

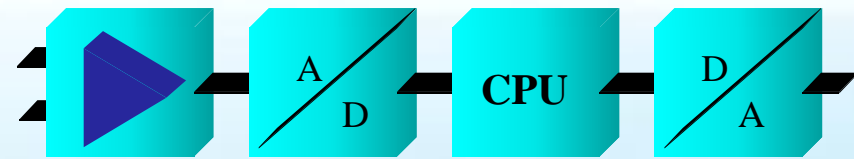


## Topic:

- Why WPC-300 ?
- Features
  - Communication and setup
  - Input and Output of parameters
  - Monitor and module specific processdata
  - Remote Control and digital Inputs/Outputs
  - Oscilloscope
  - Terminal
  - Parameter data management
- Firmware Update
- Installation USB-Driver

# WPC-300

## Why WPC-300?

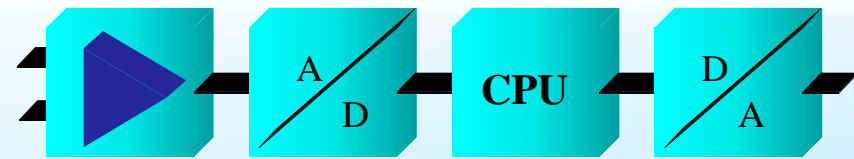


- **Tool for all modules of W.E.St. Elektronik GmbH**
  - Control modules must be adjusted and optimized via PC / Notebook
  - Assessment of the process data in real time
  - Display of status informations
  - Incorporation without long read of the manual
  - Intuitive operation

**WPC-300 is a tool to adjust and optimize our modules**

# WPC-300

## Features, Communication and setup



Command	Parameter	Help
LG	GB	Deutsch (DE)/English (GB) - Bitte ID Button nach der Änderung drücken
MODE	STD	STANDARD / EXPERT mode
PRESSURE	100	Nominal pressure range in [bar]
POL	+	Output polarity (+/-)
SENS	AUTO	Malfunction monitoring [ON/OFF/AUTO].
AIN:W	1000 1000	0 V Input scaling via linear equation
AIN:X	1000 1000	0 V Input scaling via linear equation
A:UP	100	Ramp time acceleration in ms
A:DOWN	100	Ramp time deceleration in ms
LIM:I	2500	Limitation of the integrator in 0,01%
LIM:S	2500	Integrator activation point in 0,01%
C:SC	8000	Feedforward control in 0,01%
C:P	50	P gain in 0,01 units
C:I	4000	I gain in 0,1 ms
C:D	0	D gain in 0,1 ms
C:T1	500	Filter for D gain in 0,1 ms
MIN	0	Compensation of the deadband in 0,01%
MAX	10000	Output scaling in 0,01%
TRIGGER	200	Trigger point of the MIN function in 0,01%
ERROR	200	Accepted control deviation in 0,01%
CURRENT	0	Selection of the rated current 0=1A, 1=1,6A and 2=2,6A

Options

Interface | Oscilloscope | Monitor | Table Input

Port selection: Serial Port: COM4

Transfer Mode:  Full-Duplex  Half-Duplex (19200 Baud)

Baudrate options:  Fix baudrate  Auto baudrate detection

Baudrate settings:  Auto Change To Selected Baudrate  
Auto Baudrate: 57.6 KBaud

Delay On Firmware Update: 0 Milliseconds

OK

Options

Interface | Oscilloscope | Monitor | Table Input

Display: Display Color: cBlue, Grid Color: cBlue, Line Width: Small, Signal Line Width: Small

Channel Settings: Channel 1 Color: cBlue, Channel 2 Color: cRed, Channel 3 Color: cIGreen, Channel 4 Color: cBlack

OK

Options

Interface | Oscilloscope | Monitor | Table Input

Monitor: Visible parameter: Custom Def, Visible parameters: 4

Default (4)  Custom  Max (all parameter)

OK Cancel

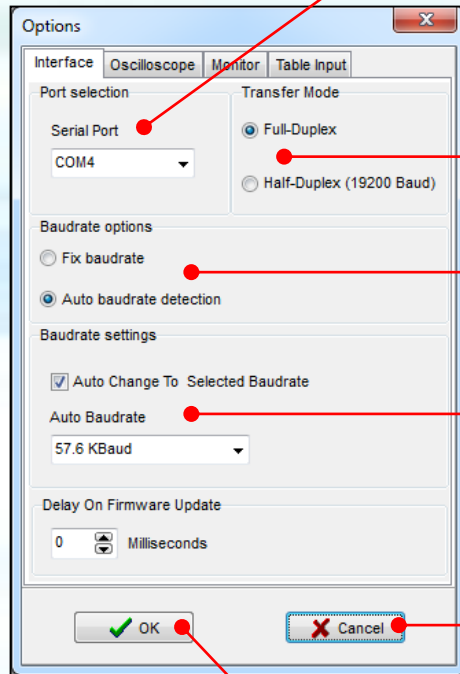
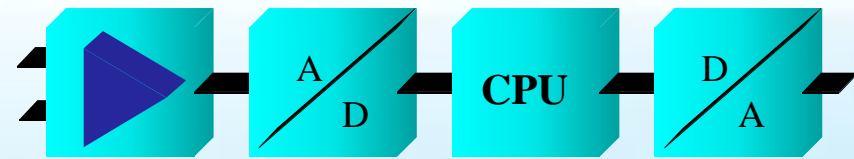
Module-Identification

Communication build-up

General setup

# WPC-300

## Features, Communication build-up



Interface selection (COM-Port)

Full-Duplex: all common modules  
Half-Duplex: Power plugs

Solid Baudrate or automatic detection

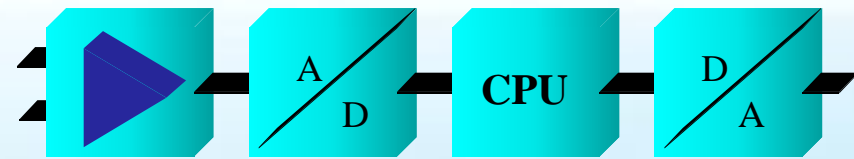
Baudrate selection and/or automatic change to a defined value  
9,2 kBaud  
19,2 kBaud  
38,4 kBaud  
57,6 kBaud

Cancel

OK

**Attention:** newer modules (up series 2030) needs a change of the „Fix baudrate“ from 9600 to 57600.

# WPC-300



## Features, Input and Output of parameters

The main window displays a list of parameters with the following table:

Command	Parameter	Help
LG	GB	Deutsch (DE)/English (GB) - Bitte ID Button nach der Änderung drücken
MODE	STD	STANDARD / EXPERT mode
PRESSURE	100	Nominal pressure range in [bar]
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SENS	AUTO	Malfunction monitoring [ON/OFF/AUTO].
AIN:W	1000 1000 0 V	Input scaling via linear equation
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C:SC	8000	Feedforward control in 0,01%
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MIN	0	Compensation of the deadband in 0,01%
MAX	10000	Output scaling in 0,01%
TRIGGER	200	Trigger point of the MIN function in 0,01%
ERROR	200	Accepted control deviation in 0,01%
CURRENT	0	Selection of the rated current 0=1A, 1=1,6A and 2=2,6A
DFREQ	120	Dither frequency in Hz
DAMPL	250	Dither amplitude in 0,01% current
PWM	2604	PWM frequency in Hz

Three input parameter windows are shown on the left:

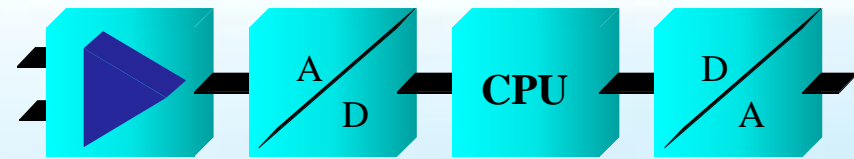
- Input SENS Parameter:** Shows a dropdown menu for 'New Value' with options ON, OFF, and AUTO. Comment: Malfunction monitoring [ON/OFF/AUTO].
- Input A:UP Parameter:** Shows a text input field for 'New Value' with 'Min Value: 1' and 'Max Value: 60000'. Comment: Ramp time acceleration in ms.
- Input CURRENT Parameter:** Shows a dropdown menu for 'New Value' with options 0, 1, and 2. Comment: Selection of the rated current 0=1A, 1=1,6A and 2=2,6A.

Input window

Parameterlist selection  
Print parameterlist

- Easy choice of parameters by „Mouse-klick“
- Parameters are monitored at the input area
- Special parameters are entered via tailored masks
- The data is immediately sent to the module and read back
- Detection of faulty insertions

# WPC-300



## Features, Monitor and module specific processdata

Monitor Selection

Demand value (input signal)

Demand value (according to profile generator)

Actual value

Error variable

Speed demand

Control signal

Module specific indicator of processdata

Parameter	Unit	Value
WA	Input signal in mm	92,65 mm
W	Command position in mm	92,64 mm
X	Feedback signal in mm	31,64 mm
XD	Position error in mm	61,01 mm
V	Speed limitation in %	100,00 %
U	Output signal in %	100,00 %

Remote Control / Status Info

Enable Remote Control

Analogue Inputs

Pin 9/10: 0, Pin 13: 0

Digital Inputs / Outputs

- Pin 8 (Enable)
- Pin 7 (START / RUN)
- Pin 5
- Pin 6 (Enable B for PAM)
- Pin 13
- Pin 14
- Pin 15 (Enable for PAM)
- free

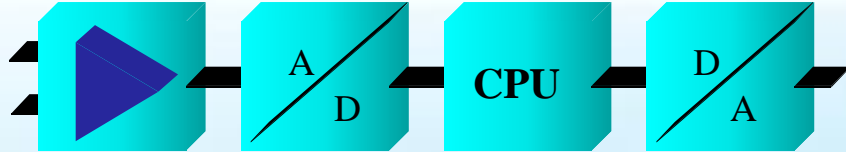
Status Info

- READY
- INPOS
- EEPROM
- INPUT PIN13
- INPUT PIN14

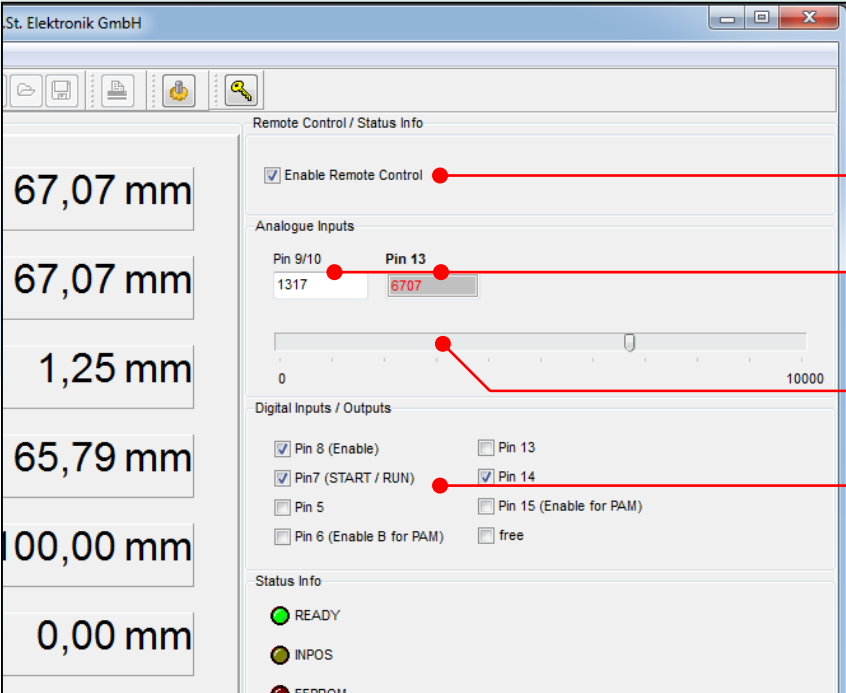
Module specific indicator of status-informations

port open Port: 4 FDX 57.6 Kbaud POS-123-A-1121 r10

# WPC-300



## Features, Remote Control and digital Inputs/Outputs



Activation Remote Control

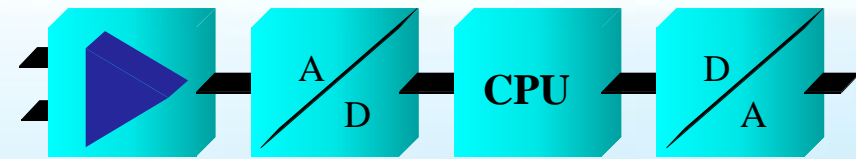
Module specific window for value input

Slider for value input

Changeable status of digital Inputs- and Outputs

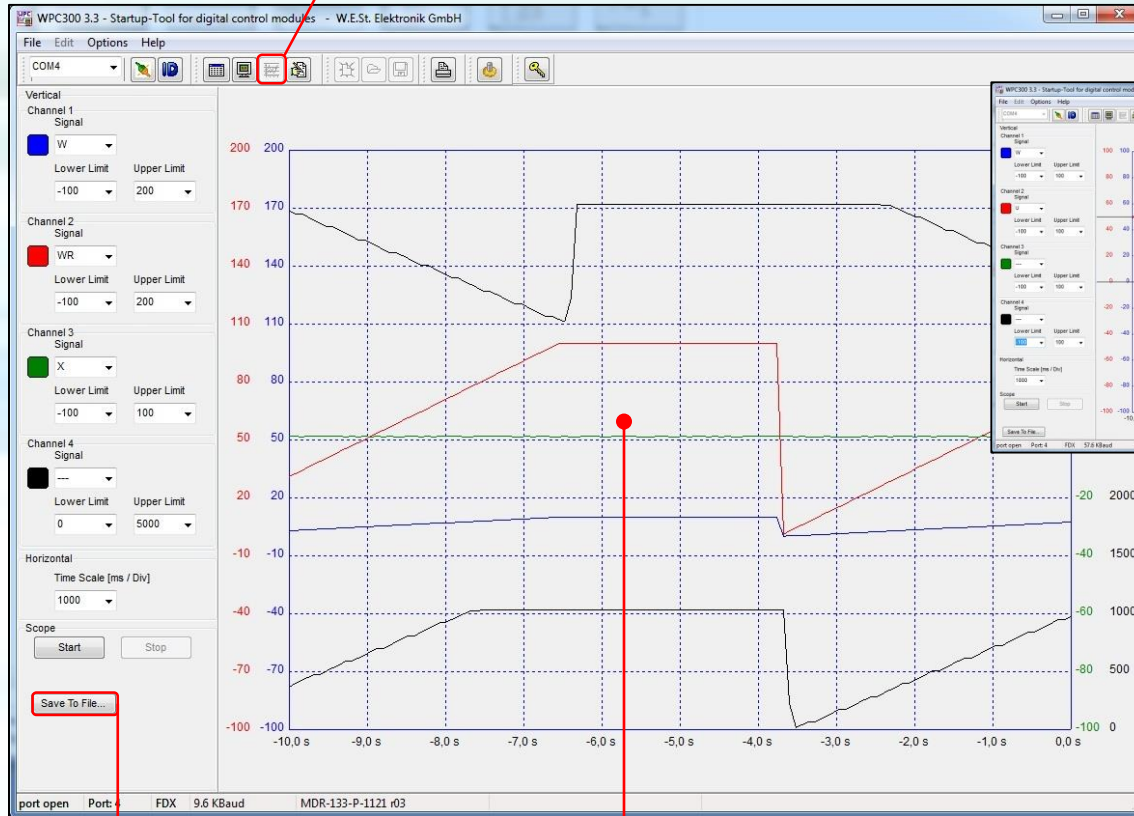
The functions are only active if Remote Control is still activated

# WPC-300



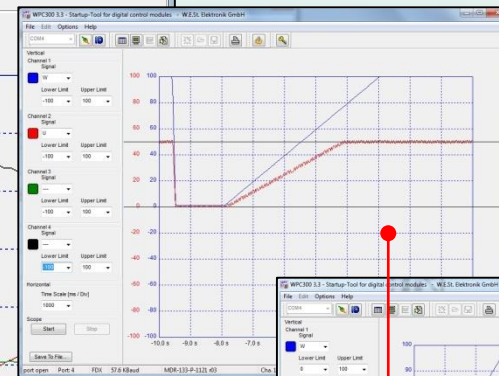
## Features, Oscilloscope

Oscilloscope selection

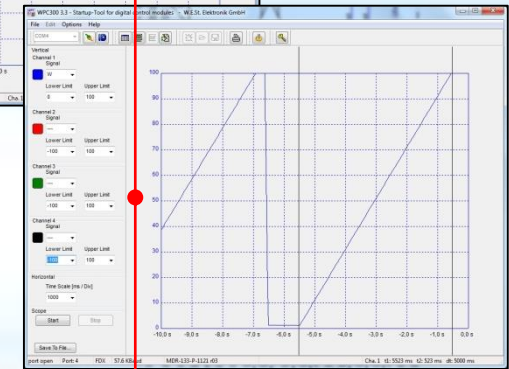


Storing the data to a file

Graphical representation of process data

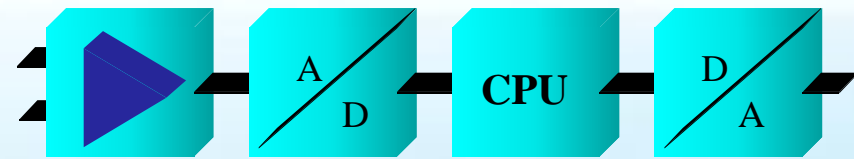


Special cursor-functions, like amplitude- and time measurement





# WPC-300



## Funktionsumfang, Terminal

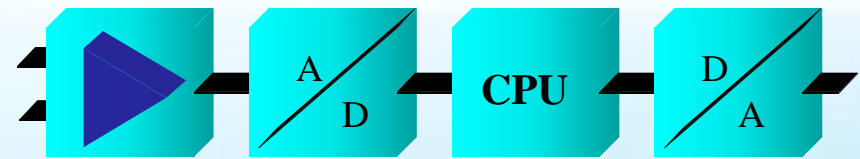
Terminal selection

```
>ID POS-123-P-1121 r05
>
>SENS AUTO
>
>A:A 150
>
>A:A 150
>
>HAND:A 4000
>
>HAND:A 4000
>
>MAX:A 5000
>
>MAX:A 5000
>
>MIN:A 300
>
>MIN:A 300
>
>CURRENT 2
>
>CURRENT 2
>
```

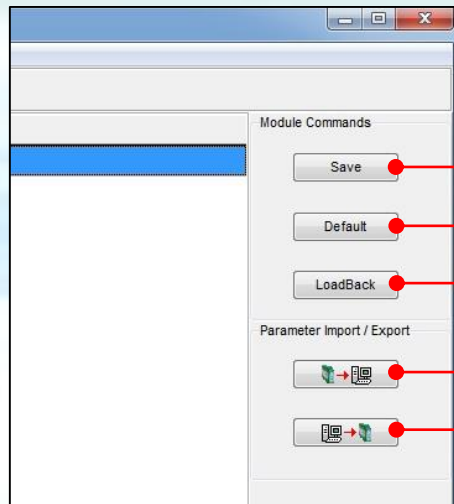
Input area

- Each parameter can be displayed
- Each parameter can be changed

# WPC-300



## *Features, Parameter data management*



Storing the parameter data

Set module to default parameter values

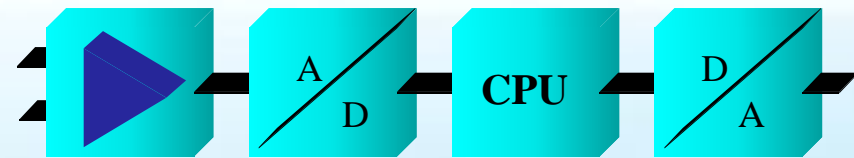
Last saved parameter data load

Parameter data to file

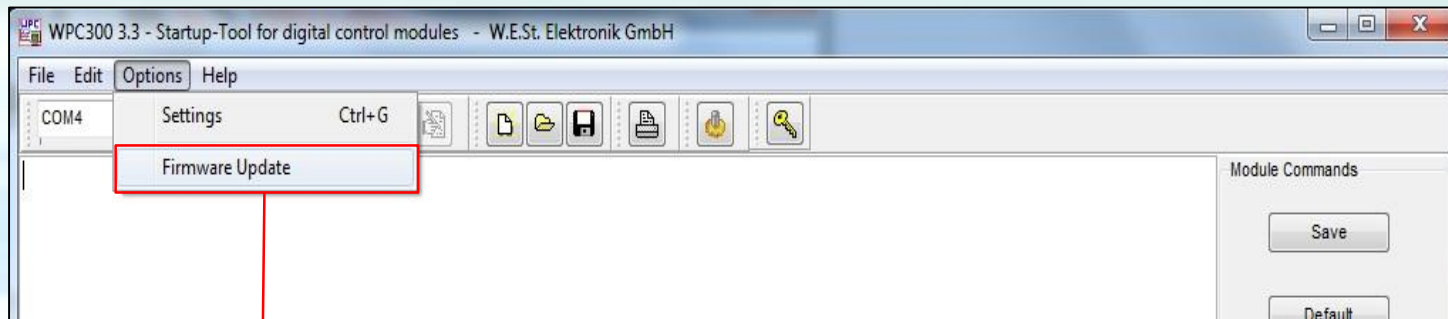
Parameter data from file

# WPC-300

## Firmware - Update



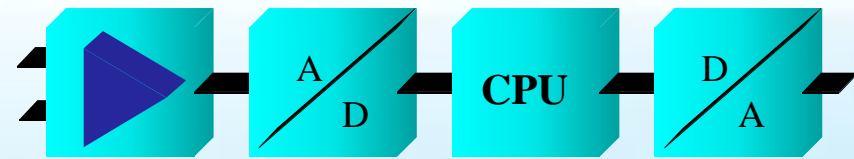
- Simple selection from the menu bar
- Warning against unintended selection ( CTRL + ALT + F7 to unlock)



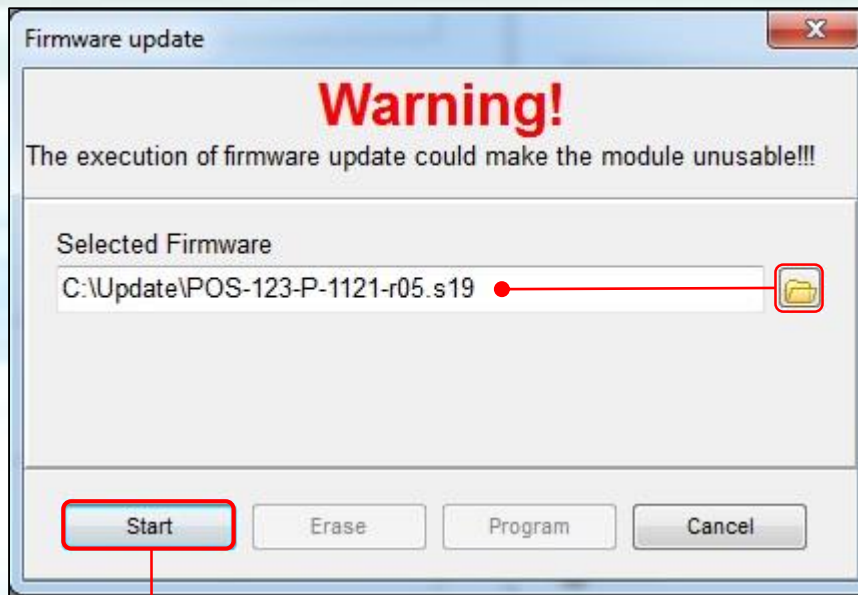
**Attention:** newer modules (up series 2030) needs a change of the „Fix baudrate“ from 9600 to 57600.

# WPC-300

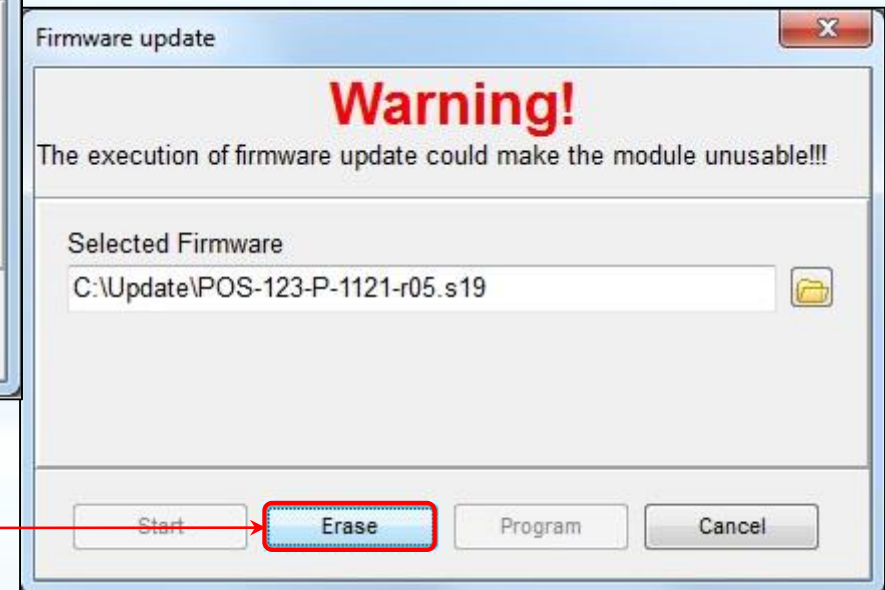
## Firmware - Update



First Step : Select firmware and initiate update process

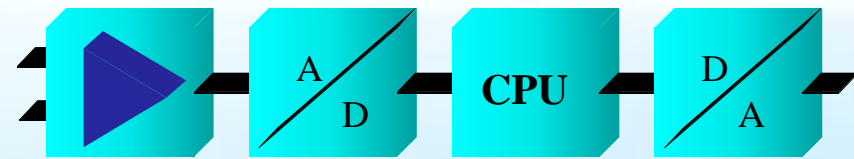


Second Step : Erase old firmware

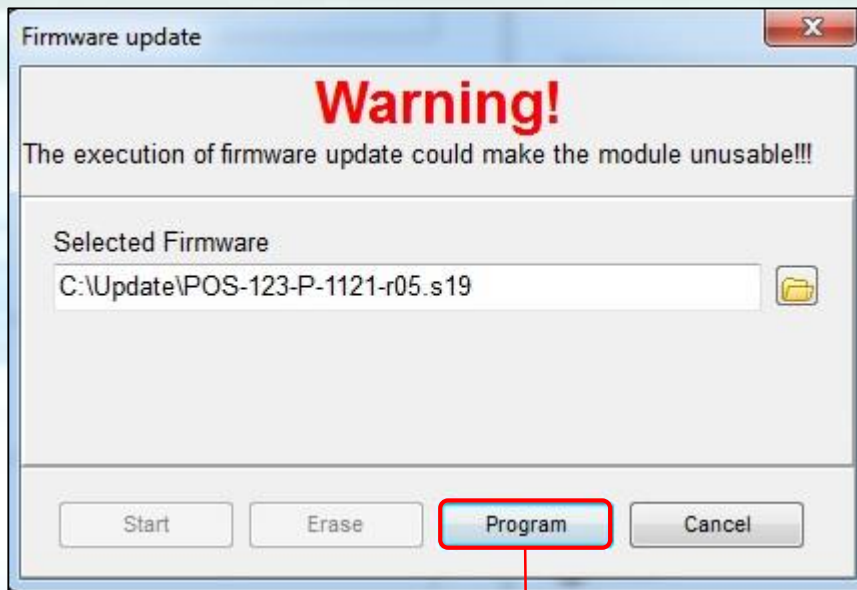


# WPC-300

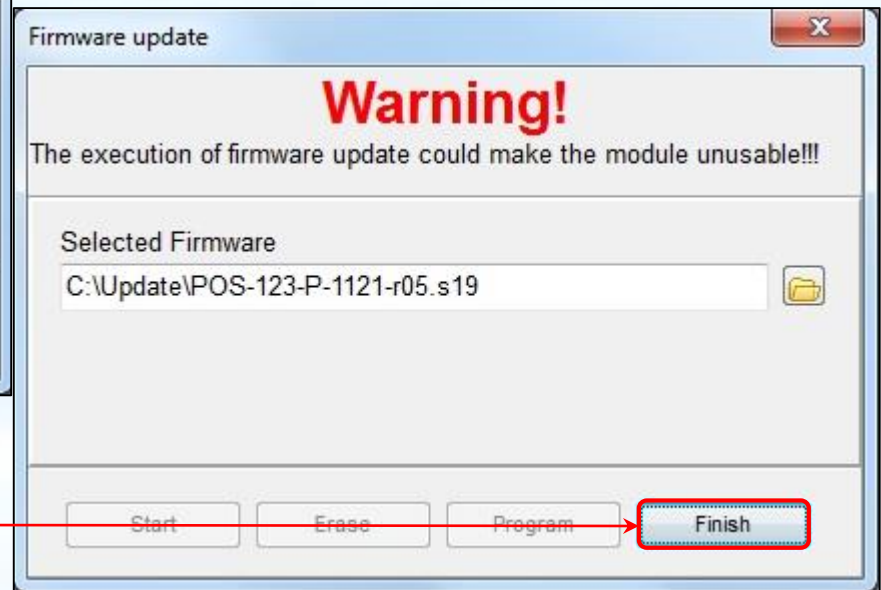
## Firmware - Update



Third Step : Start firmware-update...

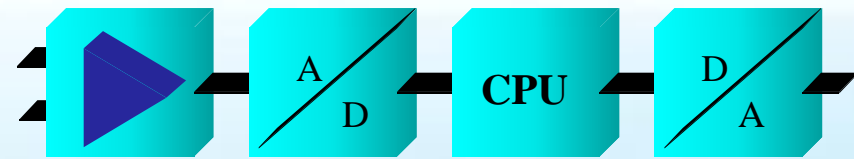


Last Step : Finish firmware-update

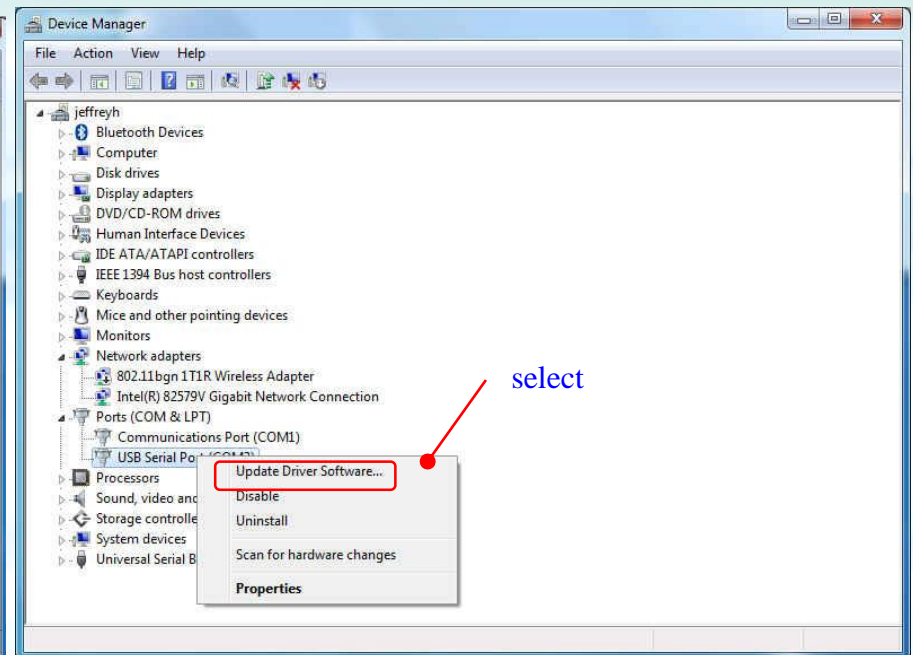
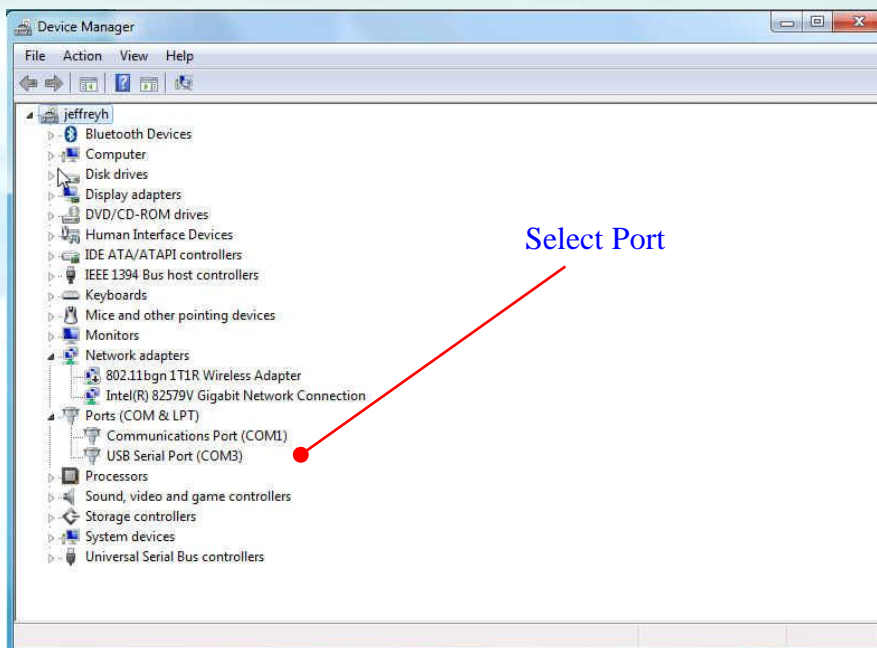


# WPC-300

## Installation USB-Driver

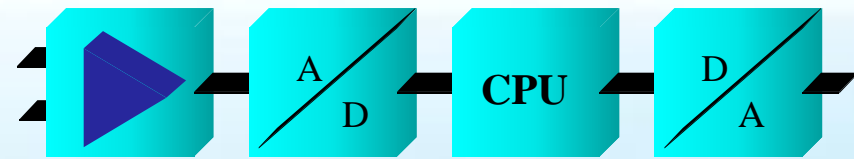


Open device-manager

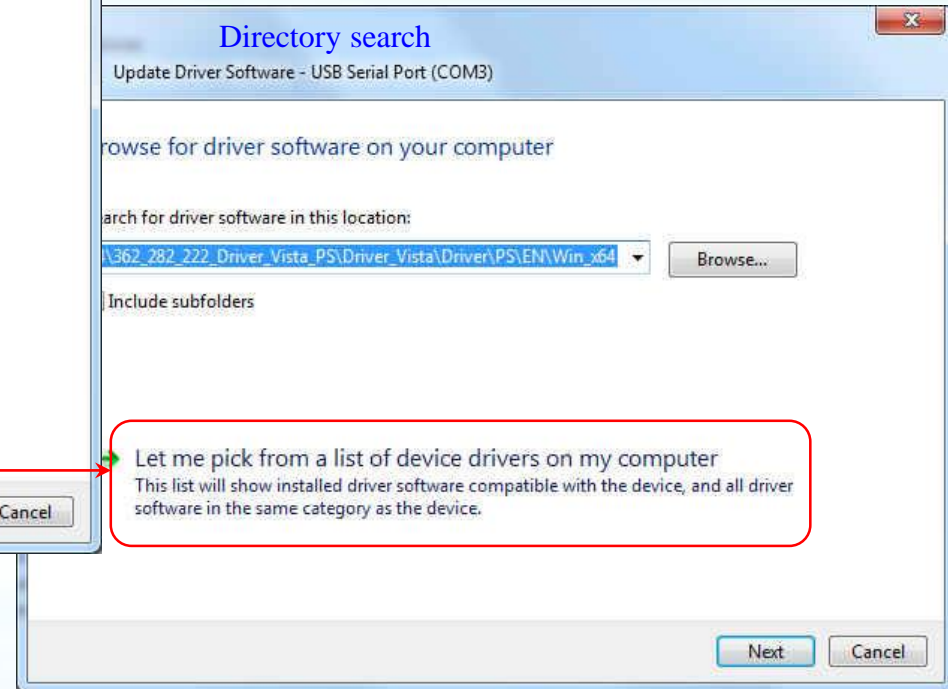
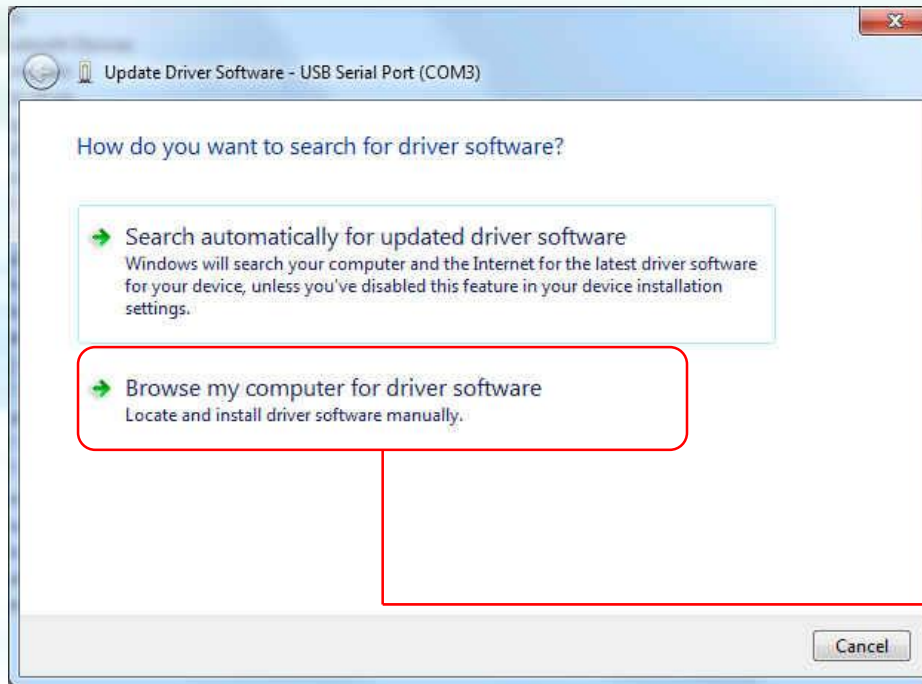


# WPC-300

## Installation USB-Driver

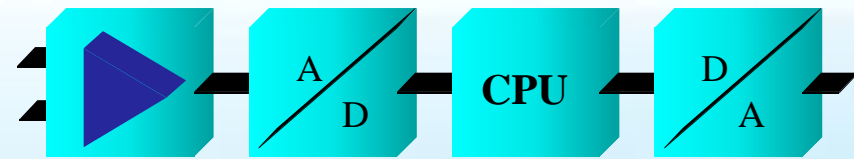


Find driver software

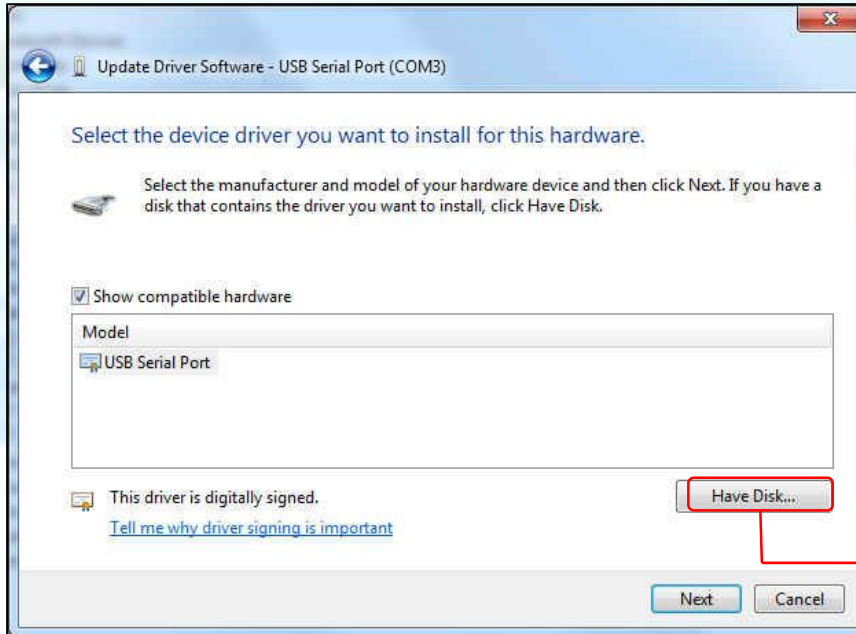


# WPC-300

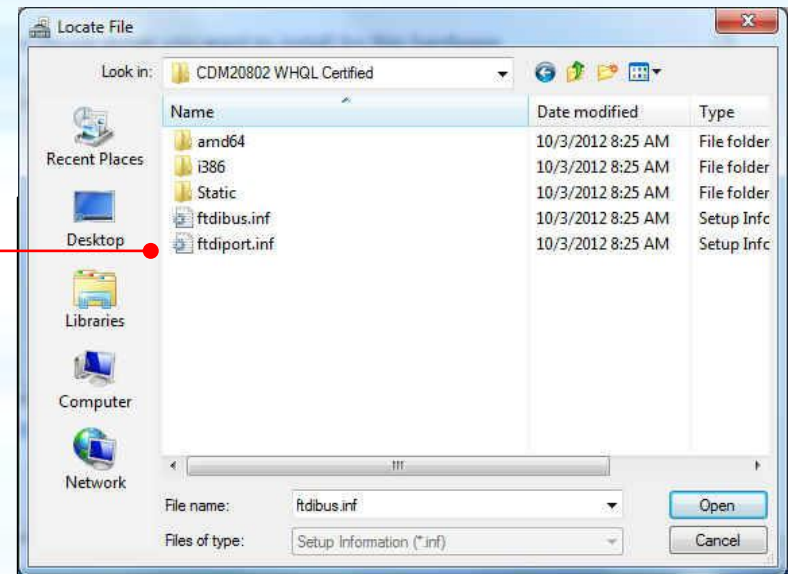
## Installation USB-Treiber



### Driver selection

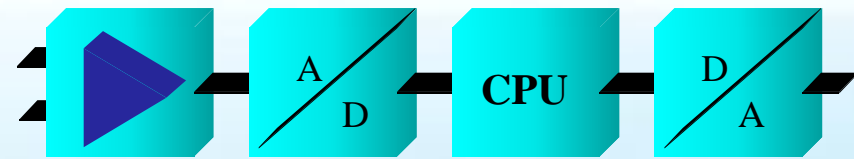


### selection and finish

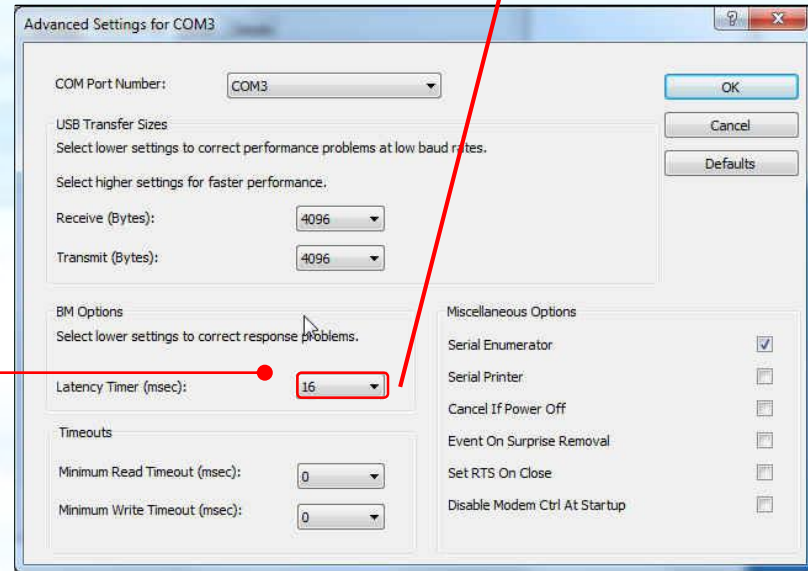
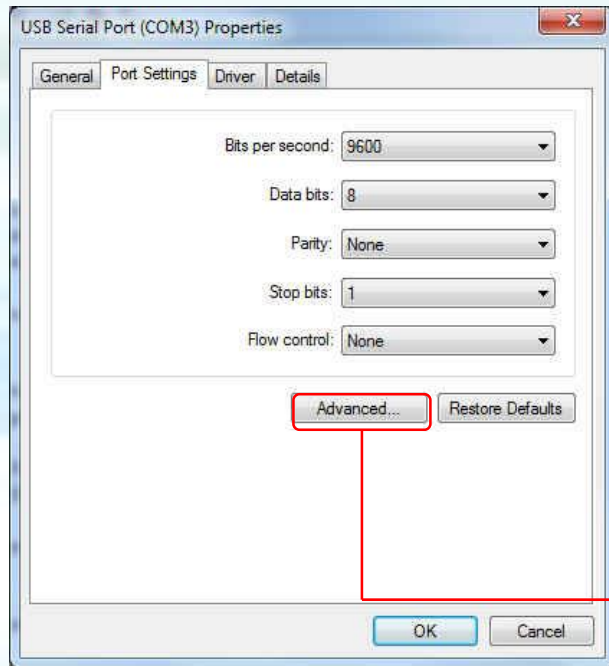




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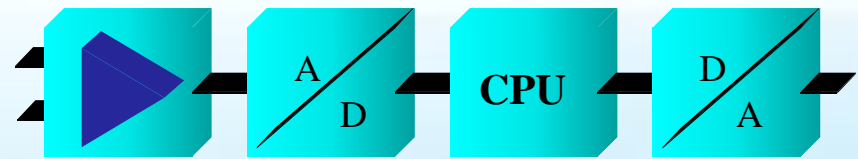
## Installation USB-Driver, Setup COM-Port



**set: 2 msec**

*Setting of the latency timer to 2 msec is important for using the oscilloscope!*

# CONTACT



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