

Front View

The TMC Signal Control Unit, Model SCU, is an electronic device designed for insertion in a line carrying signal intelligence. It controls the starting and stopping of electrically driven mechanical devices used to record information from a line or radio circuit, such as a Teletype Machine or Morse ink-tape recorder.

When connected in a series with the d.c. line carrying a signal intelligence to the recording machine, the unit will hold the recording machine in an "off" position so long as no signal intelligence is being received. The first signal pulse received will switch "on" the machine instantaneously, no delay other than that inherent in the recording machine itself being present. During the transmission of the signal intelligence, the Model SCU Signal Control Unit will maintain the machine in an "on" position, but at the completion of the transmission when the circuit has been restored to "standby" condition, the SCU will allow the recording machine to switch "off" automatically after a predetermined delay. This delay is adjustable by means of a potentiometer and is almost instantaneous to approximately three minutes in time.

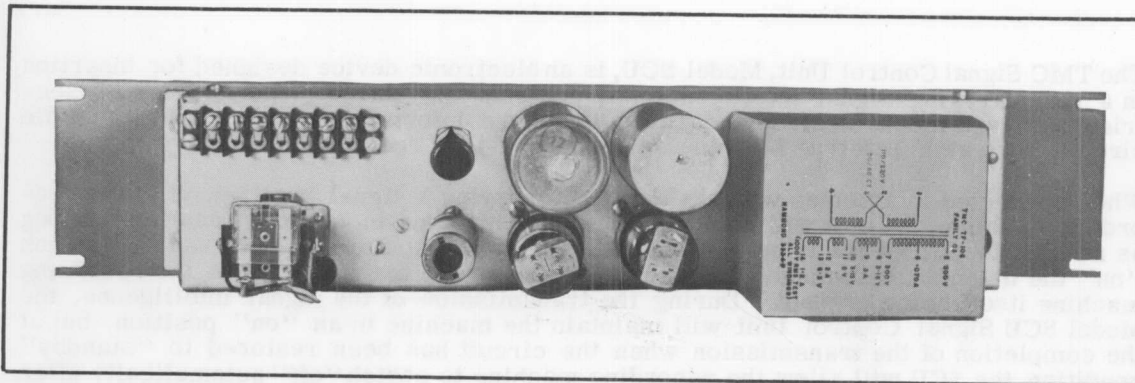
The mechanical design of the unit is such that it can be desk or rack mounted on a  $3\frac{1}{2}$ " panel. The unit is entirely electronic with the exception of two plug-in type relays, and all components are readily accessible for maintenance. These relays facilitate the changing of these components to accommodate different values of signal current or different power ratings of the controlled machine.

An important feature of the Signal Control Unit is that it will always fail "safe". The failure of any tube, fuse, or other component will automatically release the "power" relay, which will switch on the controlled machine and leave it running indefinitely. The circuit is so arranged that the opening of the signal line will also switch the controlled machine "on".

By the use of plug-in relays, the unit can be supplied for either 20 or 60 milliampere signal current. The "power" relay is normally supplied with contacts rated at 3 amps, 115 volts a.c. Other voltages or currents can be accommodated on special request.

## TECHNICAL SPECIFICATIONS

<b>INPUT POWER REQUIREMENTS:</b>	115/230 volts, 50/60 cycles, single phase.
<b>POWER CONSUMPTION:</b>	20 watts.
<b>SIZE:</b>	19" x 3 $\frac{1}{2}$ " x 6 $\frac{1}{2}$ " deep. Standard relay rack mounting or desk mounting as required.
<b>WEIGHT:</b>	Approximately 10 pounds.
<b>KEYING SPEED:</b>	Up to 75 words per minute.
<b>CONTROLS:</b>	(1) "On-Off" Switch (the switching off of the Signal Control Unit automatically starts the controlled machine). (2) Time Delay Control (adjustable from 0 to 3 minutes).
<b>SIGNAL LINE CURRENT:</b>	Normally supplied for either 20 or 60 ma dc.
<b>CONTROLLED POWER RATING:</b>	Normally 115 volts, 3 amp ac.
<b>TUBE COMPLEMENT:</b>	1 ea. 5Y3, 1 ea. 6SN7, 1 ea. OB2.
<b>COMPONENTS and CONSTRUCTION:</b>	Equipment is manufactured in accordance with JAN specifications wherever practicable.



Rear View

We reserve the right to make changes in the design of our equipment consistent with good engineering practice in order to make improvements in design and to effect economies in manufacture.

PH 326

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# THE TECHNICAL MATERIEL CORPORATION

COMMUNICATION ENGINEERS

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IN CANADA:  
TMC (CANADA) LTD.  
OTTAWA, ONTARIO

*Ed Caputo*

INTER-OFFICE MEMORANDUM NO. 127

TO: All Sales

FROM: W. J. GALIONE

SUBJECT: SCU (RE-5023/G)

DATE: December 1, 1959

The SCU was designed by Canada for the RCAF, who have a large number of Models 19, 14 and 15 Teletype machines. The maintenance problem, due to continually running motors, was tremendous. They have, so far, bought several hundred of these units and will buy up to another 1000 more. All Canadian Services have agreed to standardize on these units. This device is similar to the device which is now called the Motor Control Unit on the 28 Series and provides the same function except that our unit is "fail safe."

*W. J. Galione*

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W. J. Galione  
Executive Vice President