

# Wlx.xx.841.xxxxx

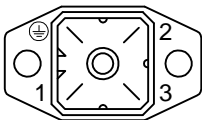
Type "DS" D-sub 25 female cable connector and housing is supplied as standard.

Option: Type "WS" IP 65 housing, incl. 2 pcs. PG7.

Cablepart Type "PS" power connector is supplied as standard.

230V Version:

1. AC, Line
2. NC
3. AC, Neutral
4. Earth



24Vdc Version:

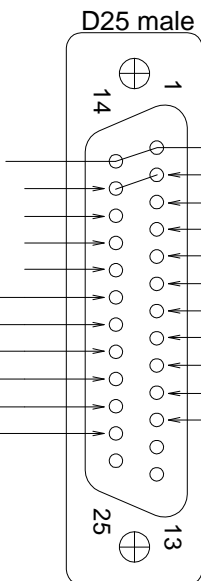
1. NC
2. 24V
3. NC
4. 0V

All inputs accepts 10 - 30V dc input = logic "1"  
All outputs are PNP transistor output max 100mA, with internal pulldown. Output voltage vary depends on application.

Note: When 240V ac or 24Vdc is supplied via the "PS" connector, pin 1+14 is used for 12/24V exit. volt output, max 100mA.

Pin no:

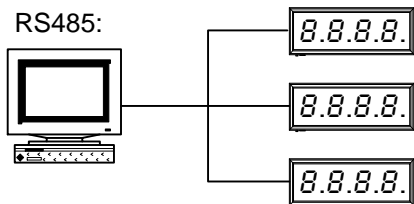
- 16: RTX - RS485, Isolated, use
- 17: RTX+ pin 5 as Signal ground.
- 18: RS485 Select. (Connect to 0V)
- 19: PI, Preset Increase
- 20: RESET, resets counter
- 21: "EVEN" output
- 22: PRESET COUNT
- 23: HOUR, MIN scale enable
- 24: HOLD, (freezes display)



- 1+14: Internally shorted = 24Vdc supply
- 2+15: Internally shorted = 0V supply
- 3: RX - 232 (isolated)
- 4: TX - 232 (isolated)
- 5: S-gnd (isolated) also used for RS485
- 6: DAY (24 Hour) scale enable
- 7: PDS, Preset Digit Select
- 8: "0000" output
- 9: 1/10 sec. Timer enable
- 10: Stop, Counter
- 11: START, Counter

Default connection for PC,PLC, etc:  
RS232, 9600 baud, 1 stop bit, no Par.

RS232, TX to pin 3 = RX  
RS232, RX to pin 4 = TX (only for prg.)  
GND to pin 5 = SIG.GND  
Power: either 24Vdc or 220Vac in PS connector.



Note: Connect pin 18 to pin 15, for selection of RS485 com. consult dealer for communication protokol and connections.

## DEFAULT TIMER FUNCTIONS:

START: input min. 10mSec. puls starts internal timebase,  
HOUR/MIN. SCALE ENABLE: Enables display scaling from 1:10 decimal to 1: 60 for displaying HOUR, MIN and SEC.  
Display values is 99999999 min. , 999999 hours 59 sec. , 9999999.9 sec. or 999hours 59min. 59sec. 9/10 sec.  
DAY SCALE ENABLE: add's 24 hour scale, max 9999days.  
STOP: Disables internal counterinput.  
HOLD: freezes display, but continue to count internally.  
RESET, resets counter to "0", or set point value (PCD on)  
PRESET DIGIT SELECT: shifts to next left digit.  
PRESET INCREASE: increments selected preset digit .  
PRESET COUNT DOWN: "1" selects preset as start value, counts down to "0000000", and stops automatically.  
"0" OUT: Output goes high "1" at counter value "00000000"  
EVEN OUT: Goes high "1" at counter value = preset value.  
TIMER ENABLE: switches between 2 internal time bases, "1" = 0.1Sek. and "0" = 1 minute on LSB.

Note: Pls. be aware that this system works internally as an 8 digit timer. If You have ordred display in only 2, 4 or 6 digits, You will only see the least significant digits, witch might cause some confusion if for ex. preset is set at a higher value than the maximum visible value. Pls. make sure to reset the preset value before entering a new value.

## Software setup:

When connecting to a ASCII terminal or a PC with a terminal emulation program, it is possible to add additional features to the counter, such as scaling, leading zero blank, network node no., baudrates, and other modes like ex. timer / stopwatch.

These options are normally set up from factory on request.  
SERIAL OUTPUT: Display value is sent automaticly every second for connection of slave displays or datacollecting. Full value (8 digits) is send in ASCII seperated by <CR>, or when a display address is selected, in TDI-NET protokol. Default baud: 9600,N,8,1.

Automatic decimal point select, indicates selected mode:

Default:

88888888 = NO, DP = Totalizing minutes.  
Hour/min. scale input "high" :  
888888.88 = Totalizing Hours and Minutes.  
Hour/Min.+Day scale input "high" :  
8888.88.88 = Totalizing Days, Hours and Minutes.  
1/10sec. input "high" :  
8888888.8 = Totalizing 1/10sec. and minutes.  
1/10sec + Hour/min. scale input "high" :  
888.88.88.8 = Totalizing 1/10sec., min.,Hours.

## PRESET FUNCTIONS:

Preset inputs can be used manually via switches or controlled by PLC, RELAY's, etc in following way:  
Press "PDS" and "PI" simultanious, and LSD will flash. Press "RESET" to make sure to start from "00000000"  
Press PI to increase value on selected digit.  
Press PDS alone to select new left digit.  
Continue until all digits is preset, and then press PDS several times until display returns to counter value. Presetvalue is then stored.  
Press PDS alone, to check PRESET VALUE.