DEPARTMENT OF TRADE AND COMMERCE

STANDARDS BRANCH

F-48

OTTAWA August 26, 1968

NOTICE OF APPROVAL

FOR

ESTERLINE-ANGUS MODEL "E1101E" SINGLE CHANNEL AND MODEL "E1102-E" TWO CHANNEL POTENTIOMETER RECORDERS

Apparatus

*Millivolt Input	10 to 100 millivolts
Record	Model E1101E single pen, model E1102-E two pen
Standardization	Continuous automatic (Zener diode)
Chart and Scale	10 inches nominal calibrated width
oPen Speeds	½, 1, 4 or 20 seconds
#Chart Speeds	1, 1.5, 2, 3, 4, 6, 8, 12, 16 and 24 inches per hour
Maximum External Resistance	10000 ohms
Power Supply	120 volts 60 hz
Ambient Temperature Range	-10oC - +40oC
Burnout protection	upscale or downscale
Amplifier(s)	solid state transistorized
Zero check switch	on amplifier chassis
#Chart Drive	number 300-1A and 300-15A

* The Kilowatts, Megawatts or other power function which the millivolts represent will be shown on the nameplate and scale.

o Pen speed is the time taken for the pen to travel the full length of the scale with a step load change equal to full scale.

Each of these recorders comes equipped with a set of coded gears which may be interchanged to produce the different chart speeds.

Description

The type E1101E is a single pen and the type E1102E is a 2-pen continuous balance null type potentiometer strip chart recorder.

The 2-pen type has two completely independent measuring circuits, each with its own pen drive and pen, drawing a continuous line on a common chart.

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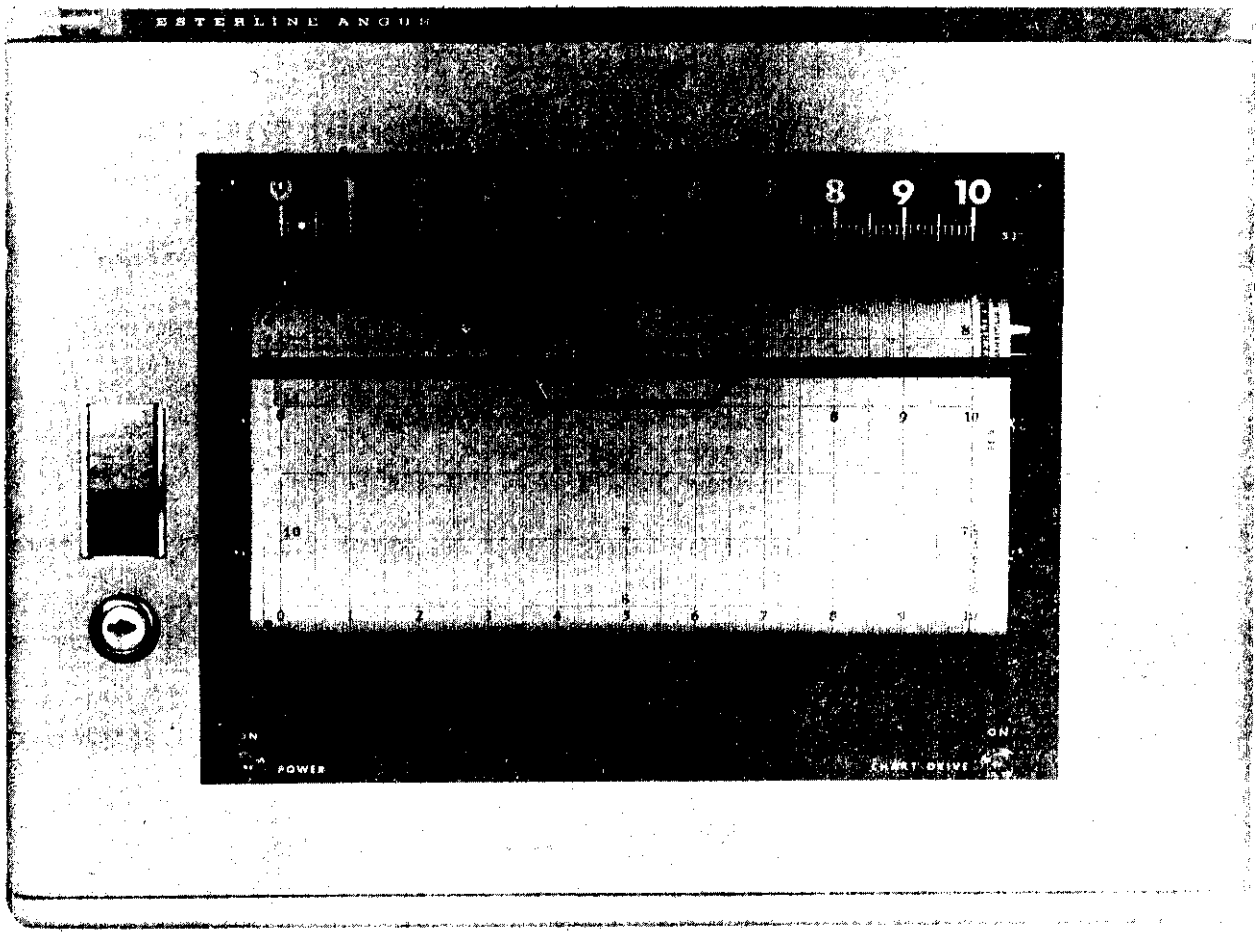
ESTERLINE-ANGUS MODEL "E1101E" SINGLE CHANNEL AND MODEL "E1102-E"
TWO CHANNEL PATENTIOMETER RECORDERS



The amplifiers associated with the pens are mounted in the rear of the case and have individual gain, zero and damping controls. Individual span adjustments are available through holes in the covers of the measuring system assembly.

Individual printed circuit range cards with the full scale value in millivolts marked on them, are attached to the front of each amplifier.

It is not necessary that the range cards on the two amplifiers have the same value of full scale millivolts, provided that the separate full scale values are compatible with the chart divisions, and the primary units per millivolt are clearly set out on the nameplate.

The measuring circuit, slide wire and pen module is connected to the amplifier(s) by means of a flexible multiconductor cable and may be swung out to replenish the ink supply.

The pen(s) are connected to the ink supply in separate plastic containers by means of coiled flexible plastic tubing, and the ink containers may be raised or lowered to increase or decrease the ink supply to the pens.

The display module is also hinged at the left and may be swung out for chart replacement or to change the gears to give different chart speeds.

Neither of these recorders are approved with a re-transmitting slide wire.

A scale is available for use in checking the chart readings.

A writing table which can be swung out to a 45° angle is provided on the front of the display module. The slack in the chart that occurs when the table is returned to its normal position is taken up in a few seconds by the power-driven take-up reel. A chart tear-off bar is also standard equipment.

A pen lifter for use when the display module is swung out for chart replacement is provided at the right hand side. This must be pushed in when the recorder is returned to service.

A 3-position toggle switch on each amplifier marked "normal-off-short" is for use in making a zero check.

The case is designed for switchboard mounting, but brackets are available if the instrument is to be mounted on a wall.

Each instrument will be provided with a door lock for use by the utility.

These instruments are manufactured by Esterline-Angus Instrument Company Inc., Indianapolis, Indiana, U.S.A.

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Approval granted to: Ahearn and Soper Limited,
844 Caledonia Road,
Toronto 19, Ontario.

J.S.T. Swanson,
Chief, Standards Laboratory,
Standards Branch.

W.J.S. Fraser,
Chief, Electricity & Gas Division,
Standards Branch.

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