TECHNICAL MANUAL



SYLVANIA RADIO TUBES

A Technical Publication of



EMPORIUM, PENNA.

COPYRIGHT 1951, BY SYLVANIA ELECTRIC PRODUCTS, INC.

.....

EIGHTH EDITION COMPLETELY REVISED 2nd Printing

The information in this Technicalibration is furnished without assuming any obligations.

Printed in U.S.A. FORM 202

THE SYLVANIA TECHNICAL MANUAL

FOREWORD

Daily developments in every field of the electronics industry have necessitated many new tube types. Keeping abreast of these many types is always a problem for servicemen and engineers. In preparing the eighth edition of this manual, every effort has been expended to assure the completeness of its contents.

One important item is the size of the book. Although more than 45 types have been added to this edition, it has still turned out to be a thinner book, easier to handle and with less danger of torn pages. To accomplish this goal, much of the previously vacant half-pages have been utilized. Many curves have been dropped on those types which are now of interest only on a renewal basis. There are, consequently, many places where data on a particular type begins at mid-page and many pages which contain two or more types. At all times, however, numericalalphabetical order has been maintained.

The increased number of cathode ray tubes has made it preferable to establish a separate section for these types. In this manner, comparisons may be made far more easily than if they were kept in the balance of the manual. Where A and B versions of television picture tubes have been included at the bottom of a listing, it should be noted that the basic diagram is shown only for the primary version. Differences encountered in the suffixed versions must be taken into consideration when studying this diagram.

The new loose-leaf binder requires no explanation. Its added simplicity of operation will make it more convenient to keep it up to date by means of the monthly supplement sheets. These additions are published in conjunction with Sylvania News, available without charge by sending a request to Sylvania Electric Products, Inc., Advertising Department, Emporium, Pennsylvania.

SYLVANIA RADIO TUBES

111

TABLE OF CONTENTS

ForewordIII
Active TypesIn Numerical Order
Active Television Picture Tube TypesIn Numerical Order
Fundamental Electrical Laws
Fundamental Properties of Vacuum Tubes
Definitions5-7
General Tube and Circuit Information8-23
Interpretation of Receiving Tube Ratings
B Voltage Supplies
Heater Voltage Supplies10
Volume Control Considerations11
Shielding
Filtering
Lock-In Types
Metal Types
G, GT and GT/G Types13
Miniature Types
Battery Tubes14
Tube and Base Diagram Symbols15
Base Connection Diagrams15
Cathode Ray Tubes16
Tube Dimensions ST1217
ST 14 & 1618
T9, GT19
• Lock-In
Miniature
Metal
Use of Curves
Resistance Coupled Data Explanation
Tabulations for Individual Types 26-55
Obsolete and Seldom Encountered Types56-82
Sylvania Panel Lamps
Sylvania Ballast Lamps
Sylvania Product Directory
Sylvania Aids for Servicemen

SYLVANIA RADIO. TUBES

IV