

Product / Type	Article No.	HW vers.	SW-vers.
COP H/. (in all versions)			V.06.10

Extension
 Improvement
 Correction
 Hardware
 Software
 Public

Important user information	
● Purpose/system:	Device software for the COP handy, COP touch and COP H CNC and COP E CNC
● Repair handling:	Repairs to COP handy, COP touch and RIO RTE will not be fitted with the new SW version.
● Product documentation:	COP handy Operating Manual, Art.No.: 322 147 58 RTE Operating Manual, Art.No.: 322 155 19

All Serviceinformations for COP operating systems Year 2000 (V00.03) to 2006 (V06.10)

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1 Improvement V00.03

1.1 Acceleration of character output

Character output on the display has been speeded up.

1.2 General acceleration of output on COP handy

Output on the COP handy display has been speeded up.

1.3 Key release

Debouncing for key release has been improved.
This also results in improved EMC properties.

1.4 LED test

The LED test in the setup menu now also displays the LED number as text.

2 Corrections V00.03

2.1 Use of fractional rational numbers

In the previous version, if constants with fractional rational numbers were used in the 'Formula' and 'Condition' objects the results were incorrect. This has been corrected.

2.2 Variable input

If the cursor is on a variable which is altered by the PLC or a switch (e.g. incrementing) the new value is displayed correctly. But if the <Enter> key (a cursor key or <TAB>) was pressed, the "old" value (the value when the inverse cursor was created) was displayed and sent to the PLC.

In the new version the "old" value appears briefly in the display (for one cycle) but it is immediately overwritten with the current value and is not sent to the PLC.

2.3 Initializing the RTC

Every time the operator panel is started up the plausibility of the real time clock (RTC) data is checked. If necessary the RTC is reset to 01/01/1970 0:00. This can only occur with a "virgin" RTC. This point does not apply to COP handy hardware design "A" or to RIO RTE (no RTC).

2.4 Downloading a PLC program

Accidental download of a PLC program via PRODOC-U is now prevented in the operator panel. A timeout error is displayed in the PRODOC interface.

2.5 Incorrect object index with an address gap of 4

If, with an address gap of 4, an incorrect structure address (i.e. not divisible by 4) was entered in the process database, the object index calculated for communication was incorrect. This meant that incorrect variables or no variables at all were read out of the controller. The object index is now calculated correctly. Note: If an element is written (write trigger = '@' and "Variable input" after entry of a value in the field) when the structure address is incorrect as described above the wrong variable will be overwritten.

2.6 \$AKTION system variable

With \$AKTION system variables the value was not counted up in seconds (as described in the ProDesigner operating manual), but only in relation to process database cycles.

When a PLC was not connected this meant that on a page where data was requested from the PLC and the \$AKTION system variable was used, the value of these system variables only increased very slowly.

In the normal case with a connected PLC this error did not usually occur, if the process database cycle was completed within one second.

The system variable now functions as described in the ProDesigner operating manual.

3 Improvement in V1.27

3.1 Visualization of the control area of the shared ram COP/PLC in Setup-Menue

In Setup-Menue BUS/VERSION the Versions-Nr. of shared RAM is shown.

After pressing ENTER the complete 10 byte control area of the shared RAM will be shown.

The function will be finished by pressing ENTER again.

3.2 Key-Test in Setup-Menue improved

3.3 Online-language change (V00.41 and newer)

By using the systemobject SPEECH the language can be changed in the COP. Also the FONT will be switched.

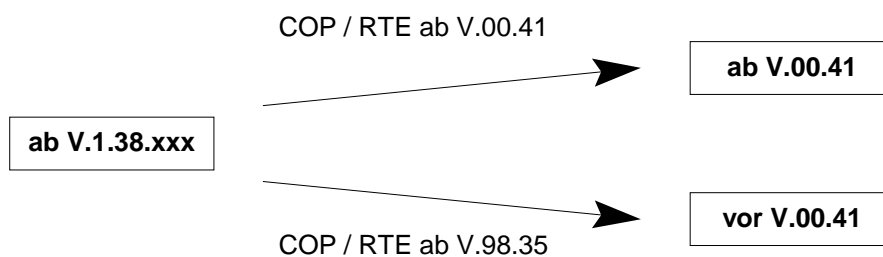
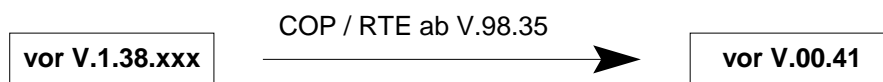
Therefore now the fonts (Latin 1 [e.g. for german / english] or Latin 2 [e.g. for tschechisch]) are transmitted to the COP together with the application.

At ProDesigner (V.1.38.008) must at *Konfiguration/Entwicklung* the correct *COP-Version* selected.

3.4 Management of Versions in ProDesigner: Menue Konfiguration/Entwicklung

Use only new ProDesigner Versionen 1.38.xxx .

If you try with elder versions of ProDesigner (1.37.xxx and older) to download the application to COP version V.00.41 or newer than it will appear fatale Runtime-Error (mostly Error 14).



3.5 Koppel-RAM Version 3

For specific panel BF2000 shared RAM Version 3 is used.

4 Corrections in V1.27

4.1 Problems by WORDSWAP=1 (V00.37 and newer)

At Communication COP <--> SCHLEICHER Controller PRONUMERIK must be in file 0.INI (Initit file) WORDSWAP=1 .

That didn't worked correct. Now is correct.

4.2 Problems at "Mirror Lowest Byte" and "Mirror Highest Byte" in process database Wordvariables

For the interpretation of "lowest" and "highest" Byte is in file 0.INI the keyword BYTESWAP responsible.

That was not correct.

In version V.00.41 and newer is that corrected.

For single Variables with driver shared RAM the adjustment "lowest" and "highest" Byte is not allowed!

4.3 Variablen-Refresh (error appeared only in V00.003 in V00.41 corrected)

If cursor is in an input field and a F-key or softkey is pressed than the variable will be no longer refreshed.
This error is corrected.

5 Corrections in V2.05

5.1 Flash-Probleme

At some Charges (Date-Code 0111 and 0113) of Atmel-Flashes AT29C040A appeared problems:
The problems are solved.

6 Corrections in V2.17

6.1 Koppel-RAM Info "Applikation läuft" appeared not correct (only V01.27 and V02.05 corrected)

The problem is solved.

7 Corrections in V 05.26:

7.1 Input of variable values in Longwords (32 Bit)

At some values the function worked not correct.

Example: Input: 8388.605 => Shows: 8388.606

The problems should be solved. (Finally solved in V06.10)

7.2 Input of textvariables: Communication appears strange

In case a textvariable is closed with Enter . Than all existing structures was read and written to PLC. That was incorrect.

The data-refresh is very slow and furtheron not correct.

Only power on and of helped in this situation.

The problems are solved.

7.3 Input of textvariables: F-keys and Softkeys

During the input of a textvariable and pressing F-key or Softkey the data input became wrong.

The problems are solved.

7.4 Input of textvariables: Cursor-Positionierung incorrect (only COP xCNC and COP touch)

The problems are solved.

8 Corrections in V06.10

8.1 Variables-Input - Problem by not edited prefixes (only V05.26 to V05.37)

In Case of Variables Input have 3 postfix columns and the operator fills e.g. '1.12' instead of '1.120' . So the value of the COP will not be accepted. The old value stays. This problem appears only at some values.

The problems are solved.

8.2 "fast" modus-change between visualization and Terminal-Modus (only COP X CNC)

A problem is solved.

8.3 Variablen-Input of textvariables

In case of Input a textvariable in Cursor-Mode and by using ZoomX = 2 the cursor positioning was wrong. The problems are solved.

8.4 Variables-Input of numeric variables - Problem by pressing Enter (only V05.26 to V05.37)

If the value of a variable is not 0 !

Now changed between the variables by pressing Enter – without change of the variables – sometimes the variables change undefinately.

The problems are solved.

8.5 Variables-Input of numeric variables - Problem at Min-/Max-Value (only V05.26 to V05.37)

In some situations the value of the active var input field can be set to zero.

Only when the PLC is writing a value out of range into this variable.

The problem is solved.

8.6 Variables-Input of numeric variables – wrong Min-/Max-Value with postfixes (only V05.26 to V05.37)

In case of Longint (Doubleword) the Minimal- and Maximal-Value check was not correct if a postfix was defined.

The problem is solved.

8.7 Variables-Input of numeric variables – wrong compare Min-/Max-Value with postfixes (only V05.26 to V05.37)

IF input value is 1.23456, at a format with 2 postfixes like x.xx the value was not accepted.

The problem is solved.

8.8 Variables-Input of numeric longint variables - Problem at value 2147483648

Now the acceptance of a longint without postfix more than 2147483648 (bigger than MAX_INT32!) will be denied.

(In older Versions appeared the value -2147483648.)

9 Hints

9.1 Min-/Max-Values at var input and Longint variables

At Variables Input can be the MinValue and MaxValue defined.
Internally this values are as a 32-Bit-IEEE-Realvalue (float) used.
32-Bit-IEEE-Realvalues have a exact range of 6 columns!

So the Min-/Max-values at longint values (32 Bit Integer) – are at big values not really exact.
At the input check the Min-/Max- values are rounded and so not every value is possible.

Example of MaxValue:

Max-Wert at ProDesigner	Max-Wert at COP, Typ float	Inputval up to ... possible
:: 1999999.81	1999999.750	1999999.75
1999999.82 :: 1999999.93	1999999.875	1999999.88
1999999.94 :: 1999999.99 :: 2000000.06	2000000.000	2000000.00
2000000.07 ::	2000000.125	2000000.13

This is also the reason that the maximum 32 Bit Integer-value (21474836.47), can not be used.
In this case the MaxValue must be defined with a higher value (e.g. MaxValue = 22222222.22). The COP-Software restricts than to the maximum Integer-value.
Some thing ist to be attended with the minimum 32 Bit Integer-value (-2147483647).

For better Value check you must check the values in PLC program.