

# NoV-32 User instructions

## Introduction

First of all, throughout reading of both Clonix and NoVRAM manuals is mandatory, as these modules behave in an identical manner as your new NoV-32 does in terms of usage and programming; being NoV-32 a NoVRAM superset including 32K RAM instead of 16K.

Your NoV-32 module can also be programmed as a Clonix-41 using Clonix6P.exe or ClonixLP.exe utilities, (doing so you'll miss RAM access) or as a NoVRAM module using any of the available configuration utilities: NoVRAM-H (for HEPAX emulation) or NoVRAM-R (for RAM-Boxes emulation), these will allow access to the first 16K RAM chip only.

Now, you've also got the ClonixCfgWin.EXE utility for Windows that greatly simplifies the configuration process. It is strongly recommended to use this new utility.

Contents of the unused RAM pages will remain unchanged and will therefore be recovered as soon as the the module is re-configured using its unique utility NoV-32-H.EXE, which also includes the HEPAX emulation.

## Basic differences between NoV-32 and NoVRAM:

In an attempt to allow the use of other modules into HP-41 physical ports and considering that the 32K RAM included in the NoV-32 module entirely fill the available addressing space by the four extension I/O ports; a mapping procedure has been implemented into the NoV-32 module.

To that extent, the address H'4100 has been selected to hold the bit pattern of said mapping procedure, with the following meaning:

Bit 0 is RAM mapping mode bit:

When bit0 = 0 then Chip 0 is selected.

When bit0 = 1 then Chip 1 is selected.

As the total number of pages (6 ROM + 8 RAM) exceeds the HP-41 available addressing range, it could be the case that some illegal configuration can be implemented when using DOS configuration versions, which may lead to a system crash. This is avoided if you use the aforementioned ClonixCfgWin utility.

By no means can your HP-41 be damaged by such crashes, to get back to original config just turn off your calculator, extract and re-insert the NoV-32 module and turn it on again.

Should an ill M-code or other cause managed to corrupt the RAM pages polling zone, it will be necessary to clean the RAM contents using the procedure described in the NoVRAM module manual. Please take into account that NoV-32 module requires the file **NovClr32.HEX** instead of **NovClear.HEX**.