

SuperKey Manual

INTRODUCTION

What the Program Does

SuperKey is a utility program for the Commodore 64 computer that allows you to redefine up to 96 keys on your keyboard. You can redefine some or all of the keys, and add, change or delete any of the definitions at any time. The keys that you can redefine are the graphics characters that are accessed by pressing and holding either the SHIFT or Commodore keys prior to pressing one of the graphics keys. Throughout the remainder of this manual the SHIFT and Commodore keys will be abbreviated SH and C=, respectively.

SuperKey allows you to redefine a key to be any string of characters (up to 200 maximum); for example, you could redefine the C= 0 character to be the string OPEN 15, 8, 15. From then on, every time you typed C= 0 the string OPEN 15, 8, 15 would appear at the current cursor position! This is very useful and time-saving if you use your computer extensively. (It will also save on a lot of typing errors too!)

When you first run SuperKey, it will automatically change the definitions of a number of keys. It does this by loading a library of key definitions from the disk. You can alter these definitions and save them back on the disk, or create your own specialized library of key definitions and save them as a separate library. Your libraries can even include segments of programs, such as a subroutine to read the joystick, and a single keystroke can place the entire program segment on the screen.

SuperKey and Normal Use—Technical Considerations

SuperKey doesn't interfere at all with the normal operation of your C-64. After it is loaded into memory, you will still have all your BASIC memory free (38K) as well as the RAM area from \$C000 to \$CFFF.

The memory area occupied by SuperKey is located under the I/O and Kernal segments, \$D000 through \$FFFF, plus an additional small region from \$02B0 to \$02FF which is unused by the operating system.

However, if you are running programs that also reside in the memory under the I/O and Kernal, or if your program uses any of the RAM between \$02B0 - \$02FF, those programs will disturb SuperKey and you'll get unpredictable (and potentially harmful) results. If you experience this, you'll have to check with the software manufacturer to determine if anything can be done about this.

Since you'll probably be using SuperKey mostly in your own BASIC programs, you're unlikely to run into any memory conflict programs with SuperKey.

CHAPTER ONE—USING SUPERKEY

Loading and Running SuperKey and EasyDisk

The disk you purchased allows you to run either EasyDisk only, SuperKey only, or both EasyDisk and SuperKey at the same time. To give you this flexibility, we've provided three "loader" programs on your disk. The names of the three loader programs are "COMLOAD" (loads both EasyDisk and SuperKey), "LU" (loads EasyDisk only), and "SUPERKEY" (loads SuperKey only). You follow the same steps to install any of these programs; the only difference is the name of the loader program.

1. Turn on your computer and disk drive.
2. Insert the EasyDisk/SuperKey diskette into your disk drive.
3. a) Type: LOAD"COMLOAD",8 and press RETURN if you want to install both EasyDisk and SuperKey.
b) Type: LOAD"LU",8 and press RETURN if you want to install EasyDisk only.
c) Type: LOAD"SUPERKEY", 8 and press RETURN if you want to install SuperKey only.
4. When the loader program has finished loading and the C-64 displays READY, type RUN and press RETURN.
5. Wait for the C-64 to display READY again.

Although it may seem as if nothing has happened, you now have the proper program installed (EasyDisk, SuperKey, or both).

New Keys When SuperKey is Installed

If SuperKey is installed, you'll automatically have the default library (called MACDEF) in memory, and the following keys will be changed:

Key	What It Does
C= A	Creates a subroutine numbered 60000 to set up the principal addresses needed for screen memory, color memory, voice, and video chip memory location.
C= B	Creates a subroutine numbered 60100 to set up locations of border color, screen color, and character color.
C= C	Same as C= B except allows you to type in numbers for immediate changing of screen, border and character color.
C= D	Lists directory of disk by performing a LOAD"\$",8:LIST.
C= E	Reads the disk error channel by creating a subroutine and executing it.
C= F	Displays a table giving the numerical value corresponding to each color available for characters, border, screen.
C= L	Types LOAD" (useful for loading programs).
C= O	Performs OPEN 15,8,15:PRINT#15," (useful for executing disk commands).
C= P	Prints a listing of the program currently in memory.
C= Q	Disables the auto-repeat mode for all keys.
C= R	Enables the auto-repeat mode for all keys.
C= S	Types SAVE" (useful for saving programs).
C= T	Gives the time by printing value of TI\$.

Once you have SuperKey installed, you should try all of these keys and see firsthand how easily SuperKey works. Don't worry if these keys aren't exactly what you want; the next chapter explains how to alter any definitions and even create your own library of key definitions!

CHAPTER TWO--EDITING KEY DEFINITIONS

In order to modify or create your own key definitions, you'll need to use the SuperKey editor. Before trying this, though, it is first necessary to understand how SuperKey keeps track of the redefined keys through the

use of a Library: a Library is just a catalog of all your key definitions, and is recorded on disk under a file name that can be saved and loaded if you want to switch between key definitions.

When SuperKey is installed, it automatically loads a library called MACDEF from the disk. MACDEF is a shortening of MACro DEFINitions; a sequence of instructions that redefines a key is called a macro. For example, the C= D key is redefined by the macro LOAD"\$",8:LIST and provides a listing of the disk directory at the touch of a key.

All macros in a particular SuperKey library have names associated with them. For example, in the default MACDEF library, the keystroke C= D is given the name "directory." Names are used to remind yourself exactly what that macro is supposed to do when you press that key.

The SuperKey Editor

To invoke the SuperKey editor from BASIC, just press the C= key together with the INST/DEL key. The following screen will appear:

```
CREATE  MODIFY  DELETE  COPY
SAVE    LOAD
```

```
MACDEF (or name of other library)
```

```
(list of available keys and
names of macros)
```

```
F3:  NEXT  F5:  PREV  F7:  CANCEL
F2:  EXIT
```

This screen is very similar in appearance to the EasyDisk screen. The CREATE command is highlighted by a white rectangular cursor. You can move this cursor around to the other commands by using the cursor control keys.

The bottom of the screen lists the function keys and their uses:

```
F2:  EXIT      — Exits to BASIC (or other program).
F3:  NEXT      — Displays next page of definable keys.
F5:  PREV      — Displays previous page of definable keys.
F7:  CANCEL    — Cancels current command and returns to menu.
```

Commands

This section describes how to use the six commands (CREATE, MODIFY, DELETE, COPY, SAVE and LOAD) that SuperKey offers you. The best way to learn these commands is to have SuperKey up and running on your C-64 and have the SuperKey editor on the screen.

To execute any of the six commands, first move the rectangular cursor on top of that command and press RETURN.

Create

Purpose: Create new macro definitions.

To Use: Position the cursor in front of the key whose macro you wish to define, and press RETURN. You will be prompted to enter the name of the macro; type in the name and press RETURN.

You will then be able to enter up to 200 characters that define your macro. You can use the left and right cursor keys (but not the up and down cursor keys) to move the cursor. Use the INST/DEL key to make corrections as you're typing.

Many of your definitions will require the execution of certain keys, such as the cursor movement keys or the RETURN key. SuperKey allows you to imbed fifteen special control keys in your macro definition. These keys are:

Key to be executed	Type this key in your macro definition	Appears as
RETURN	shift RETURN	@
cursor UP	shift u	u
cursor DOWN	shift d	d
cursor LEFT	shift l	l
cursor RIGHT	shift r	r
cursor HOME	home	h
CLR/HOME	shift home	c
f1	f1	1
f2	f2	2
f3	f3	3
f4	f4	4
f5	f5	5
f6	f6	6
CTRL yellow	CTRL 8	y
CTRL green	CTRL 6	g

Since SuperKey can be used with many commercial programs already on the market, the ability to execute the function keys in your macros can be very useful. For example, if your word processor defines f1 as "search" and f2 as "replace," you can make "search and replace" a single keystroke by defining a macro as "f1f2."

If all this seems confusing, you can use the Modify command (described next) to view the definitions that come with SuperKey, and get a little better understanding of how to create a macro.

Modify

Purpose: 1) Change an existing macro.
2) View the definition of an existing macro.

To Use: Position the cursor in front of the macro whose definition you want to view or change and press RETURN. You'll be prompted to enter a name; type in a new name and press RETURN. If you don't want to change the name or only want to view the definition, just press RETURN.

At this point you can use the cursor left, cursor right, INST and DEL keys to modify the definition. When you're done, press the RETURN key.

If you are just viewing the definition, or change your mind and don't want to change the macro, just press the F7: CANCEL key.

Delete

Purpose: Delete a key's definition and return it to its original definition.

To Use: Position the cursor in front of the definition you wish to delete and press RETURN.

Copy

Purpose: Copy the definition of an already defined key to a different key.

To Use: First, place the cursor in front of the already defined key and press RETURN; a prompt at the top of the screen will display the message COPYING. Next, place the cursor in front of the new key you want to define and press RETURN again. The old key definition will be copied to the new key instantaneously.

Save

Purpose: Save this library of macros to disk.

To Use: When you select this option from the menu, you are prompted to enter a name for the library. Type in a name and press RETURN. The library will be written to disk using the file name you entered.

Load

Purpose: Load a previously defined macro library from disk.

To Use: When you select this option from the menu, you are prompted to enter a name for the library to recall from disk. Type in a name and press RETURN. The library will be loaded into the macro definitions.

WARNING: Do not load a file that is not a SuperKey library. If you do, the results will be unpredictable but may "crash" the computer immediately or later, causing you to lose data.

Errors

SuperKey tries to guard against most input errors. However, errors can occur whenever the disk is accessed, for example during the loading and saving of libraries. When an error occurs SuperKey will read the error channel on the disk and display it on the screen. You'll have to refer to your disk manual and take the appropriate action should this occur.

Also, the memory allocated for macro definitions is limited. If you try to enter too many macros, you'll get the message NO MORE SPACE. In this case you'll have to delete some of your old macros if you want to enter new macros in this library.

Finally, in some rare cases you may get errors that give the impression SuperKey is no longer installed. For example, if you do a warmstart (RUN/STOP RESTORE), SuperKey will appear to be no longer installed. In most of these cases, you can reinstall SuperKey simply by typing SYS751 and pressing RETURN. If this doesn't work, you'll have to reload SuperKey from disk.