

USER'S OPERATING MANUAL FOR BATCH, LENGTH & PRESET COUNTER
(Models :BL-886 / BL-77 / BL-99)



BL - 886 (48 X 96)



BL - 77 (72 X 72)



BL - 99 (96 X 96)

Specifications:-

Display : 6 Digit Upper Row
4 Digit Lower Row (Except 886)
7 segment LED

Model no.	BL-886	BL-77	BL-99	Display Colour
Display height (PV)	0.56"	0.39"	0.56"	White
Display height (SV)	NA	0.39"	0.56"	Green

LED Indication : a) Mode- BC / LC / PC
b) Output RL1, RL2
c) Status - Batch / RT

Range : Ref. SET Mode

Accuracy : 0.05% Full Scale

Outputs : a) Two 5Amp @ 230VAC Relay
b) Buzzer Output

Memory : Non-Volatile (Flash)

Memory Retention: Up to 10 years

Supply : 90 to 270 VAC

Sensor Supply : 12VDC (+10%) @ 30mA

Mounting : Panel

Housing : ABS Plastic

Operating Temp. : 0 ~ 55°C

Humidity : 95% RN(Non Condensing)

Mechanical Dimension : See Table:1 (On Page 2)

Configuration Parameters:-

Count Mode : a) Batch Type
b) Length Type
c) Preset Type

Input Frequency : a) Very Low b) Low
c) Medium d) High
e) Very High

Operating Mode : a) Mode 1 }
b) Mode 2 } Ref. Configuration Mode

Front Reset : Enable / Disable (Selective)

Output 2 Function : a) As 2nd Set Point
b) As Batch Output
c) As Auxiliary Output
d) Output is Off

Lower Display : a) RPM }
b) Blank } Only in Preset Type

Leading Zero : Enable / Disable (Selective)

User Lock : It can be Set Between 1 to 9999

SAFETY INSTRUCTION

This controller is meant for Batch & Length counter applications. It is important to read the manual prior to installing or commissioning of controller. All safety related instruction appearing in this manual must be followed to ensure safety of the operating personnel as well as the instrument.

GENERAL

- ❖ The controller must be configured correctly for intended operation. Incorrect configuration could result in damage to the equipment or the process under control or it may lead personnel injury.
- ❖ The controller is generally part of control panel and in such a case the terminals should not remain accessible to the user after installation.

MECHANICAL

- ❖ The Controller in its installed state must not come in close proximity to any corrosive/combustible gases, caustic vapors, oils, steam or any other process by products.
- ❖ The Controller in its installed state should not be exposed to carbon dust, salt air, direct sunlight or radiant heat.
- ❖ Ambient temperature and relative humidity surrounding the controller must not exceed the maximum specified limit for proper operation of the controller.
- ❖ The controller in its installed state must be protected against excessive electrostatic or electromagnetic interferences. Ventilation holes provided on the chassis of the instrument are meant for thermal dissipation hence should not be obstructed in the panel.

ELECTRICAL

- ❖ The controller must be wired as per wiring diagram & it must comply with local electrical regulation.
- ❖ Care must be taken not to connect AC supplies to low voltage sensor input.
- ❖ Circuit breaker or mains s/w with fuse (275V/1A) must be installed between power supply and supply terminals to protect the controller from any possible damage due to high voltage surges of extended duration.
- ❖ Circuit breaker and appropriate fuses must be used for driving high voltage loads to protect the controller from any possible damage due to short circuit on loads.
- ❖ To minimize pickup of electrical noise, the wiring for low voltage DC and sensor input must be routed away from high current power cables. Where it is impractical to do this, use shielded ground at both ends.
- ❖ The controller should not be wired to a 3-Phase supply with unearthened star connection. Under fault condition such supply could rise above 264 VAC which will damage the controller.
- ❖ The Electrical noise generated by switching inductive loads might create momentary Fluctuation in display, alarm latch up, data loss or permanent damage to the instrument. To reduce this use snubber circuit across the load.

PROGRAMMING



Press and Hold SET & UP Key Simultaneously for 3 Sec.

To access The Set Mode press Set Key once.

To access View Mode press Shift Key once

Configuration			
Display	Default	Parameter Name	Range
LOCK	15	Lock Code	1 ~ 9999
TYPE	BATCH	Type	Batch, Length, Preset
FREQ	red	Input Frequency	V.Low, Low, Med High, V.high
mode	mode-1	Mode	Mode 1, Mode 2
FRSt	ENBL	Front Reset	Enable, Disable
OP2F	BATCH	Output 2 Function	Set Count 2, Batch, Auxiliary, Off
DIR	1000	Diameter	0.01~9999.99mm
SELT v ^ dP	1000	Set DP Point	0 0.0 0.00 0.00 0.000 0.0000 0.00000
SCAL	1000	Scale Factor	0.00001 ~ 999999
RES	0.00	Resolution	0 0.0 0.00 0.00 0.000 0.0000 0.00000
LdSP	rPn	Lower Display Set	RPM, Blank
L-0	ENBL	Leading Zero	Enable, Disable
ULoC	15	User Lock	1 ~ 9999

Set Mode in Batch Type			
Display	Default	Parameter Name	Range
SCnt	1001	Set count	1 ~ 9999 Count
OFFSC	1002	Set Count Off	1 ~ 9999 Count
SCt2	1000	Set Count 2	1 ~ 9999 Count
SbCH	1000	Set Batch	1 ~ 9999 Batch
tIaE	100	Time	0.01 ~ 99.99 Sec.

Set Mode in Length Type			
Display	Default	Parameter Name	Range
SCnt	1010	Set Meter	0.1 ~ 99999.9 Meter
SCt2	1000	Set Meter 2	0.1 ~ 99999.9 Meter
SbCH	1000	Set Batch	1 ~ 999999 Batch
tIaE	100	Time	0.01 ~ 99.99 Sec.

Set Mode in Preset Type			
Display	Default	Parameter Name	Range
SCnt	1001	Set Count	1 ~ 999999 Count
SCt2	1000	Set Count 2	1 ~ 999999 Count
SbCH	1000	Set Batch	1 ~ 999999 Batch
tIaE	100	Time	0.01 ~ 99.99 Sec.

View Mode In Batch Type		
Upper Display	Lower Display	Parameter Name
6-2486	1234	Batch Count

View Mode in Length & Preset Type		
Upper Display	Lower Display	Parameter Name
123456	6Cnt	Total Length & Speed

Run Mode in Batch Type		
Upper Display	Lower Display	Parameter Name
123456	1234	Total Run Count

Run Mode in Length Type		
Upper Display	Lower Display	Parameter Name
357218	2861	Total Length & Speed

Run Mode in Length Type		
Upper Display	Lower Display	Parameter Name
123456	1234 RPM Blank	Running Count & RPM

Parameter will display according to below symbols	
⚙	Type = Batch
◆	Type = Length
▲	Type = Preset

OVER ALL DIMENSIONS & PANEL CUT OUT (IN MM)

MODEL:- BL-886 / BL-77 / BL-99

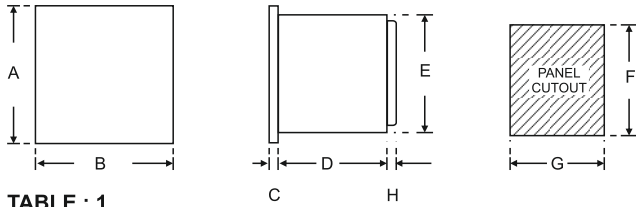


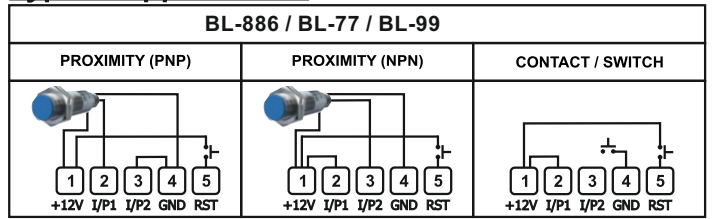
TABLE : 1

Dim Model	A	B	C	D	E	F	G	H
BL - 886	48	96	10	45	43	44	92	9
BL - 77	72	72	10	65	66	68	68	9
BL - 99	96	96	10	45	89	92	92	9

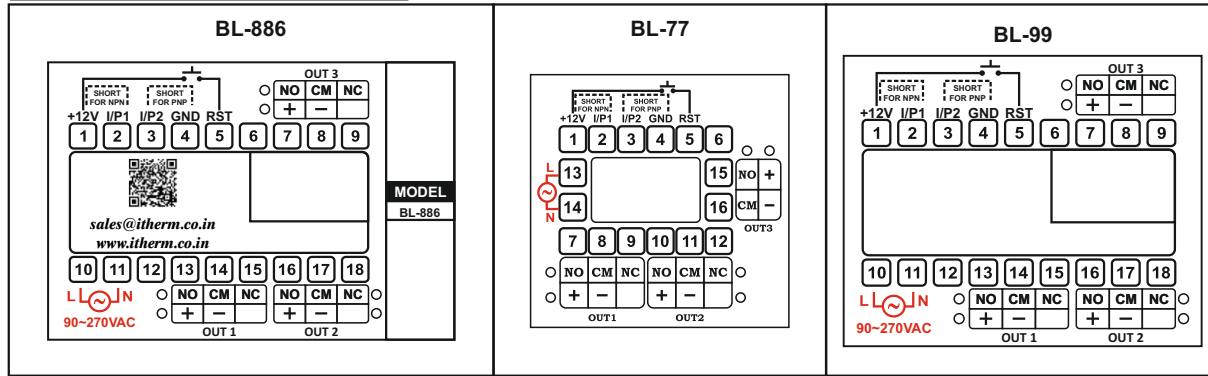
Installation Guidelines:-

1. Prepare the cut-out with proper dimension as shown in figure.
2. Remove clamp from controller.
3. Push the controller through panel cut-out and secure the controller in its place by tightening the side clamp.

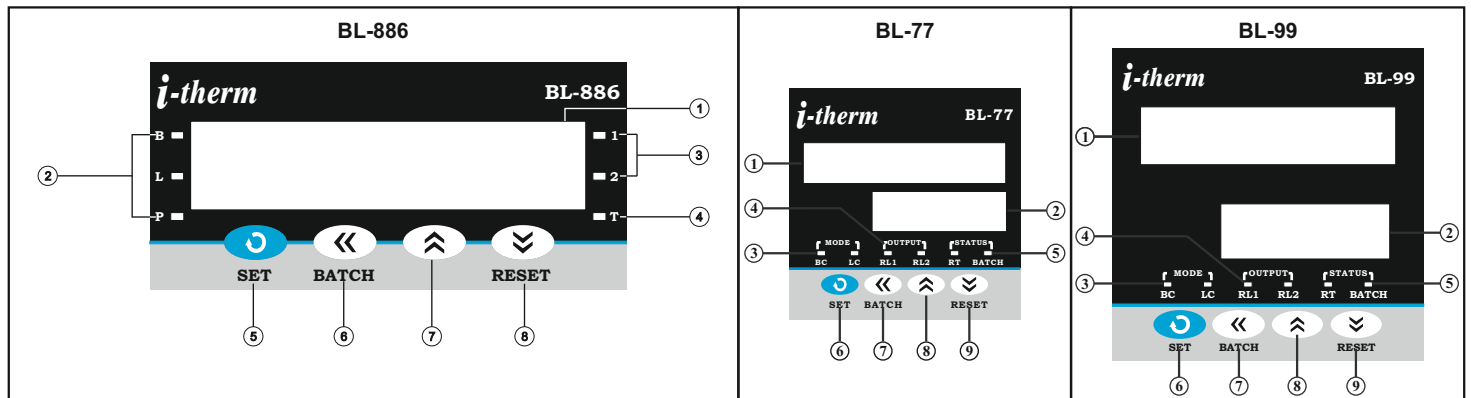
Typical Application:-



Electrical Installation:-



Front panel layout:-



Front panel layout function:-

No.	Names	Functions
1	Upper Display	It will display 1) In Run Mode, Total count for Batch type, Length for Length type & Running Count for Preset Type. 2) Sub Parameter in Set Mode & Configuration Mode.
2	Lower Display	It will display 1) Running Count in Batch type, Speed(Meter/Min) in Length type & RPM in Preset type in Run Mode. 2) Parameter in Set Mode & Configuration mode.
3	Mode LEDs	1) In Batch Type BC (Batch Counter) LED will turn On. 2) In Length Type LC (Length Counter) LED will turn On. 3) In Pre Set Type both Modes LEDs are off.
4	Output LEDs	1) RL1 Glows when OP1 is ON. 2) RL2 Glows when OP2 is ON.
5	Status LEDs	1) RT LED flashes when Auto reset time is running. 2) BATCH LED flashes in View mode.
6	Set Key	(1) For count Setting. (2) To access Configuration mode with UP Key. (3) To scroll the parameter & to store its value.
7	Shift Key	1) To select the particular digit for increment and decrement. 2) To go in View mode.
8	Up Key	1) To go in Configuration mode with SET Key. 2) To increase/alter parameter value.
9	Down Key	(1) To decrease / alter parameter value in program mode. (2) To Reset the Running count & Length by single click. 3) To Reset Total Count & Batch Count(In View Mode) by pressing the Down key for 3sec.



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