

PROBOS 2000

Owner's manual

English

© 1990

Table of contents

3. introduction

4. overview

5. the remote control station

7. aiming and taking a photo

8. contact

Introduction

Congratulations on your purchase of the Probos 2000 space probe!
The most advanced remote controlled probe on the market!

This manual will guide you through all the features of the PROBOS
2000 to provide you problem-free probing throughout the solar
system.

Overview

The PROBE 2000 is able to withstand the temperatures and radiation typical for deep space, It is made for high vacuum. so make sure it does not enter a planetary atmosphere.

Even non-atmospheric celestial bodies have a cloud of particles surrounding them, Therefore the advised closest point to pass a non-atmospheric body is 1000 km.

The probe is equipped with a photographic device that can take up to 6 photos.

Because of the high standard needed for interplanetary travel the probe is sealed and does not contain any user-replacable parts, Warranty is void if attempts are made to return the probe into atmosphere or to replace any parts.

The remote control station

Your probe should have been delivered with a remote control station. Contact your local dealer if was delivered without one.

For this part we assume that at this point the probe is aimed and well on its way to its pre-programmed target.



Figure 1: the control station screen

The circle with the 'X' indicates the probe's target with the to the right the distance to its target, where a negative number means it's approaching, a positive number means it's retreating from its target.

The dotted line is an indication of the path; notice that the station assumes passing its target to the left!

The circle with an 'E' indicates the Earth with to the right the distance of the probe to the Earth. This is an important indicator because as signals travel at light speed this is an indication how long it will take for signals to reach the probe.

The 'A' shows the angle of the probe in respect to its trajectory, It can go from 0 (in line with to its trajectory) to 180 degrees. Notice it can only aim to the right, which is why it it's so important to pass the target to the left!

The 'U' shows the speed of the probe which should be 100 km/s.

The 'S' indicates how many photo-instruction are sent and 'R' indicated how many are received.

At the bottom are the three control buttons explained below.

Note: it takes also a lot of time to receive the developed photo, because that is also sent at light speed!

Als note that because of this the shown distances are calculated not measured.

Aiming and taking a photo

Taking good photos of an object millions of kilometres away is an art form, Luckily the Probos 2000 makes it easy as long as you have some basic math skills.

The control centre has three buttons to aim and take a photo: with the ' \leftarrow ' and ' \rightarrow ' button you can increase or decrease the angle of the probe respectively, If you're sure the probe is aimed correct, you can take a photo.

Take a photo by pressing the 'P' button.

NB: the probe can take up to 6 photo's so be sure to make them count!

Beware light speed!

Aiming the probe means you know where the probe is at the moment the photo-instruction arrives at the probe and at what distance the probe is to its target. Therefore it is important to remember that light speed is 299.792 km/s (yes, per second, this is not a typo).

Example:

The probe is at a distance of 3.000,000 km from Earth and -2000 km removed from its target, If we send a photo instructions now, that will arrive ten seconds from now. By then the probe will have moved 1000 km and will be at -1000 km. We assume the probe will pass the target at a closest point of 1000 km (recommended distance for a body without atmosphere), so the probe should be aimed at 45 degrees to take the best photo.



Contact us!

We at Probos love to hear about your experience with our products!

If you have any photos you want to share and you're one of the lucky people to have an 'electronic mail' account you can send us your photos!

Send your photo's to games@goerp.nl.

We are also working on a website on the 'World wide web' (www.probos2000.goerp.nl) dedicated to any photos coming our way, so keep an eye out for that!

Warranty

The product is warranted to the original purchaser for two years from the date of purchase, to be free of structural and mechanical defects.

To be eligible for warranty the product has to be registered with Probos,

Send the filled in form below with a stamp of your Probos dealer in an envelope to the following address:

RUSSIA

Tulskayask oblast

g, Nomomoskovsk. 123456

ul, Kommunizma d, 99. kv, 88

Probos

MODEL: _____ PURCHASED FROM: _____

SERIAL NUMBER : _____ DATE OF PURCHASE: _____

PURCHASER NAME: _____

PURCHASER ADDRESS: _____

