ELECTRONIC SYSTEMS

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for Radio, Television and Electronic Mechanics

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Preface

This book is written specifically for the City and Guilds of London Institute course 222 (formerly 433) for radio, television and electronics mechanics. It covers the complete syllabus of the subject 'Electronic Systems' (both parts I and II) in one volume. To a large extent the book also covers the systems content of CGLI course 932 (formerly 969) for Telecommunications mechanics, and should prove useful to students on CGLI course 270 (formerly 434) for radio, television and electronics technicians.

The layout of the text is in accordance with the syllabus layout of the 222 course. It commences with an explanation of signals, system subunits (amplifiers, oscillators etc.) and system block diagrams. Detailed circuits are examined throughout the next seven chapters, and the final chapter is devoted to faults (causes and location), environmental considerations, and reliability. Appendixes cover resistor colour coding, matching, valve and transistor parameters, and multiple units; and the book concludes with fifty self-test questions of the kind used by the CGLI in examinations for the courses mentioned.

The approach to the theory presented is strictly non-mathematical and physical explanations have been used throughout. Numerous diagrams are included, many of which indicate typical values of components found in practical circuits. In studying these circuits the reader should bear in mind that component values may differ considerably from those indicated, as in many applications the values depend on the characteristics of the particular valve or transistor with which these components are used. Another point to note is that though components are labelled in the traditional manner, reference is made in appendix 1 to newer methods (as suggested in BS 1852) which some manufacturers are now adopting.

I would like to offer my most sincere thanks to Mrs. H. M. Morgan for her efforts in typing and preparing the manuscript, particularly as she stepped into the breach at a very late stage in the proceedings, thereby enabling the

text to reach the publishers by the proposed date. Last, but by no means least, I would, as ever, like to thank my wife for her continual encouragement and patience during many hours devoted to writing the book.

RHYS LEWIS
Openshaw, Manchester
September 1972

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