Setup Guide for Your New Comet64 Internet Modem

⚠	**Caution**: Device is static sensitive. Please use care and ground yourself prior to handling the Internet Modem.

⚠	**Caution**: Be sure to insert the Internet Modem with the correct side up (labeled on the board). Failure to do so may cause permanent damage to your Commodore computer and/or to the Internet Modem. **Caution:** Do not attempt to use more than one serial device at a time. If you are going to use the RS-232 DB9 connector, please remove the Serial-to-Ethernet device first. Failing to do so can cause damage to the board and/or your Commodore computer.

Thank you for purchasing the Comet64 Internet Modem from CommodoreServer.com. With it, you will be able to access the Internet like never before! We know you're anxious to get started, so we've developed this guide to be as quick and easy as possible. If you purchased your Comet64 as a kit, you'll find a link to assembly instructions at the bottom of CommodoreServer.com.

If you experience any problems or have any questions, please send email to:
admin@commodoreserver.com

INSTRUCTIONS FOR FIRST-TIME SETUP:

Step 1   Make sure the power is off on your Commodore 64 computer

Step 2   Insert the Ethernet cable into the modem before plugging it in to the computer (doing so will prevent you from wiggling the modem out of place accidentally).

Step 3   Insert the Comet64 into the User Port, noting the correct side up

Step 4   Connect the other end of the Ethernet cable to your router.

Step 5   Power On your Commodore 64 computer and disk drive

Step 6   Type **LOAD "V-1541UPDATE",8** <return>
            Type **RUN** <return>

            This will run the V-1541 updater program, which will download the latest V-1541 program and save it to your disk drive (will SAVE to disk on device 8 only). Completing this step ensures that everything is working. If downloading and saving to disk was unsuccessful, then repeat the steps above and try again.

Step 7   Once the V-1541 program is saved to disk, you need to enable it. Enable the V-1541 program by typing **SYS 49152** <return>

Step 8   Type **NEW** <return> (this is necessary to reset BASIC pointers)

Congratulations! Your Commodore is ready to use the Internet. Please refer to the V-1541 User Guide on how to LOAD and SAVE programs over the Internet.

From now on, follow the instructions for subsequent use below.

Note: You may run the V-1541UPDATE program following the steps above at any time to ensure you have the latest V-1541 program on your disk.

INSTRUCTIONS FOR REGULAR USE:

Step 1   Type **LOAD "V-1541",8,1** <return>
Step 2   Type **SYS 49152** <return>
Step 3   Type **NEW** <return>

Note: Some programs use the area of memory that V-1541 resides in (49152 and up). If you need to load a program in this memory area, please use the V-1541LO program instead which will work the same way, but is enabled by typing **SYS 32768** instead.

Note: It takes anywhere from 5-20 seconds for the modem to connect to the server behind the scenes. If your commands do not work, wait a few seconds and try again. Usually by the time you are finished loading V-1541, the modem has had ample time to make the connection.

V-1541 User Guide

The V-1541 program takes control over device #2 (RS-232) for LOAD and SAVE operations. LOAD and SAVE still works the same with other devices (such as your disk drive), but operates on a *virtual* disk on CommodoreServer.com. All LOAD and SAVE operations must use ,2 to signal that you wish to use the RS-232 device.

In order to use the disks you uploaded on CommodoreServer.com, you must first sign in. You sign in with your email address and PIN, which can be set in 'My Account' after signing in to CommodoreServer.com.

To Sign In:

LOAD "@EMAIL@DOMAIN.COM,XXXX",2
where xxxx = your PIN. This is the default for logging in, but you may choose the following method:

- *or* -

LOAD "@SCREENNAME,XXXX",2
Where xxxx = your PIN. If you set up your account to use your screen name instead of your email address, use this method

Commands:

Much like displaying a directory on a disk, the V-1541 program has shortcuts to perform other tasks.

LOAD "!",2	display disks that you have uploaded to your account at CommodoreServer.com
LOAD "#FILE.D64",2	INSERT a disk by .d64 name (if your disk name is games.d64, use **LOAD "#GAMES",2**) . Appending .d64 is not necessary, but is also allowed.
LOAD "$",2	displays the directory of the currently-inserted disk
LOAD "%",2	displays the name of the currently-inserted disk
LOAD "/FOLDER",2	change current folder to subfolder specified. use **LOAD "/",2** to change to root folder. See description in **Table 1** under command CF.
LOAD "/@USER",2	Changes your view of available disks to that of a friend's shared disks. The user must be in your friend's list to see their shared disks with you. Use **LOAD "/@PUBLIC",2** to view the Public Root or **LOAD "/@",2** to return to the view of your own account.
SAVE "FILENAME",2	saves the BASIC program in memory to the currently-inserted disk

Advanced Use:

CommodoreServer created a text-only, human-friendly Internet protocol (CommodoreServer Internet Protocol, or CSIP) for accessing different areas and executing different commands on CommodoreServer.com. Similar to other Internet protocols, such as SMTP, POP, FTP and more, you can perform many commands to interact with CommodoreServer's features. Although the V-1541 program was not designed to type these commands at will, it does support the ability to execute them using the **LOAD ">COMMAND",2** command. Doing so, you are able to execute commands directly using this protocol.

LOAD ">COMMAND",2
executes any of CommodoreServer's commands (see table below)
[e.g. **LOAD ">DISKS",2** is the same as **LOAD "!",2**]

This table lists only a portion of what is possible. For a complete reference, please visit CommodoreServer.com or issue the **HELP** command.

Table 1 Advanced User Commands to be used with **LOAD "COMMAND",2**

Command	Description
HELP	Displays a list of commands and the proper syntax for each.
DISKS	Displays a list of disks available in the current folder. Disks and folders are managed in your account on CommodoreServer.com
INSERT DISK.D64	Virtually inserts a disk from within the current folder. You can leave off the *.d64* part.
REMOVE	Virtually removes the currently-inserted disk
$	Displays the contents of the currently-inserted disk.
NAME	Displays the filename of the currently-inserted disk
LOAD FILENAME	Retrieves a binary program. This should not be executed without using the Commodore's LOAD command because you need to prepare the Commodore for receiving the file. Commodore's BASIC LOAD command does this. Executing the command directly will only display garbage onto the screen.
SAVE FILENAME, SIZE, TYPE	Prepares the server to accept incoming binary or text data. This should really only be done using Commodore's SAVE command for PRG files, as it sets the size and type correctly. You can easily add SEQ files if you know the size of your data.
BLOCKS	Retrieves the number of BLOCKS FREE for the currently-inserted disk
FIND TEXT	Displays a list of files containing *text* in the filename.
LOGIN LOGINNAME, PIN	Logs you into CommodoreServer.com so you can access disks and other account activities. The Login name can either be your email address or screen name, depending on what your account is set to use on the Web site. The PIN is used so that you don't have to use and expose your password when you sign in from your Commodore computer.
LOGOUT	Logs you out of your account and puts you back into the Public Domain space.
CF FOLDER	Change directory (folder). Only 'CD /' or 'CD *folder*' will work. You cannot combine levels of folders in one command, such as 'CD /root/games'. When specifying a folder, the folder must exist as a child of the current folder.
MF FOLDER	Creates a directory (folder) as a child of the current folder.
NEW D64NAME, DISKNAME, ID	Creates a newly-formatted disk in the current folder. The *d64name* is the filename for your .d64 image and the *diskname* is the 16-character name on the disk (shows when viewing the directory). *ID* is a 2-character ID for the disk. NEW will not work on existing disks.
QUIT	Logs you out of your account and disconnects the modem from the server.

Current limitations of the V-1541 program:

- There is a limit on the number of characters you can pass in the LOAD command - only as many as can fit on two lines (on the C64). If you have a long email address, you may not be able to sign in - in this case, your user name might be the better choice. Change this setting in your account on CommodoreServer.com.
- Programs cannot load subsequent programs (i.e. a menu cannot LOAD another file from the virtual disk) - only one program may be loaded.
- Disks cannot be "turned over" so that a program can access 'side B'.
- While you CAN load a machine language program to memory, it is difficult to then save the program back to a floppy disk because you cannot directly specify the starting and ending address. This can be done by setting the BASIC pointers if you know the start/end address. You may be able to find more information on CommodoreServer.com - search the blogs.
- Only LOAD and SAVE work - VERIFY does not work.
- You cannot use commands for formatting disks, validating or any other type of command that requires an OPEN statement (like OPEN 15,2,15,"n0:...") - it will not work because only LOAD and SAVE are programmed to translate to actual CSIP commands (See CSIP on CommodoreServer.com for more information). LOAD provides convenient access to the actual commands in the protocol. OPEN will still open a file, according to the Commodore syntax, but it does not access the Internet using the same commands that are sent over the serial bus. There may be other programs that interpret OPEN and translate them to commands in the protocol. Search CommodoreServer.com for more information.
- Once you start loading a file, you cannot stop the modem from delivering it to your Commodore. This is because it has a built-in buffer and data is sent almost instantaneously to the modem. The modem then sends data only as fast as the Commodore can accept it, depending on the baud rate. This quirk will cause problems if data is still in the modem's buffer and you try to load a file or other command because the modem is still delivering data to the Commodore's receive buffer. The best solution is to terminate the power by turning off the computer or resetting the modem. This will force the modem to stop attempting to send data to the Commodore computer.
- GEOS disks and files are not supported at this time.
- Performing actions on filenames containing "!", "#", and "%" will not work because V-1541 will interpret these symbols as shortcuts to commands.

Many of these items may be fixed in a future release.

Resetting Your Comet64 for use with V-1541

It is sometimes possible that the default configuration is changed if you run other software that changes it. You can reset the configuration's default values by running the V-1541CFG program. Insert the disk and type:

LOAD "V-1541CFG",8,1 <return>

then type:

RUN <return>

The default configuration will be set after a few seconds.

Public Domain Disks

CommodoreServer.com has several Public Domain disks that you can access when you are not logged-in. To see them, you must <u>not</u> be logged-in. Issue the same commands as if you *were* logged-in. Change folders to the public domain folder (`LOAD "/C= PD",2`) and then issue the `DISKS` command (`LOAD "!",2`). All other commands work the same way. Note that all public domain disks are permanently write-protected, so you cannot SAVE to them or make any other changes. If you would like to copy a file, you can LOAD the file and save it to disk, or you can change the view back to your account by typing `LOAD"@",2` or by logging-in again and then `SAVE` it to one of your virtual disks. Signing in will not erase the program from memory.

Write Your Own Programs and Games

Did you know that you can write your own programs for use with CommodoreServer.com? If you have a software idea, we encourage you to write a program and submit it in our member's directory. CommodoreServer.com is continually growing its community and strives to make it the central place for all Internet-enabled software for your Commodore computer.

CommodoreServer has a universal game room where users can gather to play games online. Your own games can take advantage of the game room, which handles all of the communication necessary to start a multiplayer game, keep games in sync, and process and deliver all game data between the different players. Additionally, the game room allows developers to quickly write any type of software where interaction between users takes place.

For more information, we suggest you review the CommodoreServer blog. It has many tips and suggestions for writing Internet programs. You can also get great ideas and programming advice from other Members as well. Explore CommodoreServer.com to get started writing and releasing your own games!

http://www.CommodoreServer.com