THE CATHODE-RAY OSCILLOSCOPE

THEORY AND PRACTICAL APPLICATIONS

By Charles Sicuranza
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RADCRAFT PUBLICATIONS, INC.
99-CR HUDSON ST.
NEW YORK, N. Y.
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RADCRAFT PUBLICATIONS, INC.
PUBLISHERS

99 HUDSON STREET • NEW YORK, N. Y.

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Printed in U. S. A.
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Introduction

The Cathode-Ray Oscilloscope is used today in practically every branch of electrical engineering, and is being used more and more in other branches of industry because of its unique abilities. Its greatest value lies in its ability to define visually and trace alternating voltages of almost any frequency and complexity. Its versatility of application in the solution of measurement problems is almost endless. Aside from its uses in the laboratory, it has become an invaluable boon to the experienced Radio Service Engineer.

This book has, as its aim, an effort to help the Radio Service Man to acquire a broader knowledge of the why and wherefore of the Cathode-Ray Oscilloscope.

The following pages are dedicated to a simple and non-mathematical exposition of the theory and practical applications of the Cathode-Ray Oscilloscope, particularly stressing its uses in the field of Radio Service.

We are not, however, forgetting our fellow workers, the "ham" and the experimenter. For their benefit, we will describe the construction and operation of oscilloscopes ranging in size from one inch to nine inches, including kits, commercial units, and a home-made instrument.

We believe that the ultimate form of television receivers will embody a Cathode-Ray tube of a form similar to those in use in present-day Cathode-Ray Oscilloscopes.

A basic knowledge of the functions of Cathode-Ray tubes in general is a prime requisite toward the understanding of how Cathode-Ray tubes are used in Television.

THE AUTHOR.