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KNX Venetian Blind driver (GTSLC4ZKNXVENBL) for KNX blind relays (OS 2.9+)

1. Disclaimer

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2. What is the venetian blind driver? What is it used for?

This driver does integrate the KNX blind modules into the Control4 System. Additionally it supports venetian blinds with louvers

3. What blind proxy features are supported?

- Up/down/stop/toggle and move to a discrete level, adjustment for louvers

4. Additional features

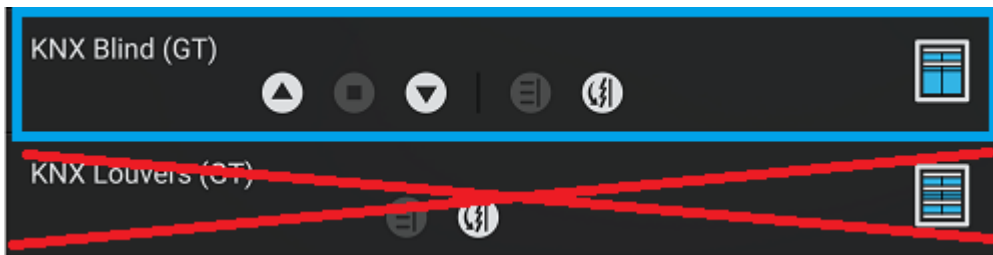
- Moving to discrete KNX 1 Byte value via programming.
- Overtaking properties from old knx blind drivers.
- Apply certain settings to other venetian blind drivers

5. Theory of operation / general info

With C4 OS 2.9 a new blind interface were introduced. This blind will appear in 2 fields on the Navigators. One field is the blind itself (red marked) and the other one are the louver from the blind (green marked)



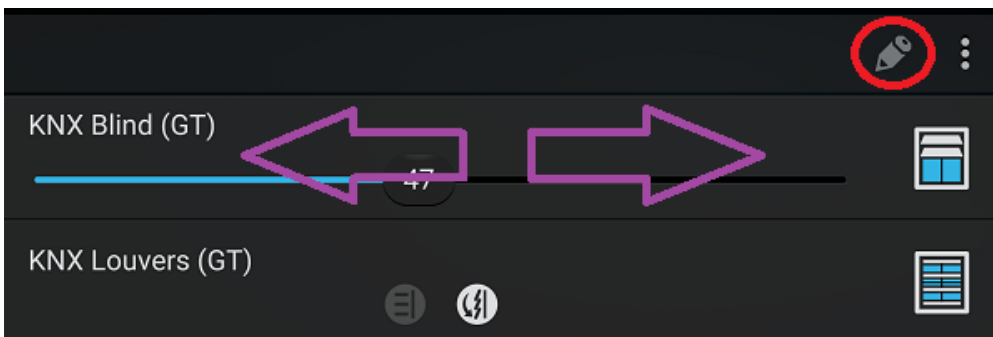
By connecting the louver and the blind part together all buttons from blind and louver can be moved to one field with all buttons (blue marked). Note that the feedback is also merged to one single field on the right and it may behave creative



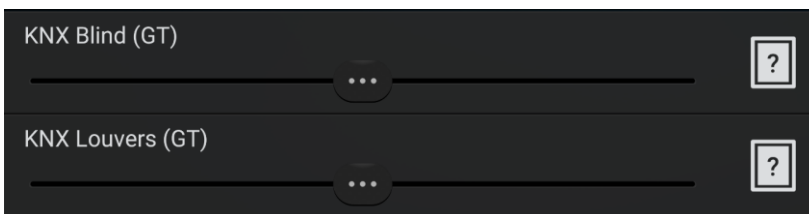
Unfortunately the Navigators don't hide the Louvers field if the connection is done, that has to be done via the room properties in Composer (hide the louver part of the blind) To get the 2 fields merged, simply connect (in Connections) the binding `BLIND_SECONDARY_CONTROL` and refresh Navigators

Blind Group	Control	BLIND_GROUP	Input	
KNX Control	Control	KNX_DEVICE	Input	KNX Network->KNX Device
Control Outputs				
Blind	Control	BLIND_SECONDARY_CONTROL	Output	KNX Louvers (GT)->Louver
Open Button Link	Control	BUTTON_LINK	Output	
Close Button Link	Control	BUTTON_LINK	Output	
Toggle Button Link	Control	BUTTON_LINK	Output	
Stop Button Link	Control	BUTTON_LINK	Output	

In any case the view of the blue or red marked field can be changed to slider view, up/down/stop, etc... view by using the pen symbol and swipe to left and right in the field.



Be aware that if the blind is set up without feedbacks the slider will show an unknown position each time the Controller starts up. As well the toggle buttons will show a question mark. In this status the driver is *uncalibrated*



Once the blind is uncalibrated and moved, it will first calibrate itself, meaning that it will

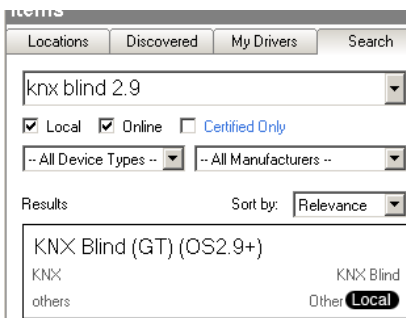
travel to an end position (using the time set in Properties *Moving time up/down (s)*) and then to the level entered.

6. Software installation Control4

6.1. Prerequisites

- The driver uses the Control4 KNX network driver or similar drivers to connect to KNX. Please make sure that this driver is installed in your project and is connected to KNX, running
- Download the driver and placed them in %USERPROFILE%\Control4\Drivers.

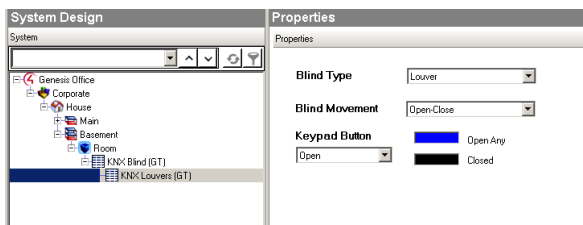
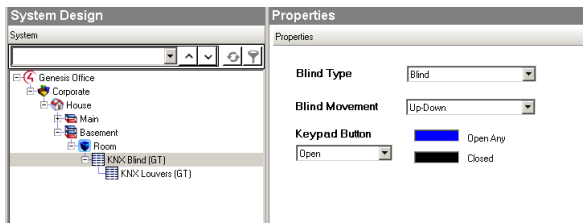
6.2. Start Composer, go to *System Design* and select the tab *Search* in the right top window. Search for *knx blind GT 2.9*. If you are running an older version please use the former driver version 10.x.x



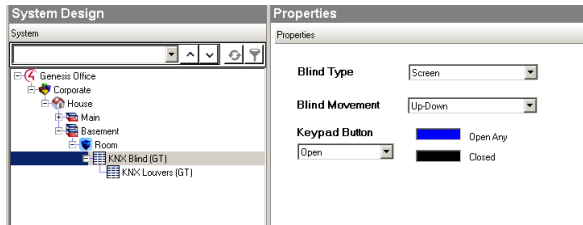
6.3. Drag and drop the *knx Blind GT* driver into the wished room.

6.4. Set the proxy properties

A venetian blind needs these settings: (depending on these setting the buttons on Navigators are shown) All these settings do not have any influence on the function side of the driver; they just define the look and feel on the Navigators



It's also possible to do a simple blind with no louver, just hide the louver part in the Rooms Properties and only the blind part will be shown. This way also a screen can be done



6.5. Common properties: Click on it and find the Properties page. (Hovering with the mouse over the Properties will show up hints)

Properties	Documentation	Actions	Lua
-> Info	28.10.2016 08:40 - Driver/Version - 11.0.1 running		
Driver name	GTSLC4ZKNXVENBL		
-> Config			
Up / down address (1 bit)	1/0/2		
Up / down status (1 Byte)			
Invert up /down operation	false		
Stop / louver address (1 bit)	1/0/3		
Louver open / close status (1 Byte)			
Moving time up (s)	12		
Dont stop after up	true		
Blind pos. change on step up (%)	0.4		
Louver open after blind up (%)	50		
Louver open after blind fully up (%)	100		
Moving time down (s)	12		
Dont stop after down	true		
Blind pos. change on step down (%)	0.6		
Louver open after blind down (%)	50		
Louver open after blind fully down (%)	0		
Louver steps open / close	11		
Invert louver operation	false		
-> UI config			
Toggle button can stop	true		
-> Config copy/retrieve			
Apply config to...		Select	
Get settings from KNX blind driver..		Select	

- -> Info: Does show the driver health info. If the driver experience issues this line will display it. If *Version x.x.x running* is shown the driver is fully started and works. If another message appears the driver will not work correct, a decent action is required.
- Driver name: The product identification of the driver
- Up / down address (1 bit): Insert the address for up/down
- Up / down status (1 Byte): If the blind does support status insert the address
- Invert up /down operation: If the actuator is wrong cabled....
- Stop / louver address (1 bit): Insert the address for stop

- Louver open / close status (1 Byte): If the louver does support status insert the address
- Moving time up (s): **Measure how long the blind travels from down to complete up and adjust accordingly**
- Don't stop after up: Once the driver reaches the final up level it sends a stop. If the stop is not needed set to true
- Blind pos. change on step up (%): Opening the louvers usually does move the complete blind a bit. Set here how many % the complete blind moves up if the Louver opens a step
- Louver open after blind up (%): Set how many % the louver is open after the blind was traveling up (blind position between 3% and 97%)
- Louver open after blind fully up (%): Set how many % the louver is open after the blind was traveling up to its end position
- Moving time down (s): **Measure how long the blind travels from up to complete down and adjust accordingly**
- Don't stop after down: Once the driver reaches the final down level it sends a stop. If the stop is not needed set to true
- Blind pos. change on step down (%): Closing the louvers usually does move the complete blind a bit. Set here how many % the complete blind moves down if the Louver closes a step
- Louver open after blind down (%): Set how many % the louver is open after the blind was traveling down (blind position between 3% and 97%)
- Louver open after blind down (%): Set how many % the louver is open after the blind was traveling down to its end position
- Louver steps open / close: How many steps the louvers need to totally open/close
- Invert louver operation: If the actuator is wrong cabled....
- Toggle button can stop: Default C4 behavior is that the toggle button does work like up/down/up... If set to true it does work as up/stop/down/stop/up...
- Apply config to...: Except the knx addresses (and the buttons colors) all settings will be transferred to the selected drivers.
- Get settings from KNX blind driver..: Select an old knx blind driver to get the knx addresses and all settings and as well the driver name transferred to this driver. The old driver will be marked with `_`(obsolete) in the project
- -> Log / Lua window: Selects the log level printed out in Lua window from Composer. Use the level *Debug* to see what the driver does
- Log period (h): The time frame the log should output
- Log auth: Developer can give you a code to see more logs. Usually not really interesting, only for in deep debug

6.5. Connections

Button links for keypads.

7. Programming

Using programming the blind and louvers can be moved with discrete 1 Byte or % values. A blind move directly to 64% is possible and also set the louvers direct without seeing steps. Using these commands also the new position (after move) of the blind/louwer must be defined.

Device Specific Command		Device Specific Command	
Send discrete KNX level (1 Byte) to the blind and refresh Navigators		Send discrete KNX level (1 Byte) to the louver and refresh Navigators	
Level	255	Level	255
Blind status (%) up	0	Louver status (%) open	100
Louver status (%) open	100	KNX address	1/0/7
KNX address	1/0/1		

Device Specific Command

Send level (%) to the blind and refresh Navigators

Level (%)	70
Blind status (%) up	30
Louver status (%) open	70
KNX address	1/0/1

Device Specific Command

Send level (%) to the louver and refresh Navigators

Level (%)	50
Louver status (%) open	80
KNX address	1/0/7

8. Known issues

- For maximum performance we recommend not to use the native Control4 knx network driver, especially in larger installations it may fail or be overloaded. Instead use a KNX gateway from B+B Steuerungstechnik and our driver "EIB Medientechnik Gateway IP". More info on <https://technet.genesis-technologies.ch>

9. Updates / Support

- Updates are available on: <https://technet.genesis-technologies.ch>
- Bugs should be reported to: info@genesis-technologies.ch
- Updates from older .c4i drivers can be done via *Drivers -> Manage drivers...* in Composer. The old driver will be marked as obsolete and can be updated to the new .c4z driver. Properties are maintained.