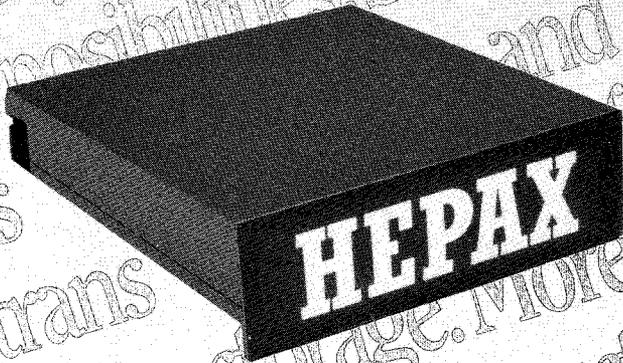


VM ELECTRONICS

# HEPAX MODULE

Owner's Manual

Using Memory Modules



Offers  
Eight times as much  
memory. New advanced progra  
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Printed in Denmark by Werks Offset, Århus.



# **The HEPAX Module**

## Using Memory Modules

March 1988

## Introduction

Congratulations on your new HEPAX memory module!

The HEPAX memory modules expand your HP-41 system further by adding even more HEPAX memory. You must have a STD HEPAX or ADV HEPAX module\* in order to use HEPAX memory modules.

The manual gives information about inserting and removing HEPAX memory modules. For information on how to use the functions in the Standard or Advanced HEPAX modules, refer to the HEPAX Module Owner's Manual, vol. 1 and 2.

### CAUTION

The HP-41 must be OFF before you insert any HEPAX module!

Before plugging in your HEPAX module, make sure that you understand the following section "Inserting and Removing HEPAX modules".

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\* Or other device that enables HP-41 Machine Language programming.

## Inserting and removing HEPAX modules

Before inserting the HEPAX module for the first time, take the time to read through this entire section.

Up to four HEPAX modules may be plugged into the HP-41 ports. This would give you a maximum of 31,408 words or 5,222 HEPAX data registers of extra memory.

### CAUTION

Turn the HP-41 OFF before inserting or removing a HEPAX module! Failure to do so could damage both the calculator and the HEPAX module.

## Configurations

### Using HEPAX with HP-41C memory modules

In an HP-41C, the HEPAX module must be placed in a port with a higher number than the last HP memory module (the HP-41CV and CX do not use memory modules). The port numbers are indicated on the back of the calculator.

### Using Advanced and Double memory modules

If you are inserting an Advanced HEPAX module or a HEPAX Double Memory module, the port next to the module must be empty or contain a system addressed device. All system addressed devices are shown below.

HP-41C memory modules  
 Extended Memory modules  
 TIME module  
 HP-IL module  
 HP-82242 IR printer module  
 HP-82143A printer

Table 1, System addressed devices

**Example:**

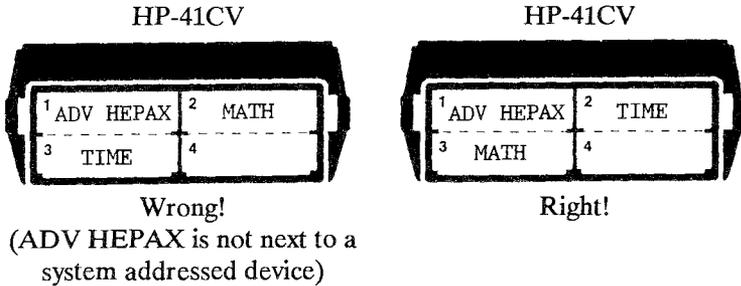


Fig. 1, Using Advanced and Double Memory HEPAX modules

**Using HEPAX together with HP-IL**

Four configurations with HEPAX and the HP-IL module (switch set to "enable") are illegal. If you turn on the HP-41 with an illegal configuration, you will get the message **ILL CONFIG**. Turn the HP-41 off and set the switch on the HP-IL module to "disable", or remove any module or peripheral.

The four illegal configurations are shown below. Note that the configurations are illegal, regardless of which port each module or peripheral is inserted in.

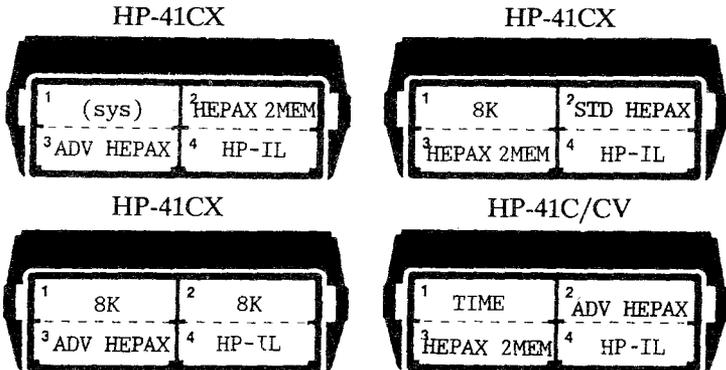


Fig. 2, Illegal configurations

"(sys)" is any system addressed device as listed in table 1. "8K" is a module that contains 8,000 words of memory or more. Most modules are known as "4K", but a few "8K" modules exist. Some of the most common 8K modules are listed in table 2 below.

HEPAX Memory modules  
 HP-IL Development ROM  
 Plotter ROM  
 Advantage module  
 Petroleum fluids module

Table 2, "8K" modules

Ask the vendor if you are in doubt if a module is "4K" or "8K".

## Identification and installation

### Identification

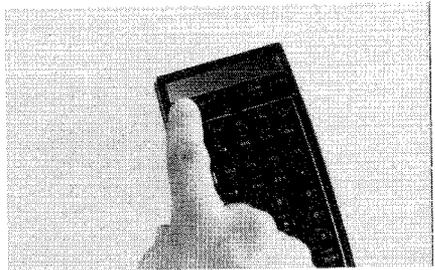
Standard HEPAX modules are identified by the legend STD HEPAX marked on the module. Advanced HEPAX modules are identified by the legend ADV HEPAX. HEPAX memory modules are identified by HEPAX MEM and HEPAX double memory modules are marked HEPAX 2MEM.

### Installing a HEPAX module

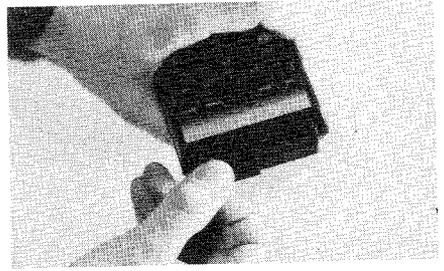
To insert a module:

Turn the calculator OFF!

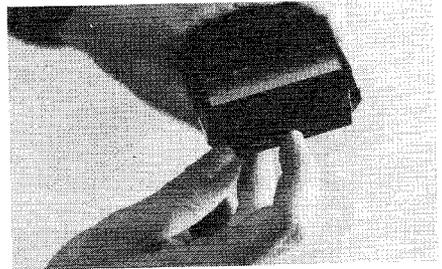
Failure to do so could damage both the calculator and the HEPAX module.



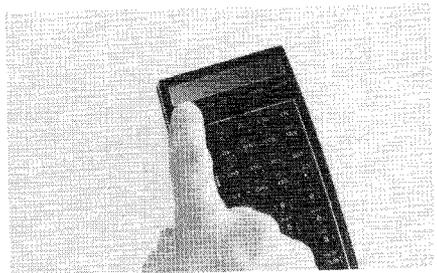
Select a port to mount the HEPAX module in. Remove the port cover (save it for later use).



Insert the HEPAX module with the right side up, as shown.



Turn the HP-41 on. The HEPAX module is now ready for use.



## Removing a HEPAX module

When removing HEPAX modules, some or all of the data in HEPAX memory may be lost. Modules should be removed according to the following rules:

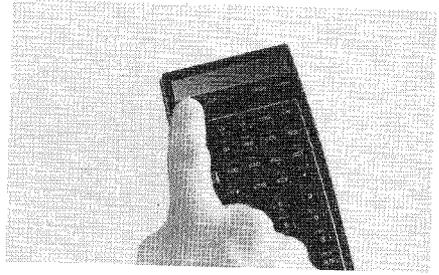
- If modules were installed at the same time, first remove the module in the highest numbered port.
- If modules were installed at different times, first remove the module that was inserted last.

Refer to section 4: "The HEPAX file system" for an explanation of these rules.

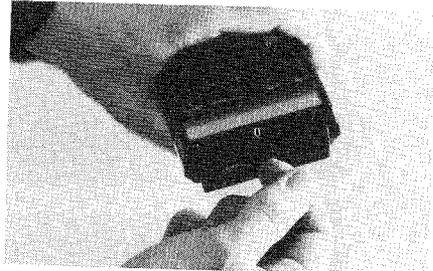
To remove a HEPAX module:

Turn the calculator OFF!

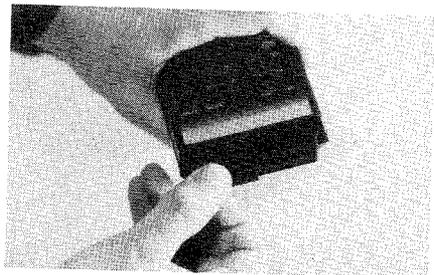
Failure to do so could damage both the calculator and the HEPAX module.



Put a nail under the edge at one of the lower corners of the HEPAX module and gently pull the module out as shown.



Cover the empty port with a port cover.



## **Batteries, Warranty and Service information**

The HEPAX module will maintain contents for the normal duration of a battery change. Refer to the Owner's Manual of your HP-41.

The HEPAX module is warranted by VM Electronics Aps against defects in materials and workmanship affecting electronics and mechanical performance, for a period of 1 (one) year from the date of original purchase. During this period, we will repair or, at our option, replace at no charge a product that proves to be defective, provided that you return the product with proof of date of purchase, shipping prepaid, to VM Electronics Aps.

This warranty does not apply if the module has been damaged by accident or misuse, has been attempted opened, or has been damaged as a result of service or modification by any other than VM Electronics.

No other express warranty is given. The repair or replacement of a product is our exclusive remedy. Any other implied warranty of merchantability or fitness is limited to the one-year duration of this written warranty.

In no event shall VM Electronics Aps be liable for consequential damages.

You may have other rights which vary from state to state.



