Zennio ZIOMBSH4V3 4ch Maxinbox Shutter User Manual

Contents

Zennio ZIOMBSH4V3 4ch Maxinbox Shutter

Product Information

Specifications

- Product Name: MAXinBOX SHUTTER 4CH / 8CH v3
- Application Program Version: 1.10
- User Manual Edition: 1.10_a
- Manufacturer: Zennio
- Channels: 4 or 8 channels (depending on the model)
- Compatibility: KNX Secure

Introduction
The MAXinBOX SHUTTER 4CH / 8CH v3 from Zennio is a specific actuator designed for controlling motorized shutter/blind systems. It is available in two models: MAXinBOX SHUTTER 4CH v3 with 4 channels and MAXinBOX SHUTTER 8CH v3 with 8 channels. These actuators are compatible with KNX Secure, ensuring secure and reliable communication.

Start-Up and Power Loss
During the start-up process, the Test/Prog. LED will blink in blue color for a few seconds before the device is ready. External orders will not be executed during this time. After start-up, the device will be ready to receive commands. In case of a power loss, the device will interrupt any pending actions and save its state. Once the power supply is restored, the device will recover its previous state. For safety reasons, all shutter channels will be stopped (relays will open) during a power loss.

Configuration
To configure the MAXinBOX SHUTTER 4CH / 8CH v3, follow these steps:

1. Import the corresponding database in ETS (Engineering Tool Software) and add the device to the desired project topology.
2. Enter the Parameters tab of the device for configuration.

ETS Parameterisation
The only parameterizable screen available by default is General. From this screen, you can activate or deactivate the required functionality.

Scenes after Download [Configured by Parameters/Keep Saved Scenes]:
This option allows you to define whether the value of the scenes should be configured by parameters or if the previously saved value should be kept after download. If the Keep Saved Scenes option has been configured, but it is the firstdownload of the device or a different version from the current one, the values configured by parameters will be adopted. If new scenes are added in successive downloads, a download by checking the option Configured by Parameters is necessary to ensure the correct operation of these scenes.

Outputs [disabled/enabled]:
This option enables or disables the Outputs tab on the left menu. Refer to section 2.2 for more details.

FAQ

- Q: What are the outstanding features of MAXinBOX SHUTTER 4CH / 8CH v3?
- A: The most outstanding features of MAXinBOX SHUTTER 4CH / 8CH v3 are its compatibility with KNX Secure and its ability to control motorized shutter/blind systems.

- Q: What happens during a power loss?
- A: During a power loss, all shutter channels will be stopped (relays will open) for safety reasons. The device will save its state and recover it once the power supply is restored.
- Q: How can I configure the device?
- A: To configure the MAXinBOX SHUTTER 4CH / 8CH v3, import the corresponding database in ETS and add the device to the desired project topology. Then, enter the Parameters tab of the device for configuration.

INTRODUCTION

MAXinBOX SHUTTER 4CH / 8CH v3

MAXinBOX SHUTTER 4CH v3 and MAXinBOX SHUTTER 8CH v3 from Zennio are KNX Secure specific actuators (of 4 or 8 channels, respectively) for controlling motorised shutter / blind systems.

The most outstanding features are:

- 8 / 16 relay outputs, configurable as up to 4 / 8 independent shutter channels (with or without slats).
- 20 customisable, multi-operation logic functions.
- 2 master light control modules for an easy, out-of-the-box control of a set of luminaires (or functionally equivalent devices) one of which acts as a general lamp and the others as secondary lamps.
- Scene-triggered action control, with an optional delay in the execution.
- Manual operation / supervision of the shutter channels through the on-board pushbuttons and LEDs.
- Heartbeat or periodic “still-alive” notification.
- Relay Switches Counter.
- KNX Security.

For detailed information about the functionality and configuration of KNX security, consult the specific user manual “KNX Security”, available in the product section of the Zennio web portal (www.zennio.com).

START-UP AND POWER LOSS

During the start-up of the device, the Test/Prog. LED will blink in blue colour for a few seconds before the device is ready. External orders will not be executed during this time, but afterwards. Depending on the configuration, some specific actions will also be performed during the start-up.

For example, the integrator can set whether the shutter channels should switch to a particular state and whether the device should send certain objects to the bus after the power recovery. Please consult the next sections of this document for further details. On the other hand, when a bus power failure takes place, the device will interrupt any pending actions, and will save its state so it can be recovered once the power supply is restored. For safety reasons, all shutter channels will be stopped (i.e., the relays will open) if a power loss takes place.

CONFIGURATION

GENERAL

After importing the corresponding database in ETS and adding the device into the topology of the desired project, the configuration process begins by entering the Parameters tab of the device.

ETS PARAMETERISATION

The only parameterisable screen available by default is General. From this screen it is possible to activate/deactivate all the required functionality.

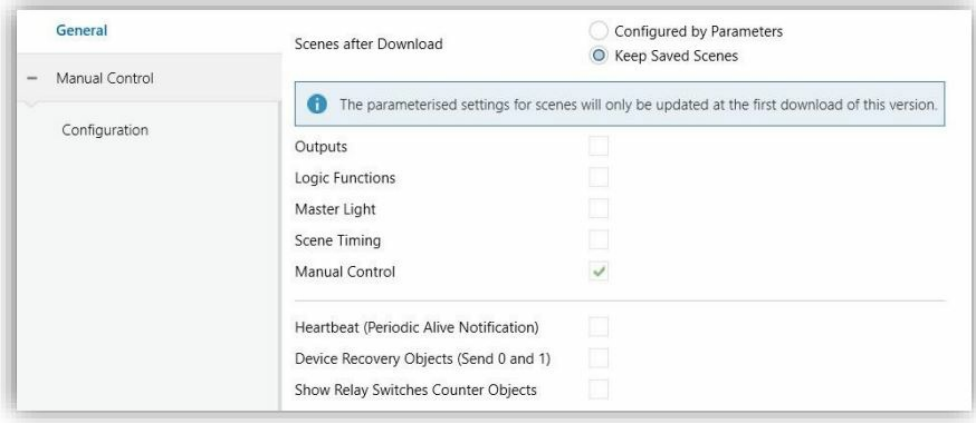

Figure 1. General.

- Scenes after Download [Configured by Parameters/Keep Saved Scenes]: allows defining whether the value of the scenes is the configured by parameter or whether the previously saved value is kept after download.
  Note: if “Keep Saved Scenes” option has been configured, but it is the first download of the device or a different version from the current one, the values configured by parameter will be adopted. If new scenes are added in successive downloads, it will be necessary to perform a download by checking the option “Configured by Parameters” to ensure the correct operation of these scenes.
- Outputs [disabled/enabled]1: enables o disables the “Outputs” tab on the left menu. See section 2.2 for more details.
- Logic Functions [disabled/enabled]: enables o disables the “Logic Functions” tab on the left menu. See section 2.3 for more details.
- Master Light [disabled/enabled]: enables o disables the “Master Light” tab on the left menu. See section 2.4 for more details.
- Scene Temporization [disabled/enabled]: enables o disables the “Scene Temporization” tab on the left menu. See section 2.5 for more details.
- Manual Control [disabled/enabled]: enables o disables the “Manual Control” tab on the left menu. See section 2.6 for more details.
- Heartbeat (Periodic Alive Notification) [disabled/enabled]: this parameter lets the integrator incorporate a one-bit object to the project (“[Heartbeat] Object to Send ‘1’”) that will be sent periodically with value “1” to notify that the device is still working (still alive).

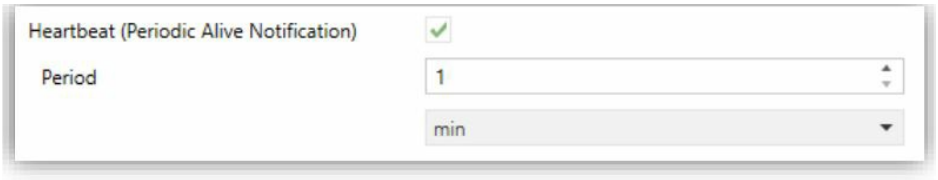

Figure 2. Heartbeat (Periodic Alive Notification).

Note: The first sending after download or bus failure takes place with a delay of up to 255 seconds, to prevent bus overload. The following sendings match the period set. Device Recovery Objects (Send 0 and 1) [disabled/enabled]: this parameter lets the integrator activate two new communication objects (“[Heartbeat] Device Recovery”), which will be sent to the KNX bus with values “0” and “1” respectively whenever the device begins operation (for example, after a bus power failure). It is possible to parameterise a certain delay [0…255] to this sending.

Figure 3. Device Recovery Objects.

Note: after download or bus failure, the sending takes place with a delay of up to 6,35 seconds plus the parameterised delay, to prevent bus overload.

- Show Relay Switches Counter Objects [disabled/enabled]: enables two communication objects to keep track of the number of switches performed by each of the relays ("[Relay X] Number of Switches") and the maximum number of switches carried out in a minute ("[Relay X] Maximum Switches per Minute").

OUTPUTS
MAXinBOX SHUTTER 4CH / 8CH v3 incorporates 8 or 16 relay outputs, respectively, configurable as up to 4 or 8 independent shutter channels, each of which will operate one motorised shutter system.

For detailed information about the functionality and the configuration of the parameters related to the shutter channels, please refer to the specific manual "Shutters", available in the MAXinBOX SHUTTER 4CH / 8CH v3 product section at the Zennio homepage (**www.zennio.com**).

LOGIC FUNCTIONS

This module makes it possible to perform numeric and binary operations to incoming values received from the KNX bus, and to send the results through other communication objects specifically enabled for this purpose. MAXinBOX SHUTTER 4CH / 8CH v3 can implement up to 20 different and independent functions, each of them entirely customisable and consisting in up to 4 consecutive operations each one.

The execution of each function can depend on a configurable condition, which will be evaluated every time the function is triggered through specific, parameterisable communication objects. The result after executing the operations of the function can also be evaluated according to certain conditions and afterwards sent (or not) to the KNX bus, which can be done every time the function is executed, periodically or only when the result differs from the last one.

Please refer to the specific "Logic Functions in MAXinBOX SHUTTER" user manual (available in the MAXinBOX SHUTTER 4CH / 8CH v3 product section at the Zennio homepage, **www.zennio.com**) for detailed information about the functionality and the configuration of the related parameters.

MASTER LIGHT
MAXinBOX SHUTTER 4CH / 8CH v3 implements two Master Light which can be enabled and configured independently.

The Master Light function brings the option to monitor the state of up to 12 light sources (or even more, if the Master Light controls from multiple Zennio devices are linked together) or of any other elements whose state is transmitted through a binary object and, depending on those states, perform a master order every time a certain trigger signal (again, a binary value) is received through a specific object.

Such master order will consist in:

- A general switch-off order, if at least one of the up to twelve status objects is found to be on.
- A courtesy switch-on order, if none of the up to twelve status objects is found to be on.

Note that the above switch-off and switch-on orders are not necessarily a binary value being sent to the bus – it is

up to the integrator the decision of what to send to the KNX bus in both cases: a shutter order, a thermostat setpoint or mode switch order, a constant value, a scene… Only the trigger object and the twelve status objects are required to be binary (on/off).

The most typical scenario for this Master Light control would be a hotel room with a master pushbutton next to the door. When leaving the room, the guest will have the possibility of pressing on the master pushbutton and make all the lamps turn off together. Afterwards, back on the room and with all the lamps off, pressing on the same master pushbutton will only make a particular lamp turn on (e.g., the closest lamp to the door) – this is the courtesy switch-on.

Besides, it is possible to concatenate two or more Master Light modules by means of a specific communication object which represents the general state of the light sources of each module. Thereby, it is possible to expand the number of light sources by considering the general state of one module as an additional light source for another.

ETS PARAMETERISATION
Once the Master Light function has been enabled, a specific tab will be included in the menu on the left. This new parameter screen contains the following options:

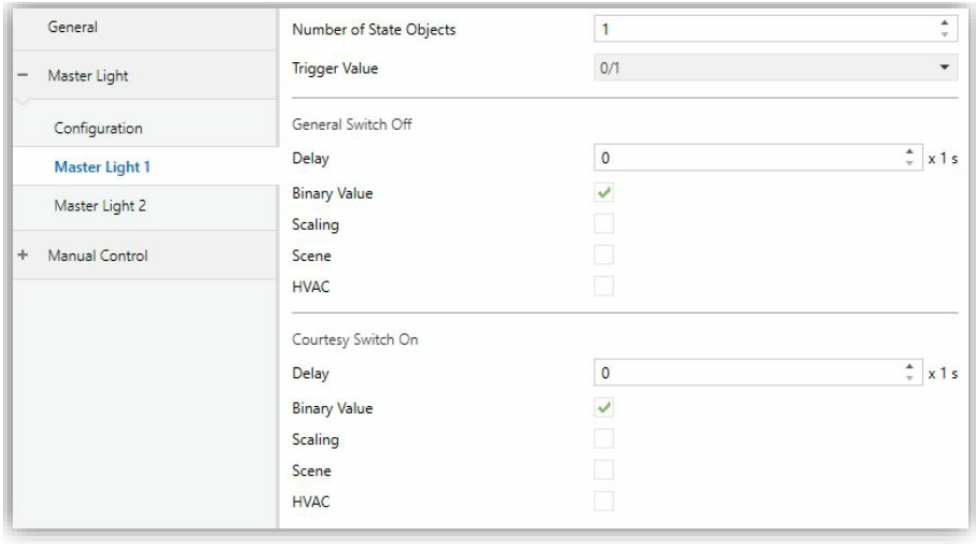

Figure 4. Master Light.

- Number of State Objects [1…12]: defines the number of 1-bit status objects required. These objects are called “[ML] Status Object n.” In addition, the general status object (“[ML] General status”) will always be available in the project topology. It will be sent to the bus with a value of “1” whenever there is at least one of the above state objects with such value. Otherwise (i.e., if none of them has a value of “1”), it will be sent with a value of “0”.
- Trigger Value [0 / 1 / 0/1]: sets the value that will trigger, when received through “[ML] Trigger”, the master action (the general switch-off or the courtesy switch-on).

General Switch-Off

- Delay [0…255] [x 1 s]: defines a certain delay (once the trigger has been received) before the execution of the general switch-off. The allowed range is 0 to 255 seconds.
- Binary Value [disabled/enabled]: if checked, object “[ML] General Switch-off: Binary Object” will be enabled, which will send one “0” whenever the general switch-off takes off.
- Scaling [disabled/enabled]: if checked, object “[ML] General Switch-off: Scaling” will be enabled, which will

send a percentage value (configurable in Value [0…100]) whenever the general switch-off takes off.

- Scene [disabled/enabled]: if checked, object “[ML] General Switch-off: Scene” will be enabled, which will send a scene run / save order (configurable in Action [Run / Save] and Scene Number [1…64]) whenever the general switch-off takes off
- HVAC [disabled/enabled]: if checked, object “[ML] General Switch-off: HVAC mode” will be enabled, which will send an HVAC thermostat mode value (configurable in Value [Auto / Comfort / Standby / Economy / Building Protection) whenever the general switch-off takes off.

Note: the above options are not mutually exclusive; it is possible to send values of different nature together.

Courtesy Switch-On:
The parameters available here are entirely analogous to those already mentioned for General Switch-Off. However, in this case the names of the objects start with “[ML] Courtesy Switch-On (…).” On the other hand, sending scene save orders is not possible for the courtesy switch-on (only orders to play scenes are allowed).

Note: object “[ML] Courtesy Switch-On: Binary Object” sends the value “1” (when the courtesy switch-on takes place), in contrast to object “[ML] General Switch-Off: Binary Object”, which sends the value “0” (during the general switch-off, as explained above).

SCENE TEMPORISATION

The scene temporisation allows imposing delays over the scenes of the shutter channels. These delays, defined in parameters, are applied on the execution of one or more scenes that may have been configured.

Please bear in mind that, as multiple delayed scenes can be configured for each shutter channel, in case of receiving an order to execute one of them when a previous temporisation is still pending in that channel, the channel will interrupt such temporisation will be interrupted and only the delay and the action of the new scene will be executed.

ETS PARAMETERISATION
Prior to setting the scene temporisation, it is necessary to have one or more scenes configured in some of the channels. When entering the Configuration window under Scene Temporization, all configured scenes will be listed, together with a few checkboxes to select which of them need to be temporised, as shown in Figure 5.

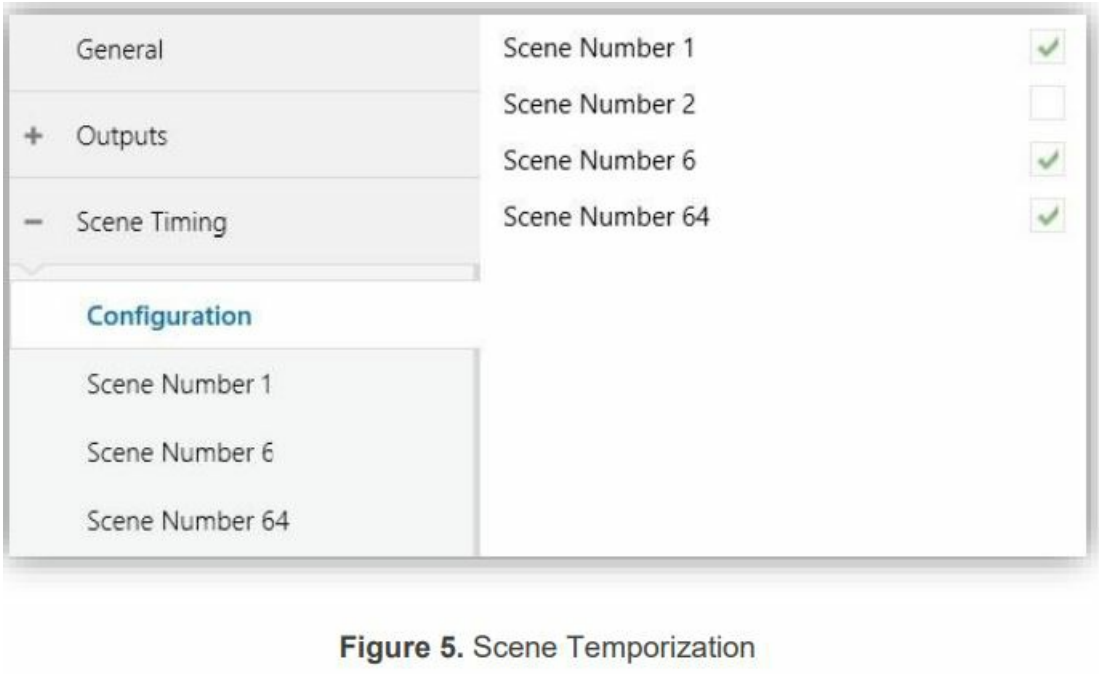

Figure 5. Scene Temporization

Enabling a certain scene number n brings a new tab with such name to the menu on the left, from which it is possible to configure the temporisation of that scene for each of the channels where it has been configured.

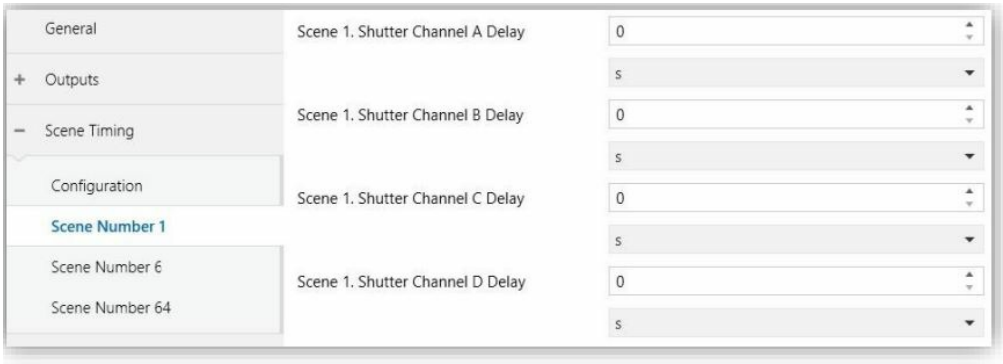

Figure 6. Configuration of Scene Temporization

Therefore, parameter “Scene m. Shutter Channel Z Delay” [0…3600 [s] / 0…1440 [min] / 0…24 [h]], defines the delay that will be applied to the action defined in Z for the execution of scene m (where Z may be a specific shutter channel).

Note: in the configuration of a scene of a shutter channel it is possible to parameterize several scenes with the same scene number. This means that several delay parameters associated with the same output appear in the configuration tab of the delays of that scene.

With this parameterization, the behavior will be as follows:
The action and delay of the first scene parameterized with the same scene number will always prevail, where the highest priority scene is 1 (the first in the scene configuration tab) and the lowest priority is the last in the configuration of a scene of a shutter channel it is possible to parameterize several scenes with the same scene number. This means that several delay parameters associated with the same output appear in the configuration tab of the delays of that scene.

With this parameterization, the behavior will be as follows:
The action and delay of the first scene parameterized with the same scene number will always prevail, where the highest priority scene is 1 (the first in the scene configuration tab) and the lowest priority is the last.

MANUAL CONTROL

MAXinBOX SHUTTER 4CH / 8CH v3 allows commanding orders through the pushbuttons on the top of the device to move the shutter up or down. Two specific pushbuttons are provided per channel (i.e., one per relay output). Manual operation can be done in two different ways, named as Test On Mode (for testing purposes during the configuration of the device) and Test Off Mode (for a normal use, anytime). Whether both, only one, or none of these modes should be accessible needs to be parameterised in ETS. Moreover, it is possible to enable a specific binary object for locking and unlocking the manual control in runtime.

Note:

- The Test Off mode will be active (unless it has been disabled by parameter) after a download or a reset with no need of a specific activation – the pushbuttons will respond to user presses from the start.
- On the contrary, switching to the Test On mode (unless disabled by parameter) needs to be done by long-pressing the Prog/Test button (for at least three seconds), until the LED is no longer red and turns yellow. From that moment, once the button is released, the LED light will remain green to confirm that the device has switched from the Test Off mode to the Test On mode. After that, an additional press will turn the LED yellow and then off, once the button is released. This way, the device leaves the Test On mode. Note that it will also leave this mode if a bus power failure takes place or if a manual control lock is sending from KNX bus.

Test Off Mode

- Under the Test Off Mode, the shutter channels can be controlled through both their communication objects and the actual pushbuttons located on the top of the device.
- When one of these buttons is pressed, the shutter will behave as if an order had been received through the corresponding communication object, and will also send the status objects when required.

This behaviour depends on the length of the button press:

- A long press makes the shutter start moving (upwards or downwards, depending on the button being pressed). The LED will light in green until the end of the motion. If the button gets pressed being the shutter already at the top or bottom positions, nothing will happen (the LED will not light).
- A short press will make the shutter drive stop (if in motion), as it normally does when a step/stop order is received from the KNX bus. In case of not being the shutter in motion, pressing the button does not cause any action, unless slats/lamellas have been parameterised – in such case, a step movement (up/down, depending on the button pressed) will take place. The status objects will be sent to the bus when corresponding.

Regarding the lock, timer, alarm and scene functions, the device will behave under the Test Off mode as usual. Button presses during this mode are entirely analogous to the reception of the corresponding orders from the KNX bus.

Test On Mode

- After entering the Test On mode, it will only be possible to control the shutters through the on-board pushbuttons. Orders received through communication objects will be ignored, with independence of the channel they are addressed to.
- Pressing the button will make the shutter drive move upward or downward (depending on the button) until the button is released again, thus ignoring the position of the shutter and the parameterised times. The LED will

light in green while the button is being hold.

- For safety reasons, the device does not allow the activation of the two outputs of a shutter channel at the same time. If the button of one of the outputs is held while the other output is active, the device will first deactivate it and afterwards perform the required action on the output associated to the button pressed.

Note: After leaving the Test On mode, the status objects will recover the values they had prior to entering Test On. As the device is never aware of the actual position of the shutter (as the shutter drive does not provide any feedback), these values may not show the real position. This can be solved by performing a complete move-up or move-down order, or by calibrating the shutter position in the Test On mode until it matches the status objects.

As described previously if the device is in Test On mode, any command sent from the KNX bus to the actuator will not affect the channel and no status objects will be sent (only periodically timed objects such as Heartbeat or logic functions will continue to be sent to the bus) while Test ON mode is active. However, in the case of the “Alarm” and “Block” objects, although in Test ON mode the actions received by each object are not taken into account, the evaluation of their status is carried out when exiting this mode, so that any change in the alarm status or blocking of the outputs while Test ON mode is active is taken into account when exiting this mode and is updated with the last status detected.

Important: the device is delivered from factory with the channel disabled, and with both manual modes (Test Off and Test On) enabled by default.

ETS PARAMETERISATION
The manual control is configured from the Configuration tab, under Manual Control.

Figure 7. Manual Control.

The only two parameters are:

- Manual Control [Disabled / Only Test Off Mode / Only Test On Mode / Test Off Mode + Test On Mode]:
  Depending on the selection, the device will permit using the manual control under the Test Off, the Test On, or both modes. Note that, as stated before, using the Test Off mode does not require any special action, while switching to the Test On mode does require long-pressing the Prog/Test button.
- Manual Control Lock [disabled/enabled]:
  Unless the above parameter has been “Disabled”, the Lock Manual Control parameter provides an optional procedure for locking the manual control in runtime. When this checkbox is enabled, object “Manual Control Lock” turns visible, as well as two more parameters:
  - **Value [0 = Lock; 1 = Unlock / 0 = Unlock; 1 = Lock]**:
    Defines whether the manual control lock/unlock should take place respectively upon the reception (through the aforementioned object) of values “0” and “1”, or the opposite.
  - **Initialization [Unlocked / Locked / Last Value]**:
    Sets how the lock state of the manual control should remain after the device start-up (after an ETS

download or a bus power failure). “Last Value” (default; on the very first start-up, this will be Unlocked.

ANNEX I. COMMUNICATION OBJECTS

“Functional range” shows the values that, with independence of any other values permitted by the bus according to the object size, may be of any use or have a particular meaning because of the specifications or restrictions from both the KNX standard or the application program itself.

Note: Some of the numbers in the first column are only applicable to MAXinBOX SHUTTER 8CH v3.

Number	Size	I/O	Flags	Data type (DPT)	Functional Range	Name	Function
1	1 Bit		**C – – T –**	DPT_Trigger	0/1	[Heartbeat] Object to Send ‘1’	Sending of ‘1’ Periodically
2	1 Bit		**C – – T –**	DPT_Trigger	0/1	[Heartbeat] Device Recovery	Send 0
3	1 Bit		**C – – T –**	DPT_Trigger	0/1	[Heartbeat] Device Recovery	Send 1
4	1 Bit	I	**C – W – –**	DPT_Enable	0/1	Lock Manual Control	0 = Lock; 1 = Unlock
	1 Bit	I	**C – W – –**	DPT_Enable	0/1	Lock Manual Control	0 = Unlock; 1 = Lock
269	1 Byte	I	**C – W – –**	DPT_SceneControl	0-63; 128-191	[Shutter] Scenes	0 – 63 (Execute 1 – 64); 128 – 191 (Save 1 – 64)
270, 299, 328, 357, 386, 415, 444, 473	1 Bit	I	**C – W – –**	DPT_UpDown	0/1	[Cx] Move	0 = Raise; 1 = Lower
271, 300, 329, 358, 387, 416, 445, 474	1 Bit	I	**C – W – –**	DPT_Step	0/1	[Cx] Stop/Step	0 = Stop/StepUp; 1 = Stop/StepDown
	1 Bit	I	**C – W – –**	DPT_Trigger	0/1	[Cx] Stop	0 = Stop; 1 = Stop
272, 301, 330, 359, 388, 417, 446, 475	1 Bit	I	**C – W – –**	DPT_Trigger	0/1	[Cx] Switched Control	0, 1 = Up, Down or Stop, Depending on the Last Move
273, 302, 331, 360, 389, 418, 447, 476	1 Bit	I	**C – W – –**	DPT_Enable	0/1	[Cx] Lock	0 = Unlock; 1 = Lock

274, 303, 332, 361, 390, 419, 448, 477	1 Byte	I	**C – W – –**	DPT_Scaling	0% – 100%	[Cx] Shutter Positioning	0% = Top; 100% = Bottom
275, 304, 333, 362, 391, 420, 449, 478	1 Byte	O	**C R – T –**	DPT_Scaling	0% – 100%	[Cx] Shutter Position (Status)	0% = Top; 100% = Bottom
276, 305, 334, 363, 392, 421, 450, 479	1 Byte	I	**C – W – –**	DPT_Scaling	0% – 100%	[Cx] Slats Positioning	0% = Open; 100% = Closed
277, 306, 335, 364, 393, 422, 451, 480	1 Byte	O	**C R – T –**	DPT_Scaling	0% – 100%	[Cx] Slats Position (Status)	0% = Open; 100% = Closed
278, 307, 336, 365, 394, 423, 452, 481	1 Bit	O	**C R – T –**	DPT_Switch	0/1	[Cx] Rising Relay (Status)	0 = Open; 1 = Closed
279, 308, 337, 366, 395, 424, 453, 482	1 Bit	O	**C R – T –**	DPT_Switch	0/1	[Cx] Lowering Relay (Status)	0 = Open; 1 = Closed

280, 309, 338, 367, 396, 425, 454, 483	1 Bit	O	**C R – T –**	DPT_Switch	0/1	[Cx] Movement (Status)	0 = Stopped; 1 = Moving
281, 310, 339, 368, 397, 426, 455, 484	1 Bit	O	**C R – T –**	DPT_UpDown	0/1	[Cx] Movement Direction (Status)	0 = Upward; 1 = Downward
282, 311, 340, 369, 398, 427, 456, 485	1 Bit	I	**C – W – –**	DPT_Switch	0/1	[Cx] Auto: On/Off	0 = On; 1 = Off
	1 Bit	I	**C – W – –**	DPT_Switch	0/1	[Cx] Auto: On/Off	0 = Off; 1 = On
283, 312, 341, 370, 399, 428, 457, 486	1 Bit	O	**C R – T –**	DPT_Switch	0/1	[Cx] Auto: On/Off (Status)	0 = On; 1 = Off
	1 Bit	O	**C R – T –**	DPT_Switch	0/1	[Cx] Auto: On/Off (Status)	0 = Off; 1 = On

284, 313, 342, 371, 400, 429, 458, 487	1 Bit	I	**C – W – –**	DPT_UpDown	0/1	[Cx] Auto: Move	0 = Raise; 1 = Lower
285, 314, 343, 372, 401, 430, 459, 488	1 Bit	I	**C – W – –**	DPT_Step	0/1	[Cx] Auto: Stop/Step	0 = Stop/StepUp; 1 = Stop/StepDown
	1 Bit	I	**C – W – –**	DPT_Trigger	0/1	[Cx] Auto: Stop	0 = Stop; 1 = Stop
286, 315, 344, 373, 402, 431, 460, 489	1 Byte	I	**C – W – –**	DPT_Scaling	0% – 100%	[Cx] Auto: Shutter Positioning	0% = Top; 100% = Bottom
287, 316, 345, 374, 403, 432, 461, 490	1 Byte	I	**C – W – –**	DPT_Scaling	0% – 100%	[Cx] Auto: Slats Positioning	0% = Open; 100% = Closed
288, 317, 346, 375, 404, 433, 462, 491	1 Bit	I	**C – W T U**	DPT_Scene_AB	0/1	[Cx] Sunshine/Shadow	0 = Sunshine; 1 = Shadow
	1 Bit	I	**C – W T U**	DPT_Scene_AB	0/1	[Cx] Sunshine/Shadow	0 = Shadow; 1 = Sunshine
289, 318, 347, 376, 405, 434, 463, 492	1 Bit	I	**C – W T U**	DPT_Heat_Cool	0/1	[Cx] Cooling/Heating	0 = Heating; 1 = Cooling
	1 Bit	I	**C – W T U**	DPT_Heat_Cool	0/1	[Cx] Cooling/Heating	0 = Cooling; 1 = Heating
290, 319, 348, 377, 406, 435, 464, 493	1 Bit	I	**C – W T U**	DPT_Occupancy	0/1	[Cx] Presence/No Presence	0 = Presence; 1 = No Presence
	1 Bit	I	**C – W T U**	DPT_Occupancy	0/1	[Cx] Presence/No Presence	0 = No Presence; 1 = Presence
291, 292, 320, 321, 349, 350, 378, 379, 407, 408, 436, 437, 465, 466, 494, 495	1 Bit	I	**C – W – –**	DPT_Alarm	0/1	[Cx] Alarm x	0 = No Alarm; 1 = Alarm
	1 Bit	I	**C – W – –**	DPT_Alarm	0/1	[Cx] Alarm x	0 = Alarm; 1 = No Alarm
293, 322, 351, 380, 409, 438, 467, 496	1 Bit	I	**C – W – –**	DPT_Ack	0/1	[Cx] Unfreeze Alarm	Alarm1 = Alarm2 = No Alarm + Unfreeze (1) => End Alarm

294, 323, 352, 381, 410, 439, 468, 497	1 Bit	I	**C – W – –**	DPT_Scene_AB	0/1	[Cx] Move (Reversed)	0 = Lower; 1 = Raise
295, 324, 353, 382, 411, 440, 469, 498	1 Bit	I	**C – W – –**	DPT_Ack	0/1	[Cx] Direct Positioning 1	0 = No Action; 1 = Go to Position
296, 325, 354, 383, 412, 441, 470, 499	1 Bit	I	**C – W – –**	DPT_Ack	0/1	[Cx] Direct Positioning 2	0 = No Action; 1 = Go to Position
297, 326, 355, 384, 413, 442, 471, 500	1 Bit	I	**C – W – –**	DPT_Ack	0/1	[Cx] Direct Positioning 1 (Save)	0 = No Action; 1 = Save Current Position
298, 327, 356, 385, 414, 443, 472, 501	1 Bit	I	**C – W – –**	DPT_Ack	0/1	[Cx] Direct Positioning 2 (Save)	0 = No Action; 1 = Save Current Position
817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834,	1 Bit	I	**C – W – –**	DPT_Bool	0/1	[LF] (1-Bit) Data Entry x	Binary Data Entry (0/1)

835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880							
881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912	1 Byte	I	**C – W – –**	DPT_Value_1_Ucount	0 – 255	[LF] (1-Byte) Data Entry x	1-Byte Data Entry (0-255)
913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944	2 Bytes	I	**C – W – –**	DPT_Value_2_Ucount	0 – 65535	[LF] (2-Byte) Data Entry x	2-Byte Data Entry

945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960	4 Bytes	I	**C – W – –**	DPT_Value_4_Count	-2147483648 – 2147483647	[LF] (4-Byte) Data Entry x	4-Byte Data Entry
961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980	1 Bit	O	**C R – T –**	DPT_Bool	0/1	[LF] Function x – Result	(1-Bit) Boolean
	1 Byte	O	**C R – T –**	DPT_Value_1_Ucount	0 – 255	[LF] Function x – Result	(1-Byte) Unsigned
	2 Bytes	O	**C R – T –**	DPT_Value_2_Ucount	0 – 65535	[LF] Function x – Result	(2-Byte) Unsigned
	4 Bytes	O	**C R – T –**	DPT_Value_4_Count	-2147483648 – 2147483647	[LF] Function x – Result	(4-Byte) Signed
	1 Byte	O	**C R – T –**	DPT_Scaling	0% – 100%	[LF] Function x – Result	(1-Byte) Percentage
	2 Bytes	O	**C R – T –**	DPT_Value_2_Count	-32768 – 32767	[LF] Function x – Result	(2-Byte) Signed
	2 Bytes	O	**C R – T –**	9.xxx	-671088,64 – 670433,28	[LF] Function x – Result	(2-Byte) Float
991, 993, 995, 997, 999, 1001, 1003, 1005, 1007, 1009, 1011, 1013, 1015, 1017, 1019, 1021	4 Bytes	O	**C R – T –**	DPT_Value_4_Ucount	0 – 4294967295	[Relay x] Number of Switches	Number of Switches
992, 994, 996, 998, 1000, 1002, 1004, 1006, 1008, 1010, 1012, 1014, 1016, 1018, 1020, 1022	2 Bytes	O	**C R – T –**	DPT_Value_2_Ucount	0 – 65535	[Relay x] Maximum Switches per Minute	Maximum Switches per Minute

1039, 1061	1 Bit	I	**C – W – –**	DPT_Trigger	0/1	[MLx] Trigger	Trigger the Master Light Function
	1 Bit	I	**C – W – –**	DPT_Ack	0/1	[MLx] Trigger	0 = Nothing; 1 = Trigger the Master Light Function
	1 Bit	I	**C – W – –**	DPT_Ack	0/1	[MLx] Trigger	1 = Nothing; 0 = Trigger the Master Light Function

1040, 1041, 1042, 1043, 1044, 1045, 1046, 1047, 1048, 1049, 1050, 1051, 1062, 1063, 1064, 1065, 1066, 1067, 1068, 1069, 1070, 1071, 1072, 1073	1 Bit	I	**C – W – –**	DPT_Switch	0/1	[MLx] Status Object x	Binary Status
1052, 1074	1 Bit	O	**C R – T –**	DPT_Switch	0/1	[MLx] General Status	Binary Status
1053, 1075	1 Bit		**C – – T –**	DPT_Switch	0/1	[MLx] General Switch Off: Binary Object	Switch Off Sending
1054, 1076	1 Byte		**C – – T –**	DPT_Scaling	0% – 100%	[MLx] General Switch Off: Scaling	0-100%
1055, 1077	1 Byte		**C – – T –**	DPT_SceneControl	0-63; 128-191	[MLx] General Switch Off: Scene	Scene Sending
1056, 1078	1 Byte		**C – – T –**	DPT_HVACMode	1=Confort 2=Standby 3=Económico 4=Protección	[MLx] General Switch Off: HVAC mode	Auto, Comfort, Standby, Economy, Building Protection
1057, 1079	1 Bit		**C – – T –**	DPT_Switch	0/1	[MLx] Courtesy Switch On: Binary Object	Switch On Sending
1058, 1080	1 Byte		**C – – T –**	DPT_Scaling	0% – 100%	[MLx] Courtesy Switch On: Scaling	0-100%
1059, 1081	1 Byte		**C – – T –**	DPT_SceneNumber	0 – 63	[MLx] Courtesy Switch On: Scene	Scene Sending
1060, 1082	1 Byte		**C – – T –**	DPT_HVACMode	1=Confort 2=Standby 3=Económico 4=Protección	[MLx] Courtesy Switch On: HVAC mode	Auto, Comfort, Standby, Economy, Building Protection

Documents / Resources

	Zennio ZIOMBSH4V3 4ch Maxinbox Shutter [pdf] User Manual ZIOMBSH4V3, ZIOMBSH8V3, ZIOMBSH4V3 4ch Maxinbox Shutter, 4ch Maxinbox Shutter, Maxinbox Shutter, Shutter

References

- Home En | Zennio
- Home En | Zennio
- Home En | Zennio
- Home En | Zennio
- User Manual