programmer's guide

A family of text readouts, designed for industrial use showing messages and simple graphics.

Valid for:

ND7070: 1040x400x100 mm for 96 x 32 pix ND7071: 1360x400x100 mm for 128 x 32 pix ND7072: 2000x400x100 mm for 192 x 32 pix

Communication over Ethernet TCP / JSON

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OVERVIEW

This family of displays are controlled by a small Linux controller and made to present ASCII characters in the ISO/IEC 8859-1 table plus simple graphics. With the standard Ethernet interface and web server installed, it will interface with JSON protocols carrying HTTP requests.

Alternative interfaces, protocols and power options are available on request.

When designing the communication behaviour of your equipment, please consider using power-saving techniques, like erasing messages when obsolete.

For best performance, update the display on a regular basis (e.g. each minute) and read back status to handle exceptions.

Smart use will increase expected life length and user experience.

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INSTALLATION

- Set IP address:
- .
- .

COMMUNICATION

Standard communication interface is Ethernet with JSON containing HTTP/HTTPS over TCP. This allows the widespread use of well tested APIs in PLS / PC or instruments.

For more information on JSON:

| TASK | COMMAND | PARAMETERS | DESCRIPTION |
|----------|---------|--|--|
| Set Text | settext | text=txt col=position row=line | Set new text. Will clear existing display content if col and row is not defined. If col or row is defined, the text will be updated at given col and row . Both defaults to 0. 0,0 is the upper left position. |
| Get Text | gettext | <pre>col=position row=line count=chars</pre> | Returns the displayed text. Without parameters, it will return full display text. Lines (row) are separated by «\» and «n». With parameters, it will return count characters starting at given row and col. If count is not given, the rest of the line will be returned. |

SIMULATOR

A web simulator is available with some simple description on how to use it:

http://displaysimulator.azurewebsites.net/simulator.php

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NOTE:

Before putting too much time into solving your challenges, contact factory for support. We believe we may learn to make better products by being confronted to your challenges.

Contact factory for updates and requests!

| OPTIONS | | GIVE US FEEDBACK | LIFETIME SUPPORT |
|-------------------------|----------|---|---|
| Interfaces: Ethernet | Power: | We appreciate any feedback – good or bad – as it will | * Help during installations |
| | | help us make better products. | * Free adaption for interfacing your equipment |
| Mechanical (| options: | Suggestions or critical remarks are best sent to the support email. | support email: <u>sales@norskdisplay.com</u> |
| | | | Tel: +47 3288 7000 |

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