nexgentec network keypad driver (NGTSKC4ZNKPINT)

1. Disclaimer
- Genesis Technologies does provide this driver as it is. There is no commitment to support, nor does Genesis Technologies assure a decent reaction time in case of a problem. Genesis Technologies can refuse all support, discontinue support, end the driver lifetime at any time. Genesis Technologies will not refund in any case licenses
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By using this driver you accept that you have read and accepted the terms above!

2. What is the nexgentec network keypad driver? What is it used for?
The driver connects Control4 to the network keypads from nexgentec

3. Configuring the network keypad to work with this driver
Configure the network processor board to a fixed IP, accordingly to the manual using the webinterface or he network keypad software. All manuals and the software can be found at
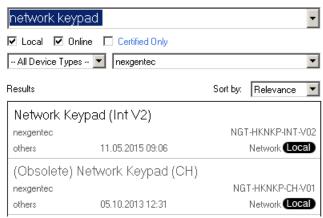https://technet.genesis-technologies.ch

4. Adding and configuring the driver in Composer
Assuming that you have already downloaded the drivers and placed them in
%USERPROFILE%\Control4\Drivers.

4.1. Start Composer, go to *System Design* and select the tab *Search* in the right top window.
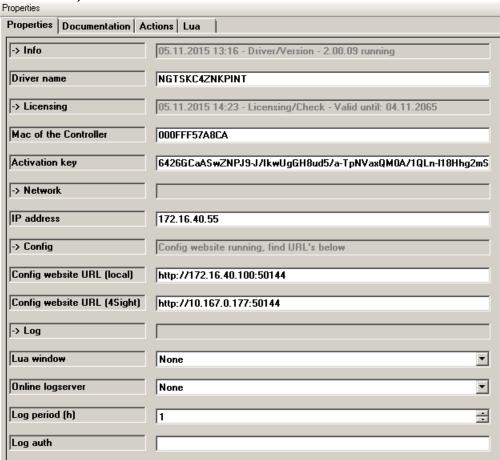 Search for *network keypad* and manufacturer *nexgentec*

If you have already used an older version of the driver it will be marked as obsolete. Use for
all nexgentec network keypads the new driver **Network Keypad (int V2).** It will work with
hardware 1.0, 1.1 and 2.x.x.

4.2. Drag and drop the *Network Keypad (int V2)* driver into the wished room. Click on it and find
the Properties page. (Hovering with the mouse over the Properties will show up hints)

4.3. Properties.
Only a small part of the settings is appearing on the properties page. **This driver**

features a config website where all keypad related settings must be done.

• -> Info: Does show the driver health info
• Driver name: The product identification of the driver
• -> Licensing: Shows info about licensing status
• Mac of the Controller: Inserted automatically
• Activation key: Insert here the license key which is displayed in the driver dashboard after you bought a license and assigned it to the system. Once assigned in the Dashboard the license may jump in automatically once the driver connects to the online services
• IP address: Insert the IP of the network keypad
• **Config website** URL (local): **Copy this URL to your browser** to get the **web configuration** page of the driver. The url only appears **after *Launch config website*** is pressed in **Actions tab** of the driver.
• **Config website** URL (4sight): **Copy this URL to your browser** if you are connecting over 4sight to get the **web configuration** page of the driver. The url only appears **after *Launch config website*** is pressed in **Actions tab** of the driver.
• -> 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 / Online log server: If a persistent problem appears that cannot be solved from the installer support may ask you to activate a decent level. Do not use until support ask you to do so
• 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

4.4. Config website:
Once the config website is loaded in the browser all keypad settings can be done.

Network Keypad driver NGTSKC4ZNKPINT

Driver name: Network Keypad (Int V2)   Keypad MAC address: 00:06:__:01:1D:79
Driver version: 20009   Keypad software version: 2.0.6
Network: Online, keypad connected   Room temperature: 24.2

05.11.2015 13:16 - Driver/Version - 2.00.09 running
05.11.2015 12:23 - Licensing/Check - Valid until: 04.11.2065

Configure keypad network settings

Button 1

Usage	Light
Push Color	○ Red ○ Green ○ Blue ○ Black
	⦿ No action
Preset/Release Color	○ Red ○ Green ○ Blue ○ Black
	⦿ Follow bound light device ○ No action

Button 2

Usage	Generic
Push Color	○ Red ○ Green ⦿ Blue ○ Black
	○ No action
Release Color	○ Red ⦿ Green ○ Blue ○ Black
	○ No action

Button 3

Usage	Volume up
Push Color	○ Red ○ Green ⦿ Blue ○ Black
	○ No action
Release Color	○ Red ○ Green ⦿ Blue ○ Black
	○ No action
Auto Release	5002

Button 4

Usage	Volume down
Push Color	○ Red ○ Green ⦿ Blue ○ Black
	○ No action
Release Color	○ Red ○ Green ⦿ Blue ○ Black
	○ No action
Auto Release	2806

Button 5

Usage	Increase source selector variable on click
Push Color	⦿ Red ○ Green ○ Blue ○ Black
	○ No action
Release Color	○ Red ○ Green ○ Blue ○ Black
	⦿ No action

Button 6

Usage	Decrease source selector variable on click
Push Color	⦿ Red ○ Green ○ Blue ○ Black
	○ No action
Release Color	○ Red ○ Green ○ Blue ○ Black
	⦿ No action

Button 7

Usage	Increase media selector variable on click
Push Color	○ Red ○ Green ○ Blue ⦿ Black
	○ No action
Release Color	○ Red ○ Green ⦿ Blue ○ Black
	○ No action

Button 8

Usage	Decrease media selector variable on click
Push Color	○ Red ○ Green ○ Blue ⦿ Black
	○ No action
Release Color	○ Red ○ Green ⦿ Blue ○ Black
	○ No action

Settings

Assigned room	Living
Temp correction	0.11
Default LED brightness	25

Save

4.4.1 Common settings
• Green marked: Status information about the driver

•Grey marked: A link to the keypad's web interface, to configure IP settings
•Yellow marked: General settings and the save button.
•Assigned room: If this room switches off the source and media selector variables go to 0 (zero)
•Temp correction: The temperature sensor may need some offset to be accurate.
•Default LED brightness: On start and reset of the keypad this LED brightness is set.

4.4.2 Button settings
Each button can be set to be used for light, volume, generic actions or modifying variables. The table below shows in which mode does activate which function

Usage	Tab commands in Programming	Button Links	Volume commands to the selected room	Increase / decrease SOURCE_SELECTOR	Increase / de MEDIA_SELEC
Light	active	active	inactive	inactive	inactive
Generic	active	inactive	inactive	inactive	inactive
Volume up	active	inactive	active	inactive	inactive
Volume down	active	inactive	active	inactive	inactive
Increase source selector variable on click	active	inactive	inactive	active	inactive
Decrease source selector variable on click	active	inactive	inactive	active	inactive
Increase media selector variable on click	active	inactive	inactive	inactive	active
Decrease media selector variable on click	active	inactive	inactive	inactive	active

4.4.3 LED settings
Each LED can be configure to change color on press/release or/and follow the bound light device. If *No action* is selected the driver will not change the LED, instead manual LED programming can be done.

4.4.4 Volume settings
For securing the AV equipment a volume auto release can be set. After the time elapsed the driver will send a release to the room to stop the volume ramp. If set to 0 the auto release is disabled.

4.4.5 Variable settings
2 programming variables can be used to select media or stations, see the variables descriptions for more info

5. Events
Each button has single double triple tab events as well as press and release. Click appears if the long press is too short, so press -> click will be executed. Press -> release is executed if the button is held for at least 500ms

6. Programming variables

- CONNECTION_STATUS (Boolean, read only): Indicates the TCP connection status. True = online, false = offline
- DEVICE_READY (Boolean, read only): If the keypad is ready for communication this variable will be set to true
- LED_INTENSITY_HIGH_RES (Integer, 0-255, writable): To change the LED intensity set this variable.
- LED_INTENSITY_LOW_RES (Integer, 0-100, writable): Change the LED intensity in a standard Control4 range which is always 0-100
- TEMPERATURE_HIGH_RES (Ranged integer, 0 – 99.9, read only): Provides the measured temperature.
- TEMPERATURE_LOW_RES (Integer, 0 – 99, read only): Provides the measured temperature.
- LED_INTENSITY_LOW_RES_INV (Integer, 0-100, writable) Inverse interpreted LED intensity.   Set to 100 will set the intensity to 0. To use with a percentage output from a brightness sensor
- SOURCE_SELECTOR: Variable increased or decreased by the button. Can be used to select sources in Programming. If the selected room turns OFF the variable jumps to 0

•MEDIA_SELECTOR: Variable increased or decreased by the button. Can be used to select media in Programming. If the selected room turns OFF the variable jumps to 0

7. Actions
- LED color: Use to set a LED to a color
- LED intensity: Sets the LED intensity
- Start LED flash: Use to set the LED to flash, adjust the on and off time.
•Stop LED flash: Use to stop the LED flash

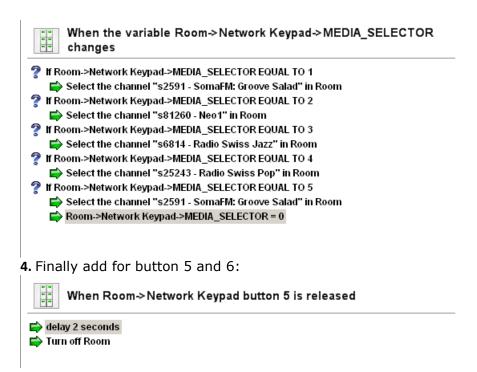### 8.   Using the temperature sensor in the C4 system
By connecting the "Temperature output" to a software thermostat the keypad can act as room temperature measuring device. Make sure to measure the room temperature while installing and set the property "Temp. correction" to a decent value that it matches exactly.
Software thermostats are available from Yatun:
http://www.yatun.cz/drivers/drivers/sw-thermostat/

9.   How to set up a room with volume and media selection of TuneIn favorites
    1. Select a room (Assigned room)
    2. Assign the functions to the buttons. Decreasing media/source selector can be left out if a loop is done in programming when media/source selector is increased
    3. In Programming add the following (TuneIn favorites findable under: Room Action → Select Media → Broadcast Audio)

When the variable Room->Network Keypad->MEDIA_SELECTOR changes

? If Room->Network Keypad->MEDIA_SELECTOR EQUAL TO 1
    Select the channel "s2591 - SomaFM: Groove Salad" in Room
? If Room->Network Keypad->MEDIA_SELECTOR EQUAL TO 2
    Select the channel "s81260 - Neo1" in Room
? If Room->Network Keypad->MEDIA_SELECTOR EQUAL TO 3
    Select the channel "s6814 - Radio Swiss Jazz" in Room
? If Room->Network Keypad->MEDIA_SELECTOR EQUAL TO 4
    Select the channel "s25243 - Radio Swiss Pop" in Room
? If Room->Network Keypad->MEDIA_SELECTOR EQUAL TO 5
    Select the channel "s2591 - SomaFM: Groove Salad" in Room
    Room->Network Keypad->MEDIA_SELECTOR = 0

4. Finally add for button 5 and 6:

When Room->Network Keypad button 5 is released

delay 2 seconds
Turn off Room

10. Updates / Support
Updates are available on: <<https://technet.genesis-technologies.ch>>
Bugs should be reported to: info@genesis-technologies.ch