

WaveFrame Version 6.52

Installation & Release Notes

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This release document discusses the following:

- Installation instructions for WaveFrame Version 6.52
- WaveFrame Version Compatibility – **IMPORTANT!!**
- Details of new features and fixes in this version update
- Warnings, cautions, and known problems

These release notes are available in a Word (.doc) version on disk 1 of the WaveFrame 6.52 installation set and are also added to the WaveFrame directory during installation.

(Release notes for versions 6.20 through 6.51 are included in a separate document in your WaveFrame directory. **If you are upgrading from 6.11 or 6.2x, please read this.**)

May, 2000

Installation of Version 6.52

The installation instructions remain the same as in v6.51 and are repeated here for consistency. Read further for the new 'custom' install options.

WaveFrame version 6.52 **requires** Microsoft Windows 98. Please refer to your Windows documentation and set up Windows 98 on your system before continuing here. If you would like the option of dual-booting to Windows 3.11 and WaveFrame versions prior to 6.20, please see the section entitled, '**Installation of Windows 98 Upgrade - Dual-Boot Option**' towards the end of the WaveFrame 6.2x-6.51 Release Notes included in your WaveFrame directory. (Please note that versions prior to 6.20 will not run properly in Windows 98).

You should install version 6.52 in a different directory/folder and program/shortcut group than any other versions (including Beta) already installed on your system. **Our installation now includes a Custom install option giving you the choice of saving your current wavefrm.ini and/or layout.ini files – see below.** (It is still a good idea to rename or backup your current wavefrm.ini file (in your specific Windows directory) before the installation). Pre-6.2x installs, including any .ini files, will not be affected by v6.52 installation since they correspond with the Windows 3.11 directory.

Close all WaveFrame applications before installing a new version.

Once you have installed and configured the basic Windows 98 OS, you may install the WaveFrame software by left-clicking on the **Start** window in the bottom left hand corner and selecting **Run** from the menu options. Install Disk 1 of the WaveFrame 6.52 software in the floppy drive and type **A:\Setup** in the command line box. When the setup program prompts you for the name of the directory to install to, WaveFrame 6.52, you can use it or choose WF652 or something similar. You can also change the default program group name if you so desire. Setup now offers three install types – Typical, Compact and Custom. The differences are explained below:

Choosing 'Typical' will install ALL files needed for WaveFrame including wavefrm.ini and layout.ini. (choosing this option will overwrite these two files).

Choosing 'Compact' performs same install as 'Typical' (see above).

Choosing ‘Custom’ will present you with three choices. Check only the box called ‘Required Files’ to install only the required WaveFrame files. This will preserve your wavefrm.ini and layout.ini files. Check either or both of the ‘Wavefrm.ini’ and ‘Layout.ini’ choices to overwrite them with a new version. Doing so will replace many of your settings with the defaults.

After all these dialogs, click Next to confirm your choices. Setup will continue automatically at this point.

After installation, it is important to re-boot the computer before running the new version. Please select ‘Finish’ and the set-up program will re-boot the system; alternately, you can choose to view the release notes (readme file) before restarting by selecting the appropriate option. In this case, go to Start..Shut Down..Restart.

You will notice 3 new WaveFrame program group icons (shortcuts): one each for new nfreedme and wavefrm.ini settings documents and one for quick access to the WaveFrame web site (www.waveframe.com).

IMPORTANT - Wavefrm.ini change

The new Broadcast Wave conversion features in version 6.5 required an updated wavefrm.ini file. If you are upgrading a system from 6.2x, it is recommended to do a Typical install, which will update (overwrite) your current waveframe.ini file. Not installing this will prevent these features from working. If you need to preserve your current wavefrm.ini settings, you can do a Custom install as described above, and then add the necessary lines into wavefrm.ini yourself. These can be found in the ‘New Features’ section of the 6.5 release notes below under Broadcast Wave conversions. Please contact Customer Support with any questions.

WaveFrame Version Compatibility - IMPORTANT

All WaveFrame versions since 6.00 are compatible except for instances noted below, including database changes since 6.11.

Upgrading directly from v6.50, 6.51 or any 6.52 beta:

Because of significant file system changes to Mount/Dismount and some resulting problems, it is **highly recommended to:**

1. **Reimport any ‘removable drive’ sessions** used in those earlier versions directly into 6.52 (if needed there). You can do this in Manage by creating new Projects and Reels and using the Import Tracks function.
2. Delete (or do not use) the older version sessions.

Not following this procedure may result in duplicate tracks and/or problems copying or saving session data. This only pertains to removable drives in versions 6.50, 6.51 and 6.52 beta and therefore not necessary for fixed drive-only projects (F1, F2 etc).

Installing version 6.2x onto a machine with any v6.5x already installed:

WaveFrame’s device driver, vnfd.386, was modified in v6.50. This file is located in the Windows/System directory (and a copy is now kept in the WaveFrame directory as of 6.52). **It is important to use the newer version of this file in any version 6.5x.** The file is backward compatible so using the newer vnfd.386 on any 6.2x is OK. Therefore, do the following **before** the 6.2x install on your 6.5x machine:

1. Look for a vnfd.386 file in your 6.5x WaveFrame directory. If it is there, skip to step 2. If it is not there, locate it in your Windows\System directory and copy it to your 6.5x directory.
2. You can now install and run version 6.2x.
3. Before switching back to version 6.5x the first time, locate the ‘cpvnfd.bat’ file in your 6.5x directory and double-click it. As long as a vnfd.386 driver file is found in this directory, it will be placed into your Windows\System directory.
4. Reboot Windows and you can then run 6.5x and safely switch between any version with the newer vnfd.386 file.

6.52 and pre-6.20 versions of WaveFrame (i.e. 6.11):

If you want the ability to switch between 6.5x (or 6.2x) and 6.1x versions, it is necessary to switch between the two Windows operating systems. Please follow our optional '**Installation of Windows 98 Upgrade - Dual-Boot Option**' procedure at the end of the 6.2x-6.51 release notes document, included in your WaveFrame directory, which will set up your WaveFrame as a dual boot system. As long as you are using any version prior to 6.20, you can choose which version to start by using icons in the correct program group once you have reverted to Windows 3.11. In addition, you may need to run cpvntd.bat from the DOS prompt in the directory of your 6.xx version to get the right vnfd.386 in the Windows\System directory. (To use versions prior to 6.00, you must start Windows 3.1x using the DCS command from DOS in the directory for the version you want to run.). When changing versions always reboot the entire system first. Please follow the procedure below to rebuild your database when switching between 6.1x and 6.2x or 6.5x versions.

Important Database Changes:

The following steps **MUST** be completed immediately after launching WaveFrame version 6.52 for the first time when upgrading directly from v6.20 or pre-6.20 versions (i.e. 6.11). **If you are upgrading from v6.21, 6.22, 6.5 or 6.51 you do not need to perform these steps.** In other words, they must be completed when switching between v6.11 and any future versions or between 6.20 and any version.

- 1) **Launch WaveFrame System only (within the appropriate WaveFrame program group). From the Disk Utilities menu, select Database Reclaims. In the Database Reclaims dialog box, select FV - All Fixed Volumes. In the section labeled Reclaim operation, select Rebuild Database. After the database is rebuilt, click OK (or press the Enter key). You should rebuild the database for each drive (fixed and removable) the first time it is used in version 6.52 when coming directly from 6.20, and any time you switch between versions as noted above.**
- 2) **Launch the desired application (Manage, Edit, Assemble, or Print) for the WaveFrame version you are running.**

New Features in version 6.52

- **Transfer of SD2 files without Mac resource forks enabled**

It is now possible to transfer SD2 files to WaveFrame format through Transfer SoundFile when the files to be converted do not include Mac resource forks. This might be helpful when converting across a network (when Here&Now can't see resource forks) or when the files were not made with resource forks (such as those converted from WaveFrame to SD2 onto a PC drive). In these instances, it is important to note that because the resource fork carries the timecode stamp, this value **will not** transfer in (i.e. it will be 0). Two other attributes - Number of Channels and Sample Rate - will transfer in at the listed default values or at whatever value you set. These settings will affect the resulting sound and its quality, and also what will appear in the WaveFrame database. Therefore it would be important to know these values when converting SD2 files without resource forks so that the database information would actually match the original sounds' inherent attributes. The following line needs to be added to the [SoundIO] section of your wavefrm.ini file for this new feature to work. In addition, it is recommended to use the next two lines to control what values your database will have after the conversion:

[SoundIO]

SD2NoResourceFork=TRUE

(TRUE => the absence of or inability to read resource forks will be ignored and the values below (or their defaults) will be assumed for all SD2 files for which this is the case; FALSE => the default; resource forks will not be ignored)

SD2DefaultChannels= (Default is 1 for Number of Channels of source sound; eligible values are 1 or 2 only)

SD2DefaultSampleRate= (Default is 48000; eligible values are 44056, 44100, 47952, 48000 only)

The default values for the above are 1 and 48000 so, for example, if SD2DefaultSampleRate is not specified then 48000 will be assumed.

- **Removable drive mounting speeds increased – use SHIFT-Mount to do a quick mount**

(WaveFrame introduced a new quick mounting routine in version 6.5. In addition to fixing a few problems, we have made modifications to this feature based on further testing and customer feedback. You will first notice that the two new v6.5 mount buttons in Volume Manager, Quick Mount and Full Mount, have been deleted in favor of one Mount button as in the past. Please read the entire section below to understand how this feature now works and when to use it. In addition, please note the portion of this feature listed in the fixed items section later in this document)

The mounting time of large removable volumes with many reels/tracks can take up to 10-20 minutes each time. We have made two mounting modifications to help speed up this process. Firstly, we improved mount times by up to 10% where possible. Secondly, we have added a new feature, called quick mount, which can be accessed using the method below. By using quick mount, where appropriate, drive mounting times are decreased significantly which will speed up re-boots considerably and long wait times will only occur upon mounting the first time on a given system.

To understand a quick mount and its benefits, it is necessary to explain what now happens during a mount and dismount. Clicking on the Mount button will copy all the necessary session information from the removable drive into the WaveFrame software on the computer's hard drive. This type of mount is the same as it always has been but may behave slightly faster. When this drive is dismounted, all the removable Projects defined on your system will now remain. This will allow for subsequent mounts of this drive to occur very quickly if the new feature is used. To mount it again using the new quick mount feature, hold down the SHIFT key while clicking Mount. (At this point you will be given an opportunity to confirm your choice of a quick mount or full mount; Yes will do a quick mount, No will perform a normal (full) mount). If no information has changed on the drive since it was last used on this system, it will mount very quickly, usually within a second or two. If any information has changed (possibly due to the drive having been accessed and updated on another WaveFrame), then a warning will appear that a full mount is needed and give you the option to continue or not. If you choose Yes here, the more complete (full) mount will take place to update the session information on the computer. In addition, this new 'quick mount' routine will automatically take place when the system is re-booted and mounts an existing removable drive where no changes are present. When selecting quick mount, the system will only give you the option to do a full mount if one of these conditions exist:

- 1) The drive has never been mounted on this system.
- 2) You previously cleaned up all removable drive projects (see below).

- 3) Changes were made to one or more of the sessions on the removable on another WaveFrame running version 6.5 or later.
- 4) You replaced your wavefrm.ini file with a new one (a line is added to this file during these mounting routines; please do not make any manual changes to it).

The new dismounting method will leave all the removable Projects defined on your system; but only fixed drive tracks will be accessible. No tasks will affect the removable drive tracks or have access to them. This includes Save Project As and Save Reel As. The only task that will show these dismounted tracks is Import Tracks. In this case, you will see those tracks listed with a 'XX' prefix to signify that they belong to no particular drive. This should help clear up any confusion about left-behind tracks. (this is necessary to allow for the import of non-mounted tracks on a print computer). If you delete one of the dismounted projects, you will just need to mount the drive again to recreate the session on your system.

A new Manage menu item has been added to aid in properly deleting these left-behind removable drive projects: Cleanup..Removable Projects. This will delete any Projects that have ONLY removable drive tracks in them. Any Projects that have at least one fixed drive track or a spotting sheet will not be deleted. Before choosing this, dismount all removables (you will get a warning if you haven't). Once this has been done, your system will be purged of all removable drive sessions, and you will need to do a Mount to recreate any pre-existing projects. (choosing quick mount in this case will prompt you to do a full mount).

To make mounting as fast as possible, you can disable 'Full FS Check on Boot' in WaveFrame System...View...Preferences. This will eliminate the file system checking done on the drive during mounting, saving approx. 10-15 seconds.

Please Note: Because this quick mount (SHIFT-Mount) feature only works in version 6.5 or later, **do not** use it when drives are shared between this and earlier versions, when bringing a drive forward from v6.11, 6.2x or beta 6.5, and when sharing a drive between WaveFrame and a Tascam MMR-8. Doing a Quick Mount in these situations will not update the important session data between the SCSI drive and the WaveFrame.

Hidden feature: You can bypass the above dismount routine by pressing the CTRL key while selecting Dismount in the Volume Manager. This does a traditional dismount whereby all removable-only projects/tracks are deleted from the system. This would be the same as doing a regular dismount followed by a Cleanup...Removable Projects.

- **Enhanced conversion of 24-bit material from the Tascam MMR-8**

WaveFrame added support for playback and editing of 24-bit Tascam MMR-8 material in version 6.5. We have enhanced this routine to make the process easier. Full instructions on the process have been reprinted here with appropriate changes made to reflect the update.

WaveFrame now supports playback and editing of 24-bit material recorded in WaveFrame format on the Tascam MMR-8 and then allows for the edited material to be played back on the MMR-8 or MMP-16. This is accomplished in a two-step process in the Track Rack, which will first convert the 24-bit sounds to WaveFrame 16-bit format and then convert the 24-bit tracks. Once the editing/conform is accomplished, the tracks are converted back to 24-bit format. Please follow this procedure:

Mount the MMR-8 drive with 24-bit material on the WaveFrame. Open the MMR project to be converted in Manage or Edit, then open the Track Rack. Highlight the track(s) you want to convert and select Copy...Selected As...16-bit. In the following dialog you are asked to select the destination drive/volume. You can choose either the same drive that your MMR tracks are on or another drive on your system. (** see below). Click OK to start the first part of the conversion (please note – you are prompted to repeat this process again after the sound files convert). Because this process takes 50% to 80% as long as actual time being copied, converting many files can be a time-consuming process, and should be performed well in advance of any planned editing. Transfer time varies depending on how many files are chosen and how large those files are. Note that converted files are given the same name as the originals and a library name of Default. Once this process has finished, you will need to repeat the same steps (for software reasons, our conversion process had to be divided into two steps). Once again, choose Copy...Selected As...16-Bit. Next select the same destination drive you used in the first routine. The tracks will be converted to 16-bit format and all events will properly link to the 16-bit sounds previously converted. (you will notice the new tracks with [16-bit] appended on them). You can now edit material on these tracks and also introduce additional 16-bit WaveFrame sounds. Once finished, go to the Track Rack and select the 16-bit tracks you just edited; select Copy...Selected As...24-Bit, choose the destination volume to be used in the MMR and new tracks with [24-bit] appended will appear. There is no need to convert the 16-bit sounds back to 24-bit format since those versions already exist on the drive. You can now dismount and take this drive to an MMR-8/MMP-16 for immediate playback of edited material. Since there may be 16-bit tracks/sounds on the drive, be sure to load up the proper 24-bit tracks on the MMR. The MMR is capable of playing back 16 and 24-bit material within tracks and reels so any new sounds you introduced during your editing will play alongside the original 24-bit sounds.

Please note: Because you can do the conversion to a different volume than where the 24-bit material is, any new 16-bit sounds you introduce into your session will be copied back to that original drive during the final 16 to 24-bit conversion. Also, please use caution though when doing these conversions on your MMR drive – backup all material beforehand and do not do conversions on the drive if space is getting low. In this case, converting to another drive could be useful.

- **Nudge feature defaults can be altered**

This undocumented but important feature has been available on the system for some time. The current nudge defaults are 1 frame (CTRL <arrow>) and ¼ frame (perf) (CTRL-SHIFT <arrow>). These can be changed using the following lines in the [Edit] section of your wavefrm.ini file:

[Edit]

SlipFrames= (default is 1; eligible values are 1 and up, which sets how many frames the CTRL <arrow> nudge moves the selected event)

SlipSubFrames= (default is 4; eligible values are 1 and up. This number is the divisor which sets how many partial frames the CTRL-SHIFT <arrow> nudge moves the selected event – 2 sets ½ frame , 3 sets 1/3 etc.)

- **CTRL-Save feature added to allow Save while playing**

(IMPORTANT: see bug fix section) If you need the option of saving tracks while playing, you can now only do so by holding the CTRL key down and choosing Save or File..Save. This new method is provided for those users who do not use removable drives and/or are willing to risk the problem of possible corrupted tracks from saving while playing.

- **Remove silence between events feature**

A special utility has been added in Edit to remove silence between events on a given track and essentially connect all the events with a butt-splice. In the Track Rack, select a track(s) and choose Copy..Selected As..Silence Removed. A new track with .1 appended to the name will be created. This track will show all edits connected one after the other from the start point. In addition, you can specify a gap between these events before the copy by making a mark anywhere on the track. The length of this mark will determine the space in between each event.

Fixes in version 6.52:

These items have been fixed in this release. Please report any further problems immediately to WaveFrame Customer Support.

**** Transfer SoundFile crashes on 'bad grouping' file errors - FIXED**

Transfer SoundFile operations will no longer halt and crash WaveFrame and/or Windows when a 'bad grouping' file is included in the conversion. Instead, you will be prompted with a warning dialog that a channel is missing and the conversion will stop. Bad Grouping means that one of the channels of a multi-channel WaveFrame file is not available. You can avoid this by not separating (unlinking) these types of files and/or keeping them together on the same volume if they have been unlinked. You can also choose the 'Individual Selected Sounds' option at the start of the Transfer SoundFile process so that all available channels of a multi-channel file are listed (see further comments under Misc Notes section later in this document).

**** Transfer SoundFile of SD2 files with timecode greater than 12 hours broken – FIXED**

We have corrected a problem affecting the conversion of SD2 files. If these files had a timecode of greater than 12 hours, they would import with a negative TC value. With this fix, all original values are preserved as long as resource forks are available.

**** Transfer SoundFile always puts sounds in 'Default' library – FIXED**

Transfer SoundFile will now add converted sounds into the library specified under Options..Current Library instead of in a library called 'Default'. (this is regardless of which volume is selected).

**** Transfer SoundFile of Broadcast Wave files causing errors – FIXED**

We have corrected problems converting Broadcast Wave to WaveFrame files when the UFN already exists on any drive in the system. Error was 'FS: File already exists, context: 2222 data: 40 ' and appeared after the expected warning that the 'UFN already exists, do you want to create a new UFN?' and Yes was chosen.

**** Auto-load feature in NetWave's mSoft Player broken – FIXED**

The WaveFrame auto-load button in the mSoft Player once again initiates a Transfer SoundFile for the listed .wav candidates.

**** 'Save Project As' and 'Save Reel As' causing errors – FIXED**

Both 'Save Project As' and 'Save Reel As' were causing errors and not saving properly under some circumstances. These problems have been fixed.

**** Transfer SoundFile errors to Mac drives– FIXED**

We have fixed 'out of space on destination disk' errors when converting directly to Mac drives larger than 2 gb in size. You can now successfully convert to nearly any size drive. Please report any further related problems immediately to WaveFrame.

**** Dismounting drive causes 'Method not in system' errors when tracks are grouped – FIXED**

We fixed an old bug whereby dismounting a removable drive in Manage (only) would produce one or more 'Method not in system' errors when the tracks had been stereo, LCR or LCRS grouped in Edit. The resulting dismount would leave ghost tracks behind and/or produce duplicate tracks in Track Rack when drive was re-mounted. It is no longer necessary to ungroup tracks before dismounting. (This never affected dismounting in Edit or WaveFrame System).

**** Duplicate tracks being erroneously created during Import and Track Rack Rename routines – FIXED**

We have fixed problems whereby duplicate tracks were appearing in the Track Rack when project management tasks such as Import and Rename were followed by dismounts and remounts of a drive. We believe ALL duplicate track problems that have been a part of 6.50/6.51/6.52 beta have been addressed. Please report ANY further related problems **immediately** to David Hart in Beta Software Support at: **760-602-WF65 or dhart@waveframe.com**

**** Save while playing now disallowed unless CTRL-Save is used - MODIFICATION**

It has been determined that performing a **Save** in Edit while playing tracks on removable drives may corrupt tracks or a reel. Because of limited SCSI bandwidth, the system cannot always properly save edit changes while playing many tracks on a removable drive. To this end, we have disabled the ability to save while playing. If you invoke this, using either the Save (F11) button or File..Save (or Save As), a red status message will appear in the lower left corner of Edit indicating that you 'Cannot Save while playing'. You must then stop the transport to save. If you do need the option of saving while playing, you can do so by holding the CTRL key down and choosing Save or File..Save. This alternate method is provided for those users who do not use removable drives and/or are willing to risk the above mentioned problem to save time.

**** Inaccessible (gray) Swap menu item in Track Rack - FIXED**

We fixed a problem where the Track Rack Swap menu item would occasionally become grayed out when track(s) were selected to be swapped in. This was due to the Track Rack being left open going from Manage to Edit. We now close the Track Rack automatically during this operation.

**** Quick Mount problems – FIXED**

We fixed some issues where doing a Quick Mount would not always work properly. In addition, this feature has been significantly modified (please see New Features section above for full details). It is now safe to do a quick mount.

**** Mount crashes on certain MO drives that hang – FIXED**

We have improved the mount functionality when certain MO drives hang or have spin-up problems. The mount routine would intermittently hang and/or crash the SCSI buss. From now on you will be given the opportunity to retry or cancel operations when these drive problems are encountered.

**** Import shows dismounted tracks as fixed and imports wrong version – FIXED**

We have fixed a problem where Import Tracks would import the wrong version of a like-named track that exists on more than one drive. In addition, Import Tracks will now show any dismounted removable tracks with a 'XX' prefix to signify that they belong to no particular drive. This should help clear up any confusion about left-behind tracks. (this is necessary to allow for the import of non-mounted tracks on a print computer).

**** Errors on File..Retrieve or Define..Reel when opening a corrupted reel – FIXED**

We have modified and improved the behavior on certain errors when opening a reel. When a track gets corrupted, subsequent opens of that reel would return errors such as 'NIL# standardize' or 'NIL# ascii' or similar. Now the software will present a message that a particular track is corrupted and open the reel properly. At that point it is recommended that you delete the suspect track (if possible). Corrupted tracks are rare and now they will not prevent you from accessing a reel.

**** Import Tracks and Add tracks causing errors – FIXED**

If a Save was not performed after deleting removable tracks in the Track Rack, and the same tracks were subsequently created using Import or Add tracks, various errors would happen when editing and saving those tracks ('Could not archive Track' and/or 'Download archive error, file not found' etc.). It has always been recommended to do a Save immediately after a track deletion (unless you wanted to undo the deleted tracks) because the deletion was not committed until doing so. When like tracks were created, the previously deleted tracks would not get overwritten properly causing the above errors. The software will now automatically complete the deleted tracks routine when you choose both Import Tracks and Add track (in Track Rack and Manage). This new method guarantees that the newly created tracks can be edited and saved without errors. Once you perform one of these steps, you will not be able to undo your track deletions. (We still suggest doing a Save before and after track deletions and Volume Manager Mount and Dismount.)

**** Overwrite prompt during Import Tracks broken – FIXED**

We have fixed an old problem whereby selecting 'No' to the 'Replace existing files?' prompt during an Import Tracks operation did not work properly. Selecting this will now cancel the import of any tracks that already exist in the reel. This means you can safely import a group of tracks and only

new (non-existent) tracks will be brought in, while current ones will be preserved. Choosing 'Yes' will always overwrite as usual.

**** Overwrite prompt during Import Projects broken – FIXED**

We have fixed the Import Project routine so that saying 'Yes' will import, overwrite and show the correct versions of the tracks. You will have to re-select the project and reel as the current session after the import. As usual by choosing 'No', you can safely import a project (with all its tracks) and only new (non-existent) tracks will be brought in, while current ones will be preserved.

**** Assembly crashes when canceling during recording – FIXED**

We addressed a problem that was crashing Assembly when canceling a Record by clicking Stop and selecting 'No' to the 'Keep Sound File' prompt. This now works as it did in previous versions allowing you to cancel assembly and exit the application if need be.

**** Dismounted drives show in Sound Selector drive fields – FIXED**

We have modified the Drive and Copy To drive/volume fields in the Sound Selector so they default to FV after a removable last used in those fields is dismounted.

**** Invalid date format error after formatting – FIXED**

We fixed a problem in the Volume Manager..Edit dialog which produced a date display error on drives formatted after 12/31/1999. There were no side effects of this error.

**** Invalid date format error in View Current – FIXED**

We fixed a problem in the Utilities...View Current window that incorrectly displayed dates of recordings made in the year 2000. For example, 1-5-100, will now show correctly as 1-5-00. There were no side effects of this and dates are being recorded and stored properly.

**** Audition of stereo sounds from MO causes noise – WORKAROUND FIX**

This version provides a workaround to a problem whereby the sound selector audition of stereo sounds from an MO does not begin play properly. **Only** systems that use the faster Pentium II and III processors and Tahiti MO drives may exhibit noise and/or other play anomalies when doing this. Use of this setting will delay the playing of all sounds in the sound selector by 2-3 seconds but you will not get the error described above. Feel free to experiment with this if you are having these problems and make the best choice for your situation. Add the following to the [Session] section of your wavefrm.ini file:

```
[Session]
PlayDelay=3000
```

**** Stop on No Sync item in Recording Preferences broken - REMOVED**

The 'Stop on No Sync' preference in Recording Preferences has been removed as it was not doing anything and was not staying 'enabled' once checked. (It was toggling to the off state as soon as it was enabled.)

**** Transfer SoundFile errors when file names start with \, - or * - FIXED**

We have fixed a Transfer SoundFile error that if the first WaveFrame sound name began with a backslash, asterisk or dash it wouldn't export to any format nor would subsequent files in batch list.

**** Import Tracks & Project not working properly - FIXED**

We have addressed a few issues involving Import Tracks & Project whereby tracks would sometimes not show up and/or duplicate tracks would exist across volumes.

**** 'No Database Entry for UFN' errors - FIXED**

We believe we have fixed problems when going from Edit to Manage and/or doing a Save or Exiting that caused 'No Database Entry for UFN' errors'. These errors are intermittent and difficult to track. Please report any further observations of this immediately to WaveFrame Customer Support.

**** Removable drive tracks do not appear in Edit player positions - FIXED**

We have fixed a problem in Edit whereby previously swapped-in removable-drive tracks would not appear swapped in after a re-boot of WaveFrame software. Leader was appearing in every player position. (Fixed-drive tracks were not affected.)

**** Noise at end of converted MMR 24-bit sounds – FIXED**

We fixed errors in the MMR 24-bit conversion process that was adding noise to the very end of some files.

Warnings, Cautions and Known Problems

**** Potential problem while building waveform files (decimating)**

There have been a few reports that the system can crash during a build waveform process or when waveform display is used in Edit. In a few of these cases, the SCSI drive with waveform files on it may become inaccessible during a subsequent reboot when the drive is mounted; during system initialization, a message is presented informing the user that the drive's 'magic header is bad' and it will only allow mounting the drive in Read-Only mode. You will not be able to use the drive unless you copy all files to another drive or, if that does not work, you initialize or low-level format the drive (which will erase all data)*. Until we provide a fix for this problem, we suggest the following:

DO NOT do a 'background' Build Waveform Files process in SoundStore. In other words, when building waveform files in SoundStore, do not also work in Edit or Manage or any other application. Doing so may increase chances of the above problem.

* After an initialize (only) the WaveFrame DARCOMM utility can be used to safely unformat the drive and recover the material. Please contact WaveFrame for details on this process. In addition, if you encounter this problem, Studioframe version 6.11 may allow you to mount the drive in Read-Only mode so you can backup or copy the data. You will then need to initialize or low-level format the affected drive.

**** Converted .WAV and .SD2 files always loop while auditioning**

We are modifying the Transfer SoundFile operation so that converted .wav and .sd2 files will not loop when auditioned in Sound Selector or SoundStore.

**** Recording between 23 and 24 hour timecode sometimes fails**

Recordings made between 23 and 24 hour timecode in chase mode (and sometimes other modes) do not always print. This is due to a conflict as the counter approaches 24 hours, or 'zero' time. This is especially a problem when loading dailies/sound rolls stamped with time-of-day code. A suggested workaround is to use an offset and later move material to proper locations.

**** Actor32 errors when switching between Manage, Edit and/or Print**

We are still working to solve some random, intermittent crashes that occur when switching to or from Print and other WF applications after doing some project management tasks. Please report any similar problems to Customer Support. Until we provide a fix, it is recommended to do a File..Retrieve and/or Save before switching to Print after doing these tasks. This has been reported to decrease the frequency of these crashes.

**** Waveform display problems**

We are looking into reported problems with waveform display where a break or hole appears in the waveform of a particular event or track. In addition, waveforms of certain events appear to render again, even after already rendering in Edit or after a previous 'Build waveform files' process.

**** Destination folder name field entries crash Transfer SoundFile**

We are working on a bug whereby entering a new directory/folder name into the destination Folder field of the long file names dialog in Transfer Sound File crashes the system. You can avoid this by first creating the folder on your target drive in Windows Explorer before typing the name in this field and/or finding the folder using the drive navigation window.

**** Error exiting Print application**

Certain printers and drivers under Windows 98 Second Edition (only) may cause a non-fatal error when exiting or switching from Print. Clicking OK at the error will allow you to continue working with no further problems. You can also uninstall the printer in Windows (if not needed) and you will not get the error.

**** Inaccessible (gray) menu items in Manage**

When booting Manage, certain top-tier menu items may appear grayed out, making them inaccessible. A suggested workaround is to either go to Edit and back to Manage, or close and reopen Manage. We hope to have this issue resolved in a future version of WaveFrame.

**** Specific instance of Drag & Drop broken**

A mouse Drag&Drop of **more than 1** grouped (LR,LCR,LCRS) and combined display (hidden) set of tracks is broken. Copy/Paste works fine and is recommended here.

**** Timecode writer output drifts**

With 48k and 44.1k sample settings, the timecode writer output on the WaveFrame appears to drift about a sub-frame every couple minutes when compared to the corresponding audio output. This is a legacy problem and we hope to provide a fix in a future version of WaveFrame. (the pulldown rates are not affected).

Misc. Notes

Transfer SoundFile conversions to a Mac drive (used with the Here&Now Mac reader program) work best when the drive has been formatted with the Mac OS; using FWB or other utilities may produce errors or incorrect results.

When Manage or Edit are running, it is advised to only access the Volume Manager (where mounting is done) through Manage or Edit (File..Mount/Dismount or Ctrl+Shift+M) rather than directly in WaveFrame System. Although operations will work this way, some window focus issues may cause two Volume Manager windows to be open at the same time. If only WaveFrame System is running you can (and have to) access Volume Manager from there.

Occasionally after a crash the WaveFrame will boot to a black 'debug on COM' screen in Windows. This is due to a WaveFrame file trying to run as a full-screen box instead of as a windowed application. To fix this error, do the following:

Locate the nf.pif file in your WaveFrame directory. Right-click with the mouse and bring up Properties. Select the Screen tab. Under Usage, select Window (not Full-screen). To prevent this from happening again, change the Attributes property under the General tab to Read-only. (With this checked a WaveFrame crash will not be able to toggle the Screen setting). Click OK. WaveFrame will now boot properly.

The StudioCAD application cannot support file and directory/folder names longer than 8 characters. Please limit your CAD file names to 8 characters. The CAD File Open Dialog will not find either long file names or any files in long name directories until you navigate through at least one directory; at this point, you will notice that the truncated (DOS) version is shown in dialog. (The directory navigation error only happens after a clean WaveFrame install; once the truncation appears in the dialog subsequent opens work properly.)

Although we allow building waveform files in the background through WaveFrame System, please use caution when combining this with too many other operations. For example, building waveform files while playing in Edit and dismounting a drive may crash the system. Also, SCSI resources may get too low to properly play or scrub many edits and tracks, or search the database while building waveforms.

Two redefined selections are offered under Transfer Mode in the initial Transfer SoundFile window. Stereo Pairs as Stereo Files will only list one instance (one channel) of a stereo file to be transferred but will transfer both channels. Choose this option to guarantee that both channels of stereo files will convert (important for transfers both from and to WaveFrame format). Choose Individual

Selected Sounds (the default) to make available all channels of all sounds for the transfer. In this mode you can select channel 1 or 2 of a stereo file if need be (the exception is on transfers from a non-WaveFrame file; in this case only one channel is listed and converted). Mono files are listed in both modes. (Transfer SoundFile can only convert mono or stereo files).

Due to current database requirements, users should continue to refrain from mounting or dismounting fixed volumes in the Drive Manager, except to initialize or low-level format (it is recommended to close and re-open WaveFrame after doing so). However, Drive Manager can be safely used to mount removable drives that were not on-line at start-up time by clicking "Include Tape Drives" to scan the SCSI buss and then mounting from the same dialog. Please be aware that mounting from this area will not copy project and track files from your removable to your hard drive. To do this, go to SoundStore ... Volume Manager, dismount and re-mount the drive. Your drive can now be used in the editor applications.

In order to guarantee sync while using the ADR/Foley Replay feature, make sure the Edit...Edit Preferences...Loop Play option is set to Single (instead of Continuous).

It is not recommended to do a WaveFrame System...Disk Utilities...Waveform File Cleanup while waveform display is turned on in Edit. Doing so may crash the system or corrupt the database. Until we resolve this, do a waveform file cleanup in Manage or close Edit before using WaveFrame System for the operation.

When the WaveFrame transport is chasing timecode (gray mode), and stop is invoked on the TC source (i.e. VTR), it is necessary to also press Stop on the WaveFrame transport to view waveforms. Not doing so will prevent waveform display from resuming. Current requirements of TC chase mode do not allow the waveform display routine to have priority in this situation. Note that this does not affect machine control (white) mode, only chase (gray) mode. This is not a change in v6.52 - this requirement has existed since early versions of WaveFrame.

It is not recommended to perform certain operations on **only** the waveform files themselves. This would include making backups of only waveform files, and copying/moving only waveform files from one drive/volume to another in the SoundStore browsers. Special links are created between sound files and they're corresponding waveforms; any attempt to alter the default location of waveform files may cause database corruption and/or waveform display problems. One exception is the deletion of waveform files. This can be done without reservation and should be followed by a waveform file cleanup.

When using the WaveFrame transport in Edit (play, record, shuttle, jog, etc.), you may experience problems using the Windows 98 Taskbar to change focus or switch between open applications, or to

minimize/maximize windows. Due to changes in Windows and the introduction of the taskbar, certain WaveFrame window operations can cause the transport to freeze. Instead, it is recommended to use the traditional ALT-TAB keyboard routine that you are already familiar with. WaveFrame will be updating this routine for Windows compatibility in the future.

Please note that in order to properly save ALL user preferences under File..Export Preferences, you must define specific user preferences under Fixed Toolbar Editor and View Preferences first. Once these two areas have a user-name 'file', all settings in these areas will be included in the export preferences routine - and can be successfully imported on another machine. (Edit Preferences, Colors and Recording Preferences do not require a user-defined name).

The old Disk Recorder (wfdm.exe) still works only on the first 8 tracks and only on F1 (FA or FB) files. There are no plans to change this. Since it is only provided for users who want this interface, and is not supported in current versions of the software, WaveFrame does not recommend using this application.

The monitor mixer CAD views have faders tied to hardware tracks (player numbers). With the automatic assignment of layout tracks to hardware tracks, the ordering of the faders may not correspond to that of the tracks in the layout. This can be avoided by not having more tracks in the layout than there are hardware tracks available.

WaveFrame Version 6.51

Installation & Release Notes

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This release document discusses the following:

- Installation instructions for WaveFrame Version 6.51
- Switching between version 6.51 and previous versions of WaveFrame
- Details of fixes in this version update
- Warnings, cautions, and known problems

These release notes are available in a Word (.doc) version on disk 1 of the WaveFrame 6.51 installation set and are also added to the WaveFrame directory during installation.

(Versions 6.5, 6.22, 6.21 and 6.20 release notes are included at the end of this document)

Installation of Version 6.51

The installation instructions remain the same as in v6.5 and are repeated here for consistency. Read further for the new 'custom' install options.

WaveFrame version 6.51 **requires** Microsoft Windows 98. Please refer to your Windows documentation and set up Windows 98 on your system before continuing here. If you would like the option of dual-booting to Windows 3.11 and WaveFrame versions prior to 6.20, please see the section entitled, '**Installation of Windows 98 Upgrade - Dual-Boot Option**' towards the end of the WaveFrame Version 6.20 release notes included at the end of this document. (Please note that versions prior to 6.20 will not run properly in Windows 98).

You should install version 6.51 in a different directory/folder and program/shortcut group than any other versions (including Beta) already installed on your system. **Our installation now includes a Custom install option giving you the choice of saving your current wavefrm.ini and/or layout.ini files – see below.** (It is still a good idea to rename or backup your current wavefrm.ini file (in your specific Windows directory) before the installation). Pre-6.2x installs, including any .ini files, will not be affected by v6.51 installation since they correspond with the Windows 3.11 directory.

Close all WaveFrame applications before installing a new version.

Once you have installed and configured the basic Windows 98 OS, you may install the WaveFrame software by left-clicking on the **Start** window in the bottom left hand corner and selecting **Run** from the menu options. Install Disk 1 of the WaveFrame 6.51 software in the floppy drive and type **A:\Setup** in the command line box. When the setup program prompts you for the name of the directory to install to, WaveFrame 6.51, you can use it or choose WF651 or something similar. You can also change the default program group name if you so desire. Setup now offers three install types – Typical, Compact and Custom. The differences are explained below:

Choosing 'Typical' will install ALL files needed for WaveFrame including wavefrm.ini and layout.ini. (choosing this option will overwrite these two files as in previous installations).

Choosing 'Compact' performs same install as 'Typical' (see above).

Choosing ‘Custom’ will present you with three choices. Check only the box called ‘Required Files’ to install only the required WaveFrame files. This will preserve your wavefrm.ini and layout.ini files. Check either or both of the ‘Wavefrm.ini’ and ‘Layout.ini’ choices to overwrite them with a new version. Doing so will replace many of your settings with the defaults.

After all these dialogs, click Next to confirm your choices. Setup will continue automatically at this point.

After installation, it is important to re-boot the computer before running the new version. Please select ‘Finish’ and the set-up program will re-boot the system; alternately, you can choose to view the release notes (readme file) before restarting by selecting the appropriate option. In this case, go to Start..Shut Down..Restart.

You will notice 3 new WaveFrame program group icons (shortcuts): one each for new nreadme and wavefrm.ini settings documents and one for quick access to the WaveFrame web site (www.waveframe.com).

IMPORTANT - Wavefrm.ini change

The new Broadcast Wave conversion features in version 6.5 required an updated wavefrm.ini file. If you are upgrading a system from 6.2x, it is recommended to do a Typical install which will update (overwrite) your current waveframe.ini file. Not installing this will prevent these features from working. If you need to preserve your current wavefrm.ini settings, you can do a Custom install as described above, and then add the necessary lines into wavefrm.ini yourself. These can be found in the ‘New Features’ section of the 6.5 release notes below under Broadcast Wave conversions. Please contact Customer Support with any questions.

IMPORTANT DATABASE CHANGES

The distributed database model in version 6.20 was removed in the 6.21 update to provide more robust performance and address specific problems. WaveFrame intends to reintroduce this type of database in a future version. Due to this change, the following steps **MUST** be completed immediately after launching WaveFrame version 6.51 for the first time when upgrading directly from v6.20. **If you are upgrading from v6.21, 6.22 or 6.5 you do not need to perform these steps.** However, they must be completed when switching between v6.11 and any future versions or between 6.20 and any version.

- 1) Launch WaveFrame System only (within the appropriate WaveFrame program group). From the Disk Utilities menu, select Database Reclaims. In the Database Reclaims dialog box, select FV - All Fixed Volumes. In the section labeled Reclaim operation, select Rebuild Database. After the database is rebuilt, click OK (or press the Enter key). You should rebuild the database for each drive (fixed and removable) the first time it is used in version 6.51 when coming directly from 6.20, and any time you switch between versions as noted above.
- 2) Launch the desired application (Manage, Edit, Assemble, or Print) for the WaveFrame version you are running.

Switching Between WaveFrame Version 6.51 and pre-6.20 versions of WaveFrame (i.e. 6.11)

If you want the ability to switch between 6.1x and 6.2x or 6.5x versions, it is necessary to switch between the two Windows operating systems. Please follow our optional '**Installation of Windows 98 Upgrade - Dual-Boot Option**' procedure at the end of the 6.20 Release Notes included at the end of this document which will set up your WaveFrame as a dual boot system.

As long as you are using any version prior to 6.20, you can choose which version to start by using icons in the correct program group once you have reverted to Windows 3.11. In addition, you may need to run cpvnfd.bat from the DOS prompt in the directory of your 6.xx version to get the right vnfd.386 in the Windows\system directory. (To use versions prior to 6.00, you must start Windows 3.1x using the DCS command from DOS in the directory for the version you want to run.). When changing versions always reboot the entire system first.

WaveFrame Version 6.2x-6.52 Release Notes

Please follow the above-mentioned procedure to rebuild your database when switching between 6.1x and 6.2x or 6.5x versions.

Fixes in Version 6.51

These items have been fixed in this release. Please report any further problems immediately to WaveFrame Customer Support.

**** 'Build Waveform Files' process crashes and causes drive to be inaccessible - FIXED**

We have addressed a bug whereby doing a 'build waveform files' (decimation) process in WaveFrame System might have crashed the system and rendered a drive inaccessible. An error similar to the following was reported – 'Volume corrupted; Bad header magic...' when rebooting and remounting a volume. You can now create waveform files in WaveFrame System without a concern for this issue.

**** Conversion to and from stereo Broadcast Wave files broken - FIXED**

We have fixed a problem whereby the conversions of stereo Broadcast Wave files would not be written properly or not complete. Converting a stereo Broadcast Wave file to WaveFrame format would produce an WFMDR error saying Bad UFN Parameter, Context 2222, Data 40 and would not complete the process. You can now do conversions of these types of files with no problems.

ALL OF THE ABOVE ITEMS HAVE BEEN FIXED IN THIS RELEASE

Warnings, Cautions and Known Problems

**** Specific instance of Drag & Drop broken**

A mouse Drag&Drop of **more than 1** grouped (LR,LCR,LCRS) and combined display (hidden) set of tracks is broken. Copy/Paste works fine and is recommended here.

**** Inaccessible (gray) menu items**

When booting Manage, certain top-tier menu items may appear grayed out, making them inaccessible. We are still working on this problem and hope to provide a fix in a future update. A suggested workaround is to either go to Edit and back to Manage, or close and reopen Manage.

**** StudioCAD application does not support long file and directory names**

The StudioCAD application cannot support file and directory/folder names longer than 8 characters. Please limit your CAD file names to 8 characters. The CAD File Open Dialog will not find either long file names or any files in long name directories until you navigate through at least one directory; at this point, you will notice that the truncated (DOS) version is shown in dialog. (The directory navigation error only happens after a clean WaveFrame install; once the truncation appears in the dialog subsequent opens work properly.)

Misc. Notes

Occasionally after a crash the WaveFrame will boot to a black 'debug on COM' screen in Windows. This is due to a WaveFrame file trying to run as a full-screen box instead of as a windowed application. To fix this error, do the following:

Locate the nf.pif file in your WaveFrame directory. Right-click with the mouse and bring up Properties. Select the Screen tab. Under Usage, select Window (not Full-screen). To prevent this from happening again, change the Attributes property under the General tab to Read-only. (With this checked a WaveFrame crash will not be able to toggle the Screen setting). Click OK. WaveFrame will now boot properly.

Although we allow building waveform files in the background through WaveFrame System, please use caution when combining this with too many other operations. For example, building waveform files while playing in Edit and dismounting a drive may crash the system. Also, SCSI resources may get too low to properly play many edits and tracks, scrub or search the database while building waveforms.

Two redefined selections are offered under Transfer Mode in the initial Transfer SoundFile window. Stereo Pairs as Stereo Files will only list one instance (one channel) of a stereo file to be transferred but will transfer both channels. Choose this option to guarantee that both channels of stereo files will convert (important for transfers both from and to WaveFrame format). Choose Individual Selected Sounds (the default) to make available all channels of all sounds for the transfer. In this mode you can select channel 1 or 2 of a stereo file if need be (the exception is on transfers from a non-WaveFrame file; in this case only one channel is listed and converted). Mono files are listed in both modes. (Transfer SoundFile can only convert mono or stereo files).

Due to current database requirements, users should continue to refrain from mounting or dismounting fixed volumes in the Drive Manager, except to initialize or low-level format (it is recommended to close and re-open WaveFrame after doing so). However, Drive Manager can be safely used to mount removable drives that were not on-line at start-up time by clicking "Include Tape Drives" to scan the SCSI buss and then mounting from the same dialog. Please be aware that mounting from this area will not copy project and track files from your removable to your hard drive. To do this, go to SoundStore ... Volume Manager, dismount and re-mount the drive. Your drive can now be used in the editor applications.

In order to guarantee sync while using the ADR/Foley Replay feature, make sure the Edit...Edit Preferences...Loop Play option is set to Single (instead of Continuous).

It is not recommended to do a WaveFrame System...Disk Utilities...Waveform File Cleanup while waveform display is turned on in Edit. Doing so may crash the system or corrupt the database. Until we resolve this, do a waveform file cleanup in Manage or close Edit before using WaveFrame System for the operation.

When the WaveFrame transport is chasing timecode (gray mode), and stop is invoked on the TC source (i.e. VTR), it is necessary to also press Stop on the WaveFrame transport to view waveforms. Not doing so will prevent waveform display from resuming. Current requirements of TC chase mode do not allow the waveform display routine to have priority in this situation. Note that this does not affect machine control (white) mode, only chase (gray) mode. This is not a change in v6.51 - this requirement has existed since early versions of WaveFrame.

It is not recommended to perform certain operations on **only** the waveform files themselves. This would include making backups of only waveform files, and copying/moving only waveform files from one drive/volume to another in the SoundStore browsers. Special links are created between sound files and they're corresponding waveforms; any attempt to alter the default location of waveform files may cause database corruption and/or waveform display problems. One exception is the deletion of waveform files. This can be done without reservation and should be followed by a waveform file cleanup.

When using the WaveFrame transport in Edit (play, record, shuttle, jog, etc..), you may experience problems using the Windows 98 Taskbar to change focus or switch between open applications, or to minimize/maximize windows. Due to changes in Windows and the introduction of the taskbar, certain WaveFrame window operations can cause the transport to freeze. Instead, it is recommended to use the traditional ALT-TAB keyboard routine that you are already familiar with. WaveFrame will be updating this routine for Windows compatibility in the future.

Please note that in order to properly save ALL user preferences under File..Export Preferences, you must define specific user preferences under Fixed Toolbar Editor and View Preferences first. Once these two areas have a user-name 'file', all settings in these areas will be included in the export preferences routine - and can be successfully imported on another machine. (Edit Preferences, Colors and Recording Preferences do not require a user-defined name).

The old Disk Recorder (wldr.exe) still works only on the first 8 tracks and only on F1 (FA or FB) files. There are no plans to change this. Since it is only provided for users who want this interface, and is not supported in current versions of the software, WaveFrame does not recommend using this application.

The monitor mixer CAD views have faders tied to hardware tracks (player numbers). With the automatic assignment of layout tracks to hardware tracks, the ordering of the faders may not correspond to that of the tracks in the layout. This can be avoided by not having more tracks in the layout than there are hardware tracks available.

WaveFrame Version 6.5

Installation & Release Notes

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This release document discusses the following:

- Installation instructions for WaveFrame Version 6.5
- Switching between version 6.5 and previous versions of WaveFrame
- Details of new features and fixes in this version update and how to use them
- Warnings, cautions, and known problems

These release notes are available in a Word (.doc) version on disk 1 of the WaveFrame 6.5 installation set and are also added to the WaveFrame directory during installation.

(Versions 6.22, 6.21 and 6.20 release notes are included at the end of this document)

Installation of Version 6.5

Many of the installation instructions remain the same as in v6.2x except for a few updates and are repeated here for consistency. Read further for the new 'custom' install options.

WaveFrame version 6.5 **requires** Microsoft Windows 98. Please refer to your Windows documentation and set up Windows 98 on your system before continuing here. If you would like the option of dual-booting to Windows 3.11 and WaveFrame versions prior to 6.20, please see the section entitled, '**Installation of Windows 98 Upgrade - Dual-Boot Option**' towards the end of the WaveFrame Version 6.20 release notes included at the end of this document. (Please note that versions prior to 6.20 will not run properly in Windows 98).

You should install version 6.5 in a different directory/folder and program/shortcut group than any other versions (including Beta) already installed on your system. **Our installation now includes a Custom install option giving you the choice of saving your current wavefrm.ini and/or layout.ini files – see below.** (It is still a good idea to rename or backup your current wavefrm.ini file (in your specific Windows directory) before the installation). Pre-6.2x installs, including any .ini files, will not be affected by v6.5 installation since they correspond with the Windows 3.11 directory.

Close all WaveFrame applications before installing a new version.

Once you have installed and configured the basic Windows 98 OS, you may install the WaveFrame software by left-clicking on the **Start** window in the bottom left hand corner and selecting **Run** from the menu options. Install Disk 1 of the WaveFrame 6.5 software in the floppy drive and type **A:\Setup** in the command line box. When the setup program prompts you for the name of the directory to install to, WaveFrame 6.5, you can use it or choose WF65 or something similar. You can also change the default program group name if you so desire. Setup now offers three install types – Typical, Compact and Custom. The differences are explained below:

Choosing 'Typical' will install ALL files needed for WaveFrame including wavefrm.ini and layout.ini. (choosing this option will overwrite these two files as in previous installations).

Choosing 'Compact' performs same install as 'Typical' (see above).

Choosing ‘Custom’ will present you with three choices. Check only the box called ‘Required Files’ to install only the required WaveFrame files. This will preserve your wavefrm.ini and layout.ini files. Check either or both of the ‘Wavefrm.ini’ and ‘Layout.ini’ choices to overwrite them with a new version. Doing so will replace many of your settings with the defaults.

After all these dialogs, click Next to confirm your choices. Setup will continue automatically at this point.

After installation, it is important to re-boot the computer before running the new version. Please select ‘Finish’ and the set-up program will re-boot the system; alternately, you can choose to view the release notes (readme file) before restarting by selecting the appropriate option. In this case, go to Start..Shut Down..Restart.

You will notice 3 new WaveFrame program group icons (shortcuts): one each for new nfreedme and wavefrm.ini settings documents and one for quick access to the WaveFrame web site (www.waveframe.com).

IMPORTANT - Wavefrm.ini change

The new Broadcast Wave conversion features in version 6.5 require an updated wavefrm.ini file. It is therefore recommended to do a Typical install which will update (overwrite) your current waveframe.ini file. Not installing this will prevent these features from working. If you need to preserve your current wavefrm.ini settings, you can do a Custom install as described above, and then add the necessary lines into wavefrm.ini yourself. These can be found in the ‘New Features’ section below under Broadcast Wave conversions. Please contact Customer Support with any questions.

IMPORTANT DATABASE CHANGES

The distributed database model in version 6.20 was removed in the 6.21 update to provide more robust performance and address specific problems. WaveFrame intends to reintroduce this type of database in a future version. Due to this change, the following steps **MUST** be completed immediately after launching WaveFrame version 6.5 for the first time when upgrading directly from v6.20. **If you are upgrading from v6.21 or 6.22 you do not need to perform these steps.** However, they must be completed when switching between v6.11 and any future versions or between 6.20 and any version.

- 1) Launch WaveFrame System only (within the appropriate WaveFrame program group). From the Disk Utilities menu, select Database Reclaims. In the Database Reclaims dialog box, select FV - All Fixed Volumes. In the section labeled Reclaim operation, select Rebuild Database. After the database is rebuilt, click OK (or press the Enter key). **You should rebuild the database for each drive (fixed and removable) the first time it is used in version 6.5 when coming directly from 6.20, and any time you switch between versions** as noted above.
- 2) Launch the desired application (Manage, Edit, Assemble, or Print) for the WaveFrame version you are running.

Switching Between WaveFrame Version 6.5 and pre-6.20 versions of WaveFrame (i.e. 6.11)

If you want the ability to switch between 6.1x and 6.2x or 6.5 versions, it is necessary to switch between the two Windows operating systems. Please follow our optional '**Installation of Windows 98 Upgrade - Dual-Boot Option**' procedure at the end of the 6.20 Release Notes which will set up your WaveFrame as a dual boot system.

As long as you are using any version prior to 6.20, you can choose which version to start by using icons in the correct program group once you have reverted to Windows 3.11. In addition, you may need to run cpvnfd.bat from the DOS prompt in the directory of your 6.xx version to get the right vnfd.386 in the Windows\system directory. (To use versions prior to 6.00, you must start Windows 3.1x using the DCS command from DOS in the directory for the version you want to run.). When changing versions always reboot the entire system first.

Please follow the above-mentioned procedure to rebuild your database when switching between 6.1x and 6.2x or 6.5 versions.

New Features in Version 6.5

- **Ability to record 8 tracks simultaneously on one drive – R8+ card required**
- **Conversion of 24-bit material from the Tascam MMR-8**
- **Conversion of 24-bit material from the WaveFrame 1000**
- **Conversion of Broadcast Wave files to and from WaveFrame recordings**
- **Ability to reverse sounds to create a reverse-playback effect**
- **File..Save Project As and Save Reel As features implemented**
- **Import (tracks) available in the Track Rack**
- **Removable drive mounting speeds greatly increased**
- **Print application mount routines enhanced**
- **Support for the mSoft Server/Player Application**
- **New NFREADME and Wavefrm.ini settings documents**

Ability to record 8 tracks simultaneously on one drive – R8+ card required

In version 6.20, WaveFrame introduced support for the R8+ card, an enhanced version of the R8 card, which allows for playback of 8 tracks on a single SCSI buss. For those who have upgraded to the R8+ card, version 6.5 now adds support for recording 8 tracks simultaneously on a single SCSI buss. In addition, it is required that you use the latest Seagate Barracuda A/V drives or faster

models. To enable this new feature, please add the following line to the [DAES] section of your wavefrm.ini file before running the software:

```
Enable8ChannelRecord=YES
```

Please note: By adding this line and enabling this feature, the WaveFrame will record more than 4 tracks to a single drive, and in a dual buss/drive system this will cause record problems. Therefore, when using this setting without an R8+ card in a standard dual buss configuration, you will need to assign your tracks to the specific drive in either F1, F2 or F3; i.e. 4 tracks to FA, 4 tracks to FB, etc. This will guarantee balanced recordings across both busses.

Conversion of 24-bit material from the Tascam MMR-8

WaveFrame now supports playback and editing of 24-bit material recorded on the Tascam MMR-8 and then allows for the edited material to be played back on the MMR-8 or MMP-16. This is currently accomplished by first converting the 24-bit sounds to WaveFrame 16-bit format and then converting the 24-bit tracks. Once the editing/conform is accomplished, the tracks are converted back to 24-bit format. Please follow this procedure:

Mount the MMR-8 drive with 24-bit material on the WaveFrame. Go to WaveFrame System. Under Disk Utilities...Transfer SoundFile, select 'MMR 24-bit Recording' as Source File Type and 'WaveFrame Recording' as Destination. Click OK. In the browser window, select the appropriate drive and all the sound files you want to convert. There is no method for converting only those sounds which are in MMR tracks – you must use your own search criteria for conversion. After moving the selected files to the right-hand list box, click Select. In the following dialog you are asked to select the destination drive/volume. We recommend choosing the same drive that your 24-bit material is on.(** see below.) Click OK to start the conversion. Because this process takes 50% to 80% as long as actual time being copied, converting many files can be a time-consuming process, and should be performed well in advance of any planned editing. Transfer time varies depending on how many files are chosen and how large those files are. Note that converted files are given the same name as the originals and a library name of Default.

Once this process has finished, go to Manage and open the MMR reel to be edited. Open the Track Rack and select the MMR tracks. Choose Copy...Selected As...16-Bit. Next select the destination drive, again choosing the one that the 24-bit material is on. The tracks will be converted to 16-bit format and all events will properly link to the 16-bit sounds previously converted. (you will notice the new tracks with [16-bit] appended on them). You can now edit material on these tracks and also introduce additional 16-bit WaveFrame sounds. Once finished, go to the Track Rack and

select the 16-bit tracks you just edited; select Copy...Selected As...24-Bit, choose the same destination volume and new tracks with [24-bit] appended will appear. There is no need to convert the 16-bit sounds back to 24-bit format since those versions already exist on the drive. You can now dismount and take this drive to an MMR-8/MMP-16 for immediate playback of edited material. Since there will be 16-bit tracks/sounds on the drive, be sure to load up the proper 24-bit tracks on the MMR. The MMR is capable of playing back 16 and 24-bit material within tracks and reels so any new sounds you introduced during your editing will play alongside the original 24-bit sounds.

Please note: Although you can do the conversion to a different volume than where the 24-bit material is, any new 16-bit sounds you introduce into your session will not be copied back to that original drive during the final 16 to 24-bit conversion. For this reason, we recommend doing all your conversions to the MMR drive. Please use caution though when doing these conversions on your MMR drive – backup all material beforehand and do not do conversions on the drive if space is getting low. In this case, converting to another drive could be useful.

Conversion of 24-bit material from the WaveFrame 1000

WaveFrame has added the ability to convert (older) WaveFrame 1000 24-bit sounds to the 16-bit format. If you have material recorded in this format from a WF 1000, mount the drive and go to WaveFrame System...Disk Utilities...Transfer SoundFile. Select '1000 24-bit Recording' as Source File Type and 'WaveFrame Recording' as Destination. Click OK. In the browser window, select the appropriate drive and the sound files you want to convert. After moving the selected files to the right-hand list box, click Select. In the following dialog you are asked to select the destination drive/volume. Click OK to start the conversion. Because this process takes 50% to 80% as long as actual time being copied, converting many files can be a time-consuming process, and should be performed well in advance of any planned editing. Transfer time varies depending on how many files are chosen, how large those files are and the speed of the destination drive you are copying to. Once finished, you can use these sounds in your reel. Note that converted files are given the same name as the originals and a library name of Default.

Conversion of Broadcast Wave files to and from WaveFrame recordings

WaveFrame has added the ability to convert Broadcast Wave sound files to WaveFrame format, and WaveFrame to Broadcast Wave. The Broadcast Wave format is very similar to the standard .WAV format but includes timecode data and can store header information. These files can have

one of two (dos) extensions, .WAV or .BWF (the standard DEVA format). By default, Transfer SoundFile only looks for and creates .WAV extensions. To change this behavior, see the section on the next page regarding wavefrm.ini settings.

If you have material recorded in the Broadcast Wave format, go to WaveFrame System...Disk Utilities...Transfer SoundFile. Select 'Broadcast Wave' as Source File Type and 'WaveFrame Recording' as Destination. Click OK. In the long file name dialog box, click Select Folder to choose the drive and folder where the source files are to be found. Once that selection is made, you will see a list of files in the file list box of the long file name dialog. (If you are importing the list of files to be converted, they can be added to the file list box by clicking 'Clipboard' (prior to this, the list of files must be added to the clipboard by doing a standard Copy command in your application)). Highlight each file to be transferred and click OK. You can then choose which WaveFrame drive to transfer to. Converting from Broadcast Wave to WaveFrame will fill in timecode in and out fields and modify the 'class' type to Dialog for later use in auto-assembly.

To convert WaveFrame files to Broadcast Wave, select 'WaveFrame Recording' as Source File Type and 'Broadcast Wave' as Destination. Click OK. After choosing the appropriate WaveFrame volume, sound files will appear in a SoundStore browser window. Once you have selected the file(s) to be converted, click Select and the long file name dialog box will appear. To select the target drive and folder, click the Select Folder button. In the following Select Directory box, navigate to the target drive and folder and click OK. Back in the long file name dialog, you can modify the name that will be given to the transferred file in the field titled 'File Name:' (this can be done for each file as it's transferred if Auto Destination Names is not checked). Click OK to start the transfer.

Four wavefrm.ini settings have been designated for use in converting to and from the Broadcast Wave format. There are two switches that preserve the file headers on conversion from and to the WaveFrame format; the basic purpose of these is to allow certain database information from the original WaveFrame files to be written into the Broadcast Wave file, including the UFN, so that if they are converted back to WaveFrame that information is brought back in. The third switch preserves the UFN (WaveFrame unique file number) on conversion back from Broadcast Wave; as an example, its purpose is to allow placement of converted WaveFrame files onto a server for later re-conversion back to WaveFrame with the same UFN for use in projects. (this is the only converted format that allows for this). The fourth switch toggles the DOS extension between .WAV and .BWF. The following lines have been added to the [SoundIO] section of the wavefrm.ini file that is installed during a Typical or Compact installation. Settings shown are the defaults. You can change any of these to TRUE or FALSE as needed. Please contact WaveFrame Customer Support with any questions.

TransferHeaders=TRUE (or FALSE)

(Set to TRUE means WaveFrame header data will be stored in any Broadcast Wave files created.)

UseTransHeaders=TRUE (or FALSE)

(Set to TRUE means WaveFrame header data will be retrieved from Broadcast Wave files previously created if above setting was set to TRUE.)

NOTE: The above header data contains info about the original UFN(s) that the file came from.

UseTransUFNs=TRUE (or FALSE)

(Set to TRUE will cause Broadcast Wave files which were generated from WaveFrame files to be restored using their original UFN(s) –provided the UFN(s) don't already exist on any mounted volume. If the UFN(s) do exist, user will be prompted with YES or NO. Choosing YES will replace existing file and create a new UFN for the converted file.)

UseBWFextension=FALSE (or TRUE)

(Set to TRUE will cause the system to use BWF as the extension for Broadcast Wave files instead of WAV; used for conversion to and from this format.)

Ability to reverse sounds to create a reverse-playback effect

You can now create reverse sound effects in the WaveFrame editor. This process is accomplished much like Create Effect and Create Loop in Edit. To use this feature, you must first select an event or mark a particular area of an event. Choose Create...Reverse Effect. The marked area will be re-recorded and then reversed. Upon completion you will see the standard 'info viewer' naming dialog box with '% Reverse Effect' in the name field. After changing the fields you want to, click Modify. The resulting reversed sound is placed into the 'paste' buffer and is now available in the sound selector and other browsers. You can paste it into the desired location in a track or retrieve it later from the database.

Please note: As with Create Effect, Create Reverse Effect can only be used with mono and stereo files and tracks (not LCR or LCRS).

File..Save Project As & File..Save Reel As features implemented

You can now create a new project based on the current project by using this new feature. In both Manage and Edit, choose File..Save Project As. When the dialog appears, type in a new Project name in the entry field. This will create a new project with all the reels and tracks (and episodes or dubs if used) from the current project. The new 'save as' Project will then be opened as the current project.

Similarly, choosing File..Save Reel As will allow you to make a copy of your current reel into any defined Project on the system. When the dialog appears, choose the Project to save the reel into from the selection box and type in a new Reel name. All the tracks in the current reel will be copied into this new reel. The new 'save as' Reel will then be opened as the current reel. (Please note that this operation can only take place within a defined Project; you cannot enter a new Project name. If you want to save your reel into a new Project, first define it then perform the Save Reel As operation).

These work just like Save..As in other Windows applications. This convenient feature will save time and effort in making duplicates of your projects and reels, eliminating the need to import tracks just to make a safety copy.

Import (tracks) available in the Track Rack

You can now import tracks directly into your current reel from within the Track Rack in both Edit and Manage. This makes the import process much more intuitive and saves time from having to go to Manage to move tracks from reel to reel. Click 'Import' from within the Track Rack and choose the appropriate local or remote drive and directory (typically C and UDD). Next, choose the Project/(Episode)/Reel/Dub you want to import from. Choose the tracks to import from the available list. Please note that you will be prompted if tracks with the same name already exist; choosing Yes to replace will overwrite the current track(s) with the same name(s), choosing No will not overwrite any duplicate tracks. This behavior is the same within and between different dub versions (i.e. you can import a track from Reel 1 Dub0 into Reel 2 Dub1 and overwrite if necessary).

Removable drive mounting speeds greatly increased

The mounting time of large removable volumes with many reels/tracks was taking up to 10-20 minutes each time. We have enhanced this routine so that long wait times only occur upon mounting the first time on a given system and will speed up re-boots considerably. In doing so a few new routines have been added and some familiar behavior modified.

You will see two new 'mount' buttons in the standard Volume Manager – Full Mount and Quick Mount. Choose 'Full Mount' the first time a particular removable drive is used on a given system. This will copy all the necessary session information into the WaveFrame software on the computer's hard drive. This type of mount will behave as before. When this drive is dismounted, all the removable Projects defined on your system will remain. To mount it again do a 'Quick Mount'. If no information has changed on the drive, it will mount very quickly, usually within a second or two. If any information has changed (possibly due to the drive having been accessed and updated on another WaveFrame or MMR-8), then a more complete full mount will automatically take place to update the session information on the computer. This 'quick mount' routine will also take place when the system is re-booted and mounts an existing removable drive where no changes are present. When selecting Quick Mount, the system will only do a Full Mount if one of these conditions exist:

- 5) The drive has never been mounted on this system.
- 6) You previously cleaned up all removable drive projects (see below).
- 7) Changes were made to one or more of the sessions on the removable on another WaveFrame or MMR-8.
- 8) You replaced your wavefrm.ini file with a new one (a line is added to this file during these mounting routines; please do not make any manual changes to it).
- 9) After dismounting a drive, you mounted another drive at that same SCSI address, then re-mounted the original drive (In this case, all session data will need to be updated again because we can only track one drive per SCSI address at a time within the system).

The new dismounting method will leave all the removable Projects defined on your system; but only fixed drive tracks will be accessible. No tasks will affect the removable drive tracks or have access to them. This includes Save Project As and Save Reel As. If you delete one of the projects, you will need to perform a Full Mount to recreate the session on your system.

A new Manage menu item has been added to aid in properly deleting these left-behind removable drive projects: Cleanup..Removable Projects. This will delete any Projects that have ONLY removable drive tracks in them. Any Projects that have at least one fixed drive track or a spotting sheet will not be deleted. Before choosing this, dismount all removables (you will get a warning if you haven't). Once this has been done, your system will be purged of all removable drive sessions,

and you will need to do a Full Mount to recreate any pre-existing projects. (choosing Quick Mount here will automatically perform a Full Mount).

To make mounting as fast as possible, you can disable 'Full FS Check on Boot' in WaveFrame System...View...Preferences. This will eliminate the file system checking done on the drive during mounting, saving approx. 10-30 seconds.

Please Note: Because this feature only works in version 6.5, it is necessary to always do a Full Mount when switching between this and earlier versions and when bringing a drive forward from v6.11, 6.2x or beta 6.5g. Doing a Quick Mount in these situations will not update the session data between the SCSI drive and the WaveFrame.

Hidden feature: You can bypass the new quick dismount routine by pressing the CTRL key while selecting Dismount in the Volume Manager. This does a traditional dismount whereby all removable-only projects/tracks are deleted from the system. This would be the same as doing a regular dismount followed by a Cleanup...Removable Projects.

Print application mount routines enhanced

The Print application mount and dismount routines now match Manage, Edit and Assemble (including the new Quick and Full Mount methods). Previously, mounting a removable volume in Print did not copy session data into the WaveFrame system.

Support for the mSoft Server/Player Application

This version adds support for the integration of the WaveFrame Transfer SoundFile feature and mSoft's sound server database. This integration allows for easy cataloging, auditioning and selecting of wave sounds from a remote server through an internet browser on the WaveFrame. The selected sounds can then be automatically imported into the WaveFrame using mSoft's wave player. Once this is done, the sounds can be used in WaveFrame sessions. (You can find a beta version of the mSoft player on the WaveFrame Beta FTP site – called 'mSoftPlayer.exe'). Use of this feature requires not only version 6.5, but mSoft's sound server and a library of wave sound files. For more information on this unique product, please contact your local WaveFrame dealer or Advanced Systems Group.

New NFREADME and Wavefrm.ini settings documents

The old NFREADME document has been updated and renamed 'nfreaddme.txt'. It includes all known environment variables and other hardware address and setting options for the WaveFrame system.

We are now providing a document that explains many of the settings in the 'wavefrm.ini' file. It is called 'wavefrm ini settings.doc' (a Microsoft Word file). Please read the introduction in this file before making any changes to your wavefrm.ini file. This is really for informational purposes only. Please use caution when making any changes. Some of the items listed do not have a description and may get updated over time. In addition, not every setting is guaranteed to work.

Both of these documents can be found in your WaveFrame installation directory and shortcuts have been added to the 6.5 program group on the Start menu.

Fixes in Version 6.5

These items have been fixed in this release. Please report any further problems immediately to WaveFrame Customer Support.

**** Transfer SoundFile to SDII format – fixed in this release**

WaveFrame sound files converted to SD2 now export properly and can be used in ProTools and other SD2-supported applications. Please refer to the v6.21 release notes to set up Here & Now software to properly read and write Mac files on your WaveFrame.

**** Manage...Backup by tracks from removable drive returns error: Method not in system: NIL#+, then system hangs - Fixed**

This behavior existed in v6.11, 6.2x and beta 6.5 and has been corrected.

**** Mount of large removable volumes with many reels/tracks can take 10-20 minutes - Fixed**

We have enhanced this routine so that long wait times only occur upon mounting the first time on a given system. See the 'new features' section for a complete explanation of this fix.

**** Backup hangs indefinitely with no error message - Fixed**

We have enhanced the WaveFrame's ability to notify the user when and why a backup has hung during its operation. In two specific instances, that of a faulty Exabyte drive and when a tape is full, Manage will now put up an error explaining that backup cannot continue. At press time, the errors may be difficult to understand, but will later be made more clear. Clicking OK on the error message will shut down the backup procedure and eject the tape. (Please note that WaveFrame may not be able to calculate a tape full error until it has actually reached the end of the tape which may be a few hours into an operation).

**** Backup and Copy operations failing on some Pentium II systems - Fixed**

SCSI timing faults were causing some drive operation failures when using (slower) Hawk drives in the latest Pentium II WaveFrames. This has been fixed. If you have any related problems with this type of configuration, please contact WaveFrame Customer Support. You can also add the following line to your 'autoexec.bat' file:

```
SET NFNOSDC=1
```

(please see the new nreadme.txt file for information on this setting.)

**** Inaccessible (gray) menu items - Fixed**

When booting Manage, certain top-tier menu items may have appeared grayed out, making them inaccessible. We have addressed this issue so you should not see it anymore. If this should happen again, please contact WaveFrame Customer Support.

**** Transfer SoundFile crash on three & four channel sounds - Fixed**

We have enhanced the functionality of Transfer SoundFile to prevent the user from trying to convert 3 and 4-channel sounds. Transfer SoundFile can only convert mono or stereo files; converting LCR/LCRS linked sound files will bring up a dialog preventing the operation. LCR and LCRS WaveFrame files should be unlinked in the Sound Selector before a conversion to any other format.

**** Date fields in Define dialog do not accept year 2000 entries – Fixed**

Manage..Define..Project and Reel Date In & Date Due fields will now accept year entries beyond 99. Any two digit year is OK.

**** Backup shows Missing Edit/Sound warnings when waveforms are part of backup – Fixed**

We have fixed a backup problem involving waveform files that may have paused your backup listing on screen. It is no longer necessary to do both a Database Rebuild and Waveform File Cleanup (in this order) before starting a backup.

**** Manage..Load errors - Fixed**

We have fixed a problem whereby Manage..Load of tapes with waveform files were sometimes crashing during the operation, leaving only sounds and waveform files on the drives but no session and track data.

**** Import Tracks from unmounted volumes broken – Fixed**

A problem importing tracks (from an exported removable drive session) while the original drive is not mounted has been corrected.

ALL OF THE ABOVE ITEMS HAVE BEEN FIXED IN THIS RELEASE

Warnings, Cautions and Known Problems

**** StudioCAD application does not support long file and directory names**

The StudioCAD application cannot support file and directory/folder names longer than 8 characters. Please limit your CAD file names to 8 characters. The CAD File Open Dialog will not find either long file names or any files in long name directories until you navigate through at least one directory; at this point, you will notice that the truncated (DOS) version is shown in dialog. (The directory navigation error only happens after a clean WaveFrame install; once the truncation appears in the dialog subsequent opens work properly.)

Misc. Notes

Occasionally after a crash the WaveFrame will boot to a black 'debug on COM' screen in Windows. This is due to a WaveFrame file trying to run as a full-screen box instead of as a Windowed application. To fix this error, do the following:

Locate the nf.pif file in your WaveFrame directory. Right-click with the mouse and bring up Properties. Select the Screen tab. Under Usage, select Window (not Full-screen). To prevent this from happening again, change the Attributes property under the General tab to Read-only. (With this checked a WaveFrame crash will not be able to toggle the Screen setting). Click OK. WaveFrame will now boot properly.

Although we allow building waveform files in the background through WaveFrame System, please use caution when combining this with too many other operations. For example, building waveform files while playing in Edit and dismounting a drive may crash the system. Also, SCSI resources may get too low to properly play many edits and tracks, scrub or search the database while building waveforms.

Two redefined selections are offered under Transfer Mode in the initial Transfer SoundFile window. Stereo Pairs as Stereo Files will only list one instance (one channel) of a stereo file to be transferred but will transfer both channels. Choose this option to guarantee that both channels of stereo files will convert (important for transfers both from and to WaveFrame format). Choose Individual Selected Sounds (the default) to make available all channels of all sounds for the transfer. In this mode you can select channel 1 or 2 of a stereo file if need be (the exception is on transfers from a

non-WaveFrame file; in this case only one channel is listed and converted). Mono files are listed in both modes. (At this time Transfer SoundFile can only convert mono or stereo files).

Due to current database requirements, users should continue to refrain from mounting or dismounting fixed volumes in the Drive Manager, except to initialize or low-level format (it is recommended to close and re-open WaveFrame after doing so). However, Drive Manager can be safely used to mount removable drives that were not on-line at start-up time by clicking "Include Tape Drives" to scan the SCSI buss and then mounting from the same dialog. Please be aware that mounting from this area will not copy project and track files from your removable to your hard drive. To do this, go to SoundStore ...Volume Manager, dismount and re-mount the drive. Your drive can now be used in the editor applications.

In order to guarantee sync while using the ADR/Foley Replay feature, make sure the Edit...Edit Preferences...Loop Play option is set to Single (instead of Continuous).

It is not recommended to do a WaveFrame System...Disk Utilities...Waveform File Cleanup while waveform display is turned on in Edit. Doing so may crash the system or corrupt the database. Until we resolve this, do a waveform file cleanup in Manage or close Edit before using WaveFrame System for the operation.

When the WaveFrame transport is chasing timecode (gray mode), and stop is invoked on the TC source (i.e. VTR), it is necessary to also press Stop on the WaveFrame transport to view waveforms. Not doing so will prevent waveform display from resuming. Current requirements of TC chase mode do not allow the waveform display routine to have priority in this situation. Note that this does not affect machine control (white) mode, only chase (gray) mode. This is not a change in v6.5 - this requirement has existed since early versions of WaveFrame.

It is not recommended to perform certain operations on **only** the waveform files themselves. This would include making backups of only waveform files, and copying/moving only waveform files from one drive/volume to another in the SoundStore browsers. Special links are created between sound files and their corresponding waveforms; any attempt to alter the default location of waveform files may cause database corruption and/or waveform display problems. One exception is the deletion of waveform files. This can be done without reservation and should be followed by a waveform file cleanup.

When using the WaveFrame transport in Edit (play, record, shuttle, jog, etc.), do not use the Windows 98 Taskbar to change focus or switch between open applications, or to minimize/maximize windows. Due to changes in Windows and the introduction of the taskbar, certain WaveFrame window operations can cause the transport to freeze. Instead, it is recommended to use the

traditional ALT-TAB keyboard routine that you are already familiar with. WaveFrame will be updating this routine for Windows compatibility in the future.

Please note that in order to properly save ALL user preferences under File..Export Preferences, you must define specific user preferences under Fixed Toolbar Editor and View Preferences first. Once these two areas have a user-name 'file', all settings in these areas will be included in the export preferences routine - and can be successfully imported on another machine. (Edit Preferences, Colors and Recording Preferences do not require a user-defined name).

The old Disk Recorder (wldr.exe) still works only on the first 8 tracks and only on F1 (FA or FB) files. There are no plans to change this. Since it is only provided for users who want this interface, and is not supported in current versions of the software, WaveFrame does not recommend using this application.

The monitor mixer CAD views have faders tied to hardware tracks (player numbers). With the automatic assignment of layout tracks to hardware tracks, the ordering of the faders may not correspond to that of the tracks in the layout. This can be avoided by not having more tracks in the layout than there are hardware tracks available.

WaveFrame Version 6.22

Installation & Release Notes

(Version 6.22 is an update to version 6.20 and 6.21)

This release document discusses the following:

- Installation instructions for WaveFrame Version 6.22
- Switching between version 6.22 and previous versions of WaveFrame
- Details of fixes in this version update
- Warnings, cautions, and known problems

These release notes are available in a Word 95 version on disk 5 of the WaveFrame 6.22 installation set and are also added to the WaveFrame directory during installation.

(Version 6.21 and 6.20 Release Notes are included at the end of this document)

Installation of Version 6.22

This is an upgrade to WaveFrame version 6.20, released in August 1998, and version 6.21, released in January 1999. Many of the instructions remain the same except for a few updates and are repeated here for consistency.

WaveFrame version 6.22 **requires** Microsoft Windows 98. Please refer to your Windows documentation and set up Windows 98 on your system before continuing here. If you would like the option of dual-booting to Windows 3.11 and WaveFrame versions prior to 6.20, please see the section entitled '**Installation of Windows 98 Upgrade - Dual-Boot Option**' in the WaveFrame Version 6.20 release notes included at the end of this document. (Please note that versions prior to 6.20 will not run properly in Windows 98).

You should install version 6.22 in a different directory/folder and program/shortcut group than any other versions (including Beta) already installed on your system. If you have been running any beta version, 6.20 or 6.21, it is recommended to rename your wavefrm.ini file (in your specific Windows directory) before the installation. This version will overwrite wavefrm.ini if it finds one. After installing, you may rename your file back to wavefrm.ini to recall your session settings. Pre-6.2x installs, including any .ini files, will not be affected by v6.22 installation since they correspond with the Windows 3.11 directory.

Close all WaveFrame applications before installing a new version.

Once you have installed and configured the basic Windows 98 OS, you may install the WaveFrame software by left-clicking on the **Start** window in the bottom left hand corner and selecting **Run** from the menu options. Install Disk 1 of the WaveFrame 6.22 software in the floppy drive and type **A:\Setup** in the command line box. When the setup program prompts you for the name of the directory to install to, WaveFrame, you can use it or choose WF622 or something similar. You may want to change the program group name from WaveFrame to WaveFrame 622 when it appears. Setup will continue automatically at this point.

After installation, it is important to re-boot the computer before running the new version. Please select 'Finish' and the set-up program will re-boot the system.

IMPORTANT DATABASE CHANGES

The distributed database model in version 6.20 was removed in the 6.21 update to provide more robust performance and address specific problems. WaveFrame intends to reintroduce this type of database in a future version. Due to this change, the following steps **MUST** be completed immediately after launching WaveFrame version 6.22 for the first time when upgrading directly from v6.20. **If you are upgrading from v6.21 you do not need to perform these steps.** They must also be completed when switching between any WaveFrame versions 6.11, 6.20, and 6.21/6.22.

- 1) **Launch WaveFrame System only (within the appropriate WaveFrame program group). From the Disk Utilities menu, select Database Reclaims. In the Database Reclaims dialog box, select FV - All Fixed Volumes. In the section labeled Reclaim operation, select Rebuild Database. After the database is rebuilt, click OK (or press the Enter key).** You should rebuild the database for each drive (fixed and removable) the first time it is used in version 6.22, and any time you switch between versions **as noted above.**
- 2) Launch the desired application (Manage, Edit, Assemble, or Print) for the WaveFrame version you are running.

Switching Between WaveFrame Version 6.22 and pre-6.2x versions of WaveFrame (i.e. 6.11)

If you want the ability to switch between 6.1x and 6.2x versions, it is necessary to switch between the two Windows operating systems. Please follow our optional **Installation of Windows 98 Upgrade - Dual-Boot Option**' procedure at the end of the 6.20 Release Notes which will set up your WaveFrame as a dual boot system.

As long as you are using any version prior to 6.20, you can choose which version to start by using icons in the correct program group once you have reverted to Windows 3.11. In addition, you may need to run cpvnfd.bat from the DOS prompt in the directory of your 6.xx version to get the right vnfd.386 in the Windows\system directory. (To use versions prior to 6.00, you must start Windows 3.1x using the DCS command from DOS in the directory for the version you want to run.). When changing versions always reboot the entire system first. Please follow the above-mentioned procedure to rebuild your database when switching between 6.1x and 6.2x versions.

Fixes in Version 6.22

These items have been fixed in this release. Please report any further problems immediately to WaveFrame Customer Support.

**** Transfer SoundFile to WAV warning – fixed in this release**

WaveFrame sound files converted to WAV will now open in many sound applications in addition to the Windows Media Player.

**** Waveform Display options in View...Preferences – fixed in this release**

If you choose between the two waveform display options under View...Preferences and go to WaveFrame System...Build Waveform Files (decimation), the system will now prompt you to turn off waveform display in the editor before allowing the operation to begin.

**** ‘Build Waveform Files’ crash on very short sound files – fixed in this release**

Generating waveforms from sound files of lengths 0 to 2 frames will now NOT crash the application.

**** Timecode Window Context Menu is off screen – fixed in this release**

The right-click context menus of the main timecode windows in Edit have been repositioned to show up entirely on screen.

ALL OF THE ABOVE ITEMS HAVE BEEN FIXED IN THIS RELEASE

Warnings, Cautions and Known Problems

**** Transfer SoundFile warning**

At this time Transfer SoundFile can only convert mono or stereo files; converting three and four channel (linked) sound files will crash the WaveFrame System application. We are working on a method to warn the user and/or to disallow this operation. LCR and LCRS WaveFrame files should be unlinked in the Sound Selector before a conversion to any other format.

**** Transfer SoundFile to SDII format broken**

We are addressing a problem that corrupts a file during conversion to the SDII file format. The file will not be usable in any SDII native applications such as ProTools. As a workaround you may transfer to the AIFF format and import that file into ProTools.

Misc. Notes

It is not recommended to do a WaveFrame System...Disk Utilities...Waveform File Cleanup while waveform display is turned on in Edit. Doing so may crash the system or corrupt the database. Until we resolve this, do a waveform file cleanup in Manage or close Edit before using WaveFrame System for the operation.

Due to the current database requirements, users should continue to refrain from mounting or dismounting fixed volumes in the Drive Manager (except to initialize drives; always reboot after doing so). However, Drive Manager can be safely used to mount removable drives that were not on-line at start-up time by clicking "Include Tape Drives" to scan the SCSI buss and then mounting from the same dialog.

In order to guarantee sync while using the ADR/Foley Replay feature, make sure the Edit...Edit Preferences...Loop Play option is set to Single (instead of Continuous).

When the WaveFrame transport is chasing timecode (gray mode), and stop is invoked on the TC source (i.e. VTR), it is necessary to also press Stop on the WaveFrame transport to view waveforms. Not doing so will prevent waveform display from resuming. Current requirements of TC chase mode do not allow the waveform display routine to have priority in this situation. Note

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that this does not affect machine control (white) mode, only chase (gray) mode. This is not a change in v6.22 - this requirement has existed since early versions of WaveFrame.

It is not recommended to perform certain operations on **only** the waveform files themselves. This would include making backups of only waveform files, and copying/moving only waveform files from one drive/volume to another in the SoundStore browsers. Special links are created between sound files and their corresponding waveforms; any attempt to alter the default location of waveform files may cause database corruption and/or waveform display problems. One exception is the deletion of waveform files. This can be done without reservation and should be followed by a waveform file cleanup.

When using the WaveFrame transport in Edit (play, record, shuttle, jog, etc.), do not use the Windows 98 Taskbar to change focus or switch between open applications, or to minimize/maximize windows. Due to changes in Windows and the introduction of the taskbar, certain WaveFrame window operations can cause the transport to freeze. Instead, it is recommended to use the traditional ALT-TAB keyboard routine that you are already familiar with. WaveFrame will be updating this routine for Windows 98 compatibility in the future.

Please note that in order to properly save ALL user preferences under File..Export Preferences, you must define specific user preferences under Fixed Toolbar Editor and View Preferences first. Once these two areas have a user-name 'file', all settings in these areas will be included in the export preferences routine - and can be successfully imported on another machine. (Edit Preferences, Colors and Recording Preferences do not require a user-defined name).

The old Disk Recorder (wfdr.exe) still works only on the first 8 tracks and only on F1 (FA or FB) files. There are no plans to change this. Since it is only provided for users who want this interface, and is not supported in current versions of the software, WaveFrame does not recommend using this application.

The monitor mixer CAD views have faders tied to hardware tracks (player numbers). With the automatic assignment of layout tracks to hardware tracks, the ordering of the faders may not correspond to that of the tracks in the layout. This can be avoided by not having more tracks in the layout than there are hardware tracks available.

WaveFrame Version 6.21

Installation & Release Notes

(Version 6.21 is an update to version 6.20)

This release document discusses the following:

- Installation instructions for WaveFrame Version 6.21
- Switching between version 6.21 and previous versions of WaveFrame
- Details of new features and fixes in this version update and how to use them
- Warnings, cautions, and known problems

These release notes are available in a Word 95 version on disk 5 of the WaveFrame 6.21 installation set and are also added to the WaveFrame directory during installation.

(Version 6.20 Release Notes are included at the end of this document)

Installation of Version 6.21

This is an upgrade to WaveFrame version 6.20, released in August 1998. Many of the instructions remain the same except for a few updates and are repeated here for consistency.

WaveFrame version 6.21 **requires** Microsoft Windows 98. Please refer to your Windows documentation and set up Windows 98 on your system before continuing here. If you would like the option of dual-booting to Windows 3.11 and WaveFrame versions prior to 6.20, please see the section entitled '**Installation of Windows 98 Upgrade - Dual-Boot Option**' in the WaveFrame Version 6.20 release notes included at the end of these release notes. (Please note that versions prior to 6.20 will not run properly in Windows 98).

You should install version 6.21 in a different directory/folder and program/shortcut group than any other versions (including Beta) already installed on your system. If you have been running any beta version or 6.20, it is recommended to rename your wavefrm.ini file (in the Win98 directory) before the installation. This version will overwrite wavefrm.ini if it finds one in the Win98 directory. After installing, you may rename your file back to wavefrm.ini to recall your session settings. Pre-6.2x installs, including any .ini files, will not be affected by v6.21 installation since they correspond with the Windows 3.11 directory.

Close all WaveFrame applications before installing a new version.

Once you have installed and configured the basic Windows 98 OS, you may install the WaveFrame software by left-clicking on the **Start** window in the bottom left hand corner and selecting **Run** from the menu options. Install Disk 1 of the WaveFrame 6.21 software in the floppy drive and type **A:\Setup** in the command line box. When the setup program prompts you for the name of the directory to install to, WaveFrame, you can use it or choose WF621 or something similar. You may want to change the program group name from WaveFrame to WaveFrame 621 when it appears. Setup will continue automatically at this point.

After installation, it is important to re-boot the computer before running the new version. Please select 'Finish' and the set-up program will re-boot the system.

IMPORTANT DATABASE CHANGES

The distributed database model in version 6.20 has been removed in this update to provide more robust performance and address specific problems. WaveFrame intends to reintroduce this type of database in a future version. Due to this change, the following steps **MUST** be completed immediately after launching WaveFrame version 6.21 for the first time. They must also be completed when switching between any WaveFrame versions (6.11, 6.20, 6.21).

- 1) **Launch WaveFrame System only (within the appropriate WaveFrame program group). From the Disk Utilities menu, select Database Reclaims. In the Database Reclaims dialog box, select FV - All Fixed Volumes. In the section labeled Reclaim operation, select Rebuild Database. After the database is rebuilt, click OK (or press the Enter key).** You should rebuild the database for each drive (fixed and removable) the first time it is used in version 6.21, and any time you switch between versions.
- 2) Launch the desired application (Manage, Edit, Assemble, or Print) for the WaveFrame version you are running.

Switching Between WaveFrame Version 6.21 and pre-6.20 versions of WaveFrame (i.e. 6.11)

If you want the ability to switch between 6.1x and 6.2x versions, it is necessary to switch between the two Windows operating systems. Please follow our optional **Installation of Windows 98 Upgrade - Dual-Boot Option**' procedure at the end of the 6.20 Release Notes which will set up your WaveFrame as a dual boot system.

As long as you are using any version prior to 6.20, you can choose which version to start by using icons in the correct program group once you have reverted to Windows 3.11. In addition, you may need to run cpvnfd.bat from the DOS prompt in the directory of your 6.xx version to get the right vnfd.386 in the Windows\system directory. (To use versions prior to 6.00, you must start Windows 3.1x using the DCS command from DOS in the directory for the version you want to run.). When changing versions always reboot the entire system first.

Please follow the above mentioned procedure to rebuild your database when switching between 6.1x and 6.2x versions.

New Features in Version 6.21

- **Long File Name Support in Transfer SoundFile operations**

The Transfer SoundFile feature now supports long file names under Windows 98 when converting to and from the WaveFrame file format. (Previously, file names longer than 8 characters were truncated to the DOS xxxxxxxx.yyy standard when exporting to a non-WaveFrame format). Using this feature, the entire file name will be preserved making name recognition and searches more efficient.

To enable this feature, go to WaveFrame System...Disk Utilities...Transfer SoundFile. Check the box labeled, 'Use Long File Names'. Follow the instructions below which will assume use of this new feature.

File Format Conversion (Transfer SoundFile)

The Transfer SoundFile feature now supports OMF, AIFF, WAVE, and SDII formats. You can select sound files in any of these formats - WaveFrame Recording, 1000 24-bit Recording, 1000 Sampler Signal, IRCAM/Gross, IRCAM/Gross low byte first, OMFI 1.5, AIFF, WAVE, SDII - and convert them to sound files in any of these formats - WaveFrame Recording, 1000 Sampler Signal, IRCAM/Gross, IRCAM/Gross low byte first, OMFI 1.5, AIFF, WAVE, SDII (see bug list below).

To convert files from one format to another, select the Transfer SoundFile item under the WaveFrame System Disk Utilities menu. A dialog box will appear showing 'source' file choices on the left and 'destination' file choices on the right. To preserve file names longer than 8 characters check the box labeled 'Use Long File Names'. Once you have selected these parameters, click the OK button. A file selection box will appear based on the source file-type default.

When converting from WaveFrame to any other format:

All sound files on FV will appear in a SoundStore browser window. Once you have selected the file(s) to be converted, click Select and the long file name dialog box will appear. To select the target drive and folder, click the Select Folder button. In the following Select Directory box, navigate to the target drive and folder and click OK. Back in the long file name dialog, you can modify the name that will be given to the transferred file in the field titled 'File Name:' (this can be done for each file as it's transferred if Auto Destination Names is not checked – see below). Click OK to start the transfer.

When converting from any other format to WaveFrame:

In the long file name dialog box, click Select Folder to choose the drive and folder where the source files are to be found. Once that selection is made, you will see a list of files in the file list box of the long file name dialog. If you are importing the list of files to be converted, they can be added to the file list box by clicking 'Clipboard' (prior to this, the list of files must be added to the clipboard by doing a standard Copy command in your application). Highlight each file to be transferred and click OK. You can then choose which WaveFrame drive to transfer to.

An option has been created for auto-naming destination files and doing 'batch' file transfers. When the Auto Destination Names box is checked in the Transfer SoundFile window, the system will automatically give the 'destination' sound file the same name as the 'source' file (use the long file name option to preserve names longer than 8 characters). This also allows for several selected files to be transferred as part of one routine. Please note that using the Auto Destination Names option asks for the destination drive on the first sound file only - the routine then uses this drive as the destination for the remainder of the batch-conversion. Because this process takes 50% to 80% as long as actual time being copied, converting many files can be a time-consuming process, and should be performed well in advance of any planned editing. Transfer time varies depending on how many files are chosen, how large those files are and the speed of the destination drive you are copying to.

Two redefined selections are offered under Transfer Mode in the initial Transfer SoundFile window. Stereo Pairs as Stereo Files will only list one instance (one channel) of a stereo file to be transferred but will transfer both channels. Choose this option to guarantee that both channels of stereo files will convert. Choose Individual Selected Sounds (the default) to make available all channels of all sounds for the transfer. In this mode you can select channel 1 or 2 of a stereo file if need be. Mono files are listed in both modes. (At this time Transfer SoundFile can only convert mono or stereo files).

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** In order to properly read and write files to and from a Mac disk on your WaveFrame you will need to run an application called Here & Now. This allows a Windows PC to access Mac files which may be required in Transfer SoundFile operations. It is necessary to enable the Here & Now resource fork option under Options...Show resource forks of Macintosh files. In addition, certain file format specifications need to be configured in Here & Now. The most common are SDII and AIFF. The following information should be added to appropriate fields in the file list in the Here & Now main window:

	<u>SDII</u>	<u>AIFF</u>
Name of application:	Sound Designer	Sound Designer
DOS Filename Extension:	SD2	AIF
Macintosh creator signature:	Sd2a	Sd2a
Macintosh file type:	Sd2f	AIFF

Here & Now can be purchased through WaveFrame.

- **Decimation renamed**

We have renamed the 'Decimate Sound File(s)' menu item under WaveFrame System...SoundStore to 'Build Waveform File(s)', a more appropriate heading. We hope this clears up any confusion about how and where to generate waveforms.

Fixes in Version 6.21

These items have been fixed in this release. Please report any further problems immediately to WaveFrame Customer Support.

**** Sound Selector Audition problem – fixed in this release**

Auditioning sounds in the Sound Selector WHILE its search list is still counting and expanding with Sort Enable on will destructively delete those sounds not yet listed.

**** Database Sort problem – fixed in this release**

Database Sort of greater than 999 files is not allowed.

**** Transfer SoundFile problems – fixed in this release**

A Transfer SoundFile operation of greater than approx. 1200 sounds (i.e. in a batch process) may abort before it finishes (usually after 50 to 80%).

**** Waveforms of certain sounds will not display – fixed in this release**

Certain operations can cause waveforms to not display even if they have displayed previously or been created through SoundStore decimation. These are:

- 1) In Edit, when doing a drag and drop copy of sound events across drives (i.e. MO to fixed, etc.) that do show waveforms, certain copied events may not display waveform.
- 2) SoundStore Backup of sounds and their corresponding waveform files and subsequent restore to a different drive causes some events on the target drive to not display waveforms.
- 3) Track Rack copies of tracks to another drive may cause copied tracks to not display waveforms.

**** No-Record Assembly problem – fixed in this release**

A No-Record Assembly of long EDL's (>150 lines) can take very long to complete.

**** SoundStore and Sound Selector Copy problem – fixed in this release**

Soundstore and Sound Selector Copy from drive to drive of greater than 500 files (sounds) crashes after approx. 50-60% of the files have been copied.

**** Sort of SoundStore Restore List error – fixed in this release**

Performing a sort of a SoundStore 'Restore' list crashes the WaveFrame System application.

**** Potential problem after decimating sound files – fixed in this release**

In a few cases it has been reported that SCSI drives with waveform files on them can become inaccessible during a system boot when the drive is mounted. In these instances, during system initialization, a message is presented informing the user that the drive's 'magic header is bad' and it will only allow mounting the drive in Read-Only mode.

**** Mounting Write-Protected MO Media error – fixed in this release**

If you attempt to mount a write-protected MO, WaveFrame System will crash with a 'Browser lock failed' error.

**** SoundStore Restore problem – fixed in this release**

Soundstore Restore to certain single drives of the fixed volume (i.e. FB,FC,FD) of files backed up from a removable drive is not working properly. Most or all files do not get restored.

ALL OF THE ABOVE ITEMS HAVE BEEN FIXED IN THIS RELEASE

Warnings, Cautions and Known Problems

**** Transfer SoundFile warning**

At this time Transfer SoundFile can only convert mono or stereo files; converting three and four channel (linked) sound files will crash the WaveFrame System application. We are working on a method to warn the user and/or to disallow this operation. LCR and LCRS WaveFrame files should be unlinked in the Sound Selector before a conversion to any other format.

**** Transfer SoundFile to SDII format broken**

We are addressing a problem that corrupts a file during conversion to the SDII file format. The file will not be usable in any SDII native applications such as ProTools. As a workaround you may transfer to the AIFF format and import that file into ProTools.

**** Transfer SoundFile to WAV warning**

We are addressing a problem whereby files converted to WAV will not open into certain applications (most notably, Windows Sound Recorder, Steinberg Wavelab and Waves Convert). The files can be read in Windows Media Player. We suggest using this application to play WAV files until we modify the Transfer SoundFile routine.

**** Waveform Display options in View...Preferences**

If you choose between the three waveform display options under View...Preferences (as opposed to the more standard View...Waveform Display menu item) and subsequently go to WaveFrame System...Build Waveform Files (decimation), the system will crash. Please refrain from using View...Preferences to toggle waveform display until we provide a fix in the next update.

**** 'Build Waveform Files' crash on very short sound files**

Generating waveforms from sound files of lengths 0 to 2 frames will crash the application. You can, however, display waveforms in Edit of such sounds in tracks. Until we fix this problem, avoid building waveforms in WaveFrame System of files under 3 frames.

Misc Notes

It is not recommended to do a WaveFrame System...Disk Utilities...Waveform File Cleanup while waveform display is turned on in Edit. Doing so may crash the system or corrupt the database. Until we resolve this, do a waveform file cleanup in Manage or close Edit before using WaveFrame System for the operation.

Due to the current database requirements, users should continue to refrain from mounting or dismounting fixed volumes in the Drive Manager (except to initialize drives; always reboot after doing so). However, Drive Manager can be safely used to mount removable drives that were not on-line at start-up time by clicking "Include Tape Drives" to scan the SCSI buss and then mounting from the same dialog.

In order to guarantee sync while using the ADR/Foley Replay feature, make sure the Edit...Edit Preferences...Loop Play option is set to Single (instead of Continuous).

When the WaveFrame transport is chasing timecode (gray mode), and stop is invoked on the TC source (i.e. VTR), it is necessary to also press Stop on the WaveFrame transport to view waveforms. Not doing so will prevent waveform display from resuming. Current requirements of TC chase mode do not allow the waveform display routine to have priority in this situation. Note that this does not affect machine control (white) mode, only chase (gray) mode. This is not a change in v6.21 - this requirement has existed since early versions of WaveFrame.

It is not recommended to perform certain operations on **only** the waveform files themselves. This would include making backups of only waveform files, and copying/moving only waveform files from one drive/volume to another in the SoundStore browsers. Special links are created between sound files and their corresponding waveforms; any attempt to alter the default location of waveform files may cause database corruption and/or waveform display problems. One exception is the deletion of waveform files. This can be done without reservation and should be followed by a waveform file cleanup.

When using the WaveFrame transport in Edit (play, record, shuttle, jog, etc..), do not use the Windows 98 Taskbar to change focus or switch between open applications, or to minimize/maximize windows. Due to changes in Windows and the introduction of the taskbar, certain WaveFrame window operations can cause the transport to freeze. Instead, it is recommended to use the traditional ALT-TAB keyboard routine that you are already familiar with. WaveFrame will be updating this routine for Windows 98 compatibility in the future.

WaveFrame Version 6.2x-6.52 Release Notes

Please note that in order to properly save ALL user preferences under File..Export Preferences, you must define specific user preferences under Fixed Toolbar Editor and View Preferences first. Once these two areas have a user-name 'file', all settings in these areas will be included in the export preferences routine - and can be successfully imported on another machine. (Edit Preferences, Colors and Recording Preferences do not require a user-defined name).

The old Disk Recorder (wldr.exe) still works only on the first 8 tracks and only on F1 (FA or FB) files. There are no plans to change this. Since it is only provided for users who want this interface, and is not supported in current versions of the software, WaveFrame does not recommend using this application.

The monitor mixer CAD views have faders tied to hardware tracks (player numbers). With the automatic assignment of layout tracks to hardware tracks, the ordering of the faders may not correspond to that of the tracks in the layout. This can be avoided by not having more tracks in the layout than there are hardware tracks available.

WaveFrame Version 6.20

Installation & Release Notes

Welcome to WaveFrame Version 6.20!

This release document discusses the following:

- Installation instructions for WaveFrame Version 6.20 and important steps that must be taken the first time you run this version
- Switching between version 6.20 and previous versions of WaveFrame (i.e. 6.11)
- Details of the new features in this version and how to use them
- Warnings, cautions, and known problems
- Installation of Windows 98 Upgrade - Dual-boot Option
- Installation and configuration of the Quatech TV-200 Machine Control card drivers

These release notes are available in a Word 95 version on disk 5 of the WaveFrame 6.20 installation set.

Installation of Version 6.20

WaveFrame version 6.20 **requires** Microsoft Windows 98. Please refer to your Windows documentation and set up Windows 98 on your system before continuing here. If you would like the option of dual-booting to Windows 3.11 and WaveFrame versions prior to 6.20, please see the section entitled, '**Installation of Windows 98 Upgrade - Dual-Boot Option**' towards the end of these release notes. (Please note that versions prior to 6.20 will not run properly in Windows 98).

You should install version 6.20 in a different directory/folder and program/shortcut group than any other versions (including Beta) already installed on your system. If you have been using a beta version, it is recommended to rename your wavefrm.ini file (in the Win98 directory) before the installation. This version will overwrite wavefrm.ini if it finds one in the Win98 directory. After installing, you may rename your file back to wavefrm.ini to recall your session settings. Previous version installs, including any .ini files, will not be affected by v6.20 installation.

Close all WaveFrame applications before installing a new version.

Once you have installed and configured the basic Windows 98 OS, you may install the WaveFrame software by left-clicking on the **Start** window in the bottom left hand corner and selecting **Run** from the menu options. Install Disk 1 of the WaveFrame 6.20 software in the floppy drive and type **A:\Setup** in the command line box. When the setup program prompts you for the name of the directory to install to, WaveFrame, you can use it or choose WF620 or something similar. You may want to change the program group name from WaveFrame to WaveFrame 620 when it appears. Setup will continue automatically at this point.

After installation, it is important to re-boot the computer before running the new version. Please select 'Finish' and the set-up program will re-boot the system.

IMPORTANT

The following steps **MUST** be completed immediately after launching WaveFrame Version 6.20 for the first time.

- 1) Launch WaveFrame System only (within the WaveFrame 6.20 group). From the Disk Utilities menu, select Database Reclaims. In the Database Reclaims dialog box, select FV - All Fixed Volumes. In the section labeled Reclaim operation, select Rebuild Database. After the database is rebuilt, click OK (or press the Enter key). You should rebuild the database for each drive the first time it is used in version 6.20.
- 2) Launch the desired application (Manage, Edit, Assemble, or Print) for WaveFrame Version 6.20.

Switching Between WaveFrame Version 6.20 and previous versions of WaveFrame (i.e. 6.11)

If you want the ability to switch between versions, it is necessary to switch between the two Windows operating systems. Please follow our optional **'Installation of Windows 98 Upgrade - Dual-Boot Option'** procedure at the end of these release notes which will set up your WaveFrame as a dual boot system. During boot-up, just before the Windows 98 start-up graphic, quickly press the F8 key. This will put up a menu on a DOS screen. The last option will be to select "***An earlier version of DOS***". Select this choice and the system will revert back to its DOS/Windows 3.1x operating system where you can run earlier versions of WaveFrame. (**Shortcut:** Alternately, you can press the F4 key and the system will automatically run DOS and Windows 3.1x bypassing the menu screen).

As long as you are using any version prior to 6.20, you can choose which version to start by using icons in the correct program group once you have reverted to Windows 3.11. In addition, you may need to run cpvnfd.bat from the DOS prompt in the directory of your 6.xx version to get the right vnfd.386 in the Windows\system directory. (To use versions prior to 6.00, you must start Windows 3.1x using the DCS command from DOS in the directory for the version you want to run.). When changing versions always reboot the entire system first.

The following steps must be completed when launching any earlier WaveFrame version after running version 6.20, and again when launching version 6.20 after running any earlier WaveFrame version:

- 1) Launch WaveFrame System only (within the WaveFrame program group). From the Disk Utilities menu, select Database Reclaims. In the Database Reclaims dialog box, select FV - All Fixed Volumes. In the section labeled Reclaim operation, select Rebuild Database. After the database is rebuilt, click OK (or press the Enter key). You should rebuild the Database for each drive the first time it is used in version 6.20
- 2) Launch the desired application (Manage, Edit, Assemble, or Print) for the WaveFrame version you are running.

New Features in Version 6.20

- **Fast Waveform Draw**
- **File Format Conversion (Transfer SoundFile)**
- **OMF Import and Export**
- **Track Hiding and Grouping via the Track Display Menu**
- **Sort Feature in Sound Selector and SoundStore Browsers**
- **Support for the DIO-8 Multichannel AES I/O card**
- **Support for the Exabyte Eliant (820)**
- **Support for the R-8+ board for 8 track single buss playback**
- **Support for Iomega JAZ drives**

Fast Waveform Draw

Version 6.20 speeds up the waveform drawing process dramatically. It saves waveform drawings as files and stores them with their associated sound files on the SCSI drives. This process, known as decimating, occurs automatically the first time a sound is viewed in Edit. WaveFrame calculates and draws the waveform of the new sound at the current zoom level, then saves this drawing as a file to the same drive/volume where the sound resides. A new waveform is calculated, drawn, and saved for each sound file as necessary whenever you zoom to a new level. Whenever a sound is edited or laid into a track, WaveFrame recalls the waveform file and displays it rather than recalculating and redrawing it. The same commands are used to turn waveform display on and off, but Selected Edit now operates on the focused track and has been enhanced to include all tracks in a group (LR, LCR, LCRS).

As an alternative to generating waveforms in the Edit window, WaveFrame offers the Decimate Sound Files command, located in the WaveFrame System SoundStore menu. Choosing this item creates waveform files for all selected sounds at all zoom levels. This process can operate in the background while you continue to do your normal work in Edit, even recording. The only requirement is that you disable waveform display in Edit first. You will see a warning if you try to decimate from SoundStore while waveforms are displayed in the editor, and if you try to activate waveform display in Edit while decimating in SoundStore. Decimating an entire database can be a time-consuming process, and may slow down some Edit operations. In these cases, it is recommended to decimate during breaks or overnight in advance of any planned editing. Once this is done however, all waveforms will be available for immediate viewing in the Edit window.

In Manage, waveform files are copied along with their associated sound files whenever the sound files and tracks are copied, backed up or loaded - either through the Track Rack, Sound Selector or during tape operations. When sounds are deleted in the Sound Selector, the corresponding waveform files are deleted as well. In SoundStore, waveform files can be copied along with their associated sound files whenever the sound files are copied, backed up, or restored - by choosing them in addition to sound files, or by clicking Yes for 'Include Subfiles?' in the browsers. To delete specific waveform files, choose SoundStore...Delete and search on the new file-type keyword, Waveform. (It is highly recommended to run Waveform File Cleanup after deleting waveform files in this manner).

A method of safely deleting orphaned (non-associated) waveform files is available. It is done as a cleanup (similar to sound file cleanup) and can be found in two areas: in Manage under Cleanup...Waveform Files and in WaveFrame System under Disk Utilities...Waveform File Cleanup. This operation will verify the links between waveform and sound files and delete all waveform files not associated with existing sound files.

Note: It is not recommended to perform certain operations on **only** the waveform files themselves. This would include making backups of only waveform files, and copying/moving only waveform files from one drive/volume to another in the SoundStore browsers. Special links are created between sound files and their corresponding waveforms; any attempt to alter the default location of waveform files may cause database corruption and/or waveform display problems. One exception is the deletion of waveform files (see above). This can be done without reservation and should be followed by a waveform file cleanup.

File Format Conversion (Transfer SoundFile)

The new Transfer SoundFile feature now supports OMF, AIFF, WAVE, and SDII formats. With Version 6.20, you can select sound files in any of these formats:

WaveFrame Recording

1000 Sampler Signal

IRCAM/Gross

IRCAM/Gross low byte first

OMFI 1.5

AIFF

WAVE

SDII

and convert them to sound files in any of these formats:

WaveFrame Recording

1000 Sampler Signal

IRCAM/Gross

IRCAM/Gross low byte first

OMFI 1.5

AIFF

WAVE

SDII

To convert files from one format to another, select the Transfer SoundFile item under the WaveFrame System Disk Utilities menu. A dialog box will appear showing 'source' file choices on the left and 'destination' file choices on the right. Once you have selected these parameters, click the OK button. A file selection box will appear based on the source file-type default (if WaveFrame Recording is the source, all sound files on FV should appear in a SoundStore browser window; if SDII has been selected, then files of this type will show up in a Win98 standard file/drive window). Once you select the drive, find and highlight the 'source' file and proceed with the transfer by clicking the appropriate OK or Select button. You will then be asked to name the converted file and choose where the destination file should be transferred to (typically a non-WF SCSI, IDE or ZIP/JAZZ drive for non-WF files or your WaveFrame volumes/drives for WF sounds). Once this selection is made click the appropriate OK or Define button to start the transfer.

An option has been created for auto-naming destination files and doing 'batch' file transfers. When the Auto Destination Names box is checked in the Transfer SoundFile window, the system will automatically give the 'destination' sound file the same name as the 'source' file (truncating long WF names for the DOS xxxxxxxx.yyy standard). This also allows for several selected files to be transferred as part of one routine. Please note that using the Auto Destination Names option asks for the destination drive on the first sound file only - the routine then uses this drive as the destination for the remainder of the batch-conversion. Because this process takes 50% to 80% as long as actual time being copied, converting many files can be a time-consuming process, and should be performed well in advance of any planned editing. Transfer time varies depending on how many files are chosen, how large those files are and the speed of the destination drive you are copying to.

OMF Import and Export

A separate application has been designed for use with WaveFrame to import and export OMF v1.0 and 2.0 composition and audio files. An icon called OMF was created during installation and can be found in the WaveFrame shortcut group. You must be running Manage, Edit or Assemble in order to use the OMF application.

Launching this program brings up the OMF Transfers window with two tabs - Import and Export. (Export is not currently implemented. Should you need to export WaveFrame projects as OMF you may want to use a Tascam MMR-8 with version 1.25 or greater software. Please contact WaveFrame Customer Support for details.)

- **Import** - Import is used to convert OMF 1.0 or 2.0 compositions and OMF audio files into the WaveFrame system.

To import OMF compositions, first define the reel in Manage that you want to import tracks into. Then retrieve some different reel. The import reel must not be the 'current' reel when you import or it won't be able to find the new tracks. On the OMF Import tab, choose either 'All Compositions' or 'Selected Compositions'. Next, click the 'Import' button and select the OMF file(s) from the appropriate drive and folder. A second file selector will come up to select the DUB0 directory of the reel you want to import into (within the c:\udd\projects path). When the right DUB0 is in the folder area at the top, click Import. The OMF tool first imports the recordings to F1 (hardwired at the moment), then imports tracks to the selected DUB0 directory. There is a status and progress bar on the main dialog. When it's done, you can do another import or quit using OK or Cancel. To check the resulting import, go to Edit, retrieve the import reel and look in the track rack for the new tracks (probably called Trk1, Trk2, etc.). You can also see the new recordings in the Sound Selector and Soundstore Browser.

To import OMF audio media files, choose 'Audio Media Only' and click the 'Import' button. Then select the OMF audio file(s) from the appropriate drive and folder and click 'Open'. A second file selector will come up to select the DUB0 directory of the reel you want to import into (within the c:\udd\projects path). When the right DUB0 is in the folder area at the top, click Import. The OMF tool imports the recordings to F1 (hardwired at the moment). When it's done, you can do another import or quit using OK or Cancel. You can now see the new recordings in the Sound Selector and Soundstore Browser.

Track Display Menu (Hiding and Grouping Tracks)

This feature allows for customizing what tracks you want to hide, view, group and edit in the track windows. To bring up this menu, right-mouse click on the **track number button** for the track position you want to customize. You will see five menu items:

- Track 'x' (or list of <track name(s)>)

This item is not always for selection. It mainly indicates which track is visible (not hidden) and which tracks are part of a Combined Display (see below). If Combined Display is invoked, then you can choose here which one of the grouped tracks you want to see. The visible track will be indicated with a check mark. Choose any of the listed tracks to toggle the visible track.

- Group Edit

Selecting this item groups the current and adjacent tracks for editing (Stereo, LCR or LCRS) based on the settings under Options....Group Size. **This is an additional method of doing something you already know**, but placed in this new area for convenience. It is the same as setting Options...Group Size and then left-clicking on the Track Number Button to toggle between ungrouped and grouped tracks. Note that if Mono is selected under Options...Group Size then selecting this item will have no effect.

- Combined Display

Selecting this item invokes a 'hide' track feature for a track group based on the settings under Options....Group Size, regardless of the Group Edit feature being selected or not. It leaves the currently selected track visible while hiding the corresponding tracks that are part of the group. An asterisk will then appear alongside the track number to indicate there are hidden tracks. In addition, the previously mentioned < track name(s) > item above shows all tracks in the group that can be selected for visibility. Unchecking this item makes all tracks in the group visible again.

For instance, you can ‘hide’ the right-channel track of the stereo group if the item is chosen while parked on the left-channel track. As expected, if the tracks are ‘grouped for edit’, any edits done on the visible track **are also** performed on the hidden tracks. It can also hide tracks that are not ‘grouped for edit’ as long as the Group Size is set to Stereo, LCR or LCRS. In this case, edits done on the visible track are **not** performed on the hidden track(s).

Note that if Mono is selected under Options...Group Size then selecting this item will have no effect. This feature provides for increased track real estate in the track window(s) only. All the usual rules for track playability (8, 16 or 24 based on hardware) are still in effect regardless of how many tracks are hidden or visible.

- Always Enabled

This item essentially ‘locks’ the player/voice resource for this track so that it never auto-mutes regardless of what other tracks’ resources are doing. A red border will show up around the track number indicating this status. This has replaced the ‘Player Locked’ check box that was previously available (see note below). Uncheck this item to unlock the track.

- Always Disabled

This item does a ‘hard mute’ on the player/voice resource so that the hardware will not attempt to play this track, freeing up resources for other tracks. The RISM mute button (M) will turn black to indicate this status. This is the same as pressing the ALT key and clicking on the mute button. To re-enable the track, uncheck this item or click on the now ‘black’ mute button.

Note that in previous versions, right-clicking on the **track number button** brought up the Player Options window. Because the system now manages player resources automatically, this window is not really needed and has been relocated to a right-click on either of the Channel Buttons (and the ‘Player Locked’ check box has been removed and replaced by the ‘Always Enabled/Disabled’ items above).

See on-line help or the manual for a review of the Track Number Button, grouping tracks for editing, and track disabling (auto or manual).

Sort Feature in Sound Selector and SoundStore Browsers

A new sorting feature has been added to the Sound Selector and various SoundStore browsers to make viewing searches easier. By enabling this, searches can be retrieved in ascending or descending order based on the various browser keys (Name, Library, Description, etc.). To turn this feature on, check the 'Sort Enable' box in any SoundStore browser or the Sound Selector.

To set what the sort is based on, select the button 'Choose Keys...' in the lower right of the sound selector and in most browser windows. On the left you will see a list of the 'Available Keys'. Moving one or more of these items to the 'Sort Order' box (by highlighting and clicking 'Add') will determine the sort priority order. Highlight a key and click 'Remove' to move it back to the available list. In addition, each key can sort in 'up' (ascending) or 'down' (descending) order. Highlight each chosen key and select the up or down button in the 'Direction' box. A '+' or '-' will appear next to each key. The sort list and settings can be saved for subsequent searches by choosing 'Save'. Clicking the 'Sort' button will perform a sort on the current search list. This is handy if you want to perform a temporary sort without changing your default settings. Finally, back in the sound selector/browser main screen, check the 'Sort Enable' box. The next searches that are performed will be based on your saved settings. It is only necessary to re-visit the 'Choose Keys...' area when you wish to change the sort priority or sort order.

A common use of this feature will be to choose the 'Name' key, select 'up', click 'Save', and then choose 'Sort Enable'. Now each search will list sound files in alphabetical order, A-Z. Again, setting up a priority list will allow a search by library and then name or any number of combinations of listed keys.

Choosing the 'Sort Enable' option in the Sound Selector enables sorting in SoundStore browsers and vice-versa. As in the past, when the sound selector is closed and re-opened, it will perform the previous search (unless the shift key is held down during opening). As long as 'Sort Enable' is checked, a sort will be performed based on the saved settings.

Sorting is disabled by default on each start-up regardless of its setting in previous sessions.

Support for the DIO-8 Multichannel AES I/O card

Version 6.20 includes support for the new DIO-8 board. Up to 3 boards may be installed in to any system for up to 24 channels of AES I/O. Each board has a DB-25 connector that has connections for 4 pairs in and 4 pairs out. Please see the instructions supplied with the DIO-8 for connection information.

Each DIO can be set via its switches to emulate an I/O-8 in the system. In the Edit track sheet it will simply look like an analog I/O. You may assign inputs and outputs to it in the same manner as an analog I/O.

Digital Sync considerations

When you have installed at least one DIO-8 in your system the AES input connector on the first R-8 card becomes your AES sync input. In order to perform digital transfers the recording system must receive proper AES sync.

This can be achieved by “Y”ing one of your incoming AES inputs or supplying house AES sync to the R-8 AES input or using house word clock supplied to each digital device. You will need to select the appropriate Word Clock source in the Sync Options dialog.

Remember that it is normal for the lock indicator to not change colors or show locked when taking its source from external word clock or AES. It does, however, show you the incoming frequency in real time.

Support for the Exabyte Eliant (820)

The Eliant is now supported for tape backup and restore. All of the previous settings for compression apply (see version 6.11 release notes). If you have been using the SCSI disconnect command in your autoexec.bat file under 6.11 to support an Eliant please remove it before installing version 6.20.

Please note that the Eliant can read the older 8200/8205 format, but can not write tapes in that format. Eliant tapes may only be read in an 8500, 8505, 8505XL, 8700 (when certified) or Eliant.

Support for the R-8+ Card

The new R-8+ card is supported under version 6.20. The R-8+ contains more on board RAM and different SCSI controllers to allow you the option of playing 8 tracks off of one drive for editing. You may connect all of your drives on the "A" buss of each card in the system.

The requirements and recommendations:

1. If you want to play 8 tracks off of one buss you must use Barracuda drives or faster.
2. You should limit the number of long simultaneous crossfades where possible.
3. You are limited to 4 track of simultaneous recording.
4. Connect your slower peripherals such as Exabytes and MO's to the B buss if you encounter run time errors.

Support for the Iomega Jaz Drive

The Iomega Jaz is now supported as a removable drive on the system. Both the 2 gig and 1 gig drives are supported with limited track playback.

When using Jazz, purchase IBM formatted disks and initialize them following the procedure for an MO. We recommend the 2 gig drive if you will be doing real time track playback, as it is 50% faster than the 1 gig drive.

Warnings, Cautions and Known Problems

Due to the current database requirements, users should continue to refrain from mounting or dismounting fixed volumes in the Drive Manager. However, Drive Manager can be safely used to mount removable drives that were not on-line at start-up time by clicking "Include Tape Drives" to scan the SCSI buss and then mounting from the same dialog.

In order to guarantee sync while using the ADR/Foley Replay feature, make sure the Edit...Edit Preferences...Loop Play option is set to Single (instead of Continuous).

When the WaveFrame transport is chasing timecode (gray mode), and stop is invoked on the TC source (i.e. VTR), it is necessary to also press Stop on the WaveFrame transport to view waveforms. Not doing so will prevent waveform display from resuming. Current requirements of TC chase mode do not allow the waveform display routine to have priority in this situation. Note that this does not affect machine control (white) mode, only chase (gray) mode. This is not a change in v6.20 - this requirement has existed since early versions of WaveFrame.

As stated in the above section on Fast Waveform Draw, it is not recommended to perform certain operations on **only** the waveform files themselves. This would include making backups of only waveform files, and copying/moving only waveform files from one drive/volume to another in the SoundStore browsers. Special links are created between sound files and their corresponding waveforms; any attempt to alter the default location of waveform files may cause database corruption and/or waveform display problems. One exception is the deletion of waveform files. This can be done without reservation and should be followed by a waveform file cleanup.

When using the WaveFrame transport in Edit (play, record, shuttle, jog, etc.), do not use the Windows 98 Taskbar to change focus or switch between open applications, or to minimize/maximize windows. Due to changes in Windows and the introduction of the taskbar, certain WaveFrame window operations can cause the transport to freeze. Instead, it is recommended to use the traditional ALT-TAB keyboard routine that you are already familiar with. WaveFrame will be updating this routine for Windows 98 compatibility in the future.

Please note that in order to properly save ALL user preferences under File..Export Preferences, you must define specific user preferences under Fixed Toolbar Editor and View Preferences first. Once these two areas have a user-name 'file', all settings in these areas will be included in the export preferences routine - and can be successfully imported on another machine. (Edit Preferences, Colors and Recording Preferences do not require a user-defined name).

The old Disk Recorder (wfdr.exe) still works only on the first 8 tracks and only on F1 (FA or FB) files. There are no plans to change this. Since it is only provided for users who want this interface, and is not supported in current versions of the software, WaveFrame does not recommend using this application.

The monitor mixer CAD views have faders tied to hardware tracks (player numbers). With the automatic assignment of layout tracks to hardware tracks, the ordering of the faders may not correspond to that of the tracks in the layout. This can be avoided by not having more tracks in the layout than there are hardware tracks available.

Installation of Windows 98 Upgrade - Dual-Boot Option

WaveFrame software versions 6.20 and later require Windows 98. WaveFrame recommends the upgrade version of Windows 98 if you want to preserve the ability to run WaveFrame versions prior to 6.20 under Windows 3.1x. By installing Windows 98 as an upgrade to your existing 3.1x installation, you have the option to set up your system with a 'dual boot' configuration. Please follow the instructions below depending on your WaveFrame system and your Windows 98 package. (For instructions on installing the full version of Windows 98, please refer to your Windows 98 manual). **Windows 98 will only be sold on CD, but can be exchanged for a floppy disc version through Microsoft.** If you have a WaveFrame 408 we recommend that you add an IDE CD-ROM drive. On older 401, DCS and DAW-80's we recommend that you either use a parallel port CD or order the floppy disc version from Microsoft. (WaveFrame has had mixed results installing from SCSI CD on Interlogic motherboards and bad results installing from SCSI CD on Trenton boards.)

Installing from CD-ROM

Boot into Windows 3.11 and insert the Windows 98 CD. Under File..Run, type 'x:setup', where 'x' is the drive letter of your CD-ROM drive. You will be asked to confirm your intent to upgrade. Click Yes to start the installation and follow the on-screen instructions. Please proceed to step #1 below.

Installing from Hard Disk via CD-ROM

For an even faster install and to quickly update your installation later, copy the CD 'Win98' directory to a 'Win98ins' directory on your 'C' drive. This approach requires between 105 and 170 Mb of extra space on your hard disk, and is only recommended if your hard drive is at least 750 Mb in size. Once this copy is done, locate the 'setup.exe' file in the 'Win98' directory **on your hard drive** and double click it. This will start the upgrade procedure. Please proceed to step #1 below.

Installing from Floppy Disc

Follow the instructions that came with the floppy disc package shipped from Microsoft. Once you have started the upgrade procedure, proceed to step #1 below.

1. Follow the directions as you are prompted on the screen. It is highly recommended that you install Win98 in its own directory (not where Win 3.1x is) so that you may revert back to your working copy of 6.11 under Windows 3.11. When you are asked what directory to install Win98 in, **do not select the default "Windows" directory**. Please choose an alternate directory name (ex. Win98). Setup will prompt you with a message stating that you will need to re-install your other applications in order for them to run under Windows 98. This is an unavoidable consequence of having a dual-boot system.
2. Follow the directions for the installation *implicitly*. Do not attempt to alter the default boot sequence of Win98. You may add or change video drivers after the initial install is completed. Once installation has finished, the computer will re-boot and you should see the Windows 98 Desktop.
3. It is advised that you become acquainted with the Windows 98 desktop as there are certain changes in the way that the icons are grouped as well as how to access program files and hardware.
4. You may proceed with the installation of WaveFrame version 6.20 and any other applications you use.
5. If you are upgrading from a working WaveFrame under Windows 3.1x, your machine control settings (TV-200 card) will be transferred and should run properly under Windows 98. If you have any problems, see the following section on re-installing those drivers.

(Please note: If you are using compressed drives, and have installed the Drivespace3 application in Win98, you may have trouble booting into Win 3.11 after the upgrade. The new Drivespace3 driver (which is loaded in config.sys if used) is incompatible with Win3.1x. Win98 will load this driver if Drivespace is installed and modify config.sys AND config.dos (the dual-boot counterpart). To avoid Win3.11 problems, do not install the Drivespace appl. or REM out the drvspace.sys line in config.dos if it's there.)

Installing Machine Control Card Drivers (Quatech TV-200/DS-202)

Windows 98 requires drivers for communicating with the RS-422 card that WaveFrame uses for machine control. The Win95/98 driver set for the Quatech TV-200 or DS-202 card is on the last WaveFrame installation disk. Updated drivers can also be obtained on the Quatech web site at <http://www.quatech.com>.

1. Insert the last disk of the WaveFrame installation set into the floppy drive of the System Unit.
2. Point to Start..Settings..Control Panel, double-click Add New Hardware and click Next twice.
3. After scanning for Plug and Play hardware in your system, Windows will ask whether it found the device you are adding. Since it most likely didn't, select No and click Next.
4. When prompted with, "Do you want Windows to search for your new hardware?", select No and click Next.
5. You will see a list of hardware types. Select 'Ports' and click Next. Find and select Quatech on the Manufacturers list and the TV-200 on the Models list (DS-202 if you have an older card) and choose Next. If you do not see your selection, click Have Disk and point the install to 'a:\quatech' and select mltp1.inf and press OK to list the models available from the floppy disk. Choose Quatech TV-200.5: 1 RS-422 Port (for COM3) and click Next.
6. When prompted to verify settings, accept the default and click Next and then Finish.
7. When prompted to re-start the computer, select No.
8. Repeat steps 2 through 6 above to add the second RS-422 port (COM4). When finished, select Yes to re-start the computer.

9. It will be necessary to reconfigure the resource (IRQ and I/O address) settings that Windows automatically chose for this device. The typical settings, based on machine control cards in most WaveFrame systems, are as follows:

COM3 - IRQ 7, I/O Address Range 03A8-03AF

COM4 - IRQ 5, I/O Address Range 02A8-02AF

10. In Control Panel, double click on System. In the System Properties screen, select Device Manager. Select Ports...Quatech TV-200.5: 1 RS-422 Port (COM3). Click Properties.
11. On the Resources page, change the Setting based on item to Basic Configuration 4.
12. In the Resource Type column, double click Input/Output Range. In the value box, change the value to 03A8-03AF. It may be necessary to use the up/down arrows on the value box to do this. When the correct value is in the box, click OK.
13. In the Resource Type column, double-click Interrupt Request. In the value box, change the value to 07. Click OK.
14. Click OK to close the properties dialog page. Do not restart the computer at this time.
15. Repeat steps 10 through 14 for COM4. The Input/Output Range is 02A8-02AF, and the Interrupt Request is 05.
16. When all changes are complete, shut down and restart the computer. Boot the WaveFrame software and verify that machine control functions.