

MODEL SPLCU1 - INSTRUCTION MANUAL

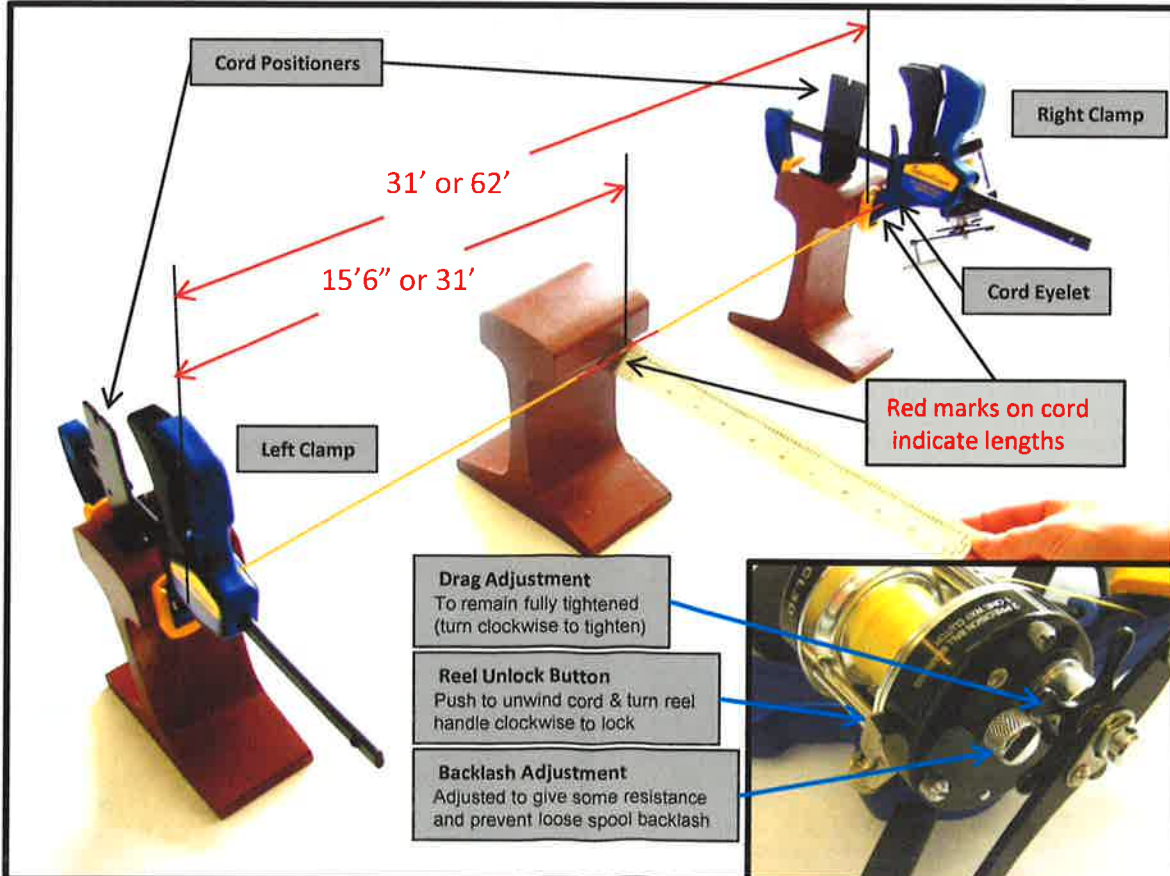
THANK YOU FOR YOUR PURCHASE OF THIS UNIQUE MANUAL CURVE CHORD AND PROFILE MEASURING TOOL. IT CLAMPS TO THE RAIL, TAKES ONLY ONE PERSON TO OPERATE AND THE CORD ROLLS UP FOR FAST MEASURING.

IMPORTANT: READ ALL INSTRUCTIONS AND THE WARNING SECTION BELOW COMPLETELY BEFORE YOU USE THIS TOOL. AT THAT TIME, IF YOU ARE NOT SATISFIED, RETURN THIS TOOL FOR A FULL REFUND.

WARNING! THIS MEASURING DEVICE IS INTENDED FOR USE ONLY BY PERSONS WHO COMPLETELY UNDERSTAND THE CONCEPT, HAVE BEEN TRAINED, AND HAVE HAD EXPERIENCE IN RAILROAD CURVE ALIGNMENT AND PROFILE MEASUREMENT AND WHO CAN DETECT ANY ERRORS OF MEASUREMENT SUCH AS IMPROPER CORD LENGTH, ORIENTATION OF CORD OR ANY OTHER ERROR! SPEEDLINER INDUSTRY, LLC ASSUMES NO LIABILITY FOR THE USE OR MISUSE OF THIS TOOL. BEFORE USING, THE USER AGREES TO DETERMINE THE SUITABILITY OF THIS PRODUCT FOR THEIR INTENDED USE AND ACCURACY, AND THE USER WILL ASSUME ALL RISK AND LIABILITY WHATSOEVER IN CONNECTION THEREWITH OR RETURN IT FOR A REFUND.

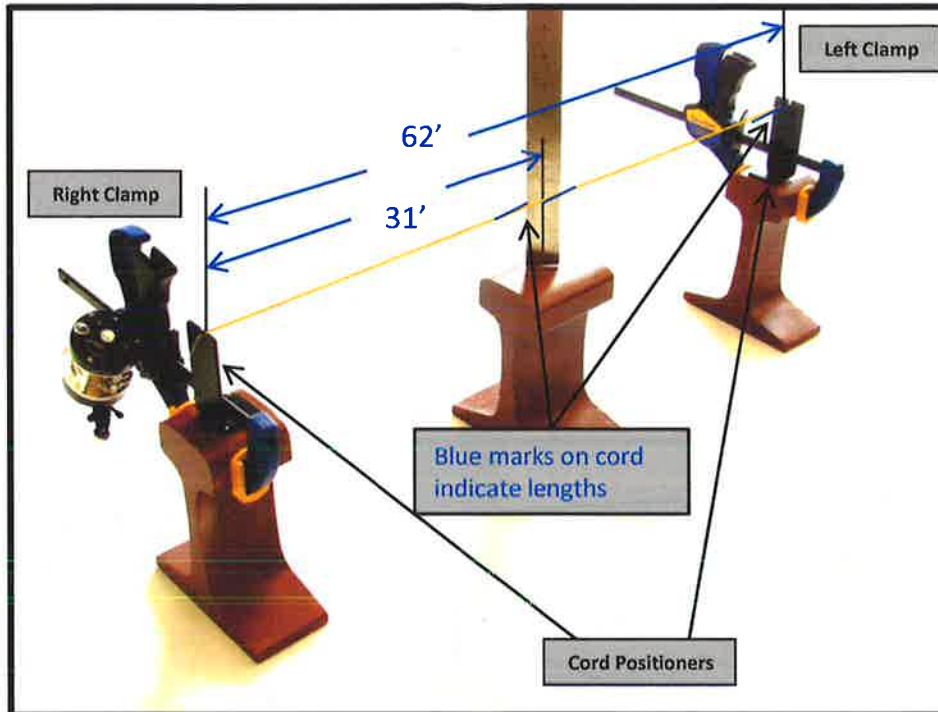
(TAKE A SINGLE **ALIGNMENT** MEASUREMENT)

- 1) UNLOCK THE REEL , TAKE THE LEFT CLAMP IN THE LEFT HAND AND THE RIGHT CLAMP IN THE RIGHT HAND.
- 2) FASTEN THE LEFT HAND CLAMP TO THE RAIL. WALK AWAY WITH THE RIGHT CLAMP UNTIL THE DESIRED LENGTH EMPTIES FROM THE REEL. **NOTE:** THERE ARE TWO DESIGNED ALIGNMENT MEASUREMENT LENGTHS. THEY ARE 31 FEET AND 62 FEET AND ARE MARKED IN **RED**. TO SET THE PROPER CORD LENGTH, THE CORRESPONDING **RED** MARK(S) MUST BE AT THE RIGHT CLAMP CORD EYELET WITH THE CORD PULLED AND THE REEL LOCKED.
- 3) WITH THE REEL LOCKED, PULL THE CORD SLIGHTLY TAUT, THEN STRETCH THE CORD APPROXIMATELY 1 INCH PER 31 FEET OF CORD. ADJUST THE LENGTH IF NECESSARY. FASTEN THE RIGHT CLAMP TO THE RAIL. **IMPORTANT:** MAKE SURE BOTH CORD POSITIONERS STAY DOWN FLUSH ON THE RAIL AND CHECK FOR A 1/2 INCH OFFSET.
- 4) USE THE CURVE CHORD SIDE OF THE RULER AND TAKE THE ALIGNMENT MEASUREMENT AT THE MIDPOINT. THE MIDPOINTS ARE MARKED IN **RED**. ADJUST THE READING IF NECESSARY (SEE ADDITIONAL NECESSARY INFO.).



(TAKE A SINGLE **PROFILE** MEASUREMENT)

- 1) UNLOCK THE REEL , TAKE THE LEFT CLAMP IN THE LEFT HAND AND THE RIGHT CLAMP IN THE RIGHT HAND.
- 2) FASTEN THE LEFT CLAMP TO THE RAIL. **IMPORTANT:** MAKE SURE THE CORD POSITIONER CONTACTS AND STAYS DOWN FLUSH ON THE RAIL.
- 3) LIFT THE CORD UP, BEHIND, OVER AND DOWN INTO THE LEFT CORD POSITIONER SLOT.
- 4) WALK AWAY WITH THE RIGHT CLAMP UNTIL THE DESIRED LENGTH EMPTIES FROM THE REEL. **NOTE:** THERE IS ONLY ONE DESIGNED PROFILE MEASUREMENT LENGTH. IT IS 62 FEET, AND MARKED IN **BLUE**.
- 5) LIFT THE CORD UP, BEHIND, OVER AND DOWN INTO THE RIGHT CORD POSITIONER SLOT. TO ASSURE THE PROPER CORD LENGTH, REEL IN THE LINE UNTIL THE **BLUE** MARK IS AT THE CORD POSITIONER SLOT.
- 6) TAKE THE RIGHT CLAMP, PULL THE CORD SLIGHTLY TAUT AND STRETCH IT ABOUT 2 INCHES. FASTEN THE RIGHT CLAMP TO THE RAIL. **IMPORTANT:** MAKE SURE THE CORD POSITIONER STAYS DOWN FLUSH ON THE RAIL.
- 7) USE THE PROFILE RULER AND TAKE THE MEASUREMENT AT THE MIDPOINT WHICH IS AT THE TWO **BLUE** COLORED MARKS ON THE CORD. (SEE ADDITIONAL NECESSARY INFO.)



ADDITIONAL NECESSARY INFORMATION

THE CURVE CHORD RULER IS DESIGNED TO MEASURE UP TO 11 DEGREES AND HAS A BUILT IN 1/2 OF AN INCH OFFSET. IF YOU NEED TO MEASURE A HIGHER DEGREE OF CURVATURE, YOU CAN USE A NORMAL TAPE MEASURE AND SUBTRACT 1/2 INCH FROM THE READING. AT ANYTIME DURING MEASURING WITH THE CURVE CHORD RULER, IF ONE OR BOTH ENDS ARE NOT AT THE DESIGNED 1/2 INCH OFFSET, AN ADJUSTMENT TO THE MIDPOINT READING OF HALF THE SUM OF EACH OF THE TWO DIFFERENCES FROM DESIGN ON EACH END SHOULD BE MADE FOR INCREASED ACCURACY.

THE PROFILE MEASUREMENT IS DESIGNED FOR A 62 FEET LENGTH MEASUREMENT TAKEN AT THE MIDPOINT. THERE IS APPROXIMATELY ONE EIGHTH OF AN INCH OF SAG IN THE CORD IF PERFORMED ACCORDING TO THESE INSTRUCTIONS. THE PROFILE RULER HAS A BUILT IN DESIGN TO COMPENSATE FOR THIS SAG AND IS A DIRECT READING RULER. IF A CORD LENGTH OTHER THAN 62 FEET IS USED, IT IS NECESSARY TO UNDERSTAND THE SAG EFFECT AND RULER DESIGN FOR BOTH SAG AND CREST DEVIATIONS.

THE CORD POSITIONERS ARE DESIGNED TO PROPERLY ORIENT THE CORD FOR BOTH ALIGNMENT AND PROFILE READINGS. FOR ALIGNMENT THEY PLACE THE CORD 5/8 INCH BELOW THE TOP OF THE RAIL. FOR PROFILE THEY SET THE CORD THREE INCHES ABOVE THE TOP OF THE RAIL. IT IS IMPORTANT THAT YOU UNDERSTAND THEIR CORRECT PLACEMENT AND THE EFFECT IF NOT ORIENTED PROPERLY. THERE MAY BE CASES, SUCH AS AT ROAD CROSSINGS, JOINT BARS, RAIL WEAR, SLIPPERY RAIL, ETC. WHERE IMPROPER PLACEMENT AND/OR TENSION WOULD GIVE INACCURATE MEASUREMENTS IF NOT HANDLED PROPERLY. FOR PROFILE MEASUREMENTS, VERIFY PROPER TENSION, SLIPPAGE, AND A THREE INCH CORD HEIGHT ABOVE THE RAIL AT EACH CORD POSITIONER BEFORE AND AFTER EACH PROFILE MEASUREMENT.

THE CORD IS A CUSTOM DESIGNED LOW STRETCH CORD. IT IS TO BE STRETCHED ABOUT ONE INCH PER 31 FEET AFTER IT IS TAUT. THE LENGTH OF THE CORD AND THE AMOUNT OF SAG ARE BASED UPON THIS AMOUNT OF STRETCH. IT SHOULD ALSO BE UNDERSTOOD THAT THE CORD TENSION WILL DIRECTLY AFFECT THE AMOUNT OF SAG. **THE USER MUST DETERMINE THE SUITABILITY AND ACCURACY OF ALL MEASUREMENTS BEING TAKEN FOR THEIR USE.**