

WACHENDORFF

Automation GmbH & Co. KG

Setup

Incremental encoder WDGN

NFC configurable



 NFC



 UL^{US}
LISTED

Industrie ROBUST




- The encoder is not a safety component
- The encoder must not be operated outside the specified limit parameters (see associated data sheet).
- Failure to observe the safety instructions may result in malfunctions, property damage and personal injury! We accept no liability for possible damage and consequential damage.
- The correct and safe mounting, installation and configuration of the encoder is the responsibility of the user
- The installation, configuration and mounting of the encoder may only be carried out by qualified personnel.
- The encoder may only be installed and mounted by a qualified electrician.
- Incorrect assembly, installation, configuration, commissioning and operation of the encoder may result in malfunctions or failure.
- We accept no liability for possible damage or consequential damage.
- The operating instructions must be observed
- The encoder may only be installed, configured and mounted when the system/machine/application is in a safe condition. The manufacturers operating instructions of the machine/plant must be observed.
- Before changing a configuration on an encoder, check that this cannot cause damage. E.g. before switching the encoder signal levels from TTL to HTL, check the corresponding signal inputs of the application. Otherwise, these could be damaged or destroyed by overvoltage.
- The function of the configuration or its change in the application should be verified in a test run under the safest possible operating conditions (e.g. reduced speed).
- Save and document your configuration in a suitable form. Especially when repairing or replacing defective encoders, it cannot be guaranteed that your configuration will be saved and preserved.



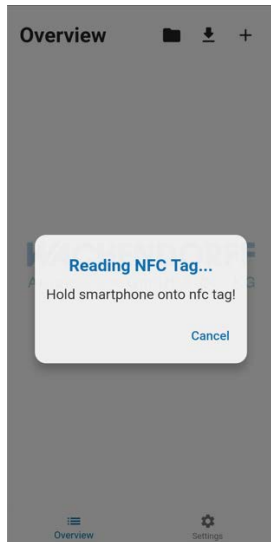
Install the app




Activate NFC on your smartphone.

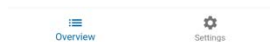
After opening the app, tap .

Now hold the encoder with the blue cap to your smartphone to read it out via NFC.



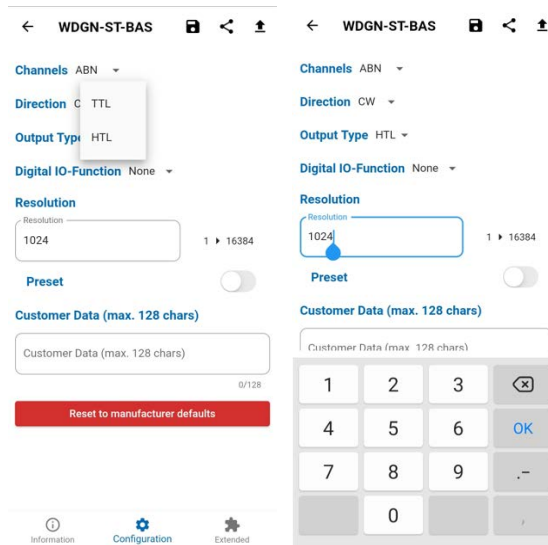
Now you will receive the information in which configuration your encoder was delivered.


You can also create a new configuration template via 



Now select your desired parameters here and then press "Save template". After you have given your template a name, tap on "Save template" and press "OK". Now you will find the first configuration with your chosen name under "Templates" in the overview.

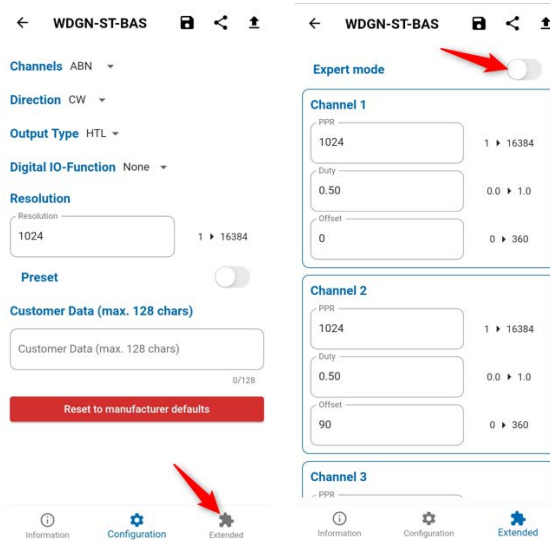
Configuration options:





- **Channels:** Number of channels (Pre-configuration A, AB, ABN,...)
- **Direction:** CW (clock wise facing shaft), CCW (counter clock wise facing shaft).
- **Output Type:** Output level TTL: 5V, HTL: 24V.
Please note that the application side inputs must be compatible!
- **Digital IO function:** Set zero pulse via pin/cable yes/no.
- **Resolution:** 1 pulse/revolution up to 16384 l/rev freely selectable.
- **Preset (set zero pulse)** Here you have the option of setting the zero pulse to the desired position. If you do not want to set the zero pulse, deactivate this function. If voltage is present, then the zero pulse is set directly when you press the  transmit the data. If no voltage is applied, the zero pulse is only set when the encoder is connected to voltage again for the first time.

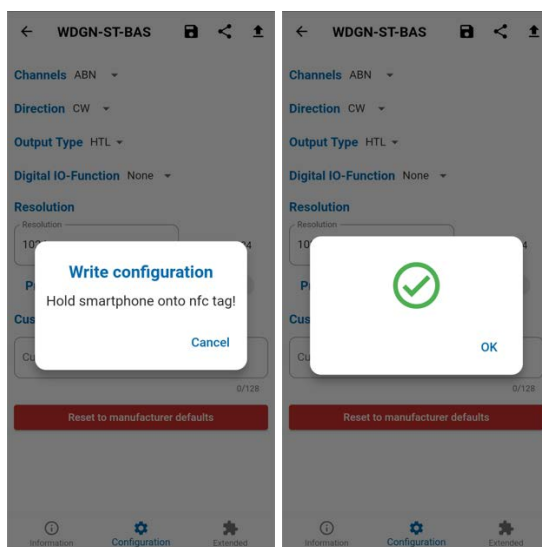
- **Customer data** (max. 128 characters): This text is also transferred to the encoder and can be called up when the encoder is read out again.
- With **Reset to manufacturer defaults** you can reset the encoder. Follow the instructions.
- **Extended:** Activate the expert mode so that you can view detailed parameters of your configuration here. If your WDGn encoder is an ADV, you can change the corresponding parameters for all 4 physical channels individually here:
 - o PPR: Resolution: 1 pulse/revolution up to 16384 l/rev. freely selectable
 - o Duty: duty cycle (pulse/pause ratio) of the signal in %: 50:50 as default, corresponds to 0.5*
 - o Offset: Phase shift of the tracks (4 channels configurable + inv. signals (ABN possible)) in relation to each other. Default 90°.

*with resolutions unequal to 2 to the power of x, deviations may occur due to rounding.

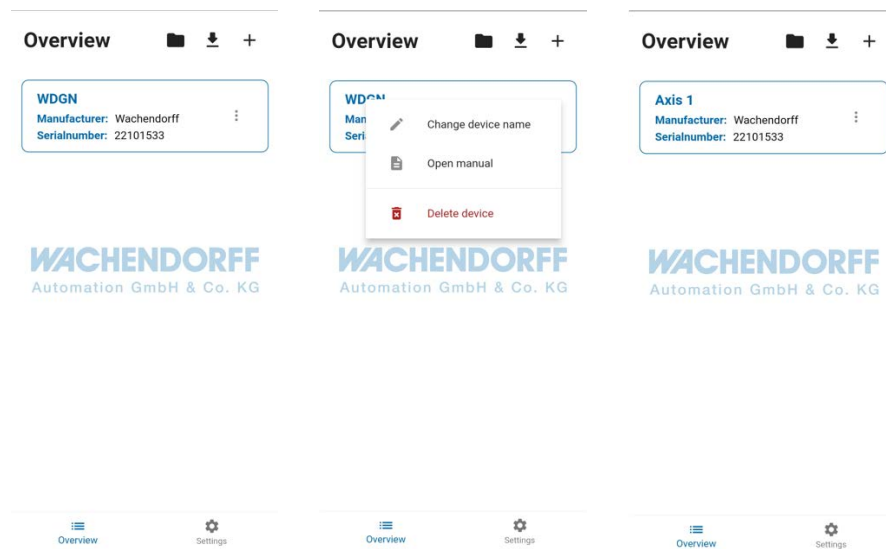


When you have set all your parameters as desired, tap  and then tap , to transmit the configuration to the encoder.

Then hold the smartphone against the blue NFC area of the encoder until you see that the transfer has been completed successfully.



When you are back in the start window and you call up your encoder, you can also rename it, e.g. "Axis 1". To do this, select the menu of the encoder ⋮ and then "Change unit name". Once you have entered a desired name, you can save it by clicking on "Save change".



Go through the APP now and discover what else is available. For example, you can also assign a PIN to the encoder or send your settings by e-mail or other messengers!

Now we wish you lots of fun with the app,

Your Wachendorff Team.