

STAN GIBILISCO

THE  
ILLUSTRATED  
DICTIONARY

OF  
**Electronics**

EIGHTH EDITION

Audio/Video

Consumer Electronics

Wireless Technology

**The  
Illustrated Dictionary of  
Electronics**

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# **The Illustrated Dictionary of Electronics**

Eighth Edition

*Stan Gibilisco*  
*Editor-in-Chief*

**McGraw-Hill**

New York Chicago San Francisco Lisbon London Madrid  
Mexico City Milan New Delhi San Juan Seoul  
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To Tony, Tim, and Samuel  
from Uncle Stan

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# Preface

*The Illustrated Dictionary of Electronics—8th Edition* has been revised, clarified, and updated, reflecting technological advances of recent years. New definitions have been added in the fields of wireless technology, robotics, and artificial intelligence. Every effort has been made to be concise and accurate, without “talking down” to the reader.

Many definitions contain cross references (indicated in ALL CAPITALS); these provide recommended additional information or allow comparison with related terms. Expressions of special significance are printed in italics. Electronics abbreviations are included in the text; the full terms are stated as definitions.

While an effort has been made to avoid superfluous mathematics, equations are sometimes necessary to completely and effectively define a term. Mathematics beyond the high-school level has not been used.

Appendix A contains the standard symbols used in electrical and electronic diagrams. These symbols are used in illustrations throughout this dictionary. Appendix B contains the following data tables:

1. Conversion between electrical systems
2. Greek alphabet
3. Mathematical functions and operations
4. Prefix multipliers
5. Resistor color code

Suggestions for future editions are welcome.

Stan Gibilisco  
Editor-in-Chief