VIRTUAL HORN SECTION PLUG-IN
USER MANUAL

1. Foreword

Thank you for purchasing this AMG Kick-Ass Brass! virtual instrument plugin. To get the best from your software purchase, we recommend that you read this manual carefully and keep a copy in a safe place for future reference.

Should you experience problems operating this product and can't find the answers in this manual, our technical support representative can be contacted at techsupport@amguk.co.uk

Don't forget, when contacting technical support to describe the problem in as much detail as possible, and provide details of your system configuration (operating system, host program, CPU, RAM, etc.).

The latest version of this User Manual and Library Guide are always available for download from the Kick-Ass Brass! product page on www.samples4.com

The AMG virtual instrument team

2. Compatibility

The AMG Kick-Ass Brass! virtual instrument has been tested with a wide variety of VST2-compatible host programs. However, host programs vary in their specifications and some may not implement features in the VST2 specifications that AMG Kick-Ass Brass! relies upon. You should carefully check a demo version with your own system if you are worried about compatibility issues.

3. Minimum System Requirements

- Windows 9x/2K/XP, 800mhz processor, 1gb RAM
- MacOS OS-X 10.3.9, 800mhz G4, 1gb RAM
- VST2 plug-in compatible host software - although a standalone version should also be available for download now too...

You can find a list of VST2 plug-in compatible host software at www.kvraudio.com <http://www.kvraudio.com/> , the internet's best resource for information about VST plug-ins and hosts.

4. Introduction – What does AMG Kick-Ass Brass! do?

AMG's Kick-Ass Brass! is a virtual horn section for your computer. We have combined our award-winning library of solo brass instrument samples with a lightning-fast, intuitive sound engine that gives you the best possible sound quality and control right where you need it – inside your sequencer. Musicians with AMG Kick-Ass Brass! can easily add realistic, multi-part horn arrangements to their tracks, with dynamic articulations and expressive real-time control.

The AMG Kick-Ass Brass! library contains three types of files: Instruments, Sections and FX presets.

An Instrument is the fundamental building block of the library, such as the Alto Sax. Instruments are divided into a number of Variations. A Variation is a particular way of playing the given instrument – for example there are different Variations for the Alto Sax instrument when it is played with vibrato, as staccato stabs, swells etc. If you edit the parameters of a preset Instrument Variation, you can save it to disk for later recall separately from the library.

The library also includes a number of FX presets that can be loaded into the two built-in stereo 64-bit FX units. The two FX units are shared by all 8 channels in AMG Kick-Ass Brass!, but you can set independent FX send levels for each Timbre. FX presets cannot be edited.

A Section file contains the Instrument assignments and settings of all 8 channels, plus both FX units. There are a number of preset Sections in the Library offering suggested combinations of Instruments and Variations for various purposes. If you create a horn Section that you like you can save it to disk for later recall separately from the library.

Instrument Variation files and Section files saved in this way do not contain the original samples, but merely refer to the original preset files in the library. For this reason you should not attempt to modify the filenames or locations of the library files. You can however place the library folder anywhere on your system that you like, even on removable or networked media. Details of how to do this are in the section on the Options page later in this manual.

5. Copy Protection

The files in the AMG Kick-Ass Brass! library are protected from unauthorised use by an advanced encryption scheme. In order to access the encrypted content, customers must register their Kick-Ass Brass! purchase with the AMG website. In order to register, three pieces of information are required:

Customer Name, Address & e-mail address
Serial Number
Machine ID

The serial number of your AMG Kick-Ass Brass! virtual instrument is unique for each copy sold and will be shown on a sticker in the product packaging. The Machine ID is a special 32-character code displayed on the product's Option page, generated using information about your specific computer. The machine ID does not access or use any information that might be able to identify you as a person – instead, a number of internal hardware metrics are scanned and combined to calculate your Machine ID.

Once AMG receive your registration, you will receive a small license file by email that you must save onto your system in the same location as the Kick-Ass Brass! library. Once installed, the license file will enable you to access the encrypted content, but only on the machine authorised to run the plug-in. If you need to install the library on multiple machines, please contact AMG customer service for more information.

Remember, you do need to have a working email address to receive your license file.

6. Front Panel Basics

When AMG Kick-Ass Brass! is correctly installed in your host sequencer, it will be selectable from within your host program's VST instrument menus. When AMG Kick-Ass Brass! is selected (in accordance to your host program's instructions), the user interface above will be displayed.

The user interface is designed to look a like a sort of cool rackmount sampler, with a glowing red "display screen". The display screen shows eight lines of text, each divided up into a number of columns. Each line corresponds to one of AMG Kick-Ass Brass!'s internal synthesiser engines, called "Timbres". The currently selected Timbre is always highlighted in bright yellow and is the focus for editing operations. You can only edit one Timbre at a time.

Around the display screen, there are a number of controls that relate to parameters of the currently selected Timbre. Theses control settings may change depending on the Timbre currently highlighted.

There are four basic types of controls used throughout Kick-Ass Brass!'s user interface:-

· Rotary controls (knobs)
Controls such as volume and pan, as shown in the screenshot above, use rotary controls to display their settings. To change the value of a rotary control, click on it, hold the mouse button down and drag vertically. Dragging up will increase the value (knob will turn right) and dragging down will decrease the value (knob will turn left). Whenever you click on a control, a small pop-up box will display the exact value you are changing. To set a control to its default value, hold down the CTRL key on your keyboard when clicking, and to get more precise control, hold down SHIFT when clicking and dragging.

If you use a host such as Cubase, it is possible to change the rotary control mode from Vertical to Round-and-Round in your project preferences. We recommend the default Vertical mode however.

· Number Spinners
The MIDI channel and Transpose controls shown in the Display Screen are examples of Number Spinner controls. These work in the same manner as the Rotary Controls described above except they display their value as a numerical value. Therefore, to change a Number Spinner control, click on number display and drag vertically up or down. The CTRL and Shift keys also act in the same way on these controls.
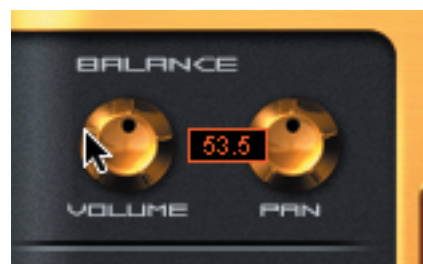
· Buttons
Each Timbre line in the Display Screen has its own Load and Clear icons that glow when you hover the mouse over them. Once the mouse is over the control and it is highlighted, simply click.
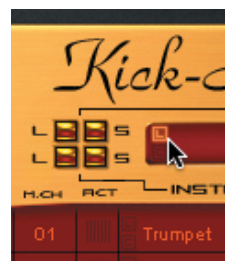
· Drop-down menus
Controls where there is a set menu of choices (for example, Glide Mode or FX patch) have been implemented with drop-down menus. Click on the control to display the menu of choices, and then click an item to select your desired option. Some menus have multiple levels of options in a "cascade". Some menus are accessed via a right-click (command-click on Mac).

AMG Kick-Ass Brass! can also be controlled entirely from an external MIDI controller, providing that controller is capable of sending MIDI Continuous Controller (CC) messages. Default CC mappings are listed in the appendix, but you can use a special MIDI "learn" mode to quickly build up your own mappings. Simply right-click on any control to display a menu of the current MIDI CC settings. Choose "link to next CC" from the menu to put a control into learn mode. Once a control is in learn mode, it will automatically link itself to the next CC message that it receives.
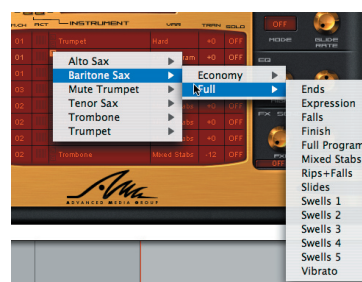
Note that MIDI controller functionality may differ from host program to host program. Some sequencers, for example, intercept and do not pass MIDI controller messages in their entirety to loaded plug-ins (FL Studio, Logic for example). You should refer to your sequencer's user manual for more information if you are not sure.
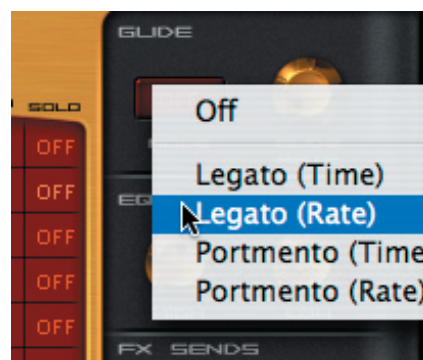

Rotary Knob

Highlighted Load Button

Drop-down Timbre Load menu

Glide Drop-down Menu

7. The Display Screen

The Display Screen is the main area of the plugin's user interface. It is a grid of seven columns and eight rows, one row for each Timbre available. The currently selected Timbre is highlighted in a brighter orange colour than the surrounding text.

The columns are, from left to right:

OUT	M.CH	ACT	INSTRUMENT	VAR	TRAN	SOLO
1	01		Trumpet	Hard	+0	OFF
1	01		Alto Sax (econ)	Full Program	+0	OFF
1	01		Tenor Sax (econ)	Full Program	+0	OFF
1	01		Trombone	Full Program	-12	OFF
1	02		Trumpet	Mixed Stabs	+0	OFF
1	02		Alto Sax	Mixed Stabs	+0	OFF
1	02		Tenor Sax	Mixed Stabs	+0	OFF
1	02		Trombone	Mixed Stabs	-12	OFF

• Output Selector
AMG Kick-Ass Brass! is a multi-output plugin. Four stereo pairs will appear as mixer channels in suitable hosts. Please consult your host manual for information about compatibility and instructions for how to use multi-output plug-ins.

When mixing down a complex horn arrangement, or if you want to use your host program's EQ or FX features, assign different Timbres to different outputs for separate processing. To assign a Timbre to an output, firstly select the Timbre by clicking in the Instrument Name column, then click in the Output Selector column to display the menu of available outputs.

• MIDI channel
AMG Kick-Ass Brass! is a multi-timbral plugin. It has eight fully-independent separate synthesiser engines called Timbres, each with up to 64 voice polyphony (less voices may be playable depending on the clock speed of your CPU). Many host programs will have the ability to send multiple tracks of MIDI data to a single plugin, using different MIDI channels. Please consult your host manual for information about compatibility and instructions for how to use multi-timbral plugins.

When scoring a complex horn arrangement, you will most likely have several horn lines on separate tracks in your sequencer all feeding into the same instance of Kick-Ass Brass! MIDI channels are used to ensure the correct track data is sent to the correct Timbre in Kick-Ass Brass! If you are working in this way, ensure your MIDI channel assignment in your sequencer is mirrored in Kick-Ass Brass!'s MIDI channel column so that the correct Timbre responds when MIDI data is sent.

To change the MIDI channel a Timbre responds to, drag vertically on the MIDI channel display for that Timbre (see Number Spinner controls in the previous section).

• Activity Display
The activity is a small bar chart of the sound level being output by a Timbre. It is for display purposes only and is a help when troubleshooting MIDI/audio/connectivity problems.

• Instrument Name
When no Instrument is selected on a Timbre, this column displays "---". To select an Instrument from the Kick-Ass Brass! library, look for the pair of buttons at the left edge of this column. There is a separate pair of buttons on each row. The buttons will light up if you position your mouse near them. The top button, labelled "L", when clicked, will show a list of all available Instruments and Variations in the installed library. Selecting an item from this menu will cause that instrument patch to be loaded. Given the large size of the Instrument files, loading can sometimes take several seconds, especially on slower computers.

To unload an Instrument from a Timbre, either right-click on the Instrument Name and choose "unload", or click the lower button labelled "C" at the left edge of the Instrument Name column.

Also, clicking in the Instrument Name column will set the currently active Timbre to that row, and show the settings for that Timbre on the surrounding controls.

• Variation Name
A Variation is a particular style of playing an Instrument. If no Instrument is loaded on the current Timbre, clicking in this column will do nothing. When an Instrument is loaded on the Timbre, clicking in this column will display a menu of the available Variations of that Instrument. Selecting an item from this menu will cause that Instrument/Variation to be loaded, which can take a few seconds.

• Transpose
Clicking and dragging vertically in the Transpose column will alter the transpose parameter of that Timbre, between –12 and +12 semitones. MIDI received by the plugin will be transposed by this amount before being sent to the synthesiser engine. The Transpose parameter is normally used to shift an Instrument into a different key without altering the MIDI data. Also, if you find a particular Instrument has an awkward keyboard range you can use the Transpose parameter to move the range up and down your master keyboard – if you want to move an Instrument down an octave on your master keyboard, set a Transpose of +12.

• Solo Mode
Clicking in the Solo Mode column will show an On/Off menu for the currently selected Timbre. Select an item from this menu to change the Solo Mode. When Solo Mode is ON, the timbre will play only one note at a time (monophonically), and it is possible to perform simple, fast trills by holding one note, and playing but then releasing another. In such a sequence, the engine will play the first note, then the second, and then automatically return to the held note. This is a very useful feature, in conjunction with the Glide Mode.

When Solo Mode is OFF, the plugin will play polyphonically and permit chords, etc.

8. Global Controls

AMG Kick-Ass Brass! has a group of four global buttons at the top of the screen for loading and saving your edited Instrument Variation and Section files. Also, there are other global controls that apply to the Section as a whole rather than to individual Timbres.

· Section Load
Loads a saved user Section file into the plug-in. When this button is clicked a standard file browser will be displayed. Windows users will have to select (using the drop-down selector at the bottom of the dialog window) which sort of files they are browsing for. Mac OSX users will not have to do this – invalid file will appear greyed-out in the browser window. The file extension for a Section file is ".kbm"

You can only load your previously saved Section files if the original library is present on your system, and your Library Path is correctly set in the options screen. You also need a valid License File saved with your Library. This is because Section files do not contain any sample data.

· Section Save
Saves the entire state of the plugin (including all Timbres, Instruments and their settings) as a user Section file. When this button is clicked, a standard file browser will be displayed. Use the dialog to navigate to the folder you would like to save your file in, provide a filename and click "OK". The filename defaults to the name of the current Section displayed in the plugin's Section display.

· Instrument Load
Loads a saved user Instrument file into the plug-in. When this button is clicked a standard file browser will be displayed. Windows users will have to select (using the drop-down selector at the bottom of the dialog window) which sort of files they are browsing for. Mac OSX users will not have to do this – invalid file will appear greyed-out in the browser window. The file extension for a Instrument file is ".kbp"

You can only load your previously saved Instrument files if the original library is present on your system, and your Library Path is correctly set in the options screen. You also need a valid License File saved with your Library. This is because Section files do not contain any sample data.

· Instrument Save
Saves the state of the currently selected Timbre as a user Instrument file. When this button is clicked, a standard file browser will be displayed. Use the dialog to navigate to the folder you would like to save your file in, provide a filename and click "OK". The filename defaults to the name of the current Section displayed in the plug-in's Section display.

Saved user Instrument files contain only the parameters relevant to that instrument and not the Section as a whole – your glide, solo and vibrato settings will be saved, but not the volume/pan/output/MIDI channel/transpose/FX sends settings which are part of the Section. If you need to save a complete set of parameters, save your settings as a Section instead.

· Section Name
The name of the currently loaded Section is displayed in this box. Double-click on the text to change the Section name. The plugin's memory can be cleared by right-clicking on this box and selecting "unload" from the pop-up menu, or by clicking the button labelled "C" (clear) on the left of the name display when it is highlighted by the mouse. The button labelled "L" above, which highlighted and clicked, will display a list of the preset Sections in the library. For more information, see the section on loading library files later in this manual..

· FX1 Patch
Clicking on this control will display a branching menu of available FX preset patches. Selecting an FX patch from the menu will cause it to be loaded into the first FX unit. If you wish to unload the patch on an FX unit, right-click on this control and select "unload" from the menu that appears.

· FX2 Patch
Clicking on this control will display a branching menu of available FX preset patches. Selecting an FX patch from the menu will cause it to be loaded into the second FX unit. If you wish to unload the patch on an FX unit, right-click on this control and select "unload" from the menu that appears.

· AMG Logo
Clicking the AMG Logo takes you to the Options Screen (see later section).
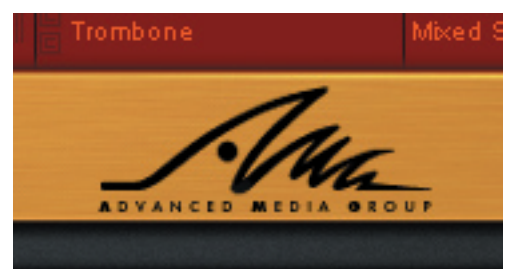
9. Timbre-Specific Controls

AMG Kick-Ass Brass! has a five groups of controls at the left and right sides of the interface for controlling parameters specific to the currently selected Timbre. The currently selected Timbre is shown in highlighted text in the Display Screen. You can change the currently selected Timbre by clicking in the Instrument Name column. The currently selected Timbre will also change automatically if you alter the values in the other columns of
the Display Screen.

· Volume
Sets the overall output volume of the currently selected Timbre in the Section. Note that this control is pre-mapped to MIDI controller 7 (volume). If your host supports the sending of default volume values to tracks, this control will respond automatically.

· Pan
Sets the balance between the left and right output channels for the currently selected Timbre in the Section. Note that this control is pre-mapped to MIDI controller 10 (Pan). If your host supports the sending of default pan values to tracks, this control will respond automatically.

· Vibrato Rate
Vibrato is a rhythmical variation in the pitch of a sound. This parameter sets the speed of the Vibrato applied to the currently selected Instrument, in Hz. A value of around 4.0-4.5 feels quite natural with horn sounds.

· Vibrato Amount
Sets the strength of the Vibrato applied to the currently selected Instrument, from −100% to +100%. Negative values cause the pitch to swing first down, then up. Positive values cause the pitch to swing first up then down. A value of around −10 to −20 sounds unobtrusive and adds movement. Higher values will give a far more pronounced effect.

· Vibrato Controller
Selects a MIDI performance controller (Velocity, Channel Aftertouch, Modulation Wheel) to be dedicated to controlling Vibrato Depth in real-time.

· Vibrato Controller Depth
Determines how much influence the Vibrato Controller messages have over the amount of Vibrato applied, from −100% to +100%. When this parameter is centred (zero %), the Vibrato Controller will have no effect on the amount of Vibrato heard. When this control is set to +50%, there will always be HALF of the amount of Vibrato set in the Vibrato Amount control at all times when the value of the Vibrato Controller is zero, but all of it will be heard when the controller is set to maximum.

The best way to use these controls is to set a maximum amount of vibrato depth that you want to hear, for example, when the modulation wheel is fully turned. Then assign the Vibrato Controller to modulation wheel, set the wheel to its zero position and adjust the Vibrato Controller Depth parameter to the desired amount of Vibrato in this position. Then sweeping the modulation wheel from fully open to fully closed will smoothly adjust the amount of Vibrato applied between these two values.

Note that a negative value of Vibrato Controller Depth will cause the action of the controller to become inverted – so reducing the value of the controller will increase the amount of Viibrato heard, and vice-versa.
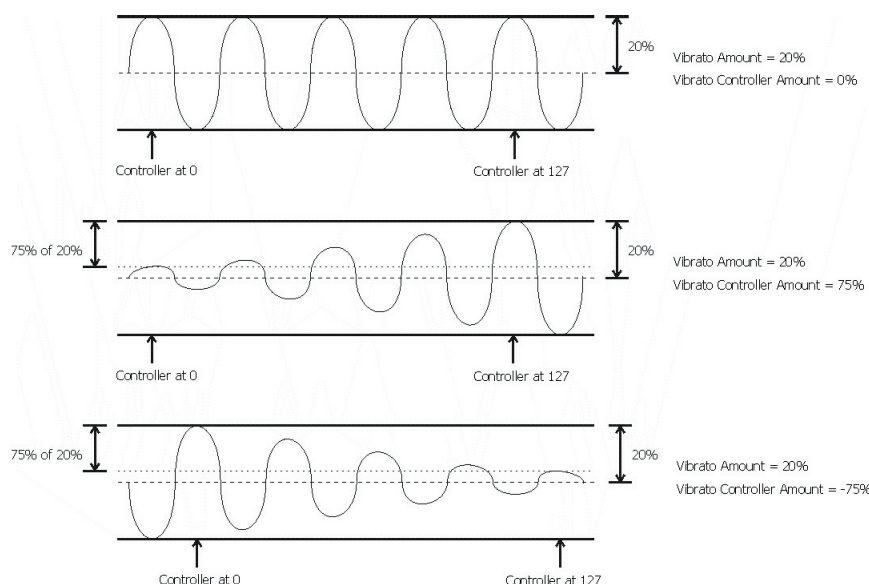
· **Glide Mode**
In Kick-Ass Brass!, Gliding means to "slur" the pitch at the beginning of a new note up or down from the pitch of the previous note that was played. The exact effect is dependent on the Glide Mode, Glide Time and the previous note being played. It is used to simulate the natural pitch slurring inherent to playing runs of notes on brass instruments.

There are four closely related Glide Modes available:
· **Legato (Time)**
· **Legato (Rate)**
· **Portamento (Time)**
· **Portamento (Rate)**

In the two Legato modes, a glide is triggered when overlapping notes are played – i.e. if a new note is played while an old one is still being held. If notes are played cleanly, glides will not occur. In the two Portamento modes, each new note will always glide from the pitch of the last key played to the new key, regardless of the interval between notes.

· **Glide Rate**
Determines how long the Glide will take to move from the starting pitch to the final pitch of the new note. The (Time) and (Rate) parts of the mode name relate to how the Glide Rate parameter is interpreted.

In Legato (Time) and Portamento (Time) modes, the Glide Rate is interpreted as an absolute measure of time in milliseconds for the glide to finish after the start of the note.

In Legato (Rate) and Portamento (Rate) modes, the Glide Rate is interpreted as a measure of how long it will take to change the pitch over a given number of semitones.

If you don't want large and small changes of pitch to occur in the same length of glide, select a (Rate) mode as appropriate for the type of triggering you want. This will mean that the larger the difference between the starting pitch and the final pitch, the longer the glide will take. If this is not desirable, select a (Time) mode where each glide, regardless of difference in pitch, will always take the time specified by this parameter to complete.

· **High EQ Amount**
Sets the strength of the internal high frequency (treble) shelving EQ effect, from –100% to +100%. A setting of zero switches the High EQ module off. Negative values make the selected Timbre less bright sounding, and positive values emphasise the higher, brighter tones of the instrument.

· **Low EQ Amount**
Sets the strength of the internal low frequency (bass) shelving EQ effect, from –100% to +100%. A setting of zero switches the High EQ module off. Negative values make the selected Timbre less full or deep sounding, and positive values emphasise the lower, darker, boomier tones of the instrument.

· **FX1 Send Amount**
Determines how much of the signal from the currently selected Timbre will be fed to the first FX unit.

· **FX2 Send Amount**
Determines how much of the signal from the currently selected Timbre will be fed to the second FX unit.

10. The Options Screen

The Options Screen is accessed when the AMG logo at the bottom of the interface is clicked. To return to the Main Screen, click anywhere in the Options Screen background.

There are only two controls on the Options Screen:

· Library Path
This text box displays the location when AMG Kick-Ass Brass! believes its library files to be installed. By default, when the plugin is installed, this is set to your current user documents folder. If the library is not installed to this location, you must click in this field to display a folder selection dialog, and choose the location where you copied the library from the CD-ROM. Selecting the Library Path like this causes AMG Kick-Ass Brass! to rescan the library directory and create new cache files for its patch menus (.kbc files). If, at any time, you delete the .kbc files in your library folder, the plugin will automatically rescan the folder shown in the Library Path next time it is started. If you decide to move your library folder after it has been used, it is a good idea (though not essential) to delete the .kbc files before you move it.

If the plugin cannot find the library folder, you will receive an error message stating "Library Scan Failed" upon starting the plugin. If the library folder is present and correctly set, but does not contain the correct folder structure and files underneath, you may also receive this warning.

The Library Path is also the folder on your system where you must save the License File sent to you by AMG after registering the plugin. If this file is not present, your Library will still scan correctly and the patch menus will be displayed, but you will not be able to load any patches.

In general, it is not safe to make modifications to the folder indicated in your Library Path. It should start out as a direct copy of the folder on your installation CD-ROM. Altering the contents of this folder in any way (except deleting cache .kbc files) might cause unexpected error messages to be displayed.

· Machine ID
As mentioned in the section on copy protection, the Machine ID is a unique "fingerprint" of your system based on metrics taken from certain hardware elements. It does not contain any information that can identify you as a person, and it is unique for that particular combination of hardware on your system.

Your Machine ID is required by AMG as part of the registration process. This allows AMG to generate a unique License File for your exact Computer. Without this license file, the plug-in cannot decrypt the files in the Library and will not be able to load any sounds.

To make it easy to register, clicking on the Machine ID display will reveal a menu with three options
· Copy To Clipboard
· Register at AMG website
· Save to File

If you copy the Machine ID to your clipboard, this will enable you to use the normal paste command in your email or web browser application during the registration process to automatically complete the Machine ID field in the registration form, or when sending an email query to AMG.

Selecting the Register option will open your default web browser, connect to the internet if necessary and automatically take you to the registration page on the www.samples4.com <http://www.samples4.com/> website. The Machine ID field will be filled in automatically for you.

Many musicians prefer to keep their Digital Audio Workstations separate from the internet. If you prefer, you can save the Machine ID to a simple text file, copy it over to a machine where you do have internet access and submit your registration request from there.

If you make significant changes to the hardware of your system, your machine ID may change unexpectedly and cause your license file to become invalid. Remember, you do need to have a working email address to receive your license file.

11. MIDI controller settings

AMG Kick-Ass Brass! can also be controlled entirely from an external MIDI controller, providing that controller is capable of sending MIDI Continuous Controller (CC) messages. Default CC mappings are listed below, but you can use a special MIDI "learn" mode to quickly build up your own mappings. Simply right-click on any control to display a menu of the current MIDI CC settings. Choose "link to next CC" from the menu to put a control into learn mode. Once a control is in learn mode, it will automatically link itself to the next CC message that it receives.

Note that MIDI controller functionality may differ from host program to host program. Some sequencers, for example, intercept and do not pass MIDI controller messages in their entirety to loaded plugins (FL Studio, Logic Audio for example). You should refer to your sequencer's user manual for more information if you are not sure.

Parameter	MIDI controller
Volume	**7**
Pan	**10**
FX1 Send Amount	**91**
FX2 Send Amount	**93**

12. Copyright and Credits

Sample Programming & Management	**Steve Cooke & Steve Cochrane**
Tachyon Engine customisation:	**David Waugh for Muon Software Ltd**
Tachyon Engine coding:	**David Waugh, Steve Baker**
Graphics:	**Shaun Ellwood for Decoder Design**
Project Management:	**Matthew Wilkinson for AMG**

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