



Mfg. Co., Inc.

THE HOUSE OF RESISTORS

DOVER, NEW HAMPSHIRE

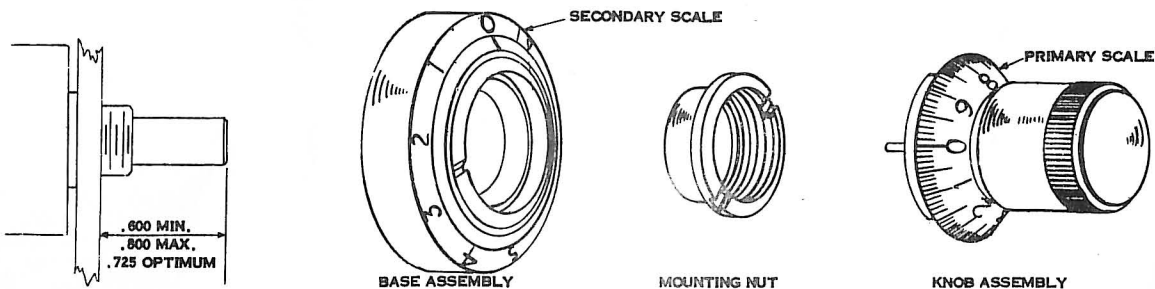
Mounting Instructions for Clarodials

MODELS

411, 421, 431
461, 471, 481

MOUNTING SPECIFICATIONS			
MODEL	411 - 461	421 - 471	431 - 481
SHAFT DIAMETER	.250 ± .0005	.125 ± .0005	.0935 ± .0005
POTENTIOMETER BUSHING THREADS	3/8 - 32 NEF2	1/4 - 32 NEF2	1/4 - 32 NEF2
SHAFT EXTENSION BEYOND FACE OF PANEL	.600 Min., .800 Max., All Models		

DO NOT ATTEMPT TO OPERATE DIAL PRIOR TO MOUNTING



MOUNTING REQUIREMENTS

Drill a hole in the panel to accommodate the potentiometer; nothing special is required for the dial. The unthreaded portion of the potentiometer bushing must not project through the panel. The shaft length, measured from the face of the panel, should be a minimum of .600 and a maximum of .800. The .600 dimension is an absolute minimum and in some cases optimum performance is not obtained. Whenever potentiometers are ordered specifically for use with these dials, it would be advisable to specify a shaft length, from mounting flange of the pot, equal to .725 plus the panel thickness.

Notice that there is a short, one half inch diameter, projection at the rear of the dial. This is required to hold the dial away from the panel to permit the turns-counting scale to turn freely. The dial will not function properly if this projection can fall through the panel.

MOUNTING INSTRUCTIONS

Discard nut and lock washer furnished with the potentiometer. Mount the dial base assembly under the special nut provided with the dial, with the spanner wrench which is furnished. Orient the dial base assembly so that the index mark is in the required position and tighten the mounting nut securely.

Turn the potentiometer shaft against its ccw stop. Hold a finger lightly on the turns-counting "secondary" scale and place the knob assembly on the shaft. Turn the knob assembly ccw until the pin in the back of the knob seats in the slot in the base assembly. Remove your finger from the secondary scale and turn the dial ccw until the secondary scale reads "zero." Continue to turn the dial ccw until the primary scale reads about 10 or 20. At this point, place the wrench in the setscrew and tighten it very lightly against the shaft. (**CAUTION:** Most potentiometer shafts are soft—do not tighten the setscrew too tightly.) With the setscrew dragging on the shaft to hold the shaft against the ccw stop, use the wrench as a lever and bring the primary scale slowly to "zero." Tighten the setscrew securely. Do not press on the knob while tightening the setscrew. If you over shoot "zero," do not try to turn back as this will probably bring the pot shaft off its ccw stop. Instead, loosen the setscrew and turn ccw until once again the outer or secondary scale reads "zero." Then repeat the zero setting operation with the setscrew dragging lightly.