HOME INVENTORY

HOME MANAGEMENT
Protect your property by recording vital information (ages 15 and up)

by RLM Micro Systems
Requires: ATARI BASIC Language Cartridge
Diskette(s) for storing records
Diskette version (1): (APX-20214)
ATARI 810 Disk Drive
32K RAM

Edition A

CONSUMER-WRITTEN PROGRAMS FOR

ATARI

HOME COMPUTERS

APX

ATARI Program Exchange
HOME INVENTORY

by

RLM Micro Systems

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Introduction

OVERVIEW

HOME INVENTORY allows you to keep track of your possessions and valuables. In the event of a casualty or other loss, you can use the listings you've saved in HOME INVENTORY to ascertain the extent of the loss. You don't need programming experience to use the program.

For each item, HOME INVENTORY lets you keep track of a name, type, description, serial number, date purchased, and purchase price. You can store information for up to 1200 items on a single diskette, and you can use as many diskettes as necessary to record all your possessions.

Color-coded screens and simple messages guide you through entering the information for each item, for locating selected items, and for printing complete or condensed inventory lists of all or selected items. You can also erase or revise information for items at a later date. Then, after you record all your valuables, you can store a copy of the diskette containing your records in another location, such as a bank safety deposit box or a friend's home.

REQUIRED ACCESSORIES

32K RAM
ATARI 810 Disk Drive
ATARI BASIC Language Cartridge

OPTIONAL ACCESSORIES

ATARI printer (or equivalent)
CONTACTING THE AUTHORS

Users wishing to contact the authors may write to them at:

168 Coachman Drive North
Freehold, NJ 07728

or call them at:

(201) 431-2305
Getting started

LOADING HOME INVENTORY INTO COMPUTER MEMORY

1. Insert the ATARI BASIC Language Cartridge in the cartridge slot of your computer.

2. Have your computer turned OFF.

3. Turn on your disk drive.

4. When the BUSY light goes out, open the disk drive door and insert the HOME INVENTORY diskette with the label in the lower right-hand corner nearest to you. Close the door. (Use disk drive one if you have more than one drive.)

5. Turn on your computer and TV set. The program will load into computer memory and start automatically.

THE FIRST DISPLAY SCREEN

When the program has loaded into computer memory, a design featuring the initials "RLM" displays. The following title appears at the top of the screen:

RLM MICRO SYSTEMS
HOME INVENTORY

PREPARING A DATA DISKETTE

HOME INVENTORY requires that you use a blank, formatted diskette to store information. The program guides you in preparing your diskette, using one OR two disk drives. If you have two disk drives, turn on disk drive two. The following screen displays:
HOME INVENTORY

Insert Home Inventory Data Diskette in disk drive 2.

Press START when ready.

Figure 1 Inserting a data diskette

If you're using one disk drive, the message in Figure 1 prompts you to insert the diskette in disk drive 1. Remove the HOME INVENTORY diskette and insert the new diskette. Press the START key.

The following prompt displays:

HOME INVENTORY

Disk is not formatted for the Home Inventory program

Do you want to format it?

Yes or No

Figure 2 Formatting a new diskette

If you type "N" to answer "no" to any of the questions, the previous screen redisplay and you can start over.

When you type "Y", the program requests that you confirm this choice, as follows:

WARNING: This will erase the disk!

Are you sure?

Yes or No

Type "Y" to format the diskette. After a short wait, the main menu displays (see Figure 3 in the Sample Session). Press the START key to continue.
Sample session

A brief sample session of HOME INVENTORY illustrates how easy it is to use.

Follow the steps in the "Getting started" section of this manual. The main menu displays as follows:

---------------------------------
HOME INVENTORY
---------------------------------

* MAIN MENU *

ADD DATA
RETRIEVE DATA
PRINT INVENTORY LIST

SELECT OPTION => _
ESC to exit.

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Figure 3 Main menu

Now enter some sample data records. Type "A" for ADD DATA. The following screen displays:

---------------------------------
HOME INVENTORY - ADD DATA
---------------------------------

Item Name _______________________
Type ___
Descrip _______________________
Serial No _________
Date _________
Cost _________

Enter data, then press START.
Press ESC for menu.

Figure 4 Add data screen
The lines at the right of the screen show how many characters (letters, numbers, punctuation marks or spaces) you may type in each space. The space for Type, for example, is only three characters long, while Item Name has space for twenty characters. You can't enter data anywhere else on the screen.

For example, type "ATARI 800 COMPUTER" next to Item Name. If you type lower-case letter, they appear in upper case on the screen. Press the RETURN key. Type "COM" (for COMPUTER?) or any combination of 1 to 3 letters next to Type. Press the RETURN key. Enter the data for Description, Serial No., Date (a six-figure date, such as 122583 for December 25, 1983), and Cost in the same way. It's not necessary to fill in each blank, although you must fill in Type and Item Name.

Press the CTRL (CONTROL) key and the arrow keys at the same time to move the cursor up, down, left or right to change any of the data that you've entered. Type the new information over the old.

Press the START key when you've filled in all the blanks. Then HOME INVENTORY stores all the information about your ATARI 800 Home Computer. Next press the ESC (ESCAPE) key to return to the main menu (Figure 3).

Try the RETRIEVE DATA option. After returning to the main menu, press "R". The RETRIEVE DATA choices display as follows:

--- HOME INVENTORY - RETRIEVE DATA ---

INQUIRY/UPDATE
BROWSE

--- SELECT OPTION => _
Press ESC for menu.

Figure 5 Retrieve data choices
Try inquiring about the new ATARI 800 COMPUTER record you just entered. Type "I" for the Inquiry/Update option. The following screen displays:

-------------------------------------
HOME INVENTORY - RETRIEVE DATA
-------------------------------------

Item Name _______________________
Type ___________

-------------------------------------
Enter data, then press START.
Press ESC for menu.

Figure 6 Inquiry screen

Type "ATARI 800 COMPUTER" next to Item Name (or COM next to Type). You may also just press the START key to retrieve all the information you've stored. Press the START key to begin the search. The ATARI 800 COMPUTER that you just entered, as well as all the information about it, now displays. Press the ESC key now to return to the main menu.
Using HOME INVENTORY

SPECIAL KEYS

** CAUTION **

TO AVOID LOSING VALUABLE DATA, DON'T PRESS THE SYSTEM RESET KEY.

All keys not used by the system have been disabled. This includes the BREAK key, all the control keys except up, down, left and right, and the ATARI logo key.

MAIN MENU OPTIONS

The main menu (Figure 3) contains the three options of HOME INVENTORY. Use option A - ADD DATA to add new information to your data file. Option R - RETRIEVE DATA, allows you to search your data file for information you've entered previously, or to update the information. Option P - PRINT INVENTORY LIST, prints a report of your valuables.

Each of these options appears in a color band (red for ADD DATA, blue for RETRIEVE DATA and green for PRINT INVENTORY LIST). All the screens for each of these options display in these colors. Each of the choices within these options displays in varying intensities of these colors.

A-Add data

Type A to enter information. HOME INVENTORY keeps track of six kinds of information about each of your possessions. These are:

- Item Name: 1-20 characters
- Type: 1-3 characters
- Description: up to 25 characters
- Serial No.: up to 10 characters
- Date: 6 character date
- Cost: up to $999999.99
Item Name and Type are required for each of your items. You may leave everything else blank. If you make an error while you’re entering data, HOME INVENTORY displays the message “Correct above error” and puts the flashing cursor next to the problem.

“Type” is the category of the items you’re entering. You might make each room of your house a type (for example, LR for living room, BED for bedroom, KIT for kitchen and so on). Then if you enter MICROWAVE OVEN as an item name, the type would be KIT. The program categorizes and stores the information according to these types.

After you enter data on one line, use the RETURN key to move the cursor to the next line. You can also use any of the arrow keys (CTRL-LEFT, CTRL-RIGHT, CTRL-UP, CTRL-DOWN), or the DELETE BACK 5 key. Use these editing keys at any time while you’re entering data. When you finish entering and correcting information, press the START key.

HOME INVENTORY converts all lower-case characters to upper case when it stores information on your data diskette.

When you enter a date, you must enter six numbers (for instance, December 16, 1979 becomes 121679). If the month or day is only one character, prefix the number with a zero. For example, enter January 3, 1983 as 010383.

The format for cost allows you to enter a decimal point for dollars and cents if you wish. Examples are 19.99, __19.99, and 00019.99. You may enter the number anywhere on the line. You don’t need the decimal point for whole dollar amounts (e.g. 2000 would be the same as 2000.00).

End the session by pressing the ESC key while you’re on the main menu. If you’ve added or updated information, the program saves the data. If you forget to do this, you may lose the information you’ve just entered.

If your data diskette is completely filled up (with 1,200 items), the program displays the message “Disk full, cannot add record.”. Format another diskette for HOME INVENTORY at this point by starting again with a blank data diskette.
R - Retrieve data

Type R to retrieve information you've already entered on your data diskette. You have two choices (see Figure 5). The first (INQUIRY/UPDATE) retrieves the complete record for an item, and allows you to update or delete it. The second choice (BROWSE) displays the Item Name, Type and Serial No. for as many as 19 items on each display screen.

Type "I" (Inquiry/Update) to instruct HOME INVENTORY to display the information about a specific item. Type the Item Name and Type of the item. You may display the information about all the items you've recorded if you prefer. Just press the START key.

HOME INVENTORY has a "wild card" feature. You can type asterisks in place of the characters you entered. This applies to the first five characters of Item Name and all three characters of Type. Examples are as follows:

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATARI 800</td>
<td>COM</td>
</tr>
<tr>
<td>ATARI</td>
<td>___ (blank)</td>
</tr>
<tr>
<td>_______ (blank)</td>
<td>C**</td>
</tr>
<tr>
<td>AT*</td>
<td>**M</td>
</tr>
<tr>
<td>_______ (blank)</td>
<td>___ (blank)</td>
</tr>
</tbody>
</table>

If you type any of these, the program displays information about your ATARI 800 COMPUTER with the Type "COM", as follows:
HOME INVENTORY - RETRIEVE DATA

Item Name   ATARI 800 COMPUTER
Type        COM
Descrip     48K WITH BASIC
Serial No   54321
Date        071582
Cost        700.00

Delete     Update     Continue

-----------------------------
SELECT OPTION => _
Press ESC for Menu.

Figure 7 Inquiry/Update display.

Type "D" to delete the record of an item. Then answer "Y" to the prompt "Are you sure?".

Type "U" to update the record. Blanks appear on the screen. Use the same procedures as you did when you added data. When you've completed updating any or all of the information, press the START key to save the records on your data diskette.

Press "C" to continue and the program displays the next record you've entered. You can delete, update, or continue. When it has displayed all the items you've stored, the message "End of file" appears. Then you return to the RETRIEVE DATA menu. You may stop before the end by pressing the ESC key.

Type B for BROWSE to display only part of the information you've recorded about each item (the Item Name, the Type and the Serial Number). After 19 records display on the screen, the following message appears:

Press any key to continue.
Press ESC for menu.
If your disk drive produces an Input/Output error or otherwise fails to complete an operation, the message "Disk drive does not respond" displays and you return the the main menu.

P - Print inventory list

Use this option to print your data file or selected portions of it. The following choices display:

----------------------------------------
HOME INVENTORY - PRINT
----------------------------------------

ALL RECORDS
SELECT BY TYPE

----------------------------------------
SELECT OPTION => _
Press ESC for menu.

Figure 8 Print options

Choose A - ALL RECORDS for a list of all the records on the diskette. The program prompts you to check your printer, and your interface module if you’re using one. Make sure your printer is turned on and in the ONLINE mode, and that your interface module is turned on. Press the START key to begin printing.

Choose S - SELECT BY TYPE to print information about all the items you’ve recorded in a certain type (all the kitchen items, for example, under Type "KIT"). The program first prompts you to check your printer and interface module. Press the START key, and the program requests that you enter the Type. Wild cards are allowed. Press the START key when you’re finished.

You may halt the printer at any time by pressing the SPACE BAR. Restart it by pressing the START key. Press the ESC key to stop the printing. You can use either an ATARI 80- or 40-column printer. (The 40-column printer requires two lines to print each record.)

At the end of the report, HOME INVENTORY prints the number
of items and the total dollar value of your inventory.

Press the ESC key while you're printing to return to the main menu. If your printer experiences an input/output error during the process, the message "Printer does not respond" displays and you return to the main menu.

BACKING UP YOUR DATA DISKETTES

Use the DOS command "J" (duplicate disk) to make backup copies of your data diskette(s). It's a good idea to do this from time to time. You can store one copy in your bank vault or with a friend. Each copy of your data diskette contains a DOS directory indicating that it's a "HOME INVENTORY data diskette."
SYSTEM ELEMENTS AND DESIGN

HOME INVENTORY comprises three programs on your master diskette. An AUTORUN.SYS program is used to boot the system up, load memory with numerous machine language routines, and continue the load process. The LOGO program loads additional machine language routines (overlaying some of the AUTORUN.SYS code), displays the title screen, and brings the MAIN program into memory. The MAIN program contains all the logic performed by the system, using the machine language code introduced by the first two programs.

Additionally, the DOS.SYS file on the master diskette has been modified. HOME INVENTORY code now resides in space that was used by DOS and BASIC.

All operations requiring speed faster than BASIC allows are coded in machine language. This includes searches, sorts, disk I/O, and string manipulations.

As HOME INVENTORY uses separate data diskettes for file storage, there’s no need to copy the master or back it up. The program can run on single- or multi-drive systems. For single-drive applications, you can insert the data diskette after power-up and place the master back into its protective sleeve. It won’t be needed again during the session. Double-drive users may insert the data diskette into drive number 2.

FILE STORAGE AND NUMBER OF RECORDS

HOME INVENTORY uses a Virtual Indexed file structure. File compression isn’t required under this access method. The primary index is the Type field. The Item Name field is used as a secondary index to allow multi-key high speed access. These files are NOT DOS compatible. The structure of the data disk is as follows:

-14-
<table>
<thead>
<tr>
<th>SEC</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>System ID, Index Length and system VTOC</td>
</tr>
<tr>
<td>2</td>
<td>Continuation of system VTOC</td>
</tr>
<tr>
<td>3-96</td>
<td>Index</td>
</tr>
<tr>
<td>100-359</td>
<td>Data</td>
</tr>
<tr>
<td>360</td>
<td>Fake DOS VTOC</td>
</tr>
<tr>
<td>361</td>
<td>Fake DOS directory</td>
</tr>
<tr>
<td>362-701</td>
<td>Data</td>
</tr>
</tbody>
</table>

The formats of the index and data records are:

<table>
<thead>
<tr>
<th>FIELD</th>
<th>POS. IN RECORD</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDEX</td>
<td></td>
</tr>
<tr>
<td>Type</td>
<td>1-3</td>
</tr>
<tr>
<td>Item Name</td>
<td>4-8</td>
</tr>
<tr>
<td>Record Number</td>
<td>9-10</td>
</tr>
<tr>
<td>DATA</td>
<td></td>
</tr>
<tr>
<td>Item Name</td>
<td>1-20</td>
</tr>
<tr>
<td>Type</td>
<td>21-23</td>
</tr>
<tr>
<td>Description</td>
<td>24-48</td>
</tr>
<tr>
<td>Serial No</td>
<td>49-58</td>
</tr>
<tr>
<td>Date</td>
<td>59-61</td>
</tr>
<tr>
<td>Cost</td>
<td>62-64</td>
</tr>
</tbody>
</table>

The Record Number, Date, and Cost fields are binary (base 256). The balance of the data consists of ASCII characters. HOME INVENTORY can store 1200 records per data disk.
Data records are packed two per sector (64 X 2 = 128). The index record contains the "relative position" of the data record within the disk.

The Fake DOS VTOC and DIRECTORY allow for copying of the disk using the "J" command (duplicate disk) and the identification of the disk (a directory will be produced by the DOS "A" command).
We're interested in your experiences with APX programs and documentation, both favorable and unfavorable. Many of our authors are eager to improve their programs if they know what you want. And, of course, we want to know about any bugs that slipped by us, so that the author can fix them. We also want to know whether our instructions are meeting your needs. You are our best source for suggesting improvements! Please help us by taking a moment to fill in this review sheet. Fold the sheet in thirds and seal it so that the address on the bottom of the back becomes the envelope front. Thank you for helping us!

1. Name and APX number of program.
   
   Home Inventory (214)

2. If you have problems using the program, please describe them here.

3. What do you especially like about this program?

4. What do you think the program’s weaknesses are?

5. How can the catalog description be more accurate or comprehensive?

6. On a scale of 1 to 10, 1 being “poor” and 10 being “excellent”, please rate the following aspects of this program:

   ____ Easy to use
   ____ User-oriented (e.g., menus, prompts, clear language)
   ____ Enjoyable
   ____ Self-instructive
   ____ Use (non-game programs)
   ____ Imaginative graphics and sound
7. Describe any technical errors you found in the user instructions (please give page numbers).


8. What did you especially like about the user instructions?


9. What revisions or additions would improve these instructions?


10. On a scale of 1 to 10, 1 representing "poor" and 10 representing "excellent", how would you rate the user instructions and why?


11. Other comments about the program or user instructions:


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[seal here]