Cost-effective Electronic Construction

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Mastering Electronics

Cost-effective Electronic Construction

John Watson

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Preface to the Revised Edition

Here is an electronics book that is, I hope, a little bit different. The projects and circuits here are related only in that they can be used in or around the home or college, and in being cost-effective solutions to electronic problems. *Cost-effective Electronic Construction* isn't intended for absolute beginners (although the construction work should pose few problems for anyone who has built one or two circuits before).

Many of the projects, besides being interesting and useful, are ideal for college projects, and can be constructed by individuals or groups. Some items — such as the modular xenon strobe and the radio-control — lend themselves particularly well to group work, each section being easily built by one group, and the sections then being put together at the end of the project.

And I hope also to illustrate that there are many different ways of designing a circuit or solving an electronic problem, and that the most obvious way is not necessarily the best. It is usually worth spending a little time in hunting for the cheapest and simplest solution. This need not lead to an unacceptable loss of performance, if you get the design right.

Most of all, I hope that you enjoy making the projects and, if you are doing it as part of a course in Further Education, that you derive satisfaction from putting your theory to practical use.

Perhaps you will produce some interesting and novel designs and applications of your own. . . if you do, why not let the publisher of this book know?

JOHN WATSON

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A receiver circuit incorporating the TBA651 was first published in *Practical Electronics*, July 1976, in a series by J. D. Whiteley.

My thanks also to Terry Tippet, Mr E. L. Hewitt, Vero Electronics Ltd and Maplin Electronic Supplies Ltd.

John Watson

PUBLISHER'S NOTE

While every effort has been made to ensure the accuracy of the projects and circuits in this book, neither the Publisher nor the author accepts liability for any injury or loss resulting from the construction of any of the designs published herein.

The Publisher will, however, be pleased to hear from readers who have corrections to the text or genuine queries, and will refer any such queries to the author.