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THE PC-TOPP CORRUGATOR TERMINAL

# Instructions for Connecting Counter IVO NE 212

## Summary

This brochure explains how to connect a counter driven by an electronic sensor to a PC running under the **Corrugator Terminal** program of the PC-Topp Scheduling System.

### Sections:

- Electrical connections
- Parameter Setup within PC-Topp
- Programming the Counter

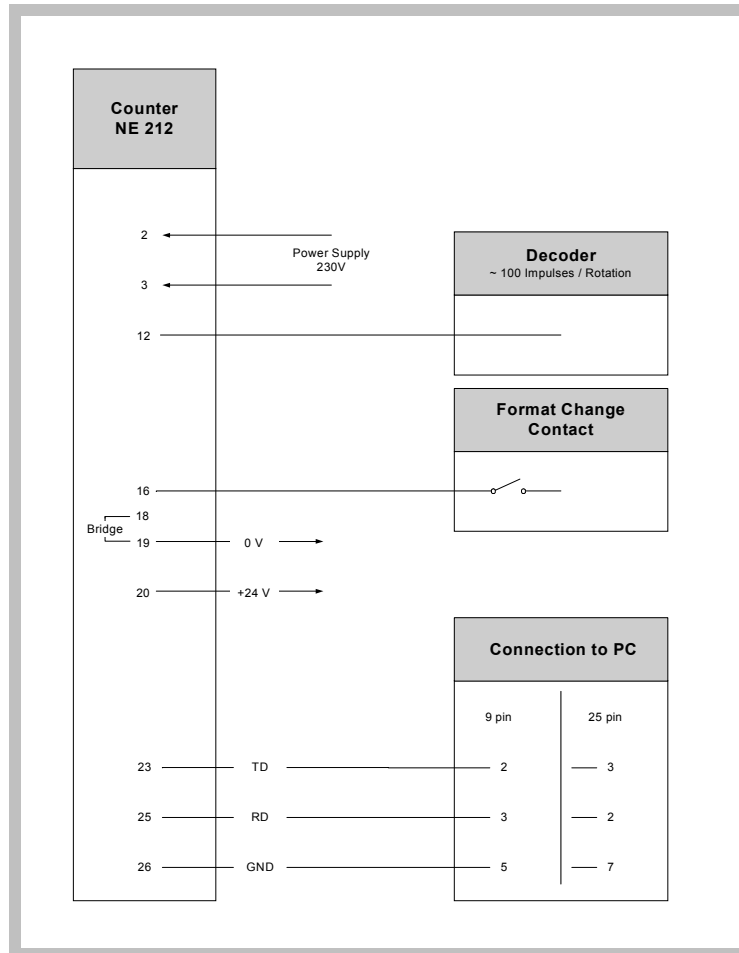
### Equipment Specification:

This document is applicable exclusively to the following equipment:

**Counter NE 212.312AX01** with RS 232 serial port

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## Wiring Diagram Counter NE 212



## Parameter Setup within the PC-Topp Corrugator Terminal

### Access to the Parameters:

- Start the CORRUGATOR TERMINAL program.
- Select **OPTIONS**.
- Enter the password as requested by the program.
- Select **DEVICE PARAMETERS**.

Change the parameters if necessary. Use **TAB** in order to jump between fields.

Hit **ENTER** to save the new values or **ESC** to leave the existing values unchanged.

### Communication Parameters of the Counter:

The communication parameters of the counter appear in the *first* row.

- Use **TAB** or the **ARROW KEYS** to change between different options. Use the **SPACEBAR** to change the values within one option.
- Select the serial port **COM1** or **COM2** to which the counter is connected.
- Select **IVO\_NE212** for **DEVICE**.

### Other Parameters:

Apart from the serial ports **COM1**, **COM2**, **COM3**, and **COM4**, the program also offers the option **NONE**.

**NONE** is used if there is no counter at the machine. The program then requires manual input of the produced quantities and behaves differently in various ways, in particular concerning the prediction of the ending times of a program.

To confirm your modifications, enter **ALT + E** or hit **ENTER**.

### Calibration:

To calibrate the counter

- Re-access **OPTIONS**.
- Select **CALIBRATION**.
- Set the field **IMPULSES PER ROTATION** to the value required by the decoder you use (in the wiring diagram on the previous page it is set to 100 impulses / rotation.  
(The unit **IMPULSES PER ROTATION** can be changed to **IMPULSES PER METER** with **ALT + M**.)

## Programming the Counter

We pre-program all counters we deliver so they will communicate correctly with the PC-Topp Corrugator Terminal. The access to these values is locked by a secret code to avoid unintentional changes. Therefore re-programming of the counter should only be necessary when the counter is replaced.

Without the secret code, it is necessary to restore the factory default setting using the procedure below.

The counter settings are stored in memory cells. If you want to change the setting, you must first enter into the counter's programming mode. Then check the value of each cell one after the other, verifying and altering it if necessary.

The different values are organized in three groups. Each group has its own specific display on the counter. You have no direct access either to a specified value or to a group of values - you always have to pass all the preceding values.

Some of the cells contain values which must be set right for the Corrugator Terminal to function. Others have no importance for the Corrugator Terminal. A third category of cells contains information such as running totals which may be of importance for the user and are unlikely to need to be reset.

For most of the cells there exists a preset value that is fixed when the counter is manufactured. Below you can see where the factory default settings need to be changed.

### How to Switch the Counter into Its Programming Mode:

1. Press P/R.
2. Press F.
3. Enter the secret code.
4. Press → (the "continue" key).

### Leaving the Programming Mode:

Press P/R.

### Changing Memory Cell Contents:

5. Press → as many times as necessary to get to the cell containing the value to be changed.
6. Press C to delete the saved value.
7. Enter a new value with the numeric keyboard.
8. Press P/R to leave the programming mode or to continue through the cells for further changes.

### Resetting the Counter to the Factory Default Settings:

Turn the counter power on while keeping the number 0 key pressed.

## SETTINGS OF THE COUNTER

### ◆ Group 1

Once the counter has been switched into its programming mode, the first values to appear belong to Group 1. Each cell value is identified by a corresponding LED below the counter display information.

Display	Required value	Meaning
XP	[unchangeable]	Result of the first counter
P1	0	100
P2	0	1000
SC	0	
Σ	[unchangeable]	Counter total
XB	0	Result of the secondary counter
B1	10	
⌚	[unchangeable]	Operating hours

### ◆ Group 2

The values of Group 2 appear after going through all the Group 1 values. In order to indicate the start of the Group 2 values, the sign „-----“ appears on the display. During the programming of Group 2, the indicator „Stat“ will appear on the left part of the display. In this group, all the default values have to be changed according to the following table.

Display	Required value	Default value
XP	1	0
P1	2	0
P2	2	0
SC	2	0
Σ	2	0
XB	1	0
B1	2	0
⌚	2	0

◆ **Group 3**

The values of Group 3 appear after going through all the Group 2 values. In order to indicate the start of Group 3 values, the sign „-----“ appears on the display. During the programming of Group 3, a line number appears on the left part of the display defining the running values. After the lines 41 and 46, the sign „-----“ will appear.

Line	Required value	Default value
21	0	
22	1.0000	
23	1	
24	0	
25	0	
26	2	0
27	2	0
28	0	
29	3	0
30	3	0
31	0.25	
32	0.25	
33	0.25	
34	0	
35	0	
36	0	
37	1.00	
38	0	
39	0	
40	0	
41	4711	0
42	----	[line 42 doesn't appear]
43	0	
44	0	
45	0	
46	0	

The value in line 41 is the secret code. It should not be changed.