

# Communication Objects – Local Commands

## EIB/KNX Inputs

Local commands affect the motor connected to the channel. They are responsible for Operations in the Room (Local Operation, Room Buttons, etc.).

If the setting for the parameter "Automatic Lock-out" on the tab "Lock-out Functions" are made accordingly, the automatic lock-out will be set when a telegram is received by the communication object.

The communication objects for local commands are described in the following tables.

It is also indicated, which parameters hide or display the communication objects.

Abbreviations used:

|      |   |
|------|---|
| CO   | Communication Object                                |
| Type | Data type (bit length of the CO)                    |
| DPT  | Data Point Type according to the Konnex Association |

| Function     | Name                                   | Description  | Type                             |
|--------------|--|--|----------------------------------|
| Up / Down    | Channel n, Local Command, End Position | 1 = Move to the lower end position<br><br>0 = Move to the upper end position<br><br>The CO is hidden/displayed by the parameter Local Command on the tab "Inputs".                 | <b>(DPT)</b><br>1 bit<br>(1.008) |
| Up / Shading | Channel n, Local Command, Shading      | 1 = Move to the shading position<br><br>0 = Move to the upper end position<br><br>The CO is hidden/displayed by the parameter Local Command on the tab "Inputs".                   | 1 bit<br>(non)                   |
| Step / Stop  | Channel n, Local Command, Tilt         | 1 = Tilt after Down, or when movement stops<br><br>0 = Tilt after Up, or when movement stops<br><br>The CO is hidden/displayed by the parameter Local Command on the tab "Inputs". | 1 bit<br>(1.010)                 |
| Automatic    | Channel n, Local                       | 1 = Set lock-out of automatic  | 1 bit                            |

|  |  |   |                   |
|--|--|---|-------------------|
| Lock-out   | Command, Automatic Lock-out            | 0 = Cancel lock-out of automatic  | (non)             |
|  |  | When the transmit flag for status is set, a feedback message for the current status of the automatic lock-out will be sent. |                   |
|  |  | The CO is hidden/displayed by the parameter Automatic Lock-out on the tab "Lock-out Function".                              |                   |
| <b>=&gt; The following communication objects are not available with the actuator MCU-09.</b> |  |   |                   |
| Height 0...<br>255   | Channel n, Local Command, Blind Height | Movement to blind height.   | 1 byte<br>(5.001) |
|  |  | 0 = all the way up, top end position  |                   |
|  |  | 255 = all the way down, lower end position  |                   |
|  |  | The CO is hidden/displayed by the parameter Local Command on the tab "Inputs".  |                   |
| Angle 0...<br>255  | Channel n, Local Command, Slat Angle   | Movement to slat angle.   | 1 byte<br>(5.001) |
|  |  | 0 = fully open  |                   |
|  |  | 255 = fully closed  |                   |
|  |  | The CO is hidden/displayed by the parameter Local Command on the tab "Inputs".  |                   |

## Communication Objects – Central Commands

Central commands are commands from a weather central unit to the actuator of the venetian blinds.

When a BMS Central Unit (e.g. Quadra) is used, only the SCO object will be displayed.

Commands from the SCO object and from the communication objects "Central Command" can also be mixed.

The priority handling must be set on the tab "Priorities" (does not apply for actuator MCU-09 of the venetian blinds).

The communication objects for central commands are described in the following table.

It is also indicated, which parameters hide or display the communication objects.

Abbreviations used:

|      |   |
|------|---|
| CO   | Communication Object                    |
| Type | Data type (bit length of the CO)        |
| DPT  | Data Point Type according to the Konnex |

## Association

**Inputs**

| <b>Function</b>   | <b>Name</b>                              | <b>Description</b>  | <b>Type</b>              |
|-------------------|--|---|--------------------------|
| All Functions     | SCO object, Central Command              | One object for the connection to the BMS central unit. All commands are sent from the central unit to all actuators. Per building, only 1 address is needed, which contains all information for all sectors.  | (DPT)<br>6 byte<br>(non) |
| Up / Down         | Channel n, Central Command, End Position | The CO is always displayed.<br>1 = Movement to the lower end position, possible cancelling of limited operation due to automatic.<br><br>0 = Movement to the upper end position, possible cancelling of limited operation due to automatic.   | 1 bit<br>(1.008)         |
| Up / Shading      | Channel n, Central Command, Shading      | The CO is hidden/displayed by the parameter Central Command on the tab "Inputs".<br>1 = Movement to the shading position (either mech. end position or by tilting up/moving to), possible cancelling of limited operation due to automatic.<br><br>0 = Movement to the upper end position, possible cancelling of limited operation due to automatic. | 1 bit<br>(non)           |
| Height<br>0...255 | Channel n, Central Command, Blind Height | The CO is hidden/displayed by the parameter Central Command on the tab "Inputs".<br>Movement to the blind height, possible cancelling of limited operation due to automatic.  | 1 byte<br>(5.001)        |
| Angle<br>0...255  | Channel n, Central Command, Slat Angle   | The CO is hidden/displayed by the parameter Central Command on the tab "Inputs".<br>Movement to the slat angle, possible cancelling of limited operation due to automatic.<br><br>The CO is hidden/displayed by the parameter Central Command on the tab "Inputs".  | 1 byte<br>(5.001)        |

|             |  |   |                      |
|-------------|--|---|----------------------|
| Step / Stop | Channel n, Central Command, Tilt           | 1 = Tilt after Down, or when movement stops, possible cancelling of limited operation due to automatic.<br><br>0 = Tilt after Up, or when movement stops, possible cancelling of limited operation due to automatic.<br><br>The CO is hidden/displayed by the parameter Central Command on the tab "Inputs".  | 1 bit<br><br>(1.010) |
| Up / Night  | Channel n, Central Command, Night Position | The "Up / Night" function cancels the lock-out of the automatic.<br><br>Movement depending on product setting.<br><br>All slat products:<br><br>0 = Movement upward<br><br>1 = Movement downward<br><br>All fabric products:<br><br>0 = Movement upward<br><br>1 = Movement upward<br><br>Window:<br><br>0 = No function<br><br>1 = Close<br><br>The CO is hidden/displayed by the parameter Central Command on the tab "Inputs". | 1 bit<br><br>(1.008) |
| Safety1     | Channel n, Central Command Safety 1        | Input for safety lock-out function.<br><br>Behaviour is set under parameter.  | 1 bit<br><br>(1.001) |
| Safety2     | Channel n, Central Command Safety 2        | The CO is hidden/displayed by the parameter Safety Function on the tab "Lock-out Functions".<br>Input for safety lock-out function.<br><br>Behaviour is set under parameter.  | 1 bit<br><br>(1.001) |
| Safety3     | Channel n, Central                         | The CO is hidden/displayed by the parameter Safety Function on the tab "Lock-out Functions".<br>Input for safety lock-out function.   | 1 bit                |

|                |                                      |                  |  |          |
|----------------|--------------------------------------|------------------|--|----------|
| BCSS<br>Object | Channel n, Control<br>System Command | Command Safety 3 | Behaviour is set under parameter.  | (1.001)  |
|                |                                      |                  | The CO is hidden/displayed by the parameter Safety Function on the tab "Lock-out Functions". |          |
| BCSS<br>Object | Channel n, Control<br>System Command |                  | Command from a control station.  | 4 byte   |
|                |                                      |                  | The CO is hidden/displayed by the parameter Receive BCSS Object on the tab "Inputs".         | (12.000) |

## Communication Objects – Inputs (Binary Input)

The communication objects for inputs (binary input) are described in the following tables.

It is also indicated, which parameters hide or display the communication objects.

Abbreviations used:

|      |   |
|------|---|
| CO   | Communication Object                                |
| Type | Data type (bit length of the CO)                    |
| DPT  | Data Point Type according to the Konnex Association |

### Button Input Venetian Blind

The contact connected to the input is used as a button input for venetian blinds.

The direction of rotation can be adapted using the parameter "Reverse Button Input" on the tab Products below Motor Settings.

| Function        | Name                               | Description   | Type           |
|-----------------|------------------------------------|---|----------------|
| Up / Down       | Input n, End Position<br>Operation | Up button = 0   | (DPT)<br>1 bit |
|                 |                                    | Down button = 1   | (1.008)        |
| Up /<br>Shading | Input n, Long+Short<br>Operation   | The CO is hidden/displayed by the parameter Input on the tab "Inputs" if Venetian Blind Button Input is selected. |                |
|                 |                                    | Long + short button pressure on the local button (no matter whether pressed on the button Up or Down).            | 1 bit<br>(non) |
| Step / Stop     | Input n, Tilt Operation            | The CO is hidden/displayed by the parameter Input on the tab "Inputs" if Venetian Blind Button Input is selected. |                |
|                 |                                    | Button pressure for slat adjustment.  | 1 bit          |

|                    |                                       |   |                |
|--------------------|---------------------------------------|---|----------------|
|                    |                                       | The CO is hidden/displayed by the parameter Input on the tab "Inputs" if Venetian Blind Button Input is selected. | (1.010)        |
| Automatic Lock-out | Input n, Button Combination Operation | Button Combination (Press Up button + Down button simultaneously).  | 1 bit<br>(non) |
|                    |                                       | The CO is hidden/displayed by the parameter Input on the tab "Inputs" if Venetian Blind Button Input is selected. |                |

## Button Input, Dimming

The local button is configured as a dimmer.

| Function         | Name                     | Description  | Type             |
|------------------|--------------------------|--|------------------|
|                  |                          |  | <b>(DPT)</b>     |
| On / Off         | Input n, Dimmer Function | Short button pressure on "Up" sends "1", short button pressure on "Down" sends "0".          | 1 bit<br>(1.001) |
|                  |                          | The CO is hidden/displayed by the parameter Button Input, Dimming on the tab "Inputs".       |                  |
| Lighter / Darker | Input n, Dimmer Function | Long button pressure on "Up" sends "Lighten dimming by 100%". When released, a stop occurs.  | 4 bit<br>(3.007) |
|                  |                          | Long button pressure on "Down" sends "Darken dimming by 100%". When released, a stop occurs. |                  |
|                  |                          | The CO is hidden/displayed by the parameter Button Input, Dimming on the tab "Inputs".       |                  |

## Contact Input

The connection for a local button is used as a binary input.

| Function | Name               | Description   | Type             |
|----------|--------------------|---|------------------|
|          |                    |   | <b>(DPT)</b>     |
| On / Off | Input n, Contact 1 | Input "Up" on the input corresponds to contact 1.   | 1 bit<br>(1.001) |
|          |                    | The CO is hidden/displayed by the parameter Contact Input on the tab "Inputs" with the selection of a function for Input 1. |                  |
| On / Off | Input n, Contact 2 | Input "Down" on the input corresponds   | 1 bit            |

|                    |                            |   |                   |
|--------------------|----------------------------|---|-------------------|
|                    |                            | to contact 2.   | (1.001)           |
|                    |                            | The CO is hidden/displayed by the parameter Contact Input on the tab "Inputs" with the selection of a function for Input 1.     |                   |
| Pos. 1<br>(Height) | Input n, Contact 1, Height | Input "Up" on the input corresponds to contact 1.   | 1 byte<br>(5.001) |
|                    |                            | The CO is hidden/displayed by the parameter Contact Input on the tab "Inputs" with the selection of a function for Input 1.     |                   |
| Pos. 1<br>(Angle)  | Input n, Contact 1, Angle  | Input "Up" on the input corresponds to contact 1.   | 1 byte<br>(5.001) |
|                    |                            | The CO is hidden/displayed by the parameter Contact Input on the tab "Inputs" with the selection of a function for Input 1.     |                   |
| Pos. 2<br>(Height) | Input n, Contact 2, Height | Input "Down" on the input corresponds to contact 2.   | 1 byte<br>(5.001) |
|                    |                            | The CO is hidden/displayed by the Contact Input parameter on the tab "Inputs" with the selection of Press Position for Input 2. |                   |
| Pos. 2<br>(Angle)  | Input n, Contact 2, Angle  | Input "Down" on the input corresponds to contact 2.   | 1 byte<br>(5.001) |
|                    |                            | The CO is hidden/displayed by the parameter Contact Input on the tab "Inputs" with the selection of Press Position for Input 2. |                   |
| Scene<br>Output 1  | Input n, Contact 1         | Input "Down" on the input corresponds to contact 1.   | 1 byte<br>(non)   |
|                    |                            | The CO is hidden/displayed by the parameter Contact Input on the tab "Inputs" with the selection of Press Scene for Input 1.    |                   |
| Scene<br>Output 2  | Input n, Contact 2         | Input "Down" on the input corresponds to contact 2.   | 1 byte<br>(non)   |
|                    |                            | The CO is hidden/displayed by the parameter Contact Input on the tab "Inputs" with the selection of Press Scene for Input 2.    |                   |

## Objects for Button LED

| Function | Name | Description | Type |
|----------|------|-------------|------|
|----------|------|-------------|------|

|                           |   |   | <b>(DPT)</b>     |
|---------------------------|---|---|------------------|
| LED<br>On/Off             | Input n, Indicate<br>Automatic Lock-out | The LED connected to the local button<br>can be controlled (e.g. to indicate the<br>lock-out of the automatic feature). | 1 bit<br>(1.001) |
|                           |   | The CO is hidden/displayed by the<br>parameter Objects f. Button LED on the<br>tab "Inputs".                            |                  |
| Blinking<br>LED<br>On/Off | Input n, Indicate Safety1               | The LED connected to the local button<br>can be controlled (Indicate Safety 1).   | 1 bit<br>(non)   |
|                           |   | The CO is hidden/displayed by the<br>parameter Objects f. Button LED on the<br>tab "Inputs".                            |                  |
| Blinking<br>LED<br>On/Off | Input n, Indicate Safety2               | The LED connected to the local button<br>can be controlled (Indicate Safety 2).   | 1 bit<br>(non)   |
|                           |   | The CO is hidden/displayed by the<br>parameter Objects f. Button LED on the<br>tab "Inputs".                            |                  |

## Communication Objects – Feedback

In the following table, the communication objects for the feedback are described.

It is also indicated, which parameters hide or display the communication objects.

Abbreviations used:

|      |  |
|------|--|
| CO   | Communication Object                                   |
| Type | Data type (bit length of the CO)                       |
| DPT  | Data Point Type according to the Konnex<br>Association |

### Feedback

| <b>Function</b>   | <b>Name</b>                        | <b>Description</b>  | <b>Type</b>       |
|-------------------|------------------------------------|---|-------------------|
|                   |                                    |   | <b>(DPT)</b>      |
| Height<br>0...255 | Channel n, Feedback,<br>Height     | Feedback Blind height.<br><br>The CO is hidden/displayed by the<br>parameter Position on the tab<br>"Feedback". | 1 byte<br>(5.001) |
| Angle<br>0...255  | Channel n, Feedback,<br>Slat Angle | Slat angle feedback.<br><br>The CO is hidden/displayed by the<br>parameter Position on the tab                  | 1 byte<br>(5.001) |



|  |                              |   |                    |
|--|------------------------------|---|--------------------|
| On / Off   | Channel n, Activate Feedback | "Feedback".<br>For "1", the current position will always be communicated and the feedback of Height / Angle is activated.   | 1 bit<br>(1.001)   |
| BCSS Object  | Name                         | The CO is hidden/displayed by the parameter Position on the tab "Feedback".<br>Feedback to the building control services system via a single, 4-byte object. A feedback message contains the current position (height/angle) as well as status information. | 4 byte<br>(12.000) |
| The CO is hidden/displayed by the BCSS Object parameter on the "Feedback" tab.               |                              |   |                    |
| <b>=&gt; The following communication objects are not available with the MCU-09 actuator.</b> |                              |   |                    |
| [Text from parameter]  | Channel n, Feedback 1        | Feedback of state, position, etc. (see parameter).  | 1 bit<br>(1.002)   |
| The CO is hidden/displayed by the parameter Feedback 1 on the tab "Feedback".                |                              |   |                    |
| [Text from parameter]  | Channel n, Feedback 2        | Feedback of state, position, etc. (see parameter).  | 1 bit<br>(1.002)   |
| The CO is hidden/displayed by the parameter Feedback 2 on the tab "Feedback".                |                              |   |                    |
| [Text from parameter]  | Channel n, Feedback 3        | Feedback of state, position, etc. (see parameter).  | 1 bit<br>(1.002)   |
| The CO is hidden/displayed by the parameter Feedback 3 on the tab "Feedback".                |                              |   |                    |
| [Text from parameter]  | Channel n, Feedback 4        | Feedback of state, position, etc. (see parameter).  | 1 bit<br>(1.002)   |
| The CO is hidden/displayed by the parameter Feedback 4 on the tab "Feedback".                |                              |   |                    |
| [Text from parameter]  | Channel n, Feedback 5        | Feedback of state, position, etc. (see parameter).  | 1 bit<br>(1.002)   |
| The CO is hidden/displayed by the parameter Feedback 5 on the tab "Feedback".                |                              |   |                    |

## Communication Objects – Logic and Scenes

=> **These communication objects are not available with the actuator MCU-09.**

The communication objects for logic and scenes are described in the following tables.

It is also indicated, which parameters hide or display the communication objects.

Abbreviations used:

CO      Communication Object  
 Type   Data type (bit length of the CO)  
 DPT    Data Point Type according to the Konnex  
         Association

## Logic

| Function             | Name             | Description   | Type<br>(DPT)       |
|----------------------|------------------|---|---------------------|
| 2-Bit Logic Function | Channel n, Logic | Input for the logic table (truth table).<br><br>The function of the logic table is the reaction of the motor (output).      | 2 bit<br><br>(none) |
| On / Off             | Logic Input 1    | The CO is hidden/displayed by the parameter 1 x 2-Bit Input on the tab "Logic".<br>Input for the logic table (truth table). | 1 bit<br><br>(none) |
| On / Off             | Logic Input 2    | The CO is hidden/displayed by the parameter 4 x 1-Bit Input on the tab "Logic".<br>Input for the logic table (truth table). | 1 bit<br><br>(none) |
| On / Off             | Logic Input 3    | The CO is hidden/displayed by the parameter 4 x 1-Bit Input on the tab "Logic".<br>Input for the logic table (truth table). | 1 bit<br><br>(none) |
| On / Off             | Logic Input 4    | The CO is hidden/displayed by the 4 x 1-Bit Input parameter on the "Logic" tab.<br>Input for the logic table (truth table). | 1 bit<br><br>(none) |

|   |               |   |        |
|---|---------------|---|--------|
| The CO is hidden/displayed by the parameter 4 x 1-Bit Input on the tab "Logic". |               |   |        |
| On / Off  | Logic Input 5 | Input for the logic table (truth table).                      | 1 bit  |
|   |               | The function of the logic table is the reaction of the motor. | (none) |
| The CO is hidden/displayed by the parameter 4 x 1-Bit Input on the tab "Logic". |               |   |        |
| On / Off  | Logic Input 6 | Input for the logic table (truth table).                      | 1 bit  |
|   |               | The function of the logic table is the reaction of the motor. | (none) |
| The CO is hidden/displayed by the parameter 4 x 1-Bit Input on the tab "Logic". |               |   |        |
| On / Off  | Logic Input 7 | Input for the logic table (truth table).                      | 1 bit  |
|   |               | The function of the logic table is the reaction of the motor. | (none) |
| The CO is hidden/displayed by the parameter 4 x 1-Bit Input on the tab "Logic". |               |   |        |
| On / Off  | Logic Input 8 | Input for the logic table (truth table).                      | 1 bit  |
|   |               | The function of the logic table is the reaction of the motor. | (none) |
| The CO is hidden/displayed by the parameter 4 x 1-Bit Input on the tab "Logic". |               |   |        |

## Scenes

| Function    | Name                | Description                         | Type            |
|-------------|---------------------|-------------------------------------|-----------------|
| Scene Input | Channel n,<br>Scene | Call up scenes in actuator or save. | (DPT)<br>1 byte |
|             |                     | Telegram: MxxxNNNN                  | (18.001)        |
|             |                     | Where:                              |                 |
|             |                     | M = "0": Call up scene              |                 |
|             |                     | M = "1": Save scene                 |                 |
|             |                     | xxx must be 0                       |                 |
|             |                     | NNNN = scene index (0...15):        |                 |

Scene numbers from 1 to 16 are entered in the setting in the plug-in. However, in the telegram from Konnex, a scene index of 0 to 15 is used.

Scene index = number set in plug-in minus 1.

The CO is hidden/displayed by the parameter Scene Active on the tab "Scenes".