OPERATING MANUAL FOR BAGKON
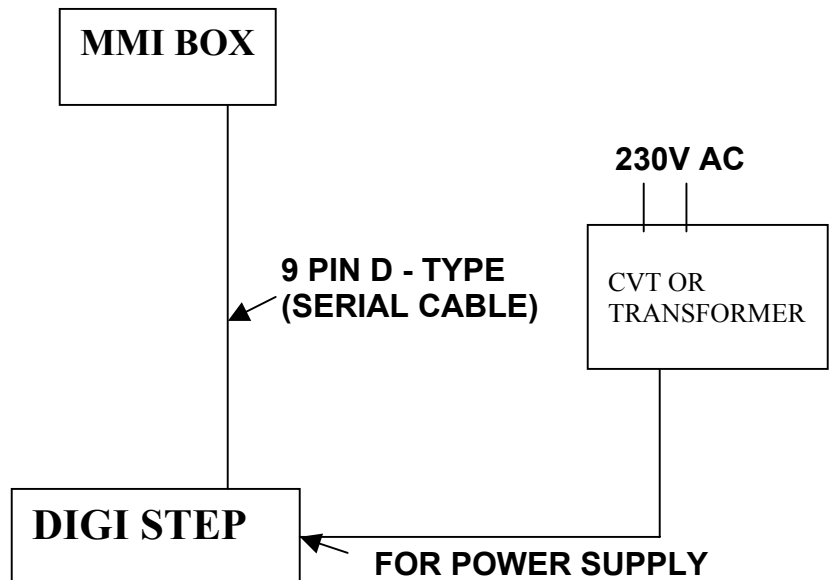
INDEX

1.   BAGKON UNIT CONSIST OF FOLLOWING ITEMS

1.   Display unit   :   This is 96 x 96 box with 16 x 2 LCD & 10 keys keypad in
      (MMI BOX)   front of it.

2.   DIGISTEP   :   This is the drive unit to drive the stepper motor. This is
      (DC Stepper Drive)   mounted on the plate with 230 V operated fan.

3.   Terminal Strip :   This is the terminal strip to connect external solenoids &
                           limit OR Proximity switches to *BAGKON*

4.   Cable Set   :   There are 1 cables to interconnect Display unit & Drive
                          with one other.

BLOCK DIAGRAM

2. *FUNCTIONAL DESCRIPTION*

DISPLAY:

Type of bag MARK / BLANK

Operating mode JOG / RUN   **Length (size) of bag in mm.**

```
JOG            BLANK        XXXmm

000000                      XXX/min.
```

Batch counter – 000 Pcs.   **Speed of M/c in no. of bags / Min.**
Totalizer   -- 000000
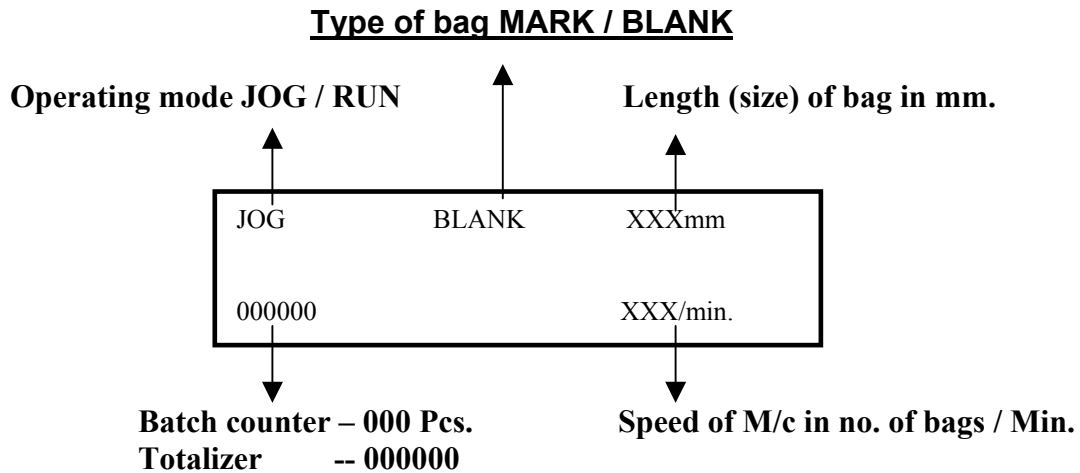
-System operates in two modes

1. MANUAL MODE 2. AUTO MODE

IN MANUAL MODE:

At the time of power ON (system stays in MANUAL mode). In MANUAL mode Upper line in LCD shows **'*JOG*'** .

In this mode stepper motor can be moved either in forward direction or in reverse direction as per input applied at the terminal strip (i.e. at INCH FOR or INCH REV)

IN AUTO MODE :-
In AUTO MODE system operates in two functional mode
1.PLAIN MODE
2.MARK MODE
Upper line of display shows '*RUN*'

On applying start signal to proxi-start input, stepper motor starts running. Motor moves for set length at set speed.
After completion of first set length seal o/p is goes on & delay to reverse direction is also active.
On completion of reverse delay motor moves in reverse direction as per set reverse stroke.
After completion of reverse length the seal o/p goes off & parallel to its delay to forward direction is also active.

On completion of forward delay motor moves in forward direction as per set forward stroke.
After stopping of stepper motor *CUT* Output operates as per set time.
After output goes off system waits for next start.

IF MARK SENSOR INPUT IS ENABLED (This can be seen in Upper line of display.
IF MARK SENSOR IS ENEBLED,'**MARK**' is displayed and if MARK SENSOR IS DISABLED, '**PLAIN**' is displayed.) Stepper motor stops as soon as MARK SENSOR input is received. If MARK SENSOR input is not received then motor will stop at set length.
IF functional mode is select in MARK. At this time mark sensor is enabled only during first length. For other two length mark sensor is not active.

IF MARK SENSOR IS DISABLED then stepper motor will stop at set length.

Now if input configuration is set to *'5'* then motor restarts after cycle time set in timar menu.

If input configuration is set to '0' then system waits for start input (proximity switch).

For other then '0' & '5' system starts as per explained in programmers guide.

DISPLAY STATUS: IN NORMAL RUNNING MODE DISPLAY SHOWS '*NORMAL STATUS'.*

1. XXX   YYYY   ZZZZ
    PPPP   QQQQ

XXX SHOWS RUN OR JOG MODE

YYYY SHOWS MARK OR PLAIN

ZZZZ SHOWS SET LENGTH

PPPP SHOWS BATCH COUNTER

QQQQ SHOWS   SHOTS/ MIN

2. On pressing *NEXT* key display shows `I/O STATUS` menu.

 First line shows the status of INPUTS & second line shows the status of OUTPUTS

```
 I >
 O >
```

START INPUT is given to the MMI at that time in INPUT STATUS MENU **2** shown

LENGTH STOP INPUT: when MARK SENSOR not in used & in counter menu MARK
SENSOR is OFF at that time stepper motor stop at its Set
Length so stepper stop at its Length in `I/O STATUS MENU` E
input shows

PHOTOCELL STOP INPUT: when MARK SENSOR used & in counter menu MARK
SENSOR is ON while MARK SENSOR is sensed in MARK
WINDOW at that time stepper motor stop at its photocell
stop. This input is F in `I/O STATUS MENU`.

NOTE   When stepper stop at PHOTOCELL STOP in I/O STATUS MENU inputs EF
Shows.

3. On pressing *NEXT* key again display shows *'SPEED STATUS'* menu.

```
R:>  AAA          BBBB
      CCCC          DDDD
```

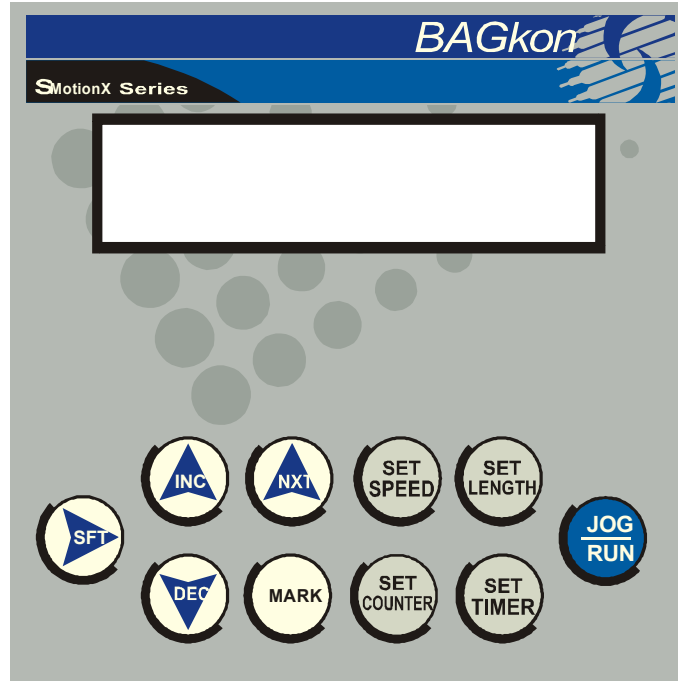AAA ⟶ shows stepper motor running time in milli seconds.

BBBB ⟶ Not in use

CCCC ⟶ Not in use

DDDD ⟶ Not in use

- On pressing *NEXT* key again display shows *NORMAL STATUS.*

I/O STATUS MENU is useful to monitor start in signal or *CUT/SEAL/PUNCH*
output signals

3. *FRONT KEY BOARD OPERATION*

1. RUN/JOG   :   This key is used to changed the mode of the bagkon.

2. SET LENGTH   :   To set parameters in *LENGTH* menu.

3. SET SPEED   :   To set parameters in *SPEED* menu.

4 SET TIMER   :   To set parameters in *TIMER* menu.

5. SET COUNTER   :   To set parameters in *COUNTER* menu.

6 & 7 INC/DEC   :   In normal running mode these keys can be used for *INC* or *DEC* count. In program mode these keys can be used to *INC* or *DEC* the Value of parameter.

8. SHIFT   :   This key can be used to *SHIFT* the digit to be programmed   in programmer mode. For select BATCH COUNT or TOTALIZER in JOG or RUN mode.

9. NEXT   :   Use **NEXT** to save the current parameter & to switch to the next parameter. Also use to scroll different display view.

10. MARK   :   This key is used for enabled or disabled the *MARK*

4.   *HOW TO PROGRAM*

Parameter SET 1 :

To enter, press **SET LENGTH**.
The upper line of LCD shows parameter name in the upper line, parameter value in the Lower line.
The cursor blinks on least significant digit.
Use **INC / DEC** to increment / decrement the digit under the cursor.
Use **SHIFT** to shift the cursor.
Use **NEXT** to save the current parameter & to switch to the next parameter.
Use **PREV** to switch to the Previous parameter.
Use **SET LENGTH** key again to exit.
Parameters :

Length (mm) :   Length to run in millimeters.
Range   :   1 to 9999
Unit   :   mm
Default   :   200

Reverse STRK: Reverse Length to run in millimeters.
Range   :   1 to 9999
Unit   :   mm
Default   :   10

Forward STRK: Forward Length to run in millimeters.
Range   :   1 to 9999
Unit   :   mm
Default   :   50

Batch Count   :   Batch Counter preset value. The batch counter resets on reaching this Count.
                    Value 0 disables the counter & output.
              :   Use key to reset the batch counter.
Range   :   1 to 9999 / Auto Reset on overflow.
Unit   :   numbers
Default   :   100

Batch Over   :   Batch Over Warning output turns on this many counts Warn before the completion of Batch Count. The output turns off on completion of batch count.
                    Value 0 disables the counter & output.
Range   :   1 to 9999 / Auto Reset on overflow.
Unit   :   numbers
Default   :   10

Cutter Count   :   Output for the cutter operates after no. of jobs equal to Cutter Count..
                    Value 0 disables the counter & output.
Range   :   1 to 9999 / Auto Reset on overflow.
Unit   :   numbers
Default   :   1

Batch Reset   :   When put to On, resets the 4 digit batch counter reset to 1.
Range   :   On / Off

Unit	:	--
Default	:	Off

Totalizer Reset	:	When put to On, resets the 6 digit totalizer to 0.
Range	:	On / Off
Unit	:	--
Default	:	Off

Parameter SET 2 :

To enter, press **SET TIMER**.
The upper line of LCD shows parameter name in the upper line, parameter value in the lower line.
The cursor blinks on least significant digit.
Use **INC / DEC** to increment / decrement the digit under the cursor.
Use **SHIFT** to shift the cursor.
Use **NEXT** to save the current parameter & to switch to the next parameter.
Use **PREV** to switch to the Previous parameter.
Use **SET TIMER** key again to exit.

Parameters :

Cycle Time	:	With Input Configuration Option 5, time between two consecutive cycles.
Range	:	00.00 to 99.99
Unit	:	Seconds
Default	:	00.50

Cutter Time	:	On completion of motor run, the output for the cutter operates for Cutter Time.
Range	:	00.00 to 99.99
Unit	:	Seconds
Default	:	00.00

Sealer Time	:	On completion of motor run, the output for the sealer operates for the Sealer Time.
Range	:	00.00 to 99.99
Unit	:	Seconds
Default	:	00.00

Punch Time	:	On completion of motor run, the output for the Punch operates for Punch Time.
Range	:	00.00 to 99.99
Unit	:	Seconds
Default	:	00.00

Start Delay	:	Before start of motor run, the output for the start delay operates for Start delay Time.
Range	:	00.00 to 99.99
Unit	:	Seconds
Default	:	00.00

BtchOvr Tim	:	On overflow of Batch Count, the batch over output operates for the Batch over Time.
Range	:	00.00 to 99.99
Unit	:	Seconds

Default   :   Not used set to 0.

Run Paralel   :   The *Run Paralel* output turns on with the running of motor &
                           Operates for the Run Paralel Time.
Range   :   00.00 to 99.99
Unit   :   Seconds
Default   :   Not used set to 0.

ErrOut Time   :   The Error output turn on with the occurrence of error and it
                           operates for the Error Time.
Range   :   00.00 to 99.99
Unit   :   Seconds
Default   :   00.00

Parameter SET 3 :

To enter, press **SET COUNTER**.
The upper line of LCD shows parameter name in the upper line, parameter value in the lower line.
The cursor blinks on least significant digit.
Use **INC / DEC** to increment / decrement the digit under the cursor.
Use **SHIFT** to shift the cursor.
Use **NEXT** to save the current parameter & to switch to the next parameter.
Use **PREV** to switch to the Previous parameter.
Use **SET COUNTER** key again to exit.
Parameters :

Mark Sensor :   To enable / disable the mark sensor input.
Range   :   On / Off
Unit   :   --
Default   :   Off

Mark Window :   When Mark Sensor is On, the sensor input is active only for the
                        distance in mark window before the set length.
Range   :   0 to 9999
Unit   :   mm
Default   :   10

Missing Mark :   When Mark Sensor is On, the system waits Missing Mark no of
                        missing marks before generating Mark Sense Error.
                        The counter resets on receipt of mark or on error generation.
Range   :   0 to 9999
Unit   :   numbers
Default   :   1

Input Configuration: Decides different configuration for the start / error conditions as follows :

0 :   The system awaits transition of *START* Signal from Off to On to start the motor.
           Speed Error is disabled.

1 :   The system awaits transition of *START* Signal from Off to On to start the motor.
           If the *START* Signal transition from Off to On takes place during the motor run,
           SPEED ERROR is generated & the system is halted.

2 :   The system awaits transition of *START* Signal from Off to On to start the motor.
           If the *START* Signal turns off during the motor run, *SPEED ERROR* is generated
           & the system is halted.

3 :   The system awaits transition of *START* Signal from On to Off to start the motor.
If the *START* Signal turns on during the motor run, *SPEED ERROR* is generated
& the system is halted.

4 :   The system awaits transition of *START* Signal from On to Off to start the motor.
If the *STOP* Signal turns on during the motor run, *SPEED ERROR* is generated
& the system is halted.

5 :   The system awaits for the *CYCLE TIME* to start the motor.
Speed Error is not generated.

Range	:	0 to 5
Unit	:	numbers
Default	:	5

Parameter SET 4 :

: To enter, Press **SET SPEED**.
The upper line of LCD shows parameter name in the upper line, parameter value in the lower line.
The cursor blinks on least significant digit.

Use **INC** to increment the digit under the cursor.
Use **SHIFT** to shift the cursor.
Use **NEXT** to save the current parameter & to switch to the next parameter.
Use **PREV** to switch to the Previous parameter.

Use **SET SPEED** key again to exit.

Parameters :

Run Speed	:	Maximum speed of the motor.
Range	:	1 to 5000
Unit	:	Hz
Default	:	2000

Start Speed	:	Starting speed of the motor.
Range	:	1 to 1000
Unit	:	Hz
Default	:	400

Start Steps	:	No. of Steps the motor run at Start Speed before accelerating to the run Speed.
Range	:	0 to 9999
Unit	:	Numbers
Default	:	0

Accel. Time	:	Time to accelerate the motor from the Start Speed to the Run Speed.
Range	:	1 to 9999
Unit	:	Milliseconds
Default	:	25

End Speed	:	End speed of the motor.
Range	:	1 to 1000
Unit	:	Hz
Default	:	400

End Steps	:	No. of Steps the motor run at End Speed after decelerating to the End Speed.
Range	:	0 to 9999
Unit	:	Numbers
Default	:	0

Decel. Time	:	Time to decelerate the motor from the Run Speed to the End Speed.
Range	:	1 to 9999
Unit	:	Milliseconds
Default	:	25

Photo Speed	:	Speed of the motor during Mark Window.
Range	:	0 to 1000
Unit	:	Hz
Default	:	400

Direction	:	Decides the direction of motor. On - Forward Off - Reverse
Range	:	On / Off
Unit	:	--
Default	:	Off

Inch Speed	:	Maximum speed of the motor during Inching.
Range	:	1 to 3000
Unit	:	Hz
Default	:	200

Parameter SET 5 : Engineer Level :

: To enable, turn on the power to the unit keeping **NEXT** pressed.
: To enter, Press SET TIMER
The upper line of LCD shows parameter name in the upper line, parameter value in the lower line.
Use **INC / DEC** to increment / decrement the digit under the cursor.
Use **SHIFT** to shift the cursor.
Use **SAVE** to save the current parameter & to switch to the next parameter.
Use **PROG** key to exit.
To exit from Engineer's Level, turn off the power to the unit.

Parameters :

Ratio PPR	:	PPR (Pulse Per Revolution) for the motor.
Range	:	1 to 2000
Unit	:	Pulses / Revolution
Default	:	400 (After changing the value of this parameter switch OFF & ON the system to activate the value.)

Ratio mm	:	Total linear travel in ten revolutions of the motor.
Range	:	1 to 9999
Unit	:	mm

Default	:	2000 (After changing the value of this parameter switch OFF & ON the system to activate the value.)
Remote Start	:	If set to On, the START Signal is activated through remote input. Local Start from AUTO/MAN is disabled.
Range	:	On / Off
Unit	:	--
Default	:	off
Default Loading	:	If set to On, default values of all the parameters get loaded.
Range	:	On / Off
Unit	:	--
Default	:	off
Remot Speed	:	If set to On, the speed of the motor is in reference to remote analog signal of 0 - 10 Vdc.
Range	:	On / Off
Unit	:	--
Default	:	off
PWM Width	:	Decides the Pulse Width in PWM.
Range	:	0 to 50
Unit	:	Numbers
Default	:	12
PWM On Speed	:	Decides the Speed at which PWM Width is active.
Range	:	1 to 1000
Unit	:	Hz
Default	:	250
Hold Time	:	Once the motor is in HOLD Condition, it remains In HOLD mode for the Hold Time. After that the winding outputs are disabled from the drive.
Range	:	1 to 1000
Unit	:	Seconds
Default	:	3
Half Step	:	If set to Off, the motor runs in Full Step Mode : 200 PPR
		If set to On, the motor runs in Half Step Mode : 400 ppr
Range	:	On / Off
Unit	:	--
Default	:	On
Auto speed	:	If it is ON then stepper motor`s speed ism set automatically at its length so no need of speed parameter if auto speed programming is done by OEM
Range	:	On/Off
Unit	:	-
Default	:	Off
Backward Travel	:	Length to run in backward direction in step. In this case system operates reverse-forward-reverse- sequence & if the setting is ZERO or above to 25 step then system operates only in forward direction i.e. standard BAGkon sequence.
Range	:	0 to 25
Unit	:	Step

Default	:	0

Config Output1:   This parameter is use to Decides configure output to activate in cycle. Every count have a define output. Output information is given below. Select your output between 0 to 9 if the selection is 0 or over to 10 then system consider only cutter output in every cycle.

Range	:	0 to 9
Unit	:	Number
Default	:	0

Config Output2:   This parameter is use to Decides configure output to activate in cycle. Every count have a define output. Output information is given below. Select your output between 0 to 9 if the selection is 0 or over to 10 then system consider only cutter output in every cycle.

Range	:	0 to 9
Unit	:	Number
Default	:	2

Config Output3:   This parameter is use to Decides configure output to activate in cycle. Every count have a define output. Output information is given below. Select your output between 0 to 9 if the selection is 0 or over to 10 then system consider only cutter output in every cycle.

Range	:	0 to 9
Unit	:	Number
Default	:	3

Config Output4:   These parameter is use to Decides configure output to activate in cycle. Every count have a define output. Output information is given below. Select your output between 0 to 9 if the selection is 0 or over to 10 then system consider only cutter output in every cycle.

Range	:	0 to 9
Unit	:	Number
Default	:	6

				Configure Output Detail
Sr.No.	Count On Display	Name Of Output	Releated Timer	Detail Of operation
1	0	Cut	Cutter Time	This is the output which can be used to operate cutter after stepper motor completes its travel. The duration for which the output remains ON is adjustable by cutter time in timer menu
2	1	Seal	Sealer Time	This is the output which can be used to operate sealer after stepper motor completes its travel of first length. This output is on during running of reverse length.
3	2	Punch	Punch Time	This is the output which can be used to operate punch after stepper motor completes its travel. The duration for which the output remains ON is adjustable by punch time in timer menu
4	3	Batch Over Warn	No Timer	This o/p turns on, giving warning that now batch counter will over after batch over count (set in length menu). This remains on till the batch count reaches. exa. If batch count is set to 200 and batch over warn is set to 10 . Output will turn ON as soon as counter crosses 190 & remains ON till 200.
5	4	Batch Over Time	Btch Over Tim	This O/P turns on after completion the batch counter. This O/P is used to indicate the Batch over function is complete. The duration for which the output remains ON is adjustable by batch over time in timer menu
6	5	Error Time	Err Out Time	This o/p turns ON when any type of error either photocell error or high speed error occurs. This o/p goes ON for set error out time in timer menu. Error can be reseted by pressing AUTO / MAN key or power ON / OFF.
7	6	Error Time	Err Out Time	This o/p turns ON when any type of error either photocell error or high speed error occurs. This o/p goes OFF for set error out time in timer menu. Error can be reseted by pressing AUTO / MAN key or power ON / OFF.
8	7	Start Delay	Start Delay	This output turns on before the start of every cycle. The duration for which the output remains on is adjustable by start delay timer in timer menu.
9	8	On with Stepper Motor	No Timer	This output turns on with the start of cycle and **ON** till to completion of motor traveling. No timer is required for this selection
10	9	Run Parallel	Run paralel	This output turns on with the start of cycle. The duration for which the output remains ON is adjustable by run parallel timer in timer menu.

Note :

WHAT IS AUTO SPEED FUNCTION & HOW TO SELECT IT?

Auto speed is the run speed, which is automatically selected by microprocessor with respect to job length. I.e., you want to change your job length thereafter you need not to change any speed parameter. For that you have to select auto speed parameter ON in the Engineer level menu.

Auto speed is depending also on other parameters which are used only at the time of commissioning because torque, roller diameter, pulley ratio etc. are changing with deferent m/c. once you set all speed parameter & ratio parameter with respect to m/c at load (with photocell), there after you need not to change those speed & ratio parameter for any length.

Auto speed will be changed with respect to start speed, end speed, acc.time, dec. time, photo speed, and mark window.

If you increased start speed, end speed & photo speed from the default value then auto speed will be decreased.

If you increased acc.time, dec.time & mark window then auto speed will be increased.

If you want to run faster then set run speed is equal to 5000 PPS (max) so auto speed which is selected by the microprocessor with respect to length & other parameters is set at its pick speed. If you want to run slower then you have to set required run speed. So auto speed will not be increased above your set run speed.

So, from the use of auto speed you can get desired speed at any job length with out changing of any parameter.

5.   *LIST OF INPUTS & OUTPUTS*

OUTPUTS   :   Output is 24v open collector type is capable of driving 250 mA
                       Load. (One can connect pneumatic valves of 24 V coil directly.)
                       (24VDC power supply is external. It is not part of system)

Config Output1:   This parameter is use to Decides configure output to activate in cycle.
                       Every count have a define output. Output information is given below.
                       Select your output 'between 0 to 9 if the selection is 0 or over to 10 then
                       system considers only cutter output in every cycle.

INPUTS   :

1.   PROXI-IN   This is the start input. Stepper motor starts running as soon as start Input
                      is received. This is N-P-N NO type input. For this input 10 – 30 VDC N-P-
                      N NO type switch can be used.

2.   PH IN NPN   This is the mark sensor input . stepper motor stops as per this input. For
                      this NPN type photocell (Mark Sensor) can be used.

3.   INCHF   On applying this input motor jogs in forward direction.

4.   INCHR   On applying this input motor jogs in reverse direction.

To activate any above inputs, input terminal is to be connected with GND.

6.   *ERROR MESSAGES*

There are two types of error messages

   1. MARK SENSOR ERROR

       When the MARK SENSOR is enabled and MARK SENSOR input is not received
       for more then set *MISSING MARK* count continuously then MARK SENSOR
       error occurs.

   2. HIGH SPPED ERROR

       When input configuration is set other then 5 and start command is received
       before stepper motor stops for more then high speed error count continuously
       then high speed error occurs.

7.   *COMMISSIONING TIPS*

(1) How to set RATIO MM count as per ROLL DIA METER

1. Set PPR = 400, RATIO MM = 2000
2. Set length =200 mm
3.   Run the machine and measure the actual draw length
4. Multiplying Draw length by 10
5. Set ratio mm as per multiplied figure

(2)   Following parameter are set as fixed values they need not to change in engg.
Level

RATIO PPR = 400
REMOTE START =OFF
DEFAULT LOADING =OFF
REMOTE SPEED =OFF
PWM ON SPEED = 250
HOLD TIME = 3
HALF STEP = ON

(3)   *MARK* sensor must be set such that when *MARK* appears in front of sensor .
The
'MARK led in DIGISTEP stepper drive should remain on.

(4)   Start proxi must be set such that when sensed by object on shaft, the '2'' in i/o
status menu is seen.

8.   *IN HEALTHY CONDITION*

1. The voltage between 0-24 of cn4 in digistep drive must be approx.► 24v ac
The voltage between 0-l1 of cn4 in digistep drive must be approx. ► 6v ac
The voltage between 0-h1 of cn4 in digistep drive must be approx.► 100 ac

2. The current status through L 1 lead must be as follows

In MANUAL MODE and motor in stand steel condition   - less then 1 amp.
In MANUAL MODE while INCHING   - 8 to 20 amp.
In AUTO running condition   - 1 to 3 amp.

3. The current status through H1 lead must be as follows

In MANUAL MODE at stand still or at inching   - less then 1 amp.
In AUTO running   - 3 to 5 amp.

4. NU2 Indication is blinking at the rate of 1 sec. On & 1 sec. Off

5. In AUTO mode *MODE* Indication in DIGI STEP should be ON

6. When any change in speed or length is made RX Indication in DIGISTEP blinks once.

7. In MANUAL MODE when INCHING is done motor rotates and INCH FORWARD, INCH REVERSE led in digistep drive glows.

8. Red led on the terminal strip glows with enough brightness.

9. *HOW TO VERIFY MARK SENSOR FUNCTION*

9. Set mark sensor enabled

10. Set mark sensor out side the job such that *MARK* led on digistep drive remains on

11. Run the machine

12. Mark sensor error should not appear anytime and the length of the job should be   (set length) –(MARK window)

13. Now set the sensor such that *MARK* led on digistep drive remains off

14. Run the machine

15. *MARK* sensor error should appear after missing mark count
16. The length of the job should be equal to set length

10 *TROUBLE SHOOTING GUIDE*

1. STEPPER MOTOR DOES NOT START

- Verify auto mode
- Verify input configuration
- Verify timer setting
- Verify input start pulse from status menu
- Verify mode ,nu2, start led as per healthy condition

2. STEPPER MOTOR ROTATES BUT NOT PROPER LENGTH IS DRAWN

- Verify ratio mm/ratio ppr parameter
- Verify supply volts & current as per healthy condition
- Verify with mark sensor disabled

3. VARIATION IN LENGTH OF APPROX- 5 TO 15 MM

- If mark sensor is enabled, disable the mark sensor & check
- Verify supply volts and currents as per healthy condition

- Variation in length does not appear in MARK SENSOR DISABLED then verify mark sensor connections and settings.

4. STEPPER MOTOR DOES NOT ROTATE BUT JUST GIVES JERKS.
- Verify all the parameters.
- Verify supply volts & currents as per healthy condition.

5. NO DISPLAY
- Just remove cn4 from digistep drive and if display appears verify input 24 volts at terminal
- Contact supplier.

6. NO OUTPUTS
- Verify timer settings
- See i/o status menu
- Verify output wiring common of the outputs must be connected to 24 volts.

7 SYSTEM CONFIRMATION TEST

1.To run this test kindly set all the parameters to default value as per given in programmer's guide.

2. Now put the system in auto mode.

3. Stepper motor should run EXECT ONE REVOLUTION. Then stops for 0.5 sec. And again one revolution.

11.   *FILL UP WHEN PROBLEM OCCURS*

For any kind of problem kindly fill the following form & email us to communicate faster

Volts at cn4 of digistep	0-24	0-L1	0-H1

Current through	LEAD L1	LEAD H1
At motor stand still		
At motor inching		
At motor normal running		

Status of **LEDS** in digistep

	ON	OFF
INCH F		
START		
MARK		
MODE		
INCH R		
NU 1		
F 2		
F 1		
NU 2 (BLINKING)		
RX		

i. Status of Display in (NORMAL RUNNING) mode in Display unit

(4) Counter increment ⟶ YES / NO
(in lower line in normal menu)

(5) Value of shots / min in auto mode in lower line in normal menu.

(6) Value of R in 3rd menu (you can access third menu by pressing next key twice)

(7) Value of all the parameters

(8) Run the system confirmation test motor is running EXACT ONE REVOLUTION ⟶ YES/NO.

12. *Wiring Diagram*

EBAGkon MMI Wiring Diagram