

# WEAVING MACHINE COUNTER (TC - 724)

## INSTRUCTION MANUAL

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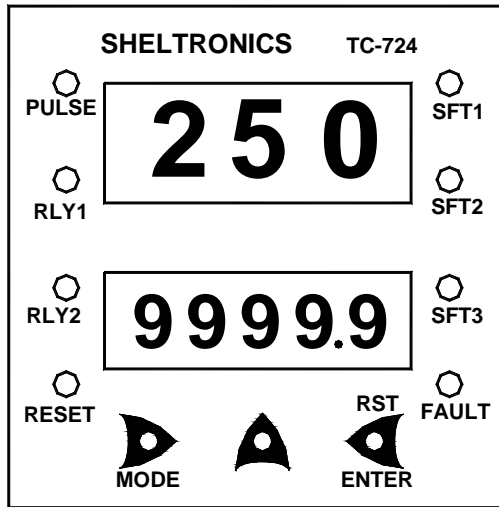
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# WEAVING MACHINE COUNTER



## LED INDICATION (FRONT FACIA DETAILS)

❖ PULSE	⓪	Delivery Sensor Status
❖ RLY1	⓪	Relay1 ON/OFF Indication
❖ RLY2	⓪	Relay2 ON/OFF Indication
❖ RESET	⓪	Reset Status
❖ SFT1	⓪	Shift 1 Indication
❖ SFT2	⓪	Shift 2 Indication
❖ SFT3	⓪	Shift 3 Indication
❖ FAULT	⓪	Fault Indication

## VIEW PARAMETERS (Depending upon the number of shifts selected)

### Total number of Shift = 1

- Total cut length (tCL)
- Clock time (tmE)
- Shift1 Efficiency (EF1)
- Shift1 Pulse counter (PL1)

### Total number of Shift = 2

- Total cut length (tCL)
- Clock time (tmE)
- Shift1 Efficiency (EF1)
- Shift1 Pulse counter (PL1)
- Shift2 Efficiency (EF2)
- Shift2 Pulse counter (PL2)

### Total number of Shift = 3

- Total cut length (tCL)
- Clock time (tmE)
- Shift1 Efficiency (EF1)
- Shift1 Pulse counter (PL1)
- Shift2 Efficiency (EF2)
- Shift2 Pulse counter (PL2)

- Shift3 Efficiency (EF3)
- Shift3 Pulse counter (PL3)

## SET PARAMETERS

- Password entering mode (PAS)
- Set Cut Length (SCL) (in meters)
- Number of Cut lengths (nCL)
- Number of Picks per Inch (nPI)
- Cut Length reset (CL rSt)
- Production datas reset (Prd rSt)
- Change User password (C- P)
- Master reset (MSt rSt)
- Shift Parameters (SFt Ptr)
  - Total Number of Shift (noS)

If Total Number of Shift =1 then no time setting required.

- Set Shift 1 time (SH1) – *optional*.
- Total Time in Shift1 (tS1) (*in minutes*).

Total Number of Shift = 2

- Set Shift 1 time (SH1)
- Time interval between Shift1 & Shift2 (tS1) (*in minutes*)
- Set Shift 2 time (SH2)
- Time interval between Shift2 & Shift1 (tS2) (*in minutes*)

Total Number of Shift = 3

- Set Shift 1 time (SH1)
- Time interval between Shift1 & Shift2 (tS1) (*in minutes*)
- Set Shift 2 time (SH2)
- Time interval between Shift2 & Shift3 (tS2) (*in minutes*)
- Set Shift 3 time (SH3)
- Time interval between Shift3 & Shift1 (tS3) (*in minutes*)

Note: Scrolling of Parameters is introduced.

- Set time to RTC (SEt rtC)
  - Update Hour Settings (Hr)
  - Update Minute Settings (Min)

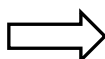
## TO SET A PARAMETER:




1. To set all set parameters, Password should be entered.

2. After Entering Password, to View press  Key.


3. To Enter Password from default display / to enter value for any Set Parameter

a. Select the parameter by pressing  from default display.




- b. Press  Key to shift digit.
- c. Press  Key to increment digit.
- d. Press  Key to Save and Exit.



## SET PARAMETERS DESCRIPTION



**PAS**  Password to alter Machine / Production Factors & Reset data.  
 1477  User Password (Changeable)  
 5555  Master Password (Not Changeable)

**SCL**  Set Cut Length (in meters).



**ncl**  Number of Cut Lengths.

**npi**  Number of picks per inch.


**Cl rst**  Cut length Reset.  
 Press Key  Continuously for 3 Seconds  
 (Until Blinking of Display) to view the Shift parameters.

**prd rst**  Production Datas Reset.  
 Press Key  Continuously for 3 Seconds  
 (Until Blinking of Display) to view the Shift parameters.


**C-p**  Change User password.

**Sft ptr**  Folder to view and set the shift parameters.  
 Press Key  Continuously for 3 Seconds  
 (Until Blinking of Display) to view the Shift parameters.

AFTER 'Sft Ptr' BLINKING,

Press  Key To View the Shift Parameters.

Press  Key To shift digit.

Press  Key To increment digit.



Press

*Key to Save and Exit.*

<b><i>nos</i></b>	⌘	Total Number of Shift.
<b><i>Sh1</i></b>	⌘	Time Set for Shift1 (optional).
<b><i>ts1</i></b>	⌘	Total time in Shift1(in minutes).

When Total Number of Shift = 2 then the following is displayed with scrolling option.

<b><i>nos</i></b>	⌘	Total Number of Shift (in minutes).
<b><i>Sh1</i></b>	⌘	Time Set for Shift1.
<b><i>ts1</i></b>	⌘	Time interval between Shift1 and Shift2 (in minutes).
<b><i>Sh2</i></b>	⌘	Time Set for Shift2.
<b><i>TS2</i></b>	⌘	Time interval between Shift2 and Shift1 (in minutes).

When Total Number of Shift = 3 then the following is displayed with scrolling option.

<b><i>nos</i></b>	⌘	Total Number of Shift.
<b><i>Sh1</i></b>	⌘	Time Set for Shift1.
<b><i>ts1</i></b>	⌘	Time interval between Shift1 and Shift2 (in minutes).
<b><i>Sh2</i></b>	⌘	Time Set for Shift2.
<b><i>TS2</i></b>	⌘	Time interval between Shift2 and Shift (in minutes).
<b><i>Sh3</i></b>	⌘	Time Set for Shift3.
<b><i>TS3</i></b>	⌘	Time interval between Shift3 and Shift1 (in minutes).

***Mst rst*** ⌘ *Master Reset. Resetting all the parameters to Default value.*

*Press Key*  *Continuously for 3 Seconds*

*(Until Blinking of Display) to view the Shift parameters.*

***set rtc*** ⌘ *Set Value to the Inbuilt Clock.*


*Press Key*  *Continuously for 3 Seconds*


*(Until Blinking of Display) to view the Shift parameters.*

*AFTER 'SEt rtc' BLINKING,*


Press  Key To View the Parameters.

Press  Key To shift digit.

Press  Key To increment digit.

Press  Key to Save and Exit.

**hr**  Set Present Hour.

**min**  Set Present Minute.

### Password Priorities:

1. To view and alter all Parameters Enter the Master Password 5555
2. User Password (changeable) – could View and Alter

- Password (Pas)
- Set Cut Length (SCL)
- Number of Cut length (nCL)
- Number of Picks per Inch (nPI)
- Cut Length reset (CL rst)
- Production Data reset (Prd rSt)

Scrolling of Parameters is introduced.

3. When no password or wrong password is entered the following parameters are viewed and could not be altered.

- Password (Pas)
- Set Cut Length (SCL)
- Number of Cut length (nCL)
- Number of Picks per Inch (nPI)
- Cut Length reset (CL rst)
- Production Data reset (Prd rSt)

Even after returning from the set mode the password is valid for 15 seconds after the exit key is pressed.

## Set Parameter Range:

Parameter	Minimum	Default	Maximum
Set Cut Length (SCL)	1.0	100.0	9999.9
Number of Cut Length (nCL)	1	20	999
Number of Picks per Inch (nPI)	1	50	999
User Password	0000	1477	9999
Total Number of Shift (nOS)	1	3	2
Time in Shift1 (tS1)	1	480	1440
Time in Shift2 (tS1)	1	480	1440
Time in Shift3 (tS1)	1	480	1440

## VIEW PARAMETERS

In Default Display, the upper 3 Digit shows the Speed and the lower 5 Digits shows the Delivery Cut length.

Press  Key to View the following Parameters.

Depending upon the number of shifts selected the parameters are viewed as

### Total number of Shift = 1

- Total cut length (tCL)
- Clock time (tmE)
- Shift1 Efficiency (EF1)
- Shift1 Pulse counter (PL1)

### Total number of Shift = 2

- Total cut length (tCL)
- Clock time (tmE)
- Shift1 Efficiency (EF1)
- Shift1 Pulse counter (PL1)
- Shift2 Efficiency (EF2)
- Shift2 Pulse counter (PL2)

### Total number of Shift = 3

- Total cut length (tCL)
- Clock time (tmE)
- Shift1 Efficiency (EF1)
- Shift1 Pulse counter (PL1)
- Shift2 Efficiency (EF2)
- Shift2 Pulse counter (PL2)
- Shift3 Efficiency (EF3)
- Shift3 Pulse counter (PL3)

## INSTALLATION

- ❖ Set the Cut Length (in meters) in parameter SCL.
- ❖ Set the Number of Cut Length in parameter nCL.
- ❖ Set the Number of Picks per Inch in parameter nPI.
- ❖ Set the Total Number of Shift (noS).
- ❖ Set the Starting time for Shift1 in parameter SH1.
- ❖ Set Total Time of Shift1 (in minutes) in tS1.
- ❖ Set the Starting time for Shift2 in SH2.
- ❖ Set Total Time of Shift2 (in minutes) in tS2 (if noS = 2 / 3).
- ❖ Set the Starting time for Shift3 in SH3.
- ❖ Set Total Time of Shift3 (in minutes) in tS3 (if noS = 3).
- ❖ If needed change the clock timings, set through SEt rtC.

## OPERATION DETAILS

- “WMC SHELTRONICS “ is displayed for 2.5 seconds.
- The Speed is displayed depending upon the delivery pulse sequence.
- Incrimination of Delivery Cut Length is based on the Number of Picks per Inch (nPI) and the delivery pulse sequence.
- When the Delivery Cut Length reaches the Set Cut Length (SCL) Doff Relay (RLY1) gets ON and the Lamp (RLY2) gets ON and OFF for every 1 second and also “LEn reached” is displayed.
- For every ‘LEn reached’ the Total Cut Length (tCL) is incremented by 1 and if the Total Cut Length reaches the settable Number of Cut Length (nCL) then “tCL reachd” is displayed.
- To clear the fault and restart the cycle, the Enter / Reset key is pressed.
- Depending upon the Number of Shift selected and the Running Shift the Shift Efficiency and the Total Pulse arrived in that particular Shift (irrespective of the Fault occurred) is calculated and displayed in EF1/2/3 and PL1/2/3 respectively.
- We could reset the Cut Length in the middle of the operation by pressing CL RST for 3Seconds.
- We could reset the Production Data in the middle of the operation by pressing PRD RST for 3Seconds.

## FAULT INDICATION

**len**

**ReACHd**

- ❖ Displayed when the Delivery Cut Length reaches the Set Cut Length (SCL).

**tcl**

**ReACHd**

- ❖ Displayed when the Total Cut Length reaches the settable Number of Cut Length (nCL).
- ❖ These Faults are indicated by the FAULT LED.

## SPECIFICATIONS

POWER SUPPLY	:	60V $\phi$ 270V AC 50-60 Hz 1 PHASE AC / DC
INPUTS	:	1 DIGITAL INPUT (12 V)
OUTPUTS	:	1 RELAY OUTPUT (5A/250V Rating)
PANEL CUTOUT	:	69 MM x 69 MM
DISPLAY	:	8 nos.
LED	:	8 nos.
KEY	:	3 nos.