



# Techni-talk

COMPLETE ELECTRONIC SERVICING INFORMATION  
radio • tv • hi-fi



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## PREVIEW!

### G.E. UNVEILS "COMPACTRON"

A significant new development in the history of controlling electron flow was unveiled by General Electric late in June. The device is called a "Compactron" and consists of a packaged combination of electronic functions.

The "Compactron" eventually is expected to be widely used in entertainment electronic equipment such as radios, television receivers, and high-fidelity in place of transistors and ordinary tubes.

#### Two Tube Radios

An example of the versatility of "Compactrons" lies in the fact that two of these devices can provide all the functions in a table radio that now are provided by five tubes or seven transistors.

Similarly, 12 "Compactrons" will provide all the electron flow control functions in a television receiver which now requires about 17 tubes or 25 transistors. Further, automobile radios which combine the best qualities of both tubes and transistors eventually can be built with two "Compactrons" instead of four tubes.

#### Complete Line Forecast

A wide variety of "Compactron" designs are being studied with a view to providing eventually a complete line of multi-function devices. While "Compactron" prices have not yet been established, indications are that they will cost slightly less per function than commercial receiving tubes.

"Compactrons" at present are being packaged in dome-shaped glass bulbs about 1 inch in diameter. "Compactrons" vary from 1 to 3 inches in "seated height."

A few types are expected to be designed into equipment that will be placed on the market next year. Replacement usage of "Compactrons" is expected to expand considerably during the next few years.

## GE WIRELESS REMOTE CONTROL SYSTEM III

The transmitter and receiver portions of the General Electric remote control system was described in the last two issues. In this issue the servicing procedure will be discussed.

A suggested method of servicing the wireless remote control section of a TV receiver is to systematically eliminate each possibility for cause of trouble. Presented below is a step by step procedure to be followed in event operation of the remote system has been determined faulty.

For trouble-shooting purposes, the wireless remote control system can be divided into the following three main sections.

1. The remote transmitter unit (Vol. 12, No. 1).
2. The remote receiver unit. (Vol. 12, No. 2)
3. Components in the TV receiver directly associated with the wireless remote system, such as the power tuning components and the TV power supply.

When a completely inoperative remote system is encountered, it is necessary to determine which section, of the three, is inoperative.

To determine if the transmitter unit is operative, it is merely necessary to tune a regular broadcast receiver to the second harmonic of

the transmitter r-f carrier frequency. In the case of a factory aligned unit, the second harmonic will fall at approximately 645KC on the radio dial. Depress one of the transmitter function buttons, and rock the dial of the radio receiver to locate the proper frequency. When the transmitter is operative, each of the four transmitter audio frequencies will be clearly heard on the broadcast receiver.

If the transmitter is functioning properly, the remote receiver unit may be checked next. This is done by connecting the receiver to a known operative TV receiver for which it was designed, or, to a functional indicating device such as that shown in Fig. 1. Depress each of the function buttons on the remote transmitter. If the receiver is operational the proper functions will be apparent by viewing the indicating device or the TV receiver.

If both the transmitter and remote receiver units are operative, the fault can only be attributed to the components contained within the TV receiver.

NOTE: Certain functions of the remote receiver will not operate unless the receiver is in an upright position.

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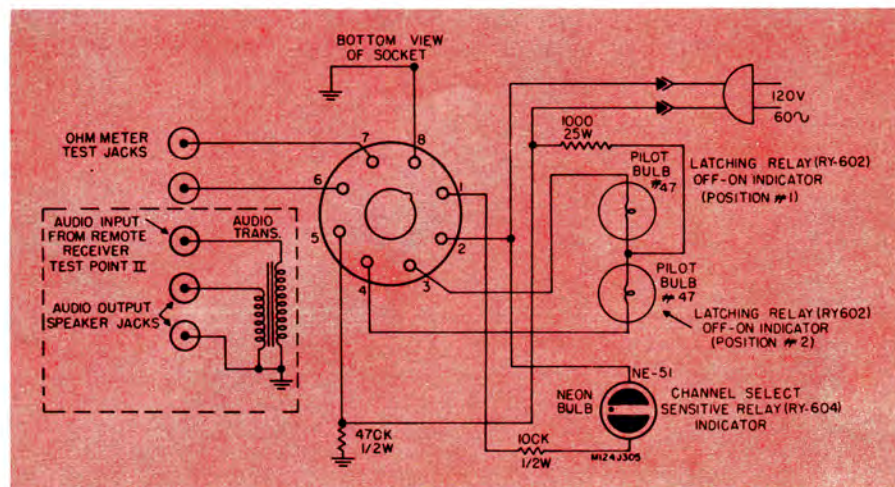


Fig. 1. Remote receiver test indicator wiring schematic.

