

**Propeller 102:  
A beginner's guide to  
learning PASM,  
the Propeller<sup>(tm)</sup> Assembly Language.**

**An easy introduction to Propeller chip  
assembly language programming.**  
(With 100s of lines of ready to run, and fully documented, PASM code.)

by Harprit Singh Sandhu.  
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## LEARNING THE PROPELLER ASSEMBLY LANGUAGE MADE EASY.

**Propeller 102.** A beginner's guide to learning PASM the Propeller Assembly Language, provides hundreds of lines of PASM code with every line commented in detail for the beginner. The author avoids the use of any compound instructions to make it easier for the beginner to understand and become comfortable with the use of assembly language.

The book is divided into six sections, each devoted to one aspect of learning and using PASM at a level suitable for absolute beginners

- Section 1 Primary resources discussed the basic resources that are available to the student to undertake learning the language
- Section 2 Secondary Resources discusses the more advanced resources that can be called upon for learning the language
- Section 3 Outputs. First the control of outputs from the Propeller is discussed in detail. Outputs have no input dependencies so can be discussed without concerns for wiring errors.
- Section 4 Inputs. The discussion of inputs ties the inputs to the knowledge of controlling outputs to create simple PASM programs that work
- Section 5 Projects. Uses the lessons learned in the earlier sections to create a number of interesting, easy to undertake, inexpensive and increasingly sophisticated projects.
- Section 6 Appendix. An extensive index provides additional support for the experiments undertaken. A complete list of the materials needed to undertake the experiments is provided.

The author does not use any techniques that will be difficult for any beginner to master. The discussions included cover each of the experiments undertaken in detail. The resource is designed as a reference for beginners where each experiment stands on its own. Code segments developed can be adapted for use in other programs created by the experimenter with minimal effort.

You will find hundreds of lines of ready to run code, fully documented and easy to follow . The code is also provided on the internet and can be copied and pasted directly to the Propeller Tool, the integrated development software provide by Parallax (at no charge).

Harprit Singh Sandhu is the founder of Rhino Robots Inc. Rhino manufactured robots and Computer Numerically Controlled lathes, milling machines and integrated work cells for education. He is the author of *Programming the propeller with SPIN*, *Running small motors with PIC microcontrollers* and *Making instruments and controllers with PIC microcontrollers*.

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