DMX to EIB config	IP address:		
	Byte1	192	
	Byte2	168	
	Byte3	10	
	Byte4	2	
	Net MAC:		
	Byte1	72	
	Byte2	68	
	Byte3	76	
	Byte4	66	
	Byte5	88	
	Byte6	99	
	OK (Cancel Default Info H	elp

Fig4.1: "P/MAC config" parameter window

"In the parameter window can set the IP Address and Net MAC of M/DMX512.

• DMX config

1.1.5 I/DIX512.1			
General IP/MAC config	DI	HX config	
DMX config DMX to EIB config	>>DMX input type	HDLNet DMX	
-	HDLNet DMX input for universe(1255)	1	
	DMX input start address(1512)	1	
	Change DMX input type via bus	Disable	
	Change Net DMX input universe via bus	Disable	
	Change DMX input start address via bus	Disable	
	Read DMX input type(0-HDLNet DMX,1-ArtNet DMX,2- DMX-1990)	Disable	
	Read Net DMX input universe form bus	Disable 👻	
	Read DMX input start address from bus	Disable 👻	
	ОК (Cancel Default Info E	<u>H</u> elp

Fig4.2: "DMX config" parameter window

In the parameter window can set DMX Input type, Output type and the other parameters.

--- >>DMX input type Options: HDLNet DMX ArtNET DMX DMX1990 The DMX input has 3 communication modes. Now, Take the HDLNet DMX as an example.

--- HDLNet DMX input for universe (1...255)

Options: 1...255

Set the NO. for universe, the NO. is same to the object's universe. The range is 1 to 255.

--- DMX input start address(1...512)

Options: 1...512

Set the start address of the DMX input by other device.

The range is 1 to 512.

--- Change DMX input type via bus

Options: Disable

Enable

If choose the Enable, other devices on the bus can send telegram to change the DMX input type.

If you chose the Disable, you can't change the DMX input type by other devices.

--- Change NetDMX input universe via bus Options: Disable Enable

If choose the Enable, other devices on the bus can send telegram to change the DMX input universe.

If you chose the Disable, you can't change the universe via bus.

--- Change DMX input start address(1...512)

Options: 1...512

Change the start address of the DMX input by other devices. The range is 1 to 512.

--- Read DMX input type(0-HDLNet DMX,1-ArtNetDMX 2-DMX-1990) Options: Disable Enable

If you choose the Enable, you can read the DMX input type by other devices.

If you set to Disable, you can't read the DMX input type by other devices.

--- Read Net DMX input universe from bus

Options: Disable Enable

If you chose the Enable, you can read the DMX input universe by other device.

If you set to Disable, you can't read the DMX input universe by other device.

--- Read DMX input start address from bus

Options: Disable

Enable

If you chose the Enable, you can read the DMX input start address by other device.

• DMX to EIB config

□ 1.1.5 I/DIX512.1			×
General IR/MAC config		DMX to EIB config	
DMX config DMX to EIB config	DMX->EIB:Channel 1	1bit for ON/OFF	^
	DMX->EIB:Channel 2	1byte for dimming	Ξ
	DMX->EIB:Channel 3	Invalid	
	DMX->EIB:Channel 4	Invalid	
	DMX->EIB:Channel 5	Invalid	
	DMX->EIB:Channel 6	Invalid	
	DMX->EIB:Channel 7	Invalid	
	DMX->EIB:Channel 8	Invalid	
	DMX->EIB:Channel 9	Invalid	
	DMX->EIB:Channel 10	Invalid	
	DMX->EIB:Channel 11	Invalid	
	DMX->EIB:Channel 12	Invalid	
	ОК	Cancel Default Info Help	

Fig4.3: "DMX to EIB config" parameter window

--- DMX-> EIB: Channel 1 Options: Invalid 1 bit for ON/OFF 1 byte for dimming

DMX to EIB is control 48 channels at all; each channel has 2 control modes, 1 bit for ON/OFF and 1 byte for dimming. The control objectives are dimming channels and relay channels.

1 bit for ON/OFF: the mode is a switch.

When the control objective is received the value of 0 to 127 the objective will off. When the control objective is received the value of 128 to 255 the objective will on.

1 byte for dimming: the mode is a dimming.

4- Communication objects description

4.1 External record mode

4.1.1 DMX config

• Change DMX input type via bus

Number	Name	Object Function	Group Addre Length	С	R	W	Т	ប	Data Type
⊒ ⊉0	DMX input type	ON switching to "HDLNet DMX"	1 bit	С	-	W	-	V	1 bit DPT_Swite
□ ‡1	DMX input type	ON switching to "ArtNet DMX"	1 bit	С	-	W	-	U	1 bit DPT_Swite
⊒ ‡2	DMX input type	ON switching to "DMX-1990"	1 bit	С	-	W	-	U	1 bit DPT_Swite

NO.	Object name	Function	Flags	Data type				
0	DMX input type	ON switch to	CWU	DPT 1.001				
		HDLNet DMX		1bit				
This o	communication is cha	ange DMX input typ	e via bus. Send te	legram value is "1",				
the DMX	input type will chang	e to HDL Net DMX.						
1	DMX input type	ON switch	C W U	DPT 1.001				
		to ArtNet DMX		1bit				
This o	communication is cha	ange DMX input typ	e via bus. Send te	legram value is "1",				
the DMX	input type will chang	e to ArtNet DMX						
2	DMX input type	ON switch	C W U	DPT 1.001				
		to DMX-1990		1 bit				
This communication is change DMX input type via bus. Send telegram value is "1",								
the DMX input type will change to DMX-1990.								

You can use KNX/EIB panel or other device send telegram to M/DMX512.1, and you must set button's group address same to M/DMX512.1.

• Change Net DMX input universe via bus

Number	Name	Object Function	Group Addre	Length	С	R	W	Т	U	Data Type
⊒ ‡]3	DMX input universe	Change Net DMX input universe		1 Byte	С	-	W	-	U	

NO.	Object name	Function	Flags			Flags			Flags			Flags			Flags			Flags			Data type
3	DMX input	Change Net DMX	С	W	U	DPT 5.004															
	universe	input universe				1 byte															
You	You can use other devices on the bus send telegram to change the DMX input																				
univers	э.																				

• Read DMX input type

HDL KNX / EIB – BUS

Number	Name	Object Function	Group Addre Length	С	R	W	T	U	Data Type
⊒ ‡15	DMX input type	Read DMX input type	1 Byte	С	R	-	Т	-	

NO.	Object name	Function	Flags	Data type
5	DMX input type	Read DMX input type	CRT	DPT 5.004 1 byte

You can use other devices on the bus read the DMX input type. If the telegram value is "0", the DMX input type is HDLNet DMX.

The telegram value	the DMX input type
0	HDLNet DMX
1	ArtNet
2	DMX-1990

• Read Net DMX input universe from bus

Number	Name	Object Function	Group Addre	Length	С	R	W	Т	U	Data Type
⊒ ‡6	DMX input universe	Read Net DMX input universe		1 Byte	С	R	-	Т	-	

NO.	Object name	Function	Flags	Data type
6	DMX input	Read DMX input	CRT	DPT 5.004
	universe	universe		1 byte
You	i can use other device	s on the bus read th	e DMX input univ	erse.

• Change DMX output type

Number	Name	Object Function	Group Addre	Length	С	R	W	T	ប	Data	Туре
⊒ ‡ 8	DMX output type	ON switching to "HDLNet DMX"		1 bit	С	-	W	-	U	1 bit	DPT_Swite
⊒ ‡]9	DMX output type	ON switching to "ArtNet DMX"		1 bit	С	-	W	-	ប	1 bit	DPT_Swite
□【10	DMX output type	ON switching to "DMX-1990"		1 bit	С	-	W	-	ប	1 bit	DPT_Swite

NO.	Object name	Function	Flags	Data type					
8	DMX output	ON	CWU	DPT 1.001					
	type	switching to		1bit					
		HDLNet DMX							
This communication is change DMX output type via bus. Send telegram value is "1",									
the DMX output type will change to HDL Net DMX.									
9	DMX output	ON switch	C W U	DPT 1.001					
	type	to ArtNet DMX		1bit					
This	communication is cha	ange DMX output ty	pe via bus. Send t	elegram value is "1",					
the DMX	output type will chan	ge to ArtNet DMX							
10	DMX output type	ON switch to	C W U	DPT 1.001					
		DMX-1990		1 bit					

This communication is change DMX output type via bus. Send telegram value is "1", the DMX output type will change to DMX-1990.

• Change Net DMX output universe via bus

Number	Name	Object Function	Group Addre	Length	С	R	W	Т	U	Data Type
_‡ 11	DMX output universe	Change Net DMX output universe		1 Byte	С	-	W	-	U	

NO.	Object name	Function	Flags	Data type
11	DMX output universe	Change Net DMX output universe	C W U	DPT 5.004 1 byte

You can use other devices on the bus send telegram to change the DMX output universe.

• Read DMX output type

Number	Name	Object Function	Group Addre Length	С	R	W	T	ប	Data Type
□ ‡13	DMX output type	Read DMX output type	1 Byte	С	R	-	Т	-	

NO.	Object name	Functio	n	Flags			Data type
13	DMX output	Read	DMX	С	R	Т	DPT 5.004
	type	output type	9				1 byte

You can use other devices on the bus read the DMX output type. If the telegram value is "0", the DMX output type is HDLNet DMX.

The telegram value	The DMX input type
0	HDLNet DMX
1	ArtNet
2	DMX-1990

• Read Net DMX output universe from bus

Number	Name	Object Function	Group Addre	Length	С	R	W	Т	V Data Type
	DMX output universe	Read Net DMX output universe		1 Byte	С	R	-	Т	-

NO.	Object name	Funct	ion	Flags			Data type					
14	DMX output	Read	DMX	С	R	Т	DPT 5.004					
	universe	output ur	niverse				1 byte					
You	You can use other devices on the bus read the DMX output universe.											

4.1.2 Program config

• Change program mode via bus

Number	Name	Object	Function	Group Addr	e I	ength	С 1	3 1	" T	U	Data	Туре
■【16	Program mode	ON swit	ching to "Play mode"		1	bit (с -	Ϋ	- י	U	1 bi	t DPT_Swi
□2 17	Program mode	ON swit	ching to "Record mode"		1	bit (с -	'n	- '	U	1 bi	t DPT_Swi
⊒ ⊉18	Program mode	ON swit	ching to "Delete mode"		1	bit (с -	Ϋ	-	U	1 bi	t DPT_Swi
NO.	Object nam	ne	Function	F	lags				Da	ata	typ	е
16	Program mod	le	ON switch	C	W	U			DF	Ϋ́Τ 1	1.00	1
			to Play mode							1b	oit	
This	communication	is cha	ange program mo	de via bu	ıs. Se	end te	legr	am	val	ue	is "1	",
the DMX	coutput type wil	ll char	nge to play mode.									
17	Program mod	le	ON switch	C	W	U			DF	Ϋ́Τ 1	1.00	1
			to Record							1b	oit	
			mode									
This	communication	is ch	ange program mo	de via bu	ıs. Se	end te	legr	am	val	ue	is "1	",
the DMX	coutput type wil	ll char	nge to record mod	e.								
40					10/						4 00	
18	Program mod	e	ON SWIICH		VV	U			Dr	1	1.00	
			to Delete mode						1	bit		
This	communication	is ch	ange program mo	de via bu	ıs. Se	end te	legr	am	val	ue	is "1	",
the DMX	coutput type wil	ll char	nge to delete mode	e.								

• Read program mode

Number	Name	Object Function	Group Addre	Length	С	R	W	Т	U Data Type
□2月19	Program mode	Read program mode(O-P, 1-R, 2-D)		1 Byte	С	R	-	Т	-

NO.	Object name	Function	Flags	Data type
19	Program mode	Read program	C R T	DPT 5.004
		mode(0-P,1-R,2-D)		1 byte
You	can use other device	es on the bus read the	DMX output u	niverse.
The te	legram value	program mode		
0		Play mode		
1		Record mode		
2		Delete mode		

• Enable program group A

DMX512 Gateway

Number	Name	Object Function	Group Addre	Length	С	R	W	T	U	Data Type
⊒⊉20	Program pause	Pause (O-pause, 1-continue)		1 bit	С	-	W	-	U	1 bit DPT_Start
⊒ ‡21	Program stop	Stop (O-stop, 1-start)		1 bit	С	-	W	-	U	1 bit DPT_Start
	Program group A	Group A-1		1 bit	С	-	W	-	U	1 bit DPT_Start
	Program group A	Group A-2		1 bit	С	-	W	-	U	1 bit DPT_Start
	Program group A	Group A-3		1 bit	С	-	W	-	U	1 bit DPT_Start
	Program group A	Group A-4		1 bit	С	-	W	-	ប	1 bit DPT_Start
	Program group A	Group A-5		1 bit	С	-	W	-	U	1 bit DPT_Start
	Program group A	Group A-6		1 bit	С	-	W	-	U	1 bit DPT_Start
	Program group A	Group A-7		1 bit	С	-	W	-	U	1 bit DPT_Start
⊒ ⊉37	Program group A	Group A-8		1 bit	С	-	W	-	ប	1 bit DPT_Start

NO.	Object name	Function	Flags	Data type
20	Program pause	Pause(0-pause,1-continue)	CWU	DPT 1.010
				1 bit
You	u can use other devi	ces control program pause or c	ontinue	
21	Program stop	Stop(0-stop,1-start)	CWU	DPT 1.010
				1 bit
You	u can use other devi	ces control program stop or sta	rt	
30	Program	GroupA-1A-8	CRT	DPT 1.010
37	group A			1 bit
You	ı can use other devi	ces control the program groups.	I	

The group B and group C are same to the group A.

4.2 DMX dimming (EIB to DMX)

4.2.1 DMX config

• Change DMX output type via bus

Number	Name	Object Function	Group Addre	Length	С	R	W	Т	U	Data Type
⊒ ‡ 8	DMX output type	ON switching to "HDLNet DMM	"	1 bit	С	-	W	-	U	1 bit DPT_Swite
⊒ ‡]9	DMX output type	ON switching to "ArtNet DMM	"	1 bit	С	-	W	-	U	1 bit DPT_Swite
10	DMX output type	ON switching to "DMX-1990"		1 bit	С	-	W	-	ប	1 bit DPT_Swite

NO.	Object name	Function	Flags	Data type
8	DMX output	ON switch	CWU	DPT 1.001
	type	to HDLNet		1bit
		DMX		
This	communication is cha	ange DMX output ty	/pe via bus. Send t	elegram value is "1",
the DMX	input type will chang	ge to HDL Net DMX		
9	DMX output	ON switch	CWU	DPT 1.001
	type	to ArtNet DMX		1bit
This	communication is cha	ange DMX output ty	/pe via bus. Send t	elegram value is "1",
the DMX	input type will chang	ge to ArtNet DMX		

10	DMX output	ON switch	C W U	DPT 1.001
	type	to DMX-1990		1 bit
This o	communication is cha	ange DMX output ty	be via bus. Send te	elegram value is "1",
the DMX	input type will chang	ge to DMX-1990.		

• Change Net DMX output universe via bus

Number	Name	Object Function	Group Addre	Length	С	R	W	Т	V Data Type
2211	DMX output universe	Change Net DMX output universe		1 Byte	С	-	W	-	V

NO.	Object name	Function	Flags			Data type
11	DMX output	Change Net	С	W	U	DPT 5.004
	universe	DMX output				1 byte
		universe				
You	ı can use other device	s on the bus send te	legrar	n to cl	hange	the DMX output
univers	e.					

• Change DMX output universe via bus

Number	Name	Object Function	Group Addre	Length	С	R	W	T	U Data Type
⊒ ‡12	DMX output start	Change DMX output address		2 Byte	С	-	W	-	V

NO.	Object name	Function	on	Flags			Data type
12	DMX output	Change	DMX	С	W	U	DPT 7.001
	start address	output ad	dress				2 Byte
You	can use other device	s on the bu	us send te	legran	n to cl	nange	the DMX output
start ad	dress.						

• Read DMX output type

Number	Name	Object Function	Group Addre	Length	С	R	W	T	U - Data Type
■【13	DMX output type	Read DMX output type		1 Byte	С	R	-	т -	

NO.	Object name	Function	on	Flags			Data type
13	DMX output	Read	DMX	С	R	Т	DPT 5.004
	type	output type					1 Byte

You can use other devices on the bus read the DMX output type. If the telegram value is "0", the DMX output type is HDLNet DMX.

The telegram value	the DMX input type
0	HDLNet DMX
1	ArtNet
2	DMX-1990

• Read Net DMX output universe from bus

 Number
 Name
 Object Function
 Group Addre...
 Length
 C
 R
 W
 T
 U
 Data Type

 114
 DMX output universe
 Read Net DMX output universe
 1 Byte
 C
 R
 T

Ν	Object	Function		Flags			Data type			
О.	name									
14	DMX output universe	Read DM output universe	С	: 1	R	Т	DPT 5.004 1 Byte			
You can use other devices on the bus read the DMX output universe.										

• Read Net DMX output universe from bus

Number	Name	Object Function	Group Addre	Length	С	R	W	Т	U Data Type
⊒ ⊉15	DMX output start	Read DMX output address		2 Byte	С	R	-	Т	-

NO.	Object name	Function		F	lags		Data type			
15	DMX output	Read	DMX	С	R	Т	DPT 7.001			
	start address	output add				2 Byte				
You can use other devices on the bus read the DMX output universe.										

4.2.2 Channel config

• Enable channel 1...8

E.g channel 1

Number	Name	Object Function	Group Addre	Length	С	R	W	Т	ប	Data Type
(30	Channel 1	Switching(1bit)		1 bit	С	-	W	-	υ	1 bit DPT_Sw:
	Channel 1	Relative dimming(4bits)		4 bit	С	-	W	-	U	3 bit control
⊒‡]32	Channel 1	Absolute dimming(1byte)		1 Byte	С	-	W	-	U	8 bit unsign

NO. Object name Function Flags Data type

30	Channel 1	Switching(1 bit)	C	W	U	DPT 1.001				
						1 bit				
You can use other devices on the bus control channel 1.										
31	Channel 1	Relative	С	W	U	DPT 3.007				
		dimming				4bit				
You	You can use other devices on the bus control channel 1for relative dimming.									
32	Channel 1	Absolute	C	R	Т	DPT 5.001				
		dimming				1 byte				
You can use other devices on the bus control channel 1 for absolute dimming.										

All channels are same to the channel 1.

• Scene config

Number	Name	Object Function	Group Addresses	C	R	W	Т	ប	Data Type
1 230	Scene	Call scene(8bit)		: C	-	W	-	U	
2 231	Scene	Scene dimming(4bit)		٢C	-	W	-	U	3 bit controll

NO.	Object name	Function		Flags		Data type				
230	Scene	Call scene(8 bit)	С	W	U	DPT 18.001				
						1 byte				
231	Scene	Scene	С	W	U	DPT 3.007				
		dimming(4 bit)				4 bit				
You ca	n use other devices o	n the bus control the	scene	e. Tota	al 24 s	cenes, all the				
scenes	scenes have a same address, you can send the value 000000 to 111111 call the									
scenes.										

• Sequence config

Number	Name	Object Function	Des	Grou	Length	С	R	W	Т	U	Data Type	Priority
⊒⊉230	Scene	Call scene(8bit)		1/2/3	1 Byte	С	-	W	-	U		Low
⊒⊉231	Scene	Scene dimming(4bit)			4 bit	С	-	W	-	U	3 bit con	Low
⊒‡232	Sequence	Sequence 1			1 bit	С	-	W	-	U	1 bit DPT	Low
⊒⊉233	Sequence	Sequence 2			1 bit	С	-	W	-	U	1 bit DPT	Low
⊒234	Sequence	Sequence 3			1 bit	С	-	W	-	U	1 bit DPT	Low
⊒⊉235	Sequence	Sequence 4			1 bit	С	-	W	-	U	1 bit DPT	Low
236	Sequence	Sequence 5			1 bit	С	-	W	-	U	1 bit DPT	Low
2237	Sequence	Sequence 6			1 bit	С	-	W	-	U	1 bit DPT	Low

NO.	Object name	Function	Flags	Data type		
232237	Sequence	Sequence 1	C W U	DPT 1.010		
				1 bit		
		Sequence 6				

You can use other devices on the bus control the sequence.

4.3 DMX to EIB

4.3.1 DMX config

• Change DMX input type via bus

Number	Name	Object Function	Group Addre Length	С	R	W	Т	ប	Data Type
⊒ ‡]0	DMX input type	ON switching to "HDLNet DMX"	1 bit	С	-	W	-	U	1 bit DPT_Swite
⊒‡]1	DMX input type	ON switching to "ArtNet DMX"	1 bit	С	-	W	-	ប	1 bit DPT_Swite
□ ‡2	DMX input type	ON switching to "DMX-1990"	1 bit	С	-	W	-	U	1 bit DPT_Swite

NO.	Object name	Function	Flags	Data type						
0	DMX input	ON switch to	CWU	DPT 1.001						
	type	HDLNet DMX		1bit						
This o	This communication is change DMX input type via bus. Send telegram value is "1",									
the DMX	input type will chang	e to HDL Net DMX.								
1	DMX input	ON switch	CWU	DPT 1.001						
	type	to ArtNet DMX		1bit						
This o	communication is cha	ange DMX input typ	e via bus. Send te	legram value is "1",						
the DMX	input type will chang	e to ArtNet DMX								
2	DMX input	ON switch	CWU	DPT 1.001						
	type	to DMX-1990		1 bit						
This communication is change DMX input type via bus. Send telegram value is "1",										
the DMX	the DMX input type will change to DMX-1990.									

You can use KNX/EIB panel or other device send telegram to M/DMX512.1, and you must set button's group address same to M/DMX512.1.

• Change Net DMX input universe via bus

Number	Name	Object Function	Des Grou	Length	С	R	W	Т	U Data Type	Priority
⊒ ‡3	DMX input universe	Change Net DMX input universe		1 Byte	С	-	W	-	U	Low
⊒ ‡]4	DMX input start address	Change DMX input address		2 Byte	С	-	W	-	V	Low

NO.	Object name	Function	Flags	Data type						
3	DMX input	Change Net DMX	C W U	DPT 5.004						
	universe	input universe		1 byte						
You	You can use other devices on the bus send telegram to change the DMX input									
univers	e.									
4	DMX input	Change DMX	CWU	DPT 7.001						
	start address	input address		2 byte						
You can use other devices on the bus send telegram to change the DMX input start										
address	5.									

• Read DMX input type

Number	Name	Object Function	Group Addre Length C R W T U Data Type
⊒ ‡5	DMX input type	Read DMX input type	1 Byte C R - T -

NO.	Object name	Function	Flags			Data type
5	DMX input type	Read DMX input type	С	R	Т	DPT 5.004 1 byte

You can use other devices on the bus read the DMX input type. If the telegram value is "0", the DMX input type is HDLNet DMX.

The telegram value	the DMX input type				
0	HDLNet DMX				
1	ArtNet				
2	DMX-1990				

• Read Net DMX input universe from bus

Number	Name	Object Function	Group Addre	Length	С	R	W	Т	ប	Data Type
⊒ ‡6	DMX input universe	Read Net DMX input universe		1 Byte	С	R	-	Т	-	

NO.	Object name	Function	Flags			Data type
6	DMX input	Read DMX input	С	R	Т	DPT 5.004
	universe	universe				1 byte
You	i can use other device	s on the bus read th	e DMX	input	unive	rse.

Read DMX input address

Number	Name	Object Function	Des	Grou	Length	С	R	W	T	V Data Type	Priority
⊒ ‡7	DMX input start address	Read DMX input address			2 Byte	С	R	-	Т	-	Low

NO.	Object name	Function	Flags	Data type						
7	DMX input	Read DMX	CRT	DPT 7.001						
	start address	input address		2 byte						
You	You can use other devices on the bus read the DMX input start address.									

4.3.2 DMX to EIB config

Number	Name	Object Function	Des Grou.	. Length	C	R	W	Т	U	Data Type	Priority
⊒⊉30	DMX to EIB	Channel 1		1 bit	С	-	-	Т	-	1 bit DPT	Low
⊒ ‡]31	DMX to EIB	Channel 2		1 bit	С	-	-	Т	-	1 bit DPT	Low
⊒ ‡]32	DMX to EIB	Channel 3		1 bit	С	-	-	Т	-	1 bit DPT	Low
⊒ ‡177	DMX to EIB	Channel 48		1 Byte	С	-	-	Т	-	8 bit uns	Low

NO.	Object name	Function	Flags	Data type	
30	DMX to EIB	Channel1	CRT	DPT1.001/3.007/	
				5.001	
220		48		1 bit/4bit/1 byte	
There are 48 channels at all, that is, it can control 48 objectives.					
The objectives are dimming, relay, respone state.					

5- Application

5.1 Program functions diagram

