

SEWING THREAD COUNTER

TC – 722

INSTRUCTION MANUAL

SHELTRONICS

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NEAR TVS NAGAR,
COIMBATORE – 641 025.**

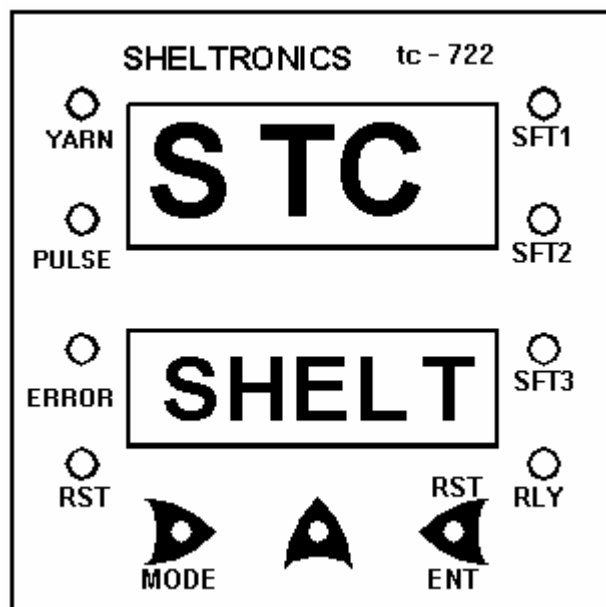
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Ver-1.1**

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SEWING THREAD COUNTER



LED INDICATION (FRONT FACIA DETAILS)

❖ YARN	🔦	YARN STATUS
❖ PULSE	🔦	DELIVERY SENSOR STATUS
❖ ERROR	🔦	YARN ERROR STATUS
❖ RST	🔦	RESET STATUS
❖ SFT1	🔦	SHIFT 1 INDICATION
❖ SFT2	🔦	SHIFT 2 INDICATION
❖ SFT3	🔦	SHIFT 3 INDICATION
❖ RLY	🔦	RELAY ON/OFF INDICATION

VIEW PARAMETERS (Depending upon the number of shifts selected)

Total number of Shift = 1

- Production counter (PC)
- Total Package (tP)
- Running hour (Hr)
- Clock time (tmE)

Total number of Shift = 2

- Production counter (PC)
- Total Package (tP)
- Running hour (Hr)

- Clock time (tmE)
- Shift 1 total package (tP1)
- Shift 2 total package (tP2)

Total number of Shift = 3

- Production counter (PC)
- Total Package (t P)
- Running hour (Hr)
- Clock time (tmE)
- Shift 1 total package (tP1)
- Shift 2 total package (tP2)
- Shift 3 total package (tP3)

SET PARAMETERS

- Production Length (PL)
- Password entering mode (PAS)
- Pulse Ratio (Pr)
- Count type (CNT)
- Reset type (RST)
- Package per Doff (Pd)
- Sensor type (St)
- Device type (Ot)
- Total Package reset (tP rSt)
- Running hour reset (Hr rSt)
- Change User password (C- P)
- Shift Parameters (SFt Ptr)

- Total Number of Shift (noS)

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

Total Number of Shift = 2

- Set Shift 1 time (SH1)
- Set Shift 2 time (SH2)

Total Number of Shift = 3

- Set Shift 1 time (SH1)
- Set Shift 2 time (SH2)

- Set Shift 3 time (SH3)

Note: Scrolling Of Parameters Is Introduced.

- Master reset (MSt rSt)
- Set time to RTC (SEt rtC)
 - Update Hour Settings (Hr)
 - Update Minute Settings (Min)

BASIC NOTE:


After selecting the any Parameter, to enter value:

PRESS  KEY to shift digit

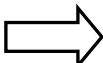
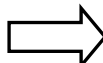
PRESS  KEY to increment digit

PRESS  KEY to Save and Exit

To View Production Length from default display:

PRESS  KEY

To set Production Length from default display:

PRESS  KEY AND THEN PRESS  KEY TO SET PRODUCTION LENGTH.

NOTE: To set all other set parameters, Password should be entered

To Enter Password from default display:

PRESS  KEY AND THEN PRESS  KEY TO ENTER PASSWORD

PAS  **PASSWORD TO ALTER MACHINE/PRODUCTION FACTORS & RESET DATA**

0258  **USER PASSWORD (Changeable)**
5555  **MASTER PASSWORD (Unchangeable)**

After Entering Password, to View Set Parameters

PRESS  KEY

SET PARAMETERS

Pr



NUMBER OF PULSES PER UNIT LENGTH

$$= [1000 / (3.14 \times \text{Delivery Roller Dia.in mm})] \times \text{NO OF PULSES PER REVOLUTION}$$

NOTE : FOR SEWING THREAD COUNTER APPLICATION , *Pr* SHOULD BE SET TO **5.00**

Cnt



COUNT DIRECTION

down DOWN COUNT

Up UP COUNT

Rst



RESET TYPE

Manul - MANUAL RESET

Auto- AUTOMATIC RESET

Pd



PACKAGE PER DOFF

St



SENSOR TYPE

NO

NC

ot



DEVICE TYPE

MOTOR

MAGNET

Hr Rst



RESETS TOTAL RUNNING HOUR OF THE MACHINE

- PRESS  KEY CONTINUOUSLY FOR 3 SECONDS

(UNTIL BLINKING OF DISPLAY)

tp Rst



RESETS TOTAL PACKAGE PER DOFF OF ALL SHIFTS

- PRESS  KEY CONTINUOUSLY FOR 3 SECONDS

(UNTIL BLINKING OF DISPLAY)

C-P



USER PASSWORD (CHANGEABLE)

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 PARAMETERS

PRESS  KEY to shift digit

PRESS  KEY to increment digit

PRESS  KEY to Save and Exit

nos  TOTAL NUMBER OF SHIFT

When Total Number of Shift = 1 the following parameters are not displayed.

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

SH1  TIME SET FOR SHIFT 1

SH2  TIME SET FOR SHIFT 2


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

SH1  TIME SET FOR SHIFT 1

SH2  TIME SET FOR SHIFT 2


SH3  TIME SET FOR SHIFT 3

mSt Rst  MASTER RESET
- RESETTING ALL PARAMETERS TO DEFAULT VALUE

- PRESS  KEY CONTINUOUSLY FOR 3 SECONDS
(UNTIL BLINKING OF DISPLAY)


SEt rtc ⚡

SET VALUE TO CLOCK

- PRESS  KEY CONTINUOUSLY FOR 3 SECONDS
(UNTIL BLINKING OF DISPLAY)

AFTER 'Set rtc' IS 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:

Production Length could be altered at all time.

Master Password (5555) – could View and Alter

- Pulse Ratio (Pr)
- Count select (Cnt)
- Reset select (rSt)
- Package per Doff (Pd)
- Sensor type (St)
- Device type (ot)
- Running Hour reset (Hr rst)
- Total Package per Doff reset (tPd rSt)
- Change User password (C- P)
- Shift Parameters
 - Total Number of Shift (noS)

If Total Number of Shift =1 then no parameters for setting time to Shift

Total Number of Shift = 2

- Set Shift 1 time (SH1)
- Set Shift 2 time (SH2)

Total Number of Shift = 3

- Set Shift 1 time (SH1)
- Set Shift 2 time (SH2)
- Set Shift 3 time (SH3)

Scrolling of Parameters is introduced.

- Master reset (MSt rSt)
- Set time to RTC (SEt rtC)
 - Update Hour Settings (Hr)
 - Update Minute Settings (Min)

User Password (changeable) – could View and Alter

- Pulse Ratio (Pr)
- Count select (Cnt)
- Reset select (rSt)
- Package per Doff (Pd)
- Sensor type (St)
- Device type (ot)
- Running Hour (Hr)
- Total Package per Doff reset (tPd rSt)
- Change User password (C- P)
- Shift Parameters

- Total Number of Shift (noS)

If Total Number of Shift =1 then no parameters for setting time to Shift

Total Number of Shift = 2

- Set Shift1 time (SH1)
- Set Shift2 time (SH2)

Total Number of Shift = 3

- Set Shift1 time (SH1)
- Set Shift2 time (SH2)
- Set Shift3 time (SH3)

Scrolling of Parameters is introduced.

When no password or wrong password is entered only the Production length (PL) is viewed and altered.

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
Production Length	1	100	99999
Count Select	Up mode	Up mode	Down mode
Package per Doff	1	1	9
Reset Select	Auto	Auto	Manual
Pulse Ratio	1.00	5.00	999.99
Sensor type	NC	NO	NO
Device type	Motor	Magnet	Magnet
User Password	0000	258	9999
Total Number of Shift	1	3	2

VIEW PARAMETERS

DEFAULT DISPLAY

PC *φ* PRODUCTION COUNT

PRESS  KEY TO VIEW THE FOLLOWING PARAMETERS

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

Total number of Shift = 1

- Production counter (PC)
- Total Package (t P)
- Running hour (Hr)
- Clock time (tmE)

Total number of Shift = 2

- Production counter (PC)
- Total Package (t P)
- Running hour (Hr)
- Clock time (tmE)
- Shift 1 total package (tP1)
- Shift 2 total package (tP2)

Total number of Shift = 3

- Production counter (PC)
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- Clock time (tmE)
- Shift 1 total package (tP1)
- Shift 2 total package (tP2)
- Shift 3 total package (tP3)

INSTALLATION

- ❖ Set the Production Length in parameter PL.
- ❖ Set the number of pulses per unit length in parameter Pr to 5.00
- ❖ Set the count direction in Cnt.
- ❖ Set the reset type (auto / manual) in rSt.
- ❖ Set the number of package per doff in Pd.
- ❖ Set the sensor type (NO/NC) in St.
- ❖ Set the device type (Motor / Magnet) in Ot.
- ❖ Set the Total Number of Shift (noS).

If Total Number of Shift is 1 then no need to set the shift timings. Instead if Total Number of Shift is 2 / 3 then correspondingly Set Shift time (SH1 & SH2) / (SH1 & SH2 & SH3) are to be set.

- ❖ Set the time for Shift1 in SH1.
- ❖ Set the time for Shift2 in SH2.
- ❖ Set the time for Shift3 in SH3.

If needed change the clock timings, set through SEt rtC.

OPERATION DETAILS

- “StC SHELTRONICS “ is displayed for 2.5 seconds.
- If yarn sensor is enabled, relay is turned ON/OFF depending upon the device selected (Magnet or Motor) and the production counter is incremented / decremented according to delivery pulse sequence and pulse ratio.
- Incrimination or decrementation of production counter (PC) is based on the ‘count select’ (CNT) parameter.
- After Production counter (PC) reaches total Production length (PL), Relay is turned off/on and ‘Doff reached’ is displayed.
- For every ‘doff reached’ the ‘total Package’ (tP) and also depending upon the Total Number of Shift the corresponding Shift’s package per doff (tP1/tP2/tP3) are incremented according to the ‘package per doff’ (Pd).
- Total Package per hour is cumulative.
- To restart the cycle, the RSTkey is pressed for 0.5 sec if manual mode is selected in ‘reset selection’ (RST) parameter.
- If auto mode is selected, then system automatically turns off its relay for 5 seconds and starts its next cycle.
- Hour meter counts the machine on time up to 9999.9 hours.
- We could reset the Production Counter, Shift1 Package per doff, Shift2 Package per doff, Shift3 Package per doff, Total Package per doff, Running hour in the middle of the operation by selecting the corresponding parameters.

FAULT INDICATION

DOF REACH

- ❖ Displayed when doff length is reached. Auto / Manual reset input clears the fault and resets the production counter.

Ym FAULT

- ❖ Displayed when yarn sensor is cut off. The fault is cleared by the input sensed from the sensor.

SPECIFICATIONS

POWER SUPPLY	:	60V ϕ 270V 50-60 Hz 1 PHASE AC / DC
INPUTS	:	2 DIGITAL INPUTS (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.