MODEL LGPBF - LEGEND PLUS FOOT-INCH LENGTH COUNTER

GENERAL

The Legend Plus foot-inch counter provides the same features as the standard Legend Plus Batch (LGPB) model with a few differences. The unit displays Process and Total count read-outs in feet and inches. A decimal point is used to separate the foot and inch units. All Process & Total presets are also displayed in feet and inches. The scaling for the Total count is the same as the Process counter.

PROGRAMMING MENU CHANGES

PROGRAM SCALING MODULE

CNT DP (Counter Decimal Point) selection not available.
  The Process counter decimal point is fixed and is to the left of the second digit. It is used to separate the foot and inches units.
TOTAL SF (Total Scale Factor) value not available.
  The Total Counter uses the same scaling as the Process Counter.
TOT. DP (Total Decimal Point) selection not available.
  The Total decimal point location is the same as the Counter decimal point.

COUNT PRESET DATA ENTRY

The Process & Total count presets are entered in feet and inches and are displayed in the same manner as the process and total counters. The Presets are entered in the same fashion as the standard Legend Plus with the following exceptions. When incrementing or decrementing the least significant inches digit, the ten's digit may be affected. If the inches units are at 0.09, incrementing the least significant digit position (9) three times will cause the display to increment to 0.10, 0.11 and back to 0.00. The inches units rolling over to zero does not carry into the foot units. If the inches units are at 0.00, decrementing the least significant position will cause the display to go to 0.11 (11 inches). Incrementing or decrementing the ten's digit will cause it to alternate between 0 and 1. If the least significant inches digit is set to 3 or above, incrementing the ten's digit to 1 will cause the least significant digit to go to zero. The foot units are changed in the same fashion as the standard Legend Plus.

SERIAL COMMUNICATIONS – LEGEND PLUS PROGRAMMING SOFTWARE (SFLGP)

The Legend Plus programming software can be utilized to program the Legend Plus foot-inch counter. The software will report the unit type as LGPB. The CNT DP, TOT DP, and TOTAL SF fields of the SFLGP Software should be set for the following:

$$CNT\ DP = 0\ (none)$$
$$TOT\ DP = 0\ (none)$$
$$TOTAL\ SF = 1.0000$$

The preset values of the SFLGP are in inches instead of feet and inches. When the data is downloaded to the LGPBF, the preset display will be in feet and inches.

Example:

SFLGP	LGPBF
Preset 1 = 25	Preset 1 = 2.01 (after download)

SPECIFICATION CHANGES

MAXIMUM COUNT RATES IN KHZ (50% Duty cycle):

MODEL	CNT+DIR		QUAD			ADD/ADD	ADD/SUB
	X1	X2	X1	X2	X4	X1✳	X1✳
LGPBF100	15	7	7	5.5	3	15	7

Notes:
1. Maximum count rates given are for Process counter set for Auto reset with the auto cycle preset set to an equivalent of 100 count pulses or greater. With auto cycle presets less than 100 counts, the maximum count rates may be lower. The actual Preset value for 100 count pulses, with Count SF=1.0000 and Count Scale Multiplier=X1, is 8.04 (8 ft 4 in. or 100 inches).
2. Maximum count rate given for X2 & X4 count modes are given for 50% duty cycle signals and Quad signals with 90° phase shift.
✳ - Inputs A & B count rates summed.

APPENDIX "A" CHANGES

When scaling for display, the "Display Units" should be in inches (not feet or feet and inches). To calculate K_T, divide the unit length in inches ("Display Units") by the number of pulses per unit length.

In the Example section on the first page of Appendix "A", the "Display Units" for the 2 foot circumference feed roll would be 24 (inches) instead of 2. The resulting value, K_T, would be 0.5000 (24 ÷ 48).

In Example #2, to scale for feet & inches, the Display units would be 30 (2.5 ft. x 12 in/ft=30 in.).