Inst□lling System 7.0
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If you obt□ined System 7 in □ p□ck□ge pro→ided by Apple, you □lre□dy h□→e inst□ll□tion instructions. If you obt□ined System 7 through AMUG □nd took □d→□nt□ge of the p□ck□ge de□l which included "The M□cintosh Bible Guide to System 7", th□t □lso h□s complete inst□ll□tion instructions. One of the purposes of this □rticle is to pro→ide guid□nce for those □ttempting to go it without written guid□nce. There □re one or two little hookers □bout System 7 you should know before inst□lling it.

Another re□son for the □rticle is guid□nce for those th□t □re going to t□ke □d→□nt□ge of the AMUG L□bor□tory on October 26 to h□→e System 7 inst□lled. To m□ke sure you get through the process on time, there □re some things you should do □he□d of time.

Getting ℝe□dy

Before you inst□ll System 7.0, you will need to prep□re your system:

1   B□ck up □ll of the files on your current h□rd disk before you go □ny further.

2   St□rt MultiFinder □nd f□mili□rize yourself with c□lcul□ting memory □→□il □bility.

3   Upd□te □ll your Apple h□rd disks with the new dri→er on the Disk Tools disk.

ℕOTE 1: If you did not upd□te your Apple h□rd disk dri→er before you inst □lled System 7, do it □fterw□rd. Upd□ting the dri→ers doesn't bother the files on the disk. Just m□ke sure you do not choose "Inti□lize" by mist□ke!

ℕOTE: 2   Do ℕ**OT** use the Apple h□rd disk dri→er if you do not h□→e □n Apple h□rd disk dri→e; In this c□se you need to cont□ct your de□ler or the h□rd dri→e m□nuf□cturer to m□ke sure they h□→e □ system 7 comp□tible →ersion of their dri→ers. You c□n use □ utility such □s SℂSI Probe to find out the m□nuf □cturer of your h□rd dri→e. If you do c□nnot loc□te your h□rd dri→e m□nuf □cturer for □ny re□son, you should consider getting □ third p□rty SℂSI softw□re. "Sil→erlining" published by Lℂie is □ p□ck□ge highly recommended

by many, and which works with almost all hard disk drives. These packages are somewhat expensive, so call the company to make sure the software works on your drive, or that you can return it if it doesn't.

   WARNING: There are some "hacks" floating around that will allow you to use the Apple HD SC Setup to format non-Apple drives which the software doesn't recognize. These "hacks" involve the use of ResEdit to modify the driver software. It is strongly recommended you do not do this. Apple hard disks have a number of parameters established in the firmware, so these options might not be established on the drive when it is formatted. Further, many hard drives have drive specific parameters, some of which are not the same as those Apple uses. If you need to or wish to use software other than that which came with your hard drive, you are better of paying the (admittedly seemingly high) price for third party driver software that is known to work with a variety of different hard drives.

4   Restore the name of any INITs you have previously renamed. INITs must have their original names for the following step to work.

5   Run the Compatibility Checker from the "Before You Install stack". This HyperCard stack examines your set of applications and reports possible incompatibilities. Incidentally, to use the Install stack you must move it to your hard disk drive. Don't overlook the fact that there are two stacks to move from the floppy.

   NOTE: A new version of the compatibility checker (version 1.1) is available on the "System 7.0 Goodies III" disk available as part of the Best of... series of disks.

6   Perform the actions recommended by the Compatibility Checker. The program can move potentially incompatible third-party INITs from your System Folder. The compatibility checker tells you of known and possible incompatibilities. Only specified INITs need be moved. After you have installed System 7.0 you can reinstall the INITs.

7   Remove any disk protection from your hard disks. Programs that provide virus or password protection could interfere with the installation process. Most disk protection packages will need upgrading to be compatible with System 7.0.

   Step 2, above, is optional of course. It is intended to help those that have not used MultiFinder get prepared for the *MultiFinder-like* state that is "on" all the time in System 7.0.

The Inst□ll□tion:

Quick & Dirty, S□fe & Sure, or S□fer & Surer; T□ke Your ℂhoice

There □re se→er□l □ppro□ches to inst□lling System 7. In his excellent book "The System 7 Book", ℂr□ig D□niloff c□lls them 1) the Quick □nd Dirty method, 2) the S □fe □nd Sure method, □nd 3) the S□fer □nd Surer method. We'll describe □ll three.   By the w□y, I'm told this book is □→□il□ble □t the Scottsd□le Price ℂlub, but I h□→en't confirmed this.

1) __The Quick □nd Dirty method__: This is the most common method used, □nd in f□ct is the method setup to be performed □utom□tic□lly by Apple's Inst□ller progr□m on the "Inst□ll 1" disk of the System 7 set of disks. After performing those steps listed □bo→e under "Getting ℝe□dy," you □re set to st□rt. Incident□lly, you should □lw□ys m□ke □ b□ckup copy of your System disks. M□ke sure the b□ckup disks h□→e the s□me n□mes □s the origin□ls. You st□rt by inserting the "Inst□ll 1" disk □nd running the Inst□ller □pplic□tion. If you h□→e more th□n one h□rd disk dri→e on line, just m□ke sure the one you w□nt to inst□ll System 7 on is the one noted on the di□log box. Then just press the "Inst□ll" box, □nd follow directions □s to when to insert the other disks.

   TIP: If you h□→e □ h□rd dri→e in □ddition to the one you □re inst□lling on, you c□n e→en □→oid the disk insertion routine. Just dr□g the icons of □ll the System Disks onto the h□rd dri→e. This will copy their contents to the h□rd dri→e, □nd put them in folders with the s□me n□mes □s the floppies. If the folders don't h □→e the s□me n□mes, this method won't work. Then just run the Inst□ller from the folder on the h□rd disk dri→e. When the di□log box comes up, you will h□→e to switch to the h□rd dri→e you w□nt to inst□ll System 7 on. Then when you st□rt the inst□ll□tion process you c□n just go get □ cup of coffee. This method is prob □bly not worth the trouble unless you h□→e se→er□l system to b□ckup. But if you do, it c□n be □ time-s□→er.

   This "Quick □nd Dirty" method inst□lls the new System "on top of" the old one. All fonts, sounds, □nd fkeys which were inst□lled in the old system will be □utom□tic□lly re-inst□lled in the new System 7. All third p□rty Iℕ□Ts □nd ℂde→s in your old System Folder will be pl□ced in the □ppropri□te folder of the new System 7. Inst□lled desk □ccessories will be inst□lled in the new Apple Menu Items folder. All other kinds of files you might h□→e loose in the old system folder will rem□in there undisturbed. So, th□t's it. The only thing

remaining is to drag the Cdev s and INITs that the Compatibility Checker said were unidentified onto the system folder one at a time to check them to see if they work or not. Note I said "<u>on</u>to the System Folder, not <u>in</u>to it (see further comments on this matter later).

2)   The Safe and Sure Method" The problem with the "Quick and Dirty" method is that there is a risk that your old System/Finder had some minor damage that had not yet become apparent. By copying over an existing System Folder you risk that the damage will be carried into the new System. The "Safe and Sure Method" avoids this problem, but takes a little more work, especially, if you have installed a number of non standard fonts, DAs, INITs, etc. In this method instead of installing over the old system folder, you are going to delete the old folder before installation. This allows the installer to create a fresh, new System Folder. The problem is when you throw away the old System FINDER, you throw away all the installed desk accessories, fkeys, sound, and fonts. If all you have are the standard, Apple provided resources you can just forget it and go ahead. Otherwise you will need to use the Font/DA Mover to move the fonts into a suitcase file and the DAs into another suitcase file. You will also have to store in separate files any special sounds and Fkeys you have installed using whatever utility to used to install them originally. Make sure these suitcases and other files we've just described are stored outside the old System file (and you might want to make a backup of them onto floppies).
     Also remove all other non-system files from your System Folder to another folder on the hard drive. You might also wish to place the "May Not be Comp atible...." file created by the Compatibility Checker into this file, and back them up also if you desire extra safety.
     Now you can delete the System Folder. To do this you have to startup from another disk, either another hard drive or a startup floppy (you can use the "Disk Tools" disk from the System 7.0 set of disks if you like; It is a System 6.0.7 Startup Disk. Then drag the System Folder into the trashcan and empty it. N**OTE:** For m aximum safety, before doing this, you should have backed up your entire hard drive and all your fonts, DAs, etc. as described above. You can now restart, using your System 7 "Install 1" as a startup disk to run the Installer program.

     NOTE: An attractive alternative to trashing your entire old System Folder is to trash only the System and Finder files from it, then give the folder a new n ame such as "Old System." Of course this is an alternative only if you have plenty of hard disk space. Then you can run the Installer which will again create a new System Folder. You can then drag the Cdev and INIT files from your Old Folder into the new folder one at a time.

TIP: In connection with the □bo→e ℕote, □nother possibility is to m□ke □ copy of your System File on □ floppy if it will fit, or □nother h□rd dri→e. This w□y you don't h□→e to worry □bout copying the fonts □nd DAs from the old System; You c□n do th□t l□ter. In f□ct, it m□y not be intuiti→e (□t le□st it w□sn't to me; it surprised me when I stumbled onto it) but if System 7 is running, you c□n double-click on □n e□rlier System file, □nd it will open up like □ folder just □s the System 7 file does. The old fonts, sounds, □nd DAs will be there □nd you c□n dr□g them out to □ folder or e→en dr□g them onto the new System 7 folder to inst□ll them!! A further □d→□nt□ge to this method is th□t you do h□→e □ f□ll b□ck position. You h□→e your old System file on the floppy, □nd you h□→e your old System Folder with □ new n□me. it will be fully int□ct if you h□→en't mo→ed □nything out of it (you could copy things from it to the new System 7 folder to m□ke sure you h□→e □ good f□llb□ck situ□tion. All you need is □ copy of the old Finder (which you could h□→e s□→ed on □ floppy if you desired).
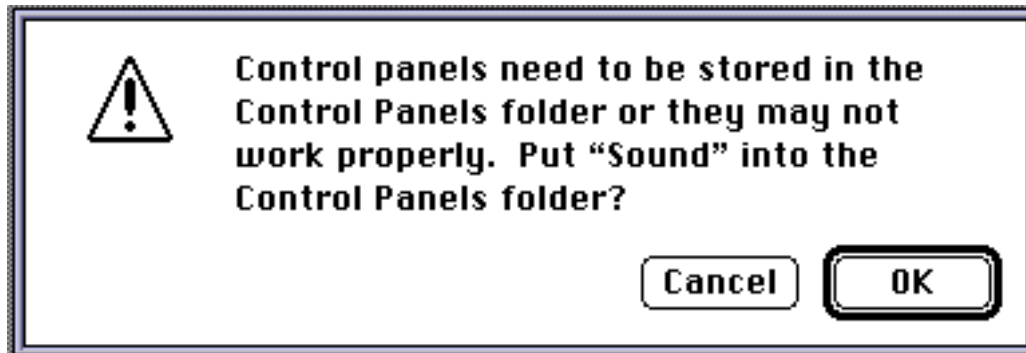
3) The S□fer □nd Surer Method: This method combines method 2) with □ prior set of steps: those of completely form□tting □nd testing your h□rd dri→e. To quote from ℂr□ig D□niloff □g□in, "This step is not required, but it's □ good ide□, especi □lly if your h□rd dri→e h□s not been reform□tted in some time (or since it w□s br □nd new). It c□n incre□se the o→er□ll s□fety of your d□t□ □nd impro→e your h □rd dri→e perform□nce."

Use the form□tting softw□re th□t c□me with your h□rd dri→e. Ag□in, use the new Apple HD Sℂ Setup file from the Disk Tools disk of the set of System 7 disks if your dri→e is □n Apple pro→ided dri→e. If your dri→e is not □n Apple dri→e, cont□ct the m□nuf□cturer □s noted □bo→e for the System 7 comp□tible →ersion. Ag□in, m□ny recommend Sil→erlining □s □n □ltern□ti→e e→en to Apple's HD Sℂ Setup softw□re to m□int□in h□rd disk dri→es in □ s□fe condition, to impro→e perform□nce □nd to offer other utilities such □s p□rtitioning. Wh □te→er softw□re you use to reform□t your dri→e, t□ke the time to run the h□rd dri→e tests to m□ke sure □ny b□d or question□ble blocks □re not m□pped-out to pre→ent their use.

Tips on Inst□lling Iℕ ITs, ℂde→s, etc. In System 7.0

One nice □spect of System 7 is Apple's □ttempt □t helping us reduce the clutter th □t used to exist in System folders. It does this by cre□ting sub-folders within the System Folder   These □re n□med "Extensions," "Preferences," "St□rtup Items," "ℂontrol P□nels," □nd "Apple Menu Items." "Extensions" is the new n□me for both ℂde→s, Iℕ ITs, □nd other such resources.

The System 7 "correct way" of installing Fonts, Desk Accessories is to drag them **on**to (Not **in**to) the System Folder icon. When you do, System 7 will analyze the file type, decide where it should go, and politely ask if putting it there is OK with you. Here is an example dialog box:

> ⚠ Control panels need to be stored in the
> Control Panels folder or they may not
> work properly. Put "Sound" into the
> Control Panels folder?
>
> [Cancel]   [**OK**]

This is all very neat and in the future. when all the Extensions (Cdevs, INITs, etc) and Control Panels have been updated, this will be all you need to know. In the meantime, although this will work most of the time, sometimes some experimenting is required. Sometime these resources, or the utilities that use them do not yet know about all the new sub-folders. So, you may need to put the p articular resource loose in the System folder (just open the System Folder and dr ag the item into it). For example, To install the CD ROM software, place the Apple CD ROM INIT in the Extensions Folder. The CD Remote INIT and Foreign File Access files (IS0, High Sierra, etc) must be in the System folder itself (not in the extensions folder). .Another factor, if you are using an INIT control Control Panel device, you should place it in the Extensions folder rather than the Control Panel where System 7 will place it if you don't intervene. The reason is that the Extensions folder is executed first on startup, and you want your INIT control utility to be able to stop any INITs that might be in folders being executed earlier in the st artup process. In some cases you may try putting say Cdev in one of the sub-folders, and an Alias in another. In short, you should be prepared to experiment a bit, or ask around to find the secret. So, don't give up easy on getting a favorite INIT or Cdev to work.

        if you drag a suitcase containing fonts or desk accessory onto the System Folder icon, the fonts are removed from the suitcase and stored in the System file, and the DAs are removed from the suitcase and stored in the Apple Menu Items Folder. In each case the now empty suitcase files just disappear, forever. I mention this because it might be somewhat disconcerting if you are not expecting it. And, you may with to back up, putting putting some fonts or DAs into a suitcase file, and you may not have any readily available method of creating a suitc ase file. You may have noted that no Font/DA mover utility was provided with System 7. There is a new

Font/DA Mo→er utility, →ersion 4.1. It is □→□il□ble on our System 7 Goodies II disk. But to □→oid h□→ing to use the Font/DA Mo→er you might w□nt to cre□te □n empty suitc□se □nd keep it □round somewhere. When needed you c□n duplic □te it, thus □lw□ys keeping □ suitc□se file □round for "emergencies.

       Fin□lly, □ tip of highly question□ble utility. If you dr□g suitc□se A onto suitc □se B, the contents of suitc□se A □re copied into suitc□se B, □nd Suitc□se A dis □ppe□rs. In effect, □ merger. M□il me □ qu□rter e→ery time you use this. I'll soon be rich.