

><PULSE PMS Software Incremental Programmable Encoder



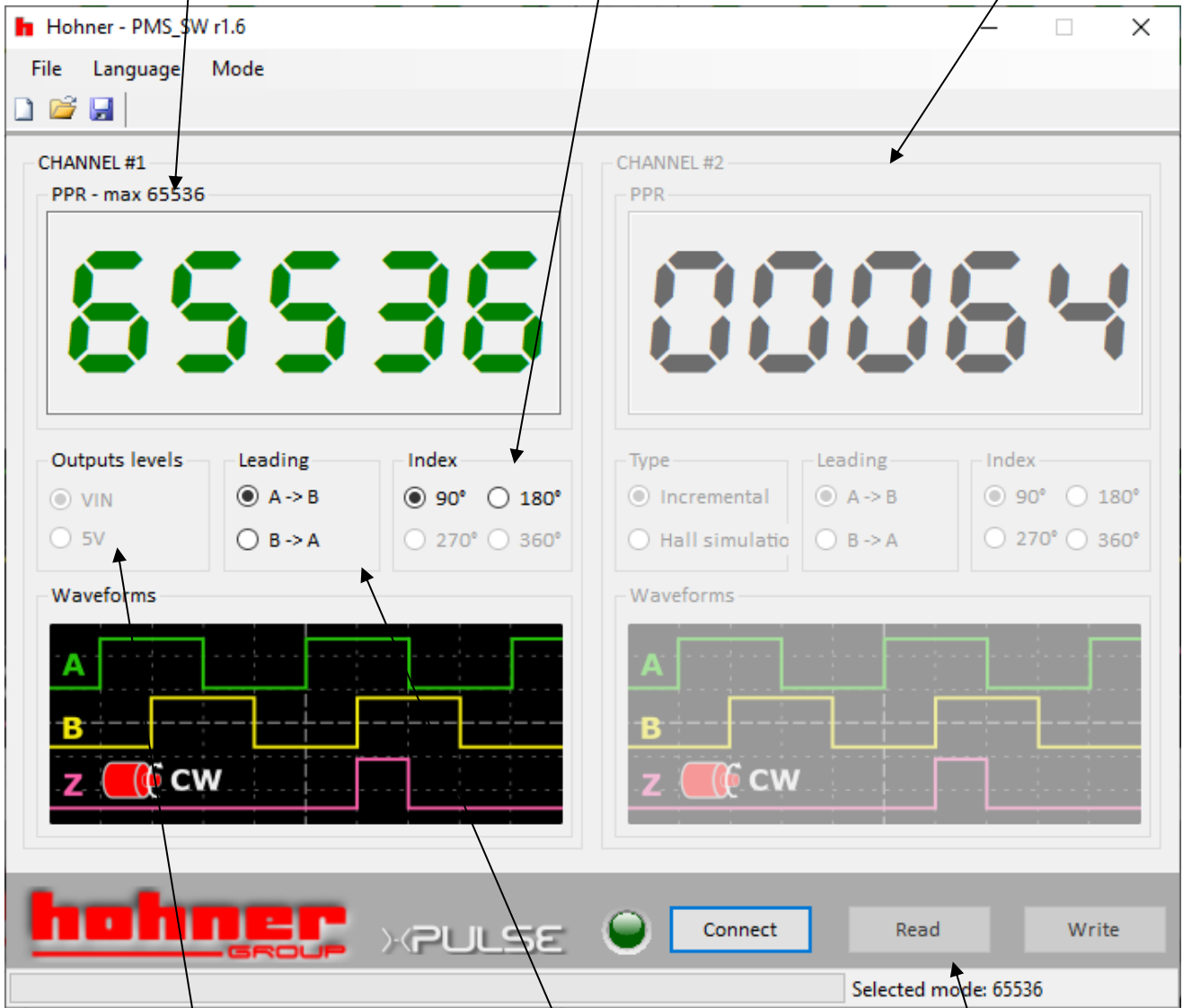
- Power supply 24 volts DC
- Up to 2 Encoder Channels
- Programmable output Levels
- Programmable by Bluetooth, USB, On-device
- 3 differential outputs / channels

MAIN WINDOW

CHANNEL #1 - PPR
Select the Incremental resolution

CHANNEL #1 - Index
Select the index dimension

CHANNEL #2
Same control as CH #1



CHANNEL #1 & #2 - Levels
Select output Level for both channels

CHANNEL #1 - Leading
Select the counting direction

Encoder Connection
Command to connect to Encoder

Software language can be changed by Language menu.
Available languages: English, German, Italian, Spain.

Introduction

The software is intended to program and define the PMS incremental encoders.

The software covers all the available features of this encoder as follows:

- Incremental Resolution up to 65536 pulses per revolution. (It depends on encoder type, PR01 version is restricted to 2048 ppr, PR02 is restricted to 65536 and PR03 to 10000 ppr)
- Selectable counting direction (A leading B or B leading A)
- Selectable index dimension in 2 steps: 90° (locked to A and B), 180° (locked to A).
- Motor feedback signal: outputs can be configured to simulate hall sensors, instead of normal incremental signals
- Up to 6 differential outputs
- Up to 2 encoder channels. Each channel is completely independent

All following instructions are applicable to both channels (except for Motor Feedback target, that is available only for CH #2)

Note

PPR

Type in the resolution required

Maximum number depends on encoder version (PR0x) and output target, as follow:

| Encoder Version | PR01 | | PR02 | | PR03 | |
|-----------------|-------------|----------------|-------------|----------------|-------------|----------------|
| | Incremental | Motor Feedback | Incremental | Motor Feedback | Incremental | Motor Feedback |
| Max resolution | 2048 ppr | 32 poles pairs | 65536 ppr | Nd | 10000 ppr | nd |

Note

LEVELS

Choose the radio button for the required outputs Levels

Options:

- 5V: output levels to 5V
- VIN: output levels follow VIN

Note

This selection is common for both channels

TARGET

Choose the radio button for the required target type

Options:

- Incremental for standard incremental encoder signals
- Motor Feedback for Hall simulation signals

Note

Only available on Channel #2

LEADING

Choose the radio button for the required counting direction

Options:

- A leading B
- B leading A

Note

INDEX

Choose the radio button for the required format of the index channel (also known as 'O' or 'Z' or Marker)

Option:

- 90° (Locked to A_{high} and B_{high})
- 180° (Locked to A_{high})

Note

This option is not available if Motor Feedback target type is selected

WAVEFORM

Here there is a schematic drawing of expected waveform based on previous selections

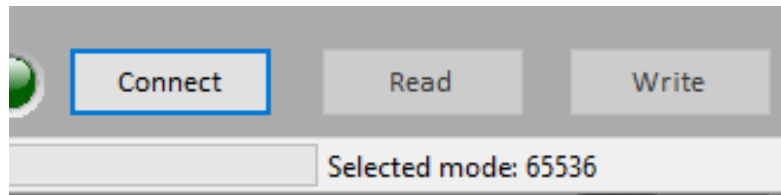
Note

OFFLINE Setup

User can select this via the 'Mode' menu
This allows programming and saving of the encoder parameters for future use

Note

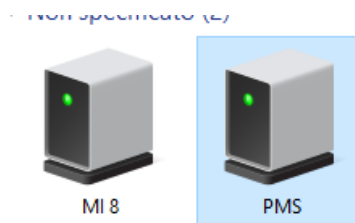
ENCODER CONNECTION



Here you can connect to the encoder via USB

Before connect check that the drivers are installed. Windows should automatically install it, but if not it is located here: <http://www.ftdichip.com/Drivers/D2XX.htm>

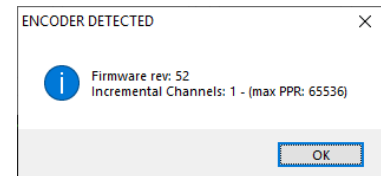
Encoder is correctly recognized when it appears in 'Devices and Printers' in the Control Panel as 'PMS' below:



CONNECT

Click the connect button to connect with your encoder. If the PMS encoder is found then a window shows the encoder information.

Only one encoder must be connected to computer at one time.



READ

Click here to read back setup data from the encoder

WRITE

Click here to program the set up data to the connected encoder.
Do not disconnect the encoder until completed.

Note

Revision History

| Release | Release Date | Chapter | Modification | Page |
|---------|--------------|---------|--------------------|------|
| A4 | 12-09-2019 | - | Minor changes | - |
| A3 | 17-02-2017 | - | Added PR03 version | 3 |
| A2 | 02-11-2016 | - | Minor changes | - |
| A1 | 17-10-2016 | - | Emission | - |