



FREE SOFTWARE!

**Read this first regarding the enclosed
free Omnia-6 software updates.**

Prior to Omnia becoming the most popular broadcast audio processor on the planet, it was a fairly inexpensive task to send Omnia memory cards to our customers at no charge. However, now that there are thousands of Omnias in everyday use around the world, it is fiscally impossible for us to ship thousands of memory cards on a one-way trip. We must now charge a small but reasonable amount for the Omnia software update cards that are not returned to us. However, we will credit the full amount of the invoice for cards that are returned to us in good condition.

Please use the supplied return address sticker and padded self-addressed return envelope to return the old cards to Telos / Omnia for full credit.

Thank you for choosing Omnia!

Omnia-6 (SW Only) (FP7.3.5)

Omnia-6 EX / EXi Software Update

Revised August 2009

Applicable to Front Panel (Display) Software Version FP7.3.5
Motherboard DSP (Release) Software Version 7.03.04 (7.3.4)

The memory card(s) enclosed with this upgrade kit will allow you to update your Omnia-6 to the latest versions of enhanced DSP code and user interface software. These enhancements are the result of ongoing research at Telos and Omnia, as well as valuable and appreciated input from our thousands of loyal customers. Please tell us what you think, and let us know what you would like to see in the next Omnia-6 software release.

The memory cards in this kit can be identified as follows:

The rear panel memory card containing the enhanced DSP algorithms and motherboard software is labeled as '7.03.04'HDFM (EX) or EXi as appropriate for your unit.

The memory card containing the enhanced front panel software is labeled as 'FP7.2.5 Loader'. **NOTE:** This card is to be used only for units running Release (rear panel) version 6.x with Display (front panel) v1.0.2.0 or earlier. NOTE: This card may not be included in your upgrade kit if it is not needed.

The front panel software of Omnia-6 units currently running Display software version FP6.05 and higher (Including FP6.05b, FP6.13, FP6.15, FP7.1.0, FP7.2.5, FP7.2.6cf, FP7.3.3 & FP7.3.3cf) must be updated via download to the unit over an Ethernet remote control connection. This is done using the free Omnia-6 Remote Control software and the proper front panel software update file ('.upd'). A .zip file containing these files can be obtained from Telos / Omnia Customer Support via email or by download from:

<http://www.omniaaudio.com/support/updates.htm>.

We recommend downloading and un-zipping the files to a new folder on your PC's desktop for convenient access during the procedure.

If you have questions or find that you require assistance with this upgrade, you may call Customer Support at 216.241.7225 during normal business hours or email us at support@omniaaudio.com. Please have the serial number of your unit handy if you need to contact us. The serial number can be found on a small barcode sticker on the rear panel that looks like this: 4700xyyyy.

*** Important Notes! Please Read! ***

- Once you have completed the upgrade please **do not attempt to load a previously saved System file** using the remote control software. Older System files are not compatible with this release and loading one may cause level discrepancies or other unpredictable results. This note applies to saved System parameters only and not to the processing Presets. System parameters are those in the Input, Output, Encode and System menus.
- Any custom user processing presets you may have on the old PCMCIA software card will need to be saved to a PC (using the free Omnia-6 Remote Control software) before upgrading and then re-loaded onto the new card once the upgrade is complete or they will be lost.
- Omnia-6 Remote Control version 7.3.5 is the **ONLY** version that is approved for use with the software enclosed in this update kit (once the upgrade is complete). Previous versions are now incompatible and will not operate properly. Version 7.3.5 of Omnia-6 Remote Control is included in the .zip file along with the front panel update file as described above.

Please refer to the following table for the proper upgrade path for your Omnia-6. You will need to know the **Display** software version currently running on your unit. You can find this in the System Menu / About screen from the front panel of the unit.

Display Version	Upgrade Procedure
1.0.2.0 or lower	You will need both the v7.03.04 HDFM (EX) or EXi and FP7.2.5 LOADER PCMCIA software cards included in this kit. Please follow the <u>“Update Procedure for units running Release 6.x & Display v1.0.2.0 or earlier”</u> starting just below on this page of this booklet.
1.0.3.9, 1.0.4.1, 1.0.4.FP6.05, FP6.05b, FP6.13, FP6.15, FP7.1.0, FP7.2.5, FP7.2.6cf, FP7.3.3 or FP7.3.3cf	You will only need the v7.03.04 HDFM (EX) or EXi rear-panel PCMCIA memory card included in this kit. The front-panel Display software in your unit must be upgraded to the latest version via an Ethernet remote control session using a special '.upd' file. Please follow the <u>“Update Procedure for units running Release 7.x & Display FP6.05 or later”</u> starting on Page 5 of this booklet.

Software Update Procedure *ONLY* for older units running Release: v6.x / Display v1.0.2.0 or earlier.
(Units with an existing front panel PCMCIA card *ONLY*)

If your unit is running Release v7.x, please use the procedure starting on Page 5.

Before you can use the features included with the Omnia-6's new software, the software must be installed. We've included new software for both the front panel and for the motherboard in this kit, and both cards must be installed in the correct locations for proper operation. In order to accomplish the upgrade, the Omnia will need to be temporarily removed from on-air service, and you should allow approximately thirty minutes in which to complete the upgrade procedure.

Please follow the next steps exactly in the order that they are presented:

1. Remove the Omnia-6 from service and disconnect power from the unit.
2. Using a #2 Philips screwdriver, remove all 30 screws from the Omnia's top lid and set the lid aside. Note that the lid is not symmetrical, so you should keep track of which way it was facing when removed. Mark the lid if necessary to assist with reinstallation later.
3. With the Omnia-6 front panel facing you and the top lid removed, locate the PCMCIA memory card slot on the right side of the front panel PC board.
4. Gently press down on the black ejector tab on the PCMCIA socket to remove the memory card. Note that it is normal to encounter a significant amount of resistance to removal of the card. Note also that using tools to remove the card can damage it and void the Omnia's warranty. Set the old card aside for now.
5. Locate the new front-panel software card labeled as 'FP7.2.5 Loader'. This card contains the software to update the older front panel OS to Linux, version FP7.2.5. Later, you will update from FP7.2.5 to FP7.3.5 over an Ethernet remote control connection.
6. Carefully install the new card, paying close attention to its orientation. The thin end of the card containing the female connector socket should be facing down. The rear side of the card containing the software version label should be facing you. Carefully align the card with the card guides in the connector, and gently but firmly push the card into the socket until it becomes fully seated. The black ejection tab should move back up to the position it was in before the old card was removed.
7. Reinstall the top cover of the Omnia using only a few screws for now. For safety reasons the unit should never be powered up with the top lid removed.
8. Re-connect the Omnia's power cord and turn on the power. The new Front Panel software will automatically upload into the NVRAM on the Front Panel circuit board. Please wait while this process completes. It can take quite a while. Status will be shown on the front panel screen.

IMPORTANT: Do not disturb or remove power from the Omnia until the upload is complete. This will result in a corrupted upload and the Omnia will have to be sent in for repair.

9. When the upload process is complete, the screen will say “No Locked Blocks Found “At this point, turn the Omnia off and disconnect the power.
10. Remove the top cover, set it aside and remove the Front Panel PCMCIA card once again by gently pressing down on the black ejector tab on the PCMCIA socket. Note that it is normal to encounter a significant amount of resistance to removal of the card. Note also that using tools to remove the card can damage it and void the Omnia's warranty. The front panel card no longer needs to be present in the Omnia and all future Front Panel software updates from this point forward will be performed using the Ethernet port and the Remote Control Software.
11. Now reinstall the top cover of the Omnia using all 30 screws. For safety reasons the unit should never be powered up with the top lid removed.
12. Find the 'omn6hd_7_3_5.upd' file obtained from Telos/Omnia Customer Support or downloaded from the Omnia website. Be sure to use only the 'omn6hd_7_3_5.upd' file and not the 'omn6hd_7.3.5cf.upd' file.
13. Configure your existing Omnia-6 Remote Control for connection to the Omnia over a network. Note that if you don't have a network, you can still use Ethernet if you use a Cat5 crossover cable between the PC and Omnia. Such cables can be obtained from many computer products stores.
14. Connect to the Omnia over Ethernet. The default password is “engineer”.
15. Using the Options menu, navigate to the “Upgrade Front Panel” menu option. When you select it, an Open File dialog box will appear. Point the program to the folder on your PC where you downloaded the update files.
16. Select the 'omn6hd_7_3_5.upd' file found in Step 12, then click the Open button. A message box will appear, detailing the process of downloading the file to the front panel. The update process can take several minutes, and may appear to be stuck at some points in the process. This is normal! Therefore do not interrupt the update! When the update is finished, a new message box will appear stating “Upgrade Successful”.
17. Turn the Omnia off and disconnect the power. Re-orient the unit so that you have a clear view of the Omnia-6's rear panel. Remove the rear-panel memory card from the top Expansion Card slot by pressing in on the black ejector tab. Set the old card aside for now.
18. Locate the software card labeled with '7.03.04'. This is the new motherboard and DSP software.
19. Carefully insert the memory card into the top slot of the Omnia's rear panel with the large Omnia logo facing up and the version number sticker facing down. Make certain that the card is properly aligned with the socket. Note that inserting the memory card upside down or into the bottom slot (which is for the optional modem only) can irreparably damage the card and/or the socket.
20. Press the card gently but firmly into the top slot until it is fully seated. Do NOT apply excessive force! Card should seat easily into the socket with only slight resistance. When fully seated the black ejector tab should pop out about a half-inch or so.
21. Connect the AC power cord, and turn on the power switch. Upon power up, both front panel displays should briefly flash, go blank, and then a flashing square cursor should appear on one screen. After a few seconds, a rotating Omnia logo should appear on each of the front panel displays, followed shortly by the meter and menu screens.

The update procedure is completed. You may now re-install the unit to its previous location.

You will now need to return both the old cards you just removed and the front panel software loader card to Telos / Omnia using the padded self-addressed return envelope. Once we have received the cards, a full credit will be issued.

Software Update Procedure *ONLY* for units running Release v7.x / Display FP6.05 or later:

The front panel software of Omnia-6 units currently running Display software version FP6.05 and higher (Including FP6.05b, FP6.13, FP6.15, FP7.1.0, FP7.2.5, FP7.2.6cf, FP7.3.3 & FP7.3.3cf) must be updated via download over an Ethernet remote control connection. This is done using the free Omnia-6 Remote Control software and the proper front panel software update file ('omn6hd_7_3_5.upd' or 'omn6hd_7_3_5cf.upd'). A .zip file containing these files can be obtained from Telos / Omnia Customer Support via email or by download from:

<http://www.omniaaudio.com/support/updates.htm>.

We recommend downloading and un-zipping the files to a new folder on your PC's desktop for convenient access during the procedure.

- **WARNING!** Before upgrading, you will need to determine which one of the two included Display software versions you will need to use. Proceed as follows:

From the Omnia's front panel, navigate to the System menu / About screen and note the 'Display:' version listed there. **If the incorrect update file is loaded, the Omnia's front panel will become inoperable, requiring a trip in for service!**

- After unzipping the downloaded file (O6_FP_735_Remote.zip), you should have two .upd (front panel update) files: omn6hd_7_3_5.upd and omn6hd_7_3_5cf.upd along with the v7.3.5 remote control software executable. (omn_remote_7_3_5.exe)
- Only one of the included '.upd' files will be used:
- omn6hd_7_3_5.upd: Update file to be used only on units currently running a non-cf Display version. For example: FP7.2.5.
- omn6hd_7_3_5cf.upd: Update file to be used only on units currently running Display version FP7.2.6cf or Display version FP7.3.3cf.

Once you have determined which '.upd' file to use, proceed as follows:

Please follow the next steps exactly in the order that they are presented:

1. Find the proper '.upd' file obtained from Telos/Omnia Customer Support or downloaded from the Omnia website. See above.
2. Configure your existing Omnia-6 Remote Control for connection to the Omnia over a network. Note that if you don't have a network, you can still use Ethernet if you use a Cat5 crossover cable between the PC and Omnia. Such cables can be obtained from many computer products stores.
3. Connect to the Omnia over Ethernet.
4. Using the Options menu, navigate to the "Upgrade Front Panel" menu option. When you select it, an Open File dialog box will appear. Point the program to the folder on your PC where you downloaded the update files.
5. Select the proper '.upd' file found in Step 1, then click the Open button. A message box will appear, detailing the process of downloading the file to the front panel. The update process can take several minutes, and may appear to be stuck at some points in the process. This is normal! Therefore do not interrupt the update! When the update is finished, a new message box will appear stating "Upgrade Successful".
6. Turn the Omnia off and disconnect the power. Re-orient the unit so that you have a clear view of the Omnia-6's rear panel. Remove the rear-panel memory card from the top Expansion Card slot by pressing in on the black ejector tab. Set the old card aside for now.

7. Locate the software card labeled with '7.03.04 HDFM or EXi'. This is the new motherboard and DSP software.
8. Carefully insert the memory card into the top slot of the Omnia's rear panel with the large Omnia logo facing up and the version number sticker facing down. Make certain that the card is properly aligned with the socket. Note that inserting the memory card upside down or into the bottom slot (which is for the optional modem only) can irreparably damage the card and/or the socket.
9. Press the card gently but firmly into the top slot until it is fully seated. Do NOT apply excessive force! Card should seat easily into the socket with only slight resistance. When fully seated the black ejector tab should pop out about a half-inch or so.
10. Connect the AC power cord, and turn on the power switch. Upon power up, both front panel displays should briefly flash, go blank, and then a flashing square cursor should appear on one screen. After a few seconds, a rotating Omnia logo should appear on each of the front panel displays, followed shortly by the meter and menu screens.

The update procedure is completed. You may now re-install the unit to its previous location.

You will now need to return both the old PCMCIA software card you just removed and the unused front panel software loader card (if present) to Telos / Omnia. Once we have received the cards, a full credit will be issued.

STAY IN TOUCH

Please log on to <http://www.omniaaudio.com/> to register take advantage of upgrades and other important information designed to keep your Omnia at optimum performance.

Brief Summary of Changes and New Features

Omnia-6 Display vFP7.3.5 / FP7.3.5cf / Remote v7.3.5 (as of August 28, 2009)

- Update of front panel (Display) and Remote control software. Rear panel DSP (Release) software remains at 7.3.4.
- Resolved issue in FP7.3.3 and Remote v7.3.3 that could result in instability (erratic or sluggish front panel operation) on some units.

Omnia-6 v7.3.4 Rear Panel DSP Software (as of October 22, 2008)

- Update of rear panel DSP (Release) software to version 7.3.4 (7.03.04) to fix minor separation issue when diversity delay is Off. Front Panel (Display) and Remote software remain at version 7.3.3.

Omnia-6 v7.3.3 / FP7.3.3 / FP7.3.3cf / Remote v7.3.3 (as of August 12, 2008)

- Support added for the new 20-second Diversity Delay DSP card. (Please contact Omnia support for information about upgrading from the original 10-second version if needed) This software is compatible with both versions of the card.
- Input SRC is monitored for "SRC Invalid State" and re-initialized when this may occur. This change is needed to prevent the Omnia's AES/EBU input chip from changing its LPF filter states due to bad data received in the AES/EBU stream from certain STL and switching equipment. However, this means that any loss of integrity in the input AES stream (anything that causes the PLL to unlock or a CRC error) will result in about 3/4 second of silence on the air. This is true even if the actual loss of integrity would have only resulted in a slight pop or click.

IMPORTANT NOTE: For this to work, the Omnia must be running the newer Rev. K motherboard or a specially modified Rev. G motherboard. Please contact Omnia Tech Support for more information.

- The old dayparting (Schedule) features have been completely removed from the motherboard. Existing rear-panel dayparts (in software Release versions prior to v7.2.5) will cease to work. NOTE: The dayparting feature was completely re-written to run on the Omnia's front panel hardware as of Release version 7.2.5. This update will have no effect on the newer, front panel based dayparting feature.

- Automatic switching to/from Daylight Savings Time is permanently disabled.
- The 'Phase Rotator' and 'HP Filter' controls have been relocated from the Input menu to a new Pre-processing block in the Process menu.

Please note that this relocation causes no audible change to the processing as these functions occupy the exact same place in the audio processing chain as before.

The change was made to reflect the fact that the settings of these controls are saved with the user processing presets (not with the global System settings) and to fix a bug where an incorrect setting of these controls could be recalled when using protected presets.

- On the security settings pages, a "Network" checkbox has been added. Checking this box for a given security level allows users logged in at that level to view and change networks settings (IP address, netmask, and gateway).
- HD limiter meter now reads the peak gain reduction that occurs in 60ms blocks rather than just the current gain reduction in 60ms intervals.
- Fixed bug where the machine time could jump ahead by one full day, and then back shortly afterwards. This would only occur in leap year after Feb 29.
- Removed "reboot display" button from front panel network screen because it is not necessary to reboot after changing network settings, and the reboot function does not work on the newer ColdFire front panel board.
- Remote controls now check the update file type (StrongARM or ColdFire) against the front panel to which it is attached before proceeding with the update.
- Changed "reboot front panel" option in the remote to "restart front panel" because it cannot reboot the ColdFire front panel and merely restarts the software. This action is still adequate after a software update.
- Added "TripleA" preset.

Omnia-6 v7.2.5 / FP7.2.5 / Remote v7.2.5 (as of June 16, 2006)

- Fixed the discrepancy between the pilot phase control setting and the actual 19kHz-38kHz phase relationship on the composite outputs that was present only in the v7.1.x software. A setting of "0 deg" now gives correct output from the Omnia without load.
- Added day event scheduler to the Front Panel software. This executes events (preset changes or script executions) reliably at a specified day of the week and time. This replaces the previous daypart scheduler system.
- Changed the range of the BS-412 "Ave Power" control to go down to -3dB.
- Corrected/enhanced the ITU BS-412 Power Limiter to prevent periods of excessive power from occurring with some material, particularly voice.
- Improved Ethernet remote connection reliability.
- Added polarity inversion control to the HD signal at the output. This is intended to correct the situation where there is a polarity mismatch between the conventional and HD signals elsewhere in the airchain.
- Added TCP port selection in the "Edit Connection" dialog of the Remote Control software. This allows the remote to connect to a port other than 23 when port redirection is being performed on a router/firewall.
- Added option to select up to 9 serial ports in the "Edit Connection" dialog of the Remote Control software.
- Fixed the "Print System..." function in the Remote Control software so the Encode menu values are now printed properly.

Omnia-6 v7.1.1 / FP7.1.0 (as of Nov. 10, 2005)

- Fixed a security bug regarding encrypted presets.
- Fixed problem of recent units requiring multiple boot attempts to boot successfully when a modem card is present.

Omnia-6 v7.1.0 / FP7.1.0 (as of June 15, 2005)

- Added support for the new Diversity Delay / LoIMD Clipper functions and their associated DSP card. (Exi style only)
- Added a second phase rotation function to reduce distortion on some types of midrange audio material.

Omnia-6 v7.0.2 / FP6.15 (as of April 10, 2005)

- Added AES external sync fail-over, which reverts AES output 1 to a selected internal sample rate if external sync is selected but the signal on the external sync input is not valid. Sync automatically returns to external as soon as a valid signal is present.
- Fixed a bug that could cause the front panel to lock-up upon disconnection of the remote control.
- Cleanup of graphics on several screens, particularly the order in which the controls are selected by turning the jog wheel.
- Added "reboot front panel" option in remote. This only works when the remote is connected via direct serial or modem.
- Added ability to gang (stereo strap) the two stereo channels of the WB AGC together. Previously, they always operated independently.
- Fixed a bug in the O6 CD style where BS-412 was permanently engaged, causing the clipper control not to function.
- Fixed a bug where O5 remote and O6 remote used the same registry key to implement "auto-connect to last".

Omnia-6 v7.0.1 / FP6.13 (as of January 30, 2004)

- Added option in the Encode Menu for High / Low composite MPX output ranges. This allows finer control of output level than was previously available. The High Range allows greater output level than was previously available.
- Added option in the System Menu / Network screen to select "slow" or "fast" meters for the remote control application when it is connected via IP / Ethernet. This can cut network bandwidth usage drastically.

Omnia-6 v7.0.0 / FP6.05 (as of September 25, 2003)

- Support has been added for the new HDFM features, such as the new look-ahead limiter, dual AES/EBU outputs, and their associated software-based signal routing patch panel.
- A control menu for the new HDFM look-ahead limiter section is accessible if the unit has been ordered with the HDFM option factory installed. If desired, you may later enable the HDFM option by contacting Telos / Omnia and purchasing the upgrade.
- The Input and Output level controls now operate as "Master" and "Right Channel Trim", simplifying setup and adjustment.
- The Phase Rotator, High Pass Filter and WB AGC Enable settings are now stored with the preset. These parameters were previously stored as part of the System defaults – they were global and therefore not preset specific.
- The Phase Rotator control in the Input Menu has only off and on selections. In the on position, the rotator behavior is equivalent to the old setting of "2".
- Several 'syspara' numbers have been re-indexed. If you are using the trigger script feature, you may need to review or edit your scripts to compensate for these changes.
- Processing presets may be protected with a secret passcode, preventing unauthorized access to preset settings. Protected presets can be freely distributed without disclosing the settings to those who do not possess the passcode.
- Three new processing controls: "Phat Tune" (in the "Enhance" processing menu), "Bass Clip Tune" and "Clipper Style" (in the "Clip" processing menu) have been added. These new controls add even more control and flexibility to the sound of the Omnia.
- Security enhancements have been added, including an Auto Lock (screensaver timeout activated). You can also force authentication for changes in security level in both up and down directions.

- A new NTP (network time protocol) feature has been added. Omnia time can be synchronized to a high-accuracy external standard over a network connection. The NTP function can retrieve time from any number of Internet-based time-servers, or from a local server if so desired.
- A new Input Failsafe feature has been added. The Omnia can automatically select a new audio input source if the primary has failed. For instance, it can switch to an analog backup source if the digital input audio fails. A “hunt” mode is also provided to enable the Omnia to automatically try to find a valid audio source if this operation is desired.
- Added the capability to update the front panel software code using the remote control software and an Ethernet connection.
- Remote’s Edit Connection dialog box now has a “Connection Timeout” setting. This allows the user to manually set the amount of time (in seconds) the software will wait for the carrier tone from the Omnia’s modem before timing out and hanging up the PC’s modem.
- Due to the number of additional parameters that are saved with each preset, the total number of presets saved to the PCMCIA card (including the permanent factory presets) is now limited to 50.

Omnia-6 Ex / EXi Manual Addendum

(Applicable to Release Software v7.1.0 and Higher)

Software version 7.1.0 added several new features and their associated new controls to the Omnia-6. Also, several existing controls were moved to different control screens.

Software version 7.2.5 added 1 new control and a re-vamped Schedule function.

Software version 7.3.3 re-locates the ‘Phase Rotator’ and ‘HP Filter’ controls from the Input menu to a new ‘Pre-processing’ block in the Process menu.

This manual addendum contains screenshots of the control screens that have changed as well as full descriptions of any new controls that are present.

Clippers Menu



Version 7.1.0 added one new control in the Clipper Submenu, “**IMD Tune**”

IMD Tune: (Exi Only)

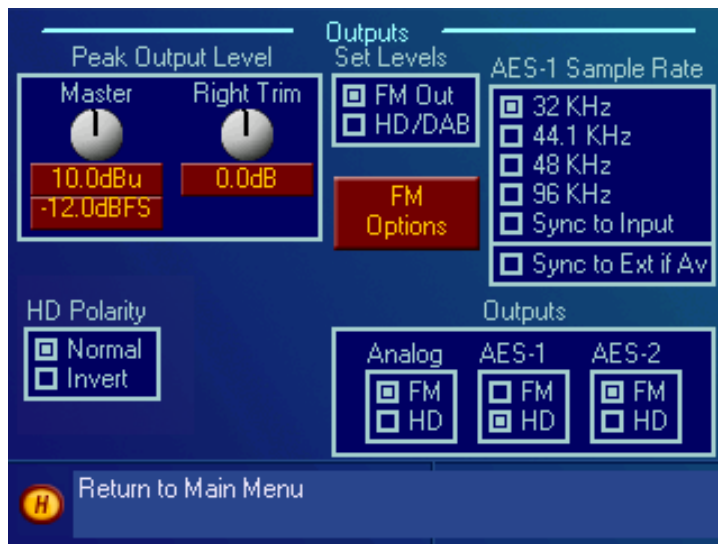
This control adjusts the amount of IM (intermodulation) distortion correction applied by the new LoIMD clipper algorithm. Proper settings will greatly reduce (without loudness loss) the “rattling” effect that can occur in some midrange material (vocals or solo instruments) when significant low bass material is present at the same time. A setting of “0” effectively turns the IM correction off. There is some interaction with the main **Clipper Drive** control where higher settings of the **IMD Tune** control will reduce overall loudness, even with very high **Clipper Drive** settings. Since these two controls interact, it is important to adjust them carefully. The preferred method is to first set the **Clipper Drive** control as you normally would, with the **IMD Tune** control is set to “0”. (Off) Once the **Clipper Drive** is set as desired, turn the **IMD Tune** control up (with some dense, full-bandwidth program material playing) until the loudness just starts to fall off and then back it off by one number. More aggressive presets may require lower numbered settings to preserve the desired loudness.

Input Menu



There are no new controls in the Input menu but the “**Pre-Emphasis**” control that was previously located here has been moved to the “**FM Options**” submenu of the Output menu and the “**Phase Rot**” and “**HP Filter**” controls have been moved to a new “**Pre-processing**” block in the Process menu.

Output Menu



Version 7.1.0 added to the Output menu the “**FM Options**” submenu and the “**Sync to External if Available**” control. The “**FM Options**” submenu contains the controls for adjusting the new built-in HD Diversity Delay (EXi only) as well as the “**Pre-Emphasis**” control (formerly in the Input menu) and the “**De-Emphasis**” and “**ITU BS-412 Power Limiter**” controls. (Formerly in the main Output menu)

Version 7.2.5 added the “**HD Polarity**” control to the main Output menu.

Sync to Ext if Available

When checked, this will cause the Omnia’s AES/EBU output sample rate to follow a valid AES/EBU signal applied to the rear panel “Ext Sync” input. If a valid signal is not present, it will revert back to the sample rate selected above.

HD Polarity (v7.2.5 and higher only)

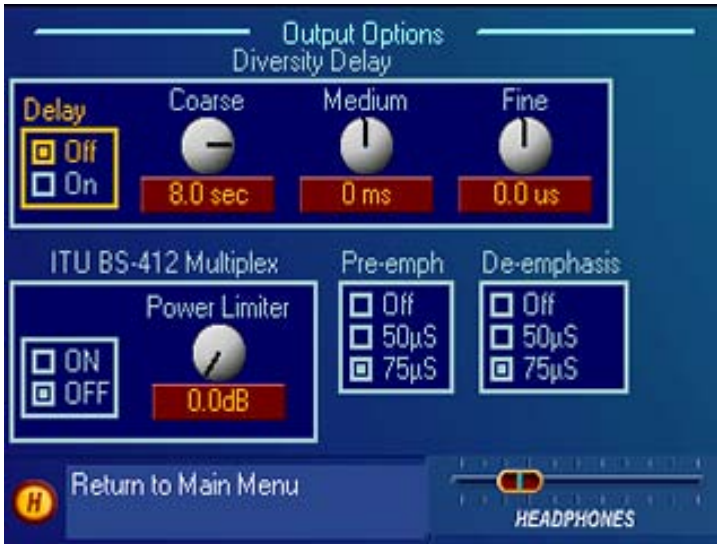
When “**Invert**” is checked the polarity of the signal at any output set to “HD” will be inverted relative to the “FM” output(s).

This is intended to correct the situation where there is a polarity mismatch between the conventional and HD signals elsewhere in the airchain.

FM Options Submenu

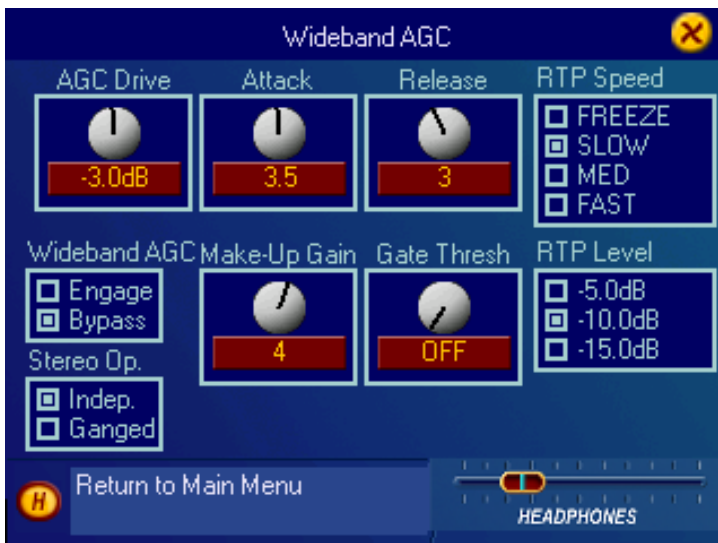
There are four controls in this submenu that adjust the Diversity Delay. (Exi only) Also moved here now are the “**ITU BS-412 Multiplex Power Limiter**” and “**De-Emphasis**” controls (previously in the main Output menu) and the “**Pre-Emphasis**” control. (Previously in the Input menu)

Diversity Delay: (Exi Only)



The four controls in this box are used to turn on and adjust the delay time of the conventional channel’s audio to precisely match the delay of the HD channel’s audio. The diversity delay is engaged or defeated using the “**Delay**” **On** or **Off** settings. The delay time can be adjusted using “**Coarse**”, “**Medium**” and “**Fine**” controls. The “**Coarse**” control adjusts the delay time from 0 to 10 seconds (when the original 10-second DD DSP card is installed) or from 0 to 20 seconds (when the newer 20-second DD DSP card is installed...v7.3.2 or higher only) in 0.1 second (100 ms) increments. The “**Medium**” control adjusts the delay time from the “**Coarse**” control over the range of +/- 50 ms in 1ms increments and the “**Fine**” control adjusts the delay time from the previous two controls over the range of +/- 500us in very precise 10.4us increments.

Process / Wideband AGC Submenu



Version 7.1.0 added one new control in the Wideband AGC submenu, “**Stereo Op.**” (Operation)

Stereo Op.

The “**Ganged**” setting allows you to gang (stereo strap) the two stereo channels of the WB AGC together. Previously, they always operated independently. The “**Ganged**” setting will preserve stereo imaging while “**Indep**” will help compensate for program material that may have slightly unbalanced left and right channels. (At the expense of a less stable stereo image)

Schedule Submenu (v7.2.5 and Higher Only)

The daypart Schedule function in the Omnia-6 has been completely re-written to run on the front panel instead of the motherboard.

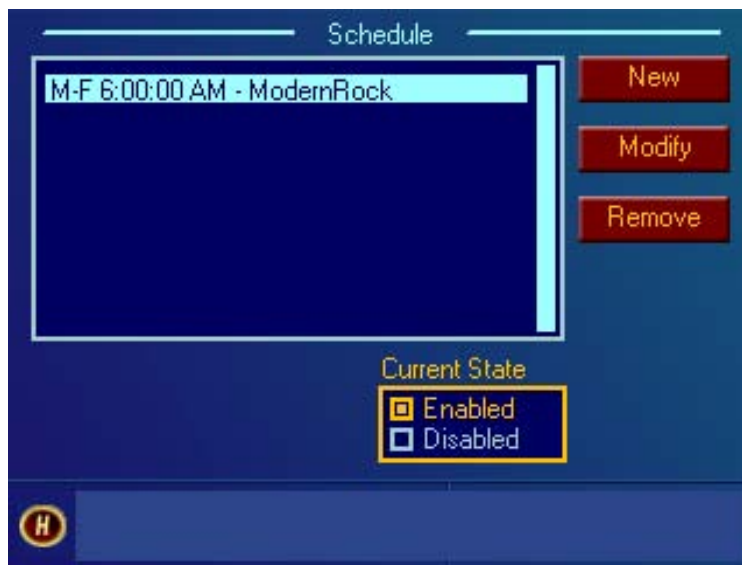
Because of this the Scheduler can only be programmed directly from the front panel of the unit (limited to preset changes) or over an Ethernet Remote Control connection using v7.2.5 of the free Omnia-6 Remote Control software.

The Omnia-6 Remote Control software can be freely downloadable from here:

<http://www.omniaaudio.com/support/updates.htm>.

The Schedule can no longer be programmed using a serial port or modem connection.

Here is the new main Schedule window:



Schedules are now programmed as individual events so the schedule shown at left will change to the “ModernRock” preset at 6AM Monday thru Friday and stay there.

If a return to a previous or different preset is desired another event will need to be programmed after this one.

The 4 controls here are **New**, **Modify**, **Remove** and **Current State**.

New:

Click this button to add a new event to the schedule list.

Modify:

Click on this button to make changes to an existing scheduled event.

Remove:

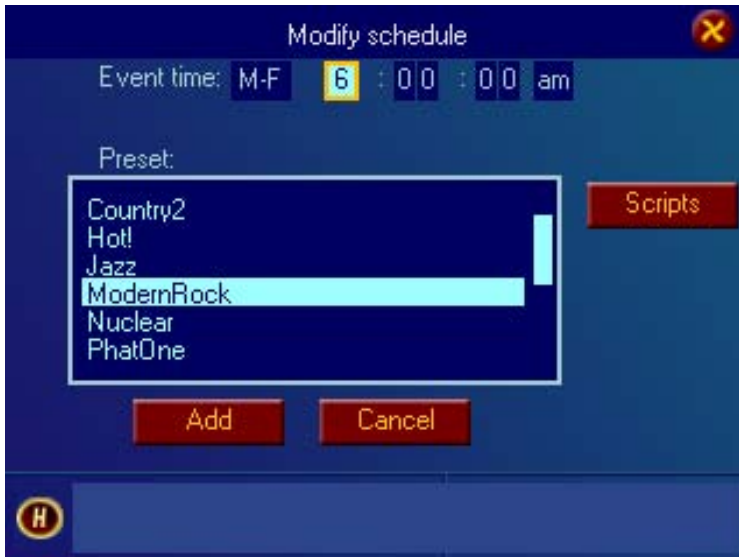
Click on this button to remove an existing event from the schedule list.

Current State:

Checking “**Enabled**” will activate the entire schedule list and the events contained in the list will occur at their scheduled day and time.

Checking “**Disabled**” will de-activate the entire schedule list and no events contained in the list will occur.

Below is the Schedule editing window that is accessed by clicking on “**New**” in the main Schedule window of the free Omnia-6 Remote Control software. (The “**Scripts**” button is not present when accessing the Schedule function directly at the Omnia’s front panel)



Here you will see the “**Event Time**” entry fields, a list of all the presets on the Omnia-6 memory card and the “**Add**”(or “**Modify**”) and “**Cancel**” buttons.

The “**Scripts**” button will only appear when accessing the Schedule function from the Remote Control software.

Event Time:

This is where the date and time that the scheduled event will occur is entered or edited.

Clicking in the first field and rotating the Jog Wheel will allow you to select between “**All**” days of the week, any individual day of the week, “**M-F**”, (Monday through Friday only) and “**S-S**” (Saturday and Sunday only) for the event being edited.

Preset:

This is a list of all of the presets that are saved to the Omnia-6’s memory card.

If no Preset is selected only a programmed Script will run at the scheduled day and time.

To select the preset that the Omnia-6 will change to at the scheduled day and time rotate the Jog Wheel to highlight the Preset list box and then click.

Rotate the Jog Wheel and click to select the desired Preset.

Add: or Modify:

When the entered or edited event is correct click this button to save it and to the Schedule list in the main Schedule window.

Cancel:

Clicking on this button cancels any changes you may have made to this event and returns to the main Schedule window.

Scripts: (Remote Control Software Only)

Clicking on this button (present only in the Remote Control software when connected via Ethernet) will open a “Scripts” dialog entry box with “**OK**”, “**Clear**” and “**Test**” buttons.

Scripts can be entered into this dialog that will be executed at the scheduled date and time with or without a preset change.

For full information about Scripts, please see the Trigger Scripts section in Chapter 6 of the Omnia-6EX / EXi manual.