# YAMAHA commercial audio

M7CL

Quick Start Guide

A guide for people using M7CL Version 3 in the real world.

Part 3

An introductory guide to the M7CL group of consoles including features included in Version 3 Firmware and the M7CL-48ES hardware.

These guides are for people about to use the M7CL for the first time, or for experienced users requiring some tips and tricks for better understanding of M7CL and its PC based software partner the M7CL editor.
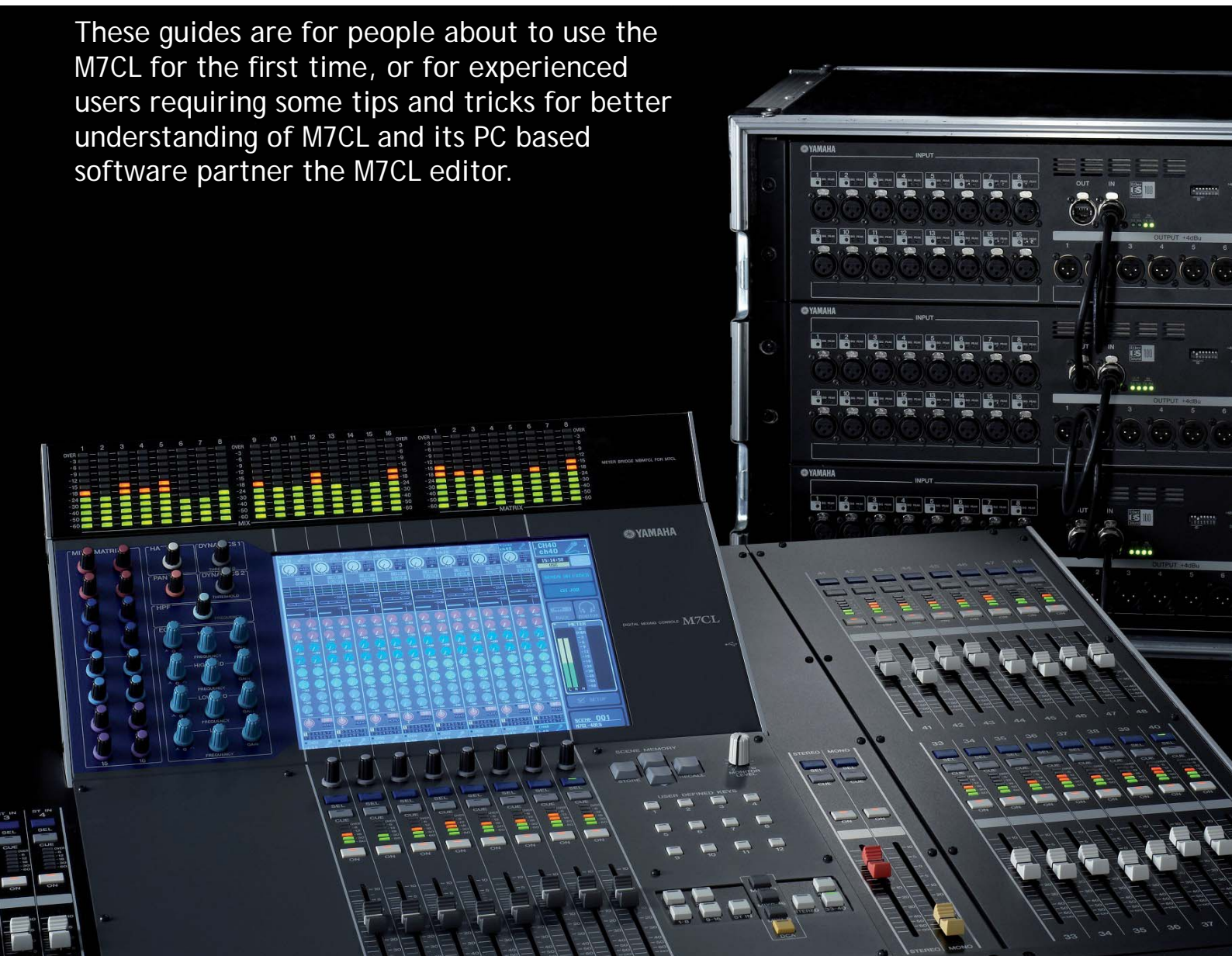
M7CL Quick Start Guides.

The M7CL Quick Start Guide is in multiple parts. It is available as a download from www.yamahaproaudio.com in the "Self Training" area. Also available is the revised M7CL Short-cuts and Tips List.

Part 1 is an introduction to the M7CL and its variations and goes on to describe the basic operations of the console to the level of a similar featured analogue console.

Part 2 introduces the extra features provided only by digital consoles; the internal effects rack package and the basic use of scenes to store and recall parameters.

Part 3 looks at scene memory use in more detail and the PC/Mac based software for remote control and setup; Studio Manager and M7CL Editor.

M7CL-48ES users may also wish to look at Yamaha's EtherSound Setup Guide. This explains the basic principals of designing an EtherSound network.

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Scene Management and other memorised features.

M7CL can memorise all of its mixing parameters such as EQ, dynamics and fader levels. These memories are stored into a "snapshot" or "scene". The analogue equivalent is "marking up" the desk on the familiar printed sheets of circles. This "scene" represents the best positions for all the parameters at that particular point in time. If soundcheck and rehearsal time allow, it is possible to create a scene snapshot for each song or act of the performance, including the preshow walk-in music and end show exit music and scenes for each support act too.

However never forget that live show mixing is a dynamic activity and that a series of scene recalls cannot always cope with the unexpected performance change or react to the change in room acoustics due to the audience. This guide explains how to take advantage of the scene snapshot system, whilst using the Recall Safe and Recall Focus functions to maintain flexibility and keep dynamically mixing your show.

In addition to scene information M7CL also remembers handy libraries of parameter information like the EQ, GEQ and dynamics libraries and set up features like patch information, User Defined Key and other preferences. Together all these memories add up to be a "session" or "console" file and these files can easily be copied to another console using a USB storage device or Yamaha Studio Manager. M7CL can only contain a single "console" or "session" file, but by connecting a PC running Studio Manager and M7CL Editor software, scenes can be extracted from one session and merged into another.

The SCENE LIST pop-up.

M7CL can store 300 scene memories or snapshots. In addition to the 300 numbered memories there is the default read only Scene 000 and also the 'current console settings' which are either the same as a scene or an edited version of a scene. These are in a special memory buffer which is also retained in case of power failure.

To see the SCENE LIST pop-up press the scene field area of the screen.

Scene 000 is "R" read only. When it is edited the yellow E appears. You cannot save to scene 000.

How to store a scene.

When the console parameters are edited to a position you want to keep, press the SCENE MEMORY up/down key to choose a numbered location for the new scene. The chosen number will flash. It is not necessary to be displaying the scene list, you can do this at any time.

Next press STORE and the SCENE STORE keyboard pop-up will appear. This lets you name the scene and provides extra space for a comment or longer scene name. If you store to a location containing a previously stored scene, this scene will be lost. (But see "Undo Options" section.) Scenes can be locked against this but generally be careful to choose a vacant scene location to avoid over-writing a valuable scene.

Clear the existing name (Initial Data) with the CLEAR key. Enter a scene name and a comment if wanted. The scene is always given an automatic time stamp when it is created and this appears in the SCENE LIST.

Press STORE (on screen or on desk), then OK on the confirmation box and the scene is stored. The scene number shows in the function access panel and the **E** goes out until another desk change is made.

For really fast scene storing you can disable the confirmation in SETUP Preferences. Now a simple double press on the STORE key will store using the current scene name. You can update the scene names later.

How to recall a scene.

To recall a scene use the up/down keys to find its number and then press RECALL. The desk will reset itself to the chosen scene. You cannot recall "empty scenes" with no data stored in them. If you want to start from a fresh clean desk choose Scene 000.

## Undo Options.

If after storing or recalling a scene you realise that you have made a mistake; perhaps you recall a scene with all channels muted, or over-write an important scene, there is one step of "undo". You can access this from the SCENE LIST pop-up. The "Undo" remains until you next store or recall.

User defined keys can be programmed to do "Undo store" or "Undo recall" functions directly.

Tip; If you use the Up/Down keys to move to new scene number, but change your mind and don't recall a scene, press Up/Down together to return to the current scene number.
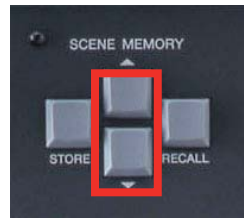
Managing the scene list.

Scenes appear in the list next to a position number. Above the list are Cut, Copy, Paste, and Insert option buttons so that you can re-order the scene list. This also lets you clear un-used scenes. It is important to realise that the scene number that you stored the scene into, is only a location and not part of the scene name. If you cut and paste scenes they will change number.

There is an "Undo" button for the scene management options, but this is only for one action back.

Editing single scenes.

Scene information can be edited by recalling the scene, making the required changes and then restoring to the same location. Alternatively the session or scene can be opened in Studio Manager M7CL Editor and changes made on an offline PC. Scenes can be locked from being over-written by pressing the grey square in the padlock icon column. Scene 000 is read only and cannot be over-written.

Editing multiple scenes; Global Paste.

When you have multiple scenes that all require the same edit it is convenient to use Global Paste. A typical example would be when a musician gets a replacement instrument, like a new bass guitar, the engineer needs to change the EQ setting in every scene where that new bass is played.
Access the Global Paste popup from the tab on the SCENE LIST Screen.

The Global Paste popup is a powerful and complex screen; it has three main areas to consider;

1.   Choose the kind of parameters you want to edit from the tabs at the bottom. In, Out, Rack or Patch.
2.   Choose the parameters and the channels you want to edit. (In our example this could be restricted to just the EQ for the bass guitar).
3.   Select a range of scenes to edit; starting from and ending at.

> **Tip;** If there is a scene within a list that does not need editing (for example the old bass is still used) then that scene should be locked against editing with the padlock symbol.

This Global Paste screen shows the settings to edit the EQ of channel 9 (Bass) in all scenes from 2 to 8.

PASTE; when the [PASTE] button is pressed all the selected parameters of the selected channels will be changed to the position of the current scene on the surface.
All selected scenes will have a new Bass EQ.

Limiting the effects of scene recall.

Scene recall is an extremely powerful function to help the sound engineer make many rapid changes to the console between songs or scenes. However, there are many circumstances when the engineer needs some changes but does not want to implement other changes. M7CL has two different solutions to this limiting of scene recall; Recall Safe and Focus.

Recall Safe and Focus.

When a scene is stored, all the parameters of all the channels are memorised, regardless of any safe settings, but when a scene is recalled with Recall Safe or Focus settings applied, the specific parameters of channels to be recalled are limited by those settings, and the parameters remain unchanged by the recall. Recall Safe can be applied to a whole channel or as Partial Recall Safe be applied to individual parameters.
Recall Safe affects the parameter in all scenes but Focus affects the parameter only when that specific scene is recalled. For a more in-depth understanding of Recall Safe consult the "M7CLV3 Recall Safe Guide" available from the Self Training pages of www.yamahapraudio.com

Recall Safe; typical use examples.

1.   If a special channel is added to an existing show made up of many scenes. This might be a presenters mic or safety announcement mic. Each time a scene is recalled this mic channel will "disappear" because it is not part of the newly recalled scene. By placing the mic channel in "Recall Safe" the scene recall does not affect that channel and the mic will stay as before the scene recall.
2.   Another common example is when using a scene for every song in a bands set. During the first song the engineer improves the sound of the bass drum by altering the EQ. When the second song starts the bass drum EQ is recalled with the original EQ and the engineer must repeat their alterations. This workload accumulates throughout the set as more channels are altered. By using "partial recall safe" just the EQ of those channels can be removed from scene recall so that it remains unchanged even when the fader level, sends, on/off etc is being changed.
3.   GEQ and rack settings can be recall safed. This is quite desirable so that any system or monitor GEQ applied in song one, is not undone when song two starts.

To apply Recall Safes;

The Recall Safe pop-up is in the Channel Job area. Press the CH JOB area on the screen and then select RECALL SAFE, the pop-up will appear.
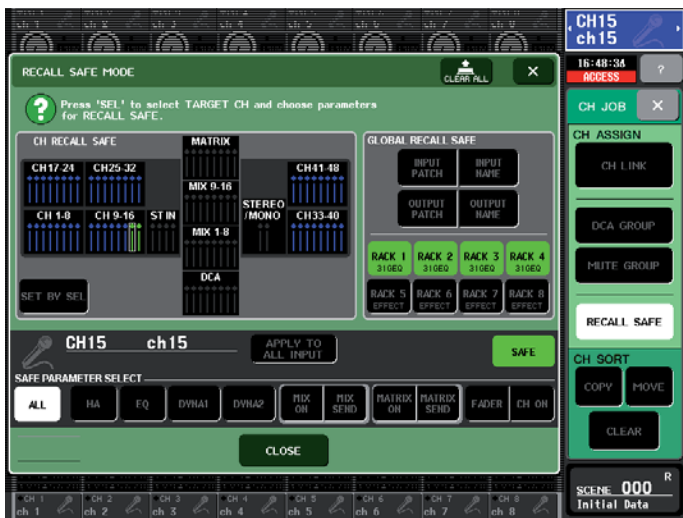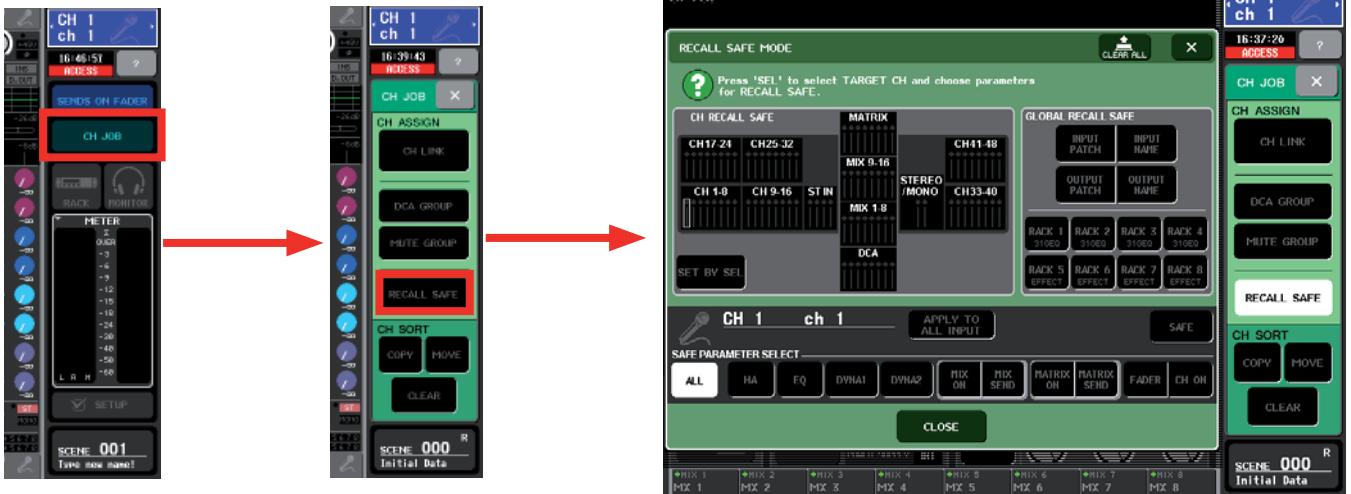
Recall Safes can be applied from this screen and the Safe Parameters can be selected.

To apply a Safe, select the channel to display its setting in the lower part of the pop-up. Select the parameters to be safed (eg ALL or HA and EQ). Turn on the Safe with the SAFE button. This setting can be applied to many channels quickly by using the SET BY SEL function in the box above.

Channels with all parameters safed are shown green. Channels with partial safes are shown blue. There are many possible partial safe combinations but all are shown in blue.

It is easy to create mute scenes by selecting all the buttons other than CH ON from the SAFE PARAMETER SELECT part of the RECALL SAFE MODE pop-up, and applying this to all channels. In this case each scene will only operate the channel ON/OFF parameter. Check to Safe all the RACK, NAME and PATCH boxes too.

Note; There is a difference between [ALL] and all the parameters buttons together. Be aware of the exception that channel link, MIX/MATRIX bus setup, TO STEREO/MONO, PAN/BAL, LCR, and MUTE/DCA Assign are also recalled with ON/OFF keys, because these parameters are not subject to recall safe (always recalled) or can be safed only with ALL. For a more in-depth understanding of Recall Safe consult the "M7CLV3 Recall Safe Guide" available from the Self Training pages of www.yamahapraudio.com

Turning safes on and off.

Safes can be turned on and off from the Selected Channel View and there is also a short-cut to the RECALL SAFE MODE pop-up. If the safe is set to a partial setting this will be indicated here and the partial setting remains even when switched off.

Focus (or Recall Focus); Typical use examples;

Focus is another way of limiting the amount of information that is recalled when the chosen scene is recalled.

1.   *Multiband shows.* In a multiband line up show each engineer wants his own GEQ setting, but also they want changes to be possible without scene recall "undoing" them. Because Focus is available on a scene by scene basis this is possible. Use Focus to remove the RACK from recall in all scenes *except the first scene* of each band's set. Now the GEQ settings will change only when a new band starts.

2.   *Patch Changes.* In a live recording set up it is required to have the mics connected to the channels of the scenes for recording, but for playback use the same scenes and have the recorder connected. By recalling a "record set up" scene the mics can be patched to the channels or by recalling a "playback set up" scene the recorder can be patched to the channels. Use Focus to remove the INPUT PATCH from scene recall for the actual scenes, but keep the INPUT PATCH within Focus for the two special "set up " scenes.

The focus screen can be accessed from the SCENE LIST pop-up by pressing the [FOCUS] tab below the scene list. It is important to understand that Focus differs from Recall Safe; Recall Safe is global to all scenes and Focus is specific to a particular scene. Also the selectable parameters are different.

How scene recall can be limited; a summary.

By Focus.	By Recall Safe.
Set and stored for each scene in the SCENE LIST pop-up.	Set for all scenes in the RECALL SAFE MODE pop-up.
Rack Effect preset and parameters, but not patching. *HA* Head Amp, Level, +48V, Ø *Input patch* Input patching, Insert patching, Direct Output patching, but not on/off *Output patch* Output patching, cascade patching. *IN* Input channel parameters; Name/Icon, EQ+ATT, dynamics, mute and DCA group settings, on/off, pan/balance, fader. Insert and direct on/off. *OUT* Output channel parameters; EQ, dynamics, on/off, fader and the With send settings if pressed. *(With send)* ON/OFF and send level settings for mix and matrix sends.	*Global recall safe* Input patch, Input name. Output patch, Output name. Individual rack units 1 to 8. *Input Channel* All parameters or partial safe menu of; HA, EQ+ATT, Dyn 1, dyn 2, Mix on, Mix send, Matrix on, Matrix send, Fader, on/off. *Stereo/Mono master Output Channel* All parameters or partial safe menu of; EQ, Dyna, Matrix on, matrix send, fader, on/off. *Mix master Output Channel* All parameters or partial safe menu of; EQ, Dyna, Matrix on, matrix send, fader, on/off. With Mix Send. *Matrix master Output Channel* All parameters or partial safe menu of; EQ, Dyna, fader, on/off. With Matrix send. *DCA groups* All parameters or partial safe menu of; Level/on

What is in a scene?

When a scene is stored it is useful to know what is included in the scene and can be changed by scene recall and what is not. However just because things are not remembered by scene recall doesn't mean they are not remembered at power down or are not included in the whole console file.

These text boxes should make it clear what is stored in scene memory and what is not.

Included in Scene Recall.

Head Amp (Level, +48V, Ø)
Ext Head Amp (Port, Level, +48V,)
Scene Comment, Time Stamp
Name/Icon
Patch/Routing (Input, Output, Insert, Direct, Monitor, Cascade, Rack)
Insert (on/off, position)
Direct Out (on/off, position, level)
EQ (All parameters inc HPF)
ATT (digital attenuator)
Dynamics 1 (All parameters)
Dynamics 2 (All parameters)
Matrix levels, on/off.
Matrix sends (Bus setup, on/off, level, pre/post, pan)
Mix sends (Bus setup, on/off, level, pre/post, pan)
Pan/balance (Position Stereo/ Mono/LCR)
DCA (assignment, level, mute)
Mute group (assignment, on/off)
Faders and on/off
Rack (all parameters)
Rear panel input to talkback routing (and levels in MONITOR Screen)
Focus
Cross fade (On, time)
Channel link settings
To Stereo/Mono (On, pre/post)
Cascade patching

Not included in Scene recall.
but still remembered for all scenes.

User defined keys
Preferences
Brightness controls
OUTPORT delay and level settings
MIDI setup
Wordclock
Master +48V
CUE Pop-up; PFL trim inputs, DCA trim, PFL trim Outputs
Monitor Pop-up; (levels, source on/off, mono, link)
Oscillator (all parameters)
Safe assignments (mute, recall)
Passwords/Admin/guest settings
Screen page or pop-up
Sends on fader selected
Metering point selection
External HA to Slot assignment and HPF.
User Access Level
Network settings
Clock!!
Slots and MY Card settings
User Libraries
 EQ/HPF, (User and ROM)
 Dynamics (not key-in), (User and ROM)
 GEQ, (User only)
 Effects (User and ROM)

Saving and Loading data.

Storing and recalling operations relate to scenes within a console file. Saving and Loading relate to adding or copying files from the console. The console file is made up of various libraries but these are all linked together so that they can all be saved or loaded together in one easy file. These files are common to both the M7CL 32/48 and M7CL-48ES, but no other console.

In addition to the scene memory (including the patch scenes) the console also remembers the various console settings and preferences not included in the scenes.

All this information can be backed up to a simple USB storage device.

Yamaha does not make and sell the USB storage devices, but these are widely available from computer and electronics stores and from many manufacturers. When choosing a storage device remember that; M7CL is USB1.1 compliant, so both USB1.1 and USB2.0 will work. Storage capacity must not exceed 16Gig. The drive can be formatted to FAT12 FAT16 or FAT32 but must not be partitioned. You can format a new drive in M7CL, but remember formatting an old drive erases all its memories. Most USB memory devices work, but Yamaha have a list of tested ones on www.yamahapropaudio. com (Downloads>Technical Documents & Data> Utilities and Data> Mixers)

Saving data to a USB storage device.

The scenes and set up of an M7CL console can be stored to an external USB storage device. This serves to back up the console's internal memory and allow transfer of the data to another console in another territory. Files made on either M7CL32/48 or M7CL-48ES channel version will open in the other version.

In the unusual case that files were created in an M7CL32/48 loaded with MY16-ES64 EtherSound cards and using SB168-ES external stageboxes, files must be "converted" to work with consoles not using the MY16-ES64 cards; even if it is M7CL-48ES. The reverse operation also needs "conversion". Just press [STAGE BOX DATA CONVERSION] button and follow the on screen instructions. The conversion process does not alter the data on the USB device.

Simply inserting a USB storage device will open the SAVE /LOAD pop-up screen.

If your stick is already connected then you can access the SAVE /LOAD pop-up from SETUP in the function access panel and then press SAVE/LOAD.

Pressing the SAVE button will result in an ALL DATA save. The text box explains what is included in that data file.

You can also access the CREATE USER KEY pop-up from this page. In addition to Administrator-set user access privileges the key stores your preferences and User Defined Key settings. So it's a useful way to transfer User Defined Keys and preferences to another console when you are starting a new project.

Saved on USB storage device as ALL DATA file.

All the scene data from the above list for all the scenes.

The current scene (the scene in use at the time of SAVE).

External HA to slot assignment

Safe assignments

Work Clock settings

CUE Pop-up settings; PFL trim inputs, DCA trim, PFL trim Outputs

Monitor Pop-up settings; (levels, source on/off, mono, link)

Metering point selection

MIDI settings

Outport settings (delay and level)

User Libraries

      EQ/HPF, (User and ROM)

      Dynamics (not key-in), (User and ROM)

      GEQ, (User only)

      Effects (User and ROM)

User Access Level

Preferences

User Defined Keys

Stored on User Authentication Key.

User Access Level

Preferences

User Defined Keys

Loading data to the console from a USB storage device.

When an ALL DATA file is loaded into a M7CL all the data in the console is over-written. (Except the few items like Passwords in the text box below). Similarly if a LIB scenes-only file is loaded all existing scenes are over-written but setup data like User Defined Keys are retained. LIB files are discussed later.

Other memorised data.

Some things are memorised by the console but not included in the ALL DATA file. And somethings are not memorised by the console at all.

Memorised at power down on the console but not in ALL DATA file.

Passwords
Screen page
Brightness controls
Network settings
Clock (time/date etc)

Not stored anywhere!

Screen page pop-up. (but can be bookmarked)
Talkback on,
Cue on (always off at power up)
Osc on (always off at power up)
Monitor dimmer on (always off at power up)
Console Lock (always off at power up)
Monitor, Talkback and Headphone pots (but shouldn't move in transit!)

Management of M7CL console files.

In the SAVE/LOAD screen you can COPY, PASTE and DELETE items on your USB storage device, regardless of what kind of file they are.

However only certain kinds of file can be loaded into M7CL. Only ALL DATA and USER KEY files can be created on M7CL but Studio Manager M7CL Editor can save Scene Only data. There are also firmware files and Help Menu files to recognise. See the guide below.

How files appear in M7CL.

How files appear in MS Windows.

NOTE: there are two types of .M7C files; ALL and LIB.

M7CL files.

All.M7C This is an ALL DATA console set-up file that includes all the information listed in the text box on page 8. All.M7C files can be created on either the console or the M7CL Editor and these files can be used for transferring data between consoles and editors.

User Key.M7U This is the User Authentication key that carries the user preference and access information listed on page 8. The user access privileges may be created, viewed and edited on the Console or the editor, but only the console can view and edit the preferences and User defined keys.

LIB.M7C This is a file of "scene-only" data created within the Studio Manager. It does not include other non-scene recallable data like User defined keys or EQ etc libraries.
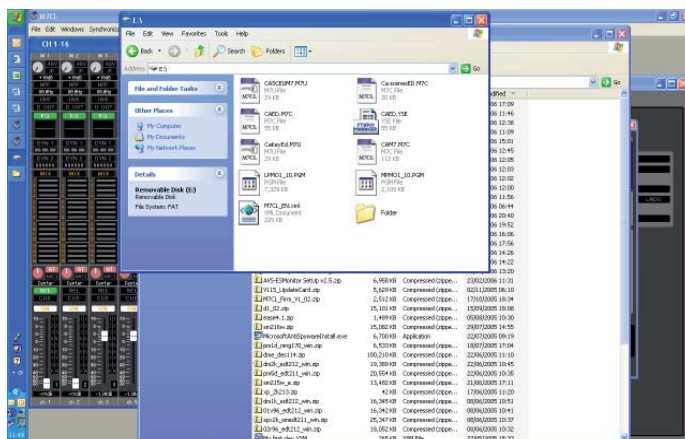
Firmware.PGM files. There are four different .PGM files that make up the console firmware (actually two for M7CL32/48 and two for M7CL-48ES but they always get downloaded together and the consoles only load what they need) and these will self load at power up. (With a confirm dialogue pop-up) They cannot be loaded from the SAVE/LOAD screen.

M7CL_EN.XML There are several different language [Help] files available and these must be loaded from the save/load screen.

name.YSE This is a session file created and stored in the Yamaha Studio Editor format and it will not open in the console, only the editor.

New.M7C Sessions saved on newer versions of Studio Manager appear as "New" on old console firmware. Update your firmware to access them.
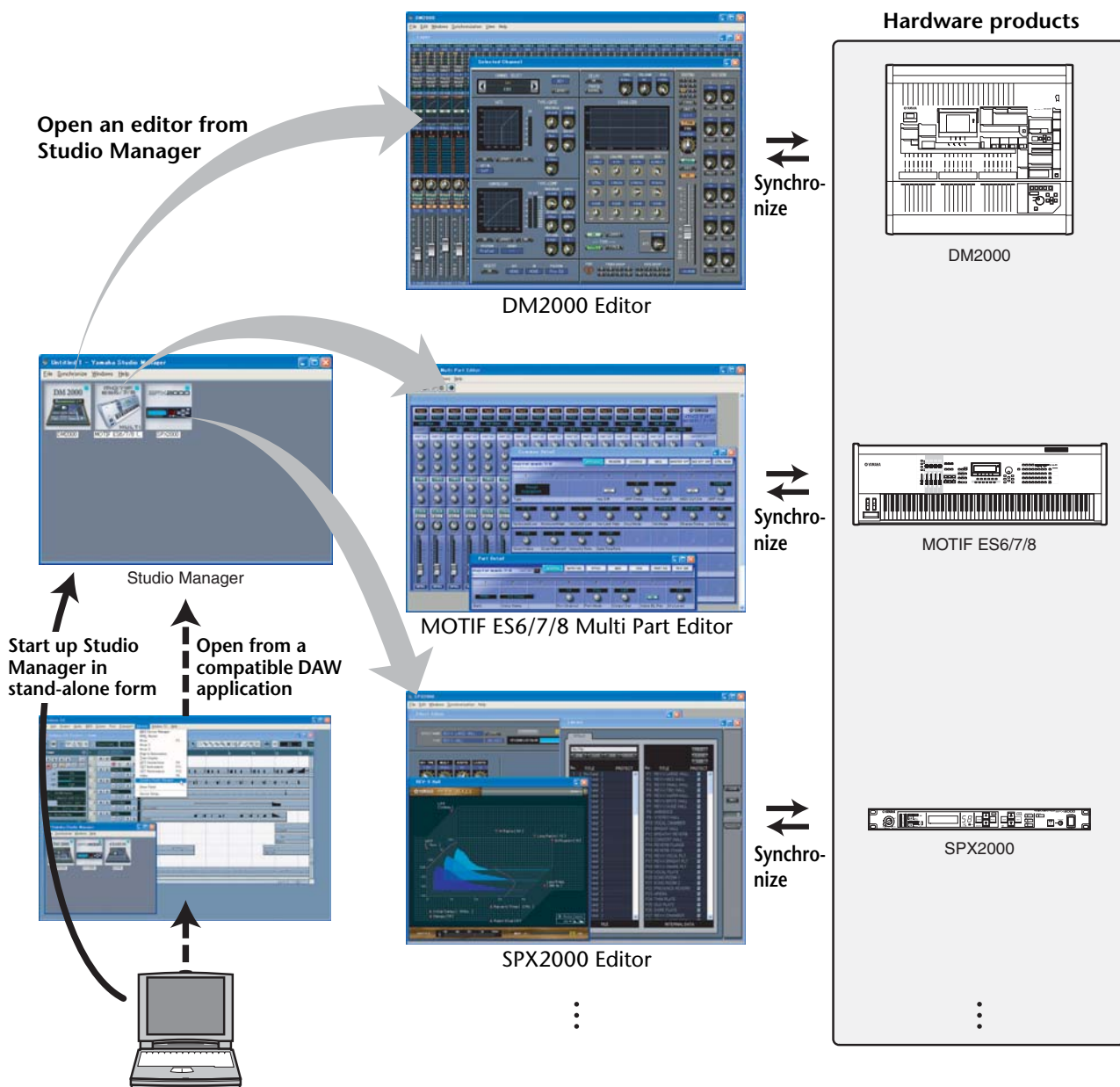
STUDIO MANAGER and the M7CLV3 EDITOR.

Background and introduction to Studio Manager.

M7CL is not aimed at any kind of studio activity; it is primarily a live concert mixer so many people are confused by the Studio Manager title of its remote control and editing software. In fact the Studio Manager and M7CLV3 editor are very well adapted to the needs of the live sound engineer; M7CL files can be opened on a PC, away from the console, and edited, saved and copied. The files are small and can be easily emailed and scenes from different shows can be brought together to create a new file allowing seamless changes from any one scene to another.

The Studio Manager title comes from the software's much broader capability to integrate with many other digital audio products found in studio environments. Far from being limited to the remote control of a M7CL, Studio Manager can remote control several M7CLs, other Yamaha digital mixers, SPX2000s and Motif Keyboards. In turn Studio Manager can be part of a Steinberg Cubase DAW setup and all the settings of these products can be saved in a single file launched from the DAW.

Hardware products

Open an editor from Studio Manager

Synchronize

DM2000 Editor

DM2000

Studio Manager

Synchronize

MOTIF ES6/7/8 Multi Part Editor

MOTIF ES6/7/8

Start up Studio Manager in stand-alone form

Open from a compatible DAW application

Synchronize

SPX2000 Editor

SPX2000

Of course this broader functionality is not relevant for the simple remote control and editing of M7CL, but it is useful to learn a little background now in order to understand later how you can save files that are from setups of multiple consoles used in a master and sub mix or cascade configurations later if ever needed.

What is Studio Manager and M7CLV3 Editor for?

The combination of Studio Manager and M7CLV3 Editor gives you the software to create and edit .M7 files on your personal computer (PC or Mac). These files hold all the parameter data for all the scenes in a setup and can be transferred to a console using a USB key. Alternatively, by using the DME-N Network driver(PC) or Network MIDI driver(Mac) and a Cat5 crossover cable connection, the Studio Manager and M7CL Editor can be used "online" for remote control and monitoring of a M7CL console or direct exchange of data between the computer and console memory.

It is not required to ever use Studio Manager with a M7CL; the console offers all its features without any external computer devices, but Studio Manager adds very useful extra access. The preparation chores like naming channels, patching I/O, setting effects units and parameters can all be done on your Personal Computer without the need to access the console; while you are at home, on the bus, or even on a plane. Secondly Studio Manager offers an alternative interface when connected to a M7CL, this gives a different view, an extra control interface for dual operators and the possibility of remote or even wireless control using tablet type PCs.

Where can I get Studio Manager?

Studio Manager and the various editor programmes are available as free download from;

www.yamahaproaudio.com

From the DOWNLOADS page look for FIRMWARE AND SOFTWARE.

There are three things you should download for M7CL;
1. The Studio Manager V2 Host (PC or Mac)
2. The M7CLV3 Editor (PC or Mac)
3. The DME-N Network driver(PC) or Network MIDI driver(Mac).

Downloads from www.yamahaproaudio.com will always be the latest versions and compatible with each other and the latest console firmware. Older versions of Studio Manager may not communicate with the latest console versions and so it is best to rely on downloads rather than a CD that may have come with the console or been loaned to you. Any extra limitations caused by the ongoing development of the software will be explained on the website.

The Studio Manager software can currently be downloaded free of charge, but remember there is a "Licence Agreement" to check and you should only use the software as permitted by the terms and conditions of that agreement.

Note; M7CLV3 Editor works in Studio Manager V2 Host.

What kind of computer do I need?

The system requirements are subject to change with future updates and current information is given on the download pages of the website, but in Autumn 2010 all network equipped devices with;

For Windows 7

CPU: 1.4GHz or higher Intel Core/Pentium/Celeron family processor

OS: Windows 7(32-bit, 64-bit; Ultimate / Professional / Home Premium)

Hard Disk: 100 MB or more

Memory: 1GB or more (64bit 2GB or more)

Display: 1,024 x 768 pixels or higher; High Color 16-bit or higher

For Windows Vista

CPU: 1.4GHz or higher Intel Core/Pentium/Celeron family processor

OS: Windows Vista(32-bit; Ultimate/Enterprise/Business/Home Premium/Home Basic)

Hard Disk: 100 MB or more

Memory: 1GB or more

Display: 1,024 x 768 pixels or higher; High Color 16-bit or higher

For Windows XP

CPU: 1 GHz or higher Intel Core/Pentium/Celeron family processor

OS: Windows XP Professional / XP Home Edition / XP Tablet PC Edition 2005

Hard Disk: 100 MB or more

Memory: 256 MB or more

Display: 1,024 x 768 pixels or higher; High Color 16-bit or higher

For Mac OSX

CPU: Intel Core family processor

OS; Mac OS 10.5.8/10.6.x

Hard Disc; 100MB or more

Memory; 1GB or more

Display: 1,024 x 768 pixels or higher; High Color 16-bit or higher

Mac version is now here.
M7CL V3 Editor and LS9 Editor for Mac

Which Version of Firmware and Software should I use?

Yamaha always recommends the latest version of console firmware and the latest version of Studio Manager and M7CLV3 Editor. This combination is compatible for on-line connection and synchronization, will have the latest features and least known bug problems. However, we understand that in the real world there are older versions of consoles in circulation and that some engineers may have saved data in older versions of the SM and Editor.

How can I deal with older versions?

Yamaha constantly develops the M7CL mixing system, sometimes new versions are released that include new features and sometimes versions simply tweak the existing system to improve performance and "bug fix". When new console versions are released, new Studio Manager and Editor versions are often required to keep compatibility.

All files saved in mixers are .M7C type files and these will open in all future mixer versions, however it is not possible to guarantee future files will still be compatible with older mixers.   For this reason Yamaha strongly recommends the use of current mixer firmware in all consoles. If you own the mixer, keep it up to date or visiting engineers may not be able to open their files. If you are a touring freelance engineer carry latest firmware and USB key for upgrading. Console firmware is provided free of charge on www.yamahaproaudio.com.

This table is an example from October 2010; get the latest from www.yamahaproaudio.com

⚠ **Caution**

- The M7CL V3 Editor is for use with Studio Manager V2 Host and Network Driver. Be sure to use the latest versions of both the Studio Manager V2 Host and Network Driver, Both are available from this site.
- Use the Editor with the supported firmware listed in the following table.
- Files saved using later Editor or console versions cannot be loaded into earlier versions.

M7CL V3 Compatibility(Win)

M7CL Editor	Studio Manager V2 Host	M7CL Firmware
3.0.4		3.04
3.0.3	2.3.1	3.03
3.0.0		3.02, 3.01

M7CL V3 Compatibility(Mac)

M7CL Editor	Studio Manager V2 Host	M7CL Firmware
3.0.5	2.3.3	3.04

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Files saved in Studio Manager can have other formats (see page 11 of this guide). If a file was saved as a .YSM or .YSE file in V1 of Studio Manager it will not open in V2 or V3. To ensure that no files become unusable there are three versions of M7CL Editor available from the www.yamahaproaudio.com download pages. These relate to the last V1,V2 and the latest V3 of the M7CL mixer firmware. If you have existing V1 Editor files saved as .YSM or .YSE type files you need to use the V1 versions. You can then re-save these as .M7C files that will load into any version. If the console is V3 then the newly saved file will be upgraded to V3 and you can move on to using V3 Studio Manager and Editor.

Installing the software.

Full instructions for installing the software are available from the download pages. The wizards will guide you through the installation. Use the default settings unless you have particular requirements on where to install things.

If I don't have access to a M7CL can I still get started and use the software?

Yes. Once the software is installed correctly you can open the Studio Manager without a console. However you should understand that the M7CLV3 Editor graphics are not the same as those in the console and that studying M7CLV3 Editor is not an efficient way to learn how the actual console appears and works.

Open Studio Manager like any other programme;
click "Start"..............

## Opening Studio Manager and the Editor for the first time.

The first time you open Studio manager there are some setup chores to be done.
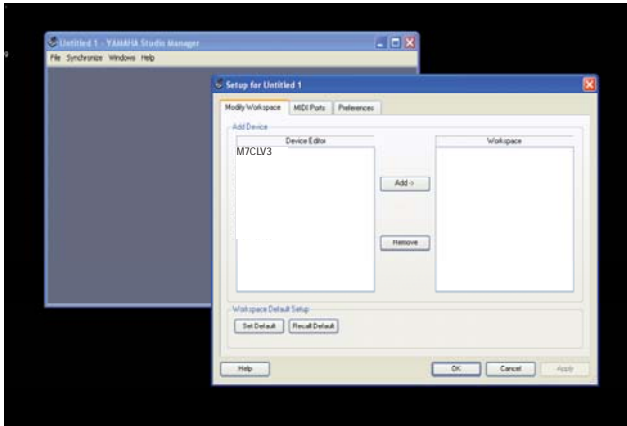
When the program opens, select the Setup parameter from the File menu. Highlight the M7CLV3 Editor and click [Add->] to move it to the workspace. Repeat this for the other editors if you need them for opening older Studio Manager files.

When the editors are in the workspace you should check the [Set Default] box so that you don't have to do this next time you open Studio Manager.

Click the [OK] button and the Studio Manager Window will show the Chosen Editors.
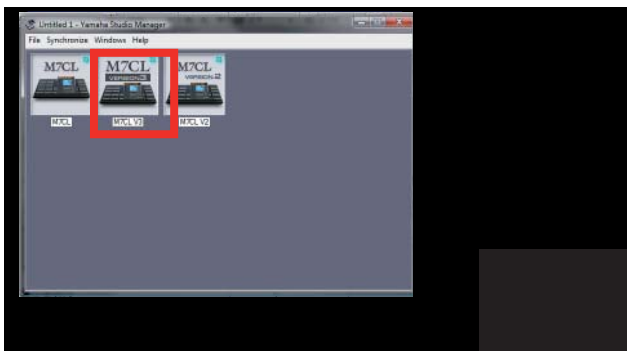
Double click on the Editor Icon to open the Editor.

(If you have a more complicated set up with multiple consoles you can choose to name each one by double left clicking on the name below the icon)

Using Editor Windows

When the Editor opens it shows the window INPUT CH 1-16.

Windows can be sized but the contents do not scale. You must use scroll bars if your screen is not big enough.

Tip; For Windows like INPUT CH 1-16 the View tab can be useful. You can remove unused parts of the window from display, for example if you don't need to see all the Mix sends you can hide them and have a smaller window. This means you may not have to scroll to see the whole window and there is space to open other windows at the same time.

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Use the Window tab to open other windows as required. The better resolution your screen has the more windows you can layout.

Changing parameters

Use your computer mouse to set the controls shown in the Editor Window.
For example;
Click and drag a fader up or down.
Click a button on or off.
Click and drag a rotary knob either clockwise or anti-clockwise.
Double click on dB numerical values and type in a value.
Double click on the name (eg Ch14) and rename the channel.
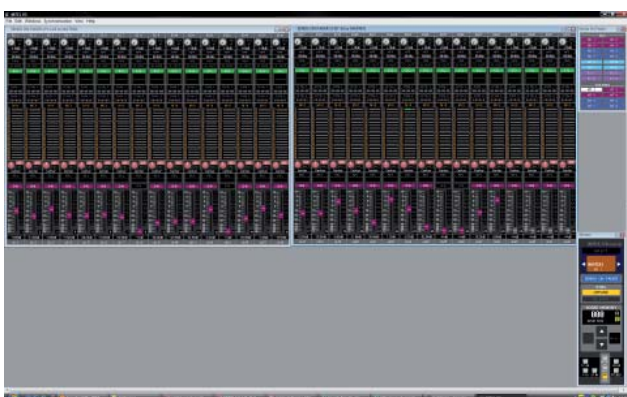
Enter SENDS ON FADER mode and drag mix send values up and down for setting monitor mix levels. Select your mixes from the Sends on Fader Window.

Tip; In Sends on Fader mode the fader caps colour helps to show the chosen mix. Grey faders are turned off channels. (The ON button in this view is the Mix On not the channels On.)

Dragging a rotary knob.

To set the value of a rotary knob click on the knob and drag it round. The knob will reach an end-stop just like an analogue knob.

> *Tip:* For greater accuracy you can click on the knob, drag the pointer out along the radius of a circle and then turn the knob as if it was a giant knob with this radius. This can be especially useful when using tablet control. Alternatively, type a value into the text box above the knob.

Drag out, then turn
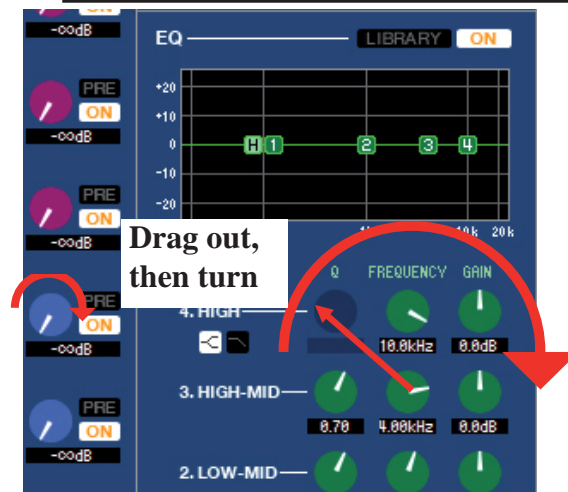
The SEL channel windows;

Main and Additional

In the M7CLV3 Editor there are two SEL channel windows; Main View and Additional View. Both views can appear the same, they differ in how their displayed channel is selected.
Note also the main view can access the libraries from buttons within the window, but these are greyed out in the additional view.

The selection of the Main View is by the [SEL] buttons, but the Additional View selection is either by using the arrows to increment and decrement the channel or by clicking on the [Select] bar to produce a drop down box of all the channels to choose from.

For now it doesn't matter which SEL channel you use, the Main View is probably a little easier, and it has the library short-cuts, but later when connected on-line to the console you may want to decide if you need the Studio Manager to show the same SEL channel as the console or a different SEL channel. The real purpose of the Additional view is to provide a second independent control of the mixer when on-line.

Keyboard Shortcuts

Menu	Action	Key operation
File menu	Creates a new Session	Ctrl+N
	Opens a previously saved Session	Ctrl+O
	Saves the current Session	Ctrl+S
Edit menu	Undo	Ctrl+Z
	Redo	Ctrl+Y
Windows menu	Closes the active window	Ctrl+W
	Closes all windows	Ctrl+Alt+W
	Tiles all windows	Ctrl+T
	Cascades all windows	Ctrl+Alt+T
	Opens the Master window	Ctrl+1
	Opens the Sends On Fader window	Ctrl+2
	Opens the INPUT CH (CH1-16) window	Ctrl+Alt+1
	Opens the INPUT CH (CH17-32) window	Ctrl+Alt+2
	Opens the INPUT CH (CH33-48) window	Ctrl+Alt+3
	Opens the ST IN window	Ctrl+Alt+4
	Opens the MIX window	Ctrl+Alt+5
	Opens the MATRIX window	Ctrl+Alt+6
	Opens the STEREO/MONO window	Ctrl+Alt+7
	Opens the MATRIX window	Ctrl+Alt+8
	Opens the Selected Channel window	Ctrl+3
	Opens the Library window	Ctrl+4
	Opens the Patch Editor window	Ctrl+5
	Opens the Rack window	Ctrl+6
	Opens the Meter window	Ctrl+7
	Opens the Group/Link window	Ctrl+8
	Opens the Scene window	Ctrl+9
Synchronization menu	Opens the Re-Synchronize window	Ctrl+0
Library window or SCENE MEMORY page of the Scene window	Selects consecutive multiple items (memories)	Shift+click
	Selects non-consecutive multiple items (memories)	Ctrl+click
	Selects all memories in a section	Ctrl+A

Scene management using Studio Manager and M7CLV3 Editor.

Editing console files on the M7CL Editor.

Console files, stored to a USB storage device can be opened using M7CL editor. Open a stored session with "File>Open" and browse for the USB storage device in "My Computer". Only .YSE files are displayed until you select Console files in the "Files of type;" box below the file name box.

The Editor can be used to change most of the scene parameter data. Notably the Editor cannot be used for the items in the following text boxes.

<table>
<tr><td>

Cannot be set by M7CL Editor.
(but still saved in .M7C .YSM or .YSE files)

Preferences
OUTPORT delay and level settings
MIDI setup
Wordclock
Master +48V
CUE Pop-up; PFL trim inputs, DCA trim, PFL trim Outputs
Monitor Pop-up; (levels, source on/off, mono, link)
Oscillator (all parameters)
User Access Level

</td><td>

Cannot be set by M7CL Editor.
(and not stored in .M7C .YSM or .YSE files)

Network settings
Clock (day/date etc)
Passwords
Brightness controls

</td></tr>
</table>

Online with M7CL Editor.

When connected via the Ethernet port and "online" the editor can control the M7CL console. Dragging the controls with the mouse will cause the mixer parameters, the screen images and faders to change and move. Please note that until the "RE SYNC" operation is completed the Editor and M7CL may not show the same settings. When "RE SYNC" is performed each parameter will be copied to the other device and it is important to make the correct decision when faced with the Re-Synchronize dialogue box;
Console->PC or PC->Console.

Managing scenes with the Editor.

The Editor session is just like the console session in that it contains 300 scenes. Scenes can be stored and recalled from the MASTER window, and scenes can be viewed in the SCENE window just like the console.
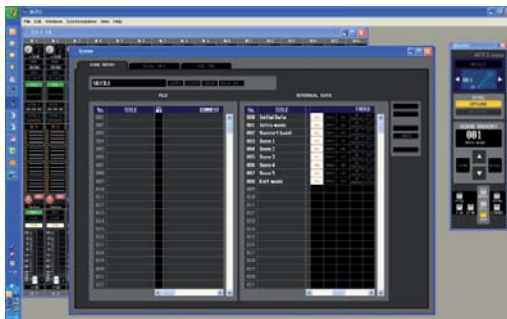
The Scene window.

**File column on the left
Internal data column on the right**

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Using the Scene Window.

The Scene window shows two columns.

The right side column is headed "INTERNAL DATA" and the scenes listed in this column form part of an ALL DATA session file. They are available for editing on the software. If the editor is connected online with a console these scenes are the same as those shown in the console SCENE pop-up. Recalling one of these scenes displays it in the editor windows and recalls it to the console.

The left side column is headed "FILE" and the scenes listed in this column are "scenes only". They are not "wrapped" in an ALL DATA file. Once saved and transferred to a USB sorage device, they appear as a LIB file in the console SAVE/LOAD page.
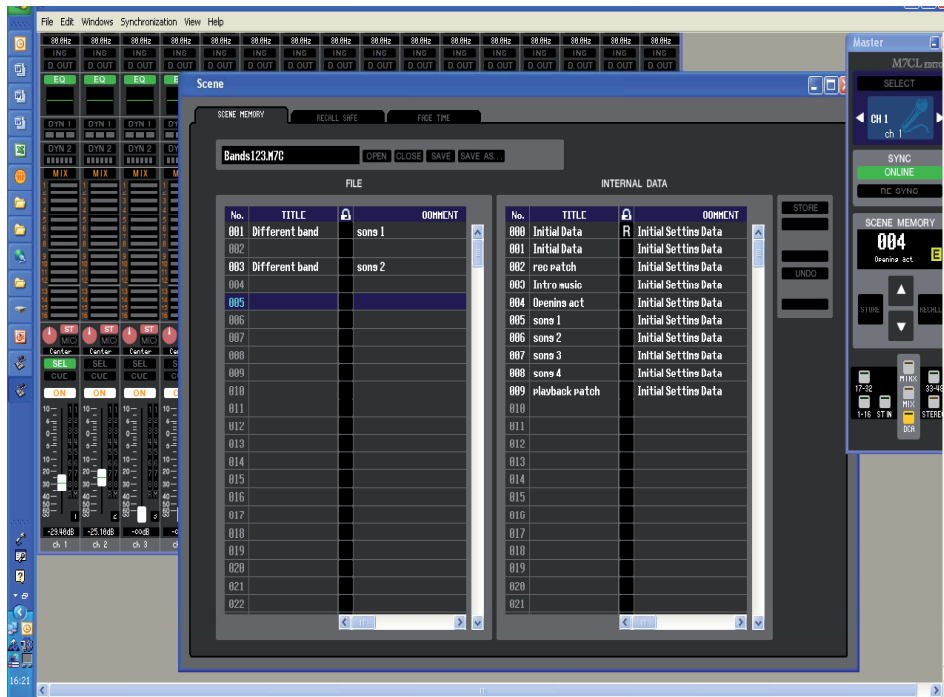
To SAVE the INTERNAL DATA scene list go to FILE>Save Session and save to your computers memory. The file can be saved either as an .M7C file for transfer direct to a console via USB storage device or as a .YSE file for opening on the editor. .YSE files cannot be opened on a console but they have the very small advantage of remembering the layout of the windows when opened in the M7CL Editor.

To SAVE the FILE list of scenes use the SAVE AS button above the list. This will also have the file extension .M7C but it is not an ALL DATA file, just scenes. These will appear as a LIB file in the console SAVE/LOAD pop-up and can be opened into a console but always as a block of 300 scenes, so you will lose all scene data within the console.

Note; the current scene is not over-written in this special case of LIB loading.

Library Window dragging.
## Example; load a stored user effect from one session to another.

In this example let's imagine that "Guest", the vocalist is joining "The Examples" on stage. "Guest" requires a special delay effect patch to suit his voice. The special effect parameters are available in a different M7CLV3 file. There are two ways to transfer them;

1. Manually. Open Studio Manager and M7CLV3 Editor and look at the parameters in "Guests" show file. Then copy them manually into the show file of "The Examples" and store them. This is acceptable if there is only one effect but if Guest was going to sing several songs with different effects it could be tedious and error prone.
2. Use M7CLV3 Editor to drag them across.
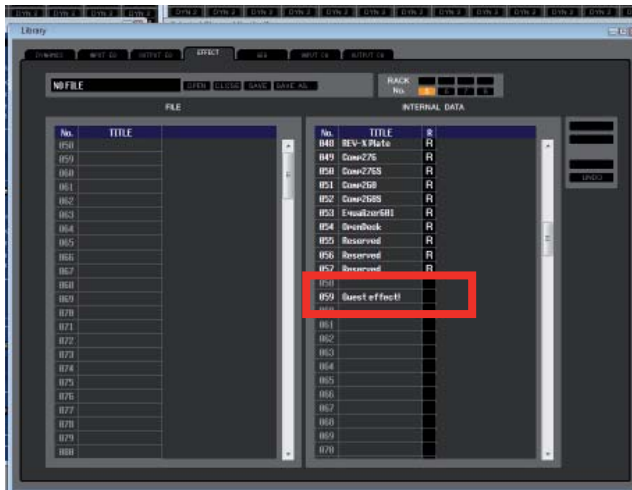
Before Guest Delay FX can be transferred from one file to another it must be stored to the effect library. Using M7CLV3 Editor, open the scene with the effect, open the Effect Editor Window and store the effect to the library. (This might already be done by Guest's engineer.)

Next, drag the stored effect from the right hand column (INTERNAL DATA) and drop in the left hand column (FILE) and confirm. You cannot choose library positions less than 056 as these are ROM for the Yamaha presets.
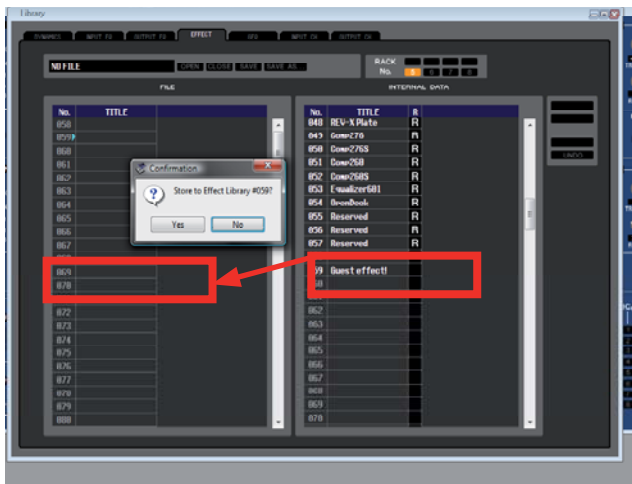
Save the new user library by clicking on SAVE above the FILE column. This will save the library onto your computer as a .M7C file. However it is important to understand this is not a M7CL session file, just an effects library. For this reason we suggest you give the library a name that reflects what its contents are, because it is easy to get it mixed up with other .M7C files if you don't. In this case we choose "GuestFX".

You cannot directly load this library into a console, but you can drag library entries out and put then in a different session file.
Close the "Guest" session and open "The Examples".
Open the Effect Library window.

Next open the "GuestFX" library on the FILE side, by using the Open button above the FILE column. (It could still open from the saving).

Drag the stored "Guest Delay FX" from FILE to INTERNAL data. Choose a location that is free.
Now the Guest effect is available in the main band show file.
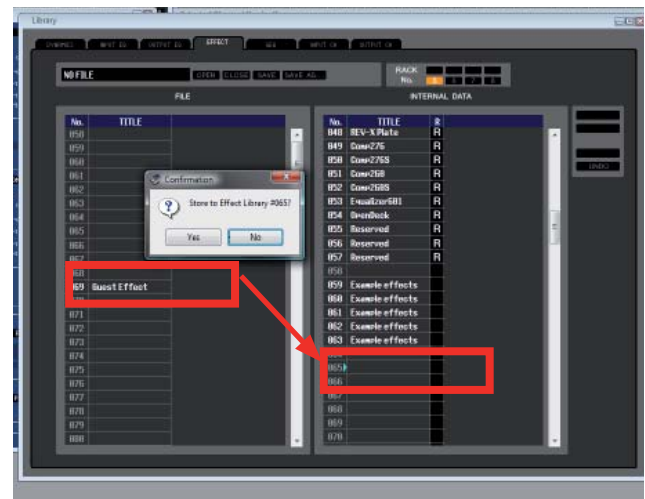
More Library Window dragging.

This technique of dragging items across the library window will work for other library items too. Channel library items for example; perhaps the guest has channel settings you want to copy from their file to yours; use the same technique.

In addition to the library items, scenes can be dragged in this way, but consider the alternative of using two editors instead; this skips the in between stage of saving to the PC.
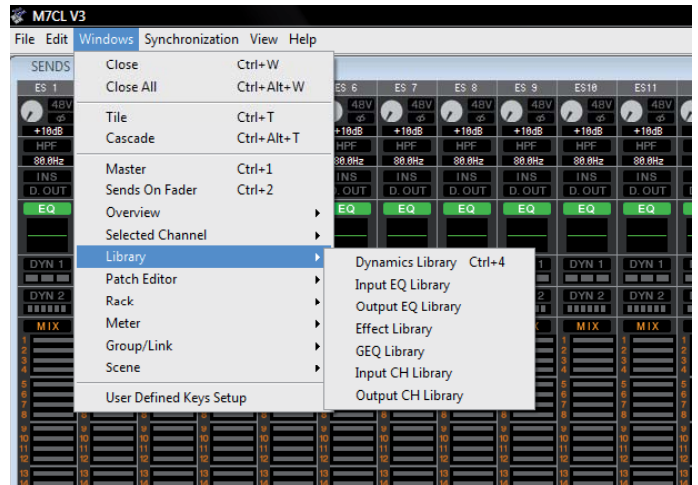
Using two M7CLV3 Editors.

An alternative to dragging from INTERNAL DATA to FILE and saving as a library file, is to open two instances of the M7CLV3 Editor. The advantage of this is that two sessions can be opened at the same time and data dragged across from one to the other without going through the middle stage of saving. This is particularly effective when one editor is on-line with the console and one is off-line. You can drag from an off-line session and drop directly into the console! Take great care not to have two editors on-line with the console at the same time and name the editors to avoid confusion!

To merge two bands scenes into one session file;

The procedure to drag a scene from one session into another (for example to merge two bands sessions when they appear in the same show) is;
Open two instances of the M7CLV3 Editor in Studio Manager. (One and Two)
Open each band's session within one editor.
Open the Scene Window in both sessions and re-size all windows so that you can see both at the same time.
Drag required scenes from Editor One to Editor Two. Choose vacant scene locations (probably new numbers).

Now the scenes from band One are available in band Two's session.

Finally save this new session by File>Save As, rename and select the file type from .M7C or .YSE.

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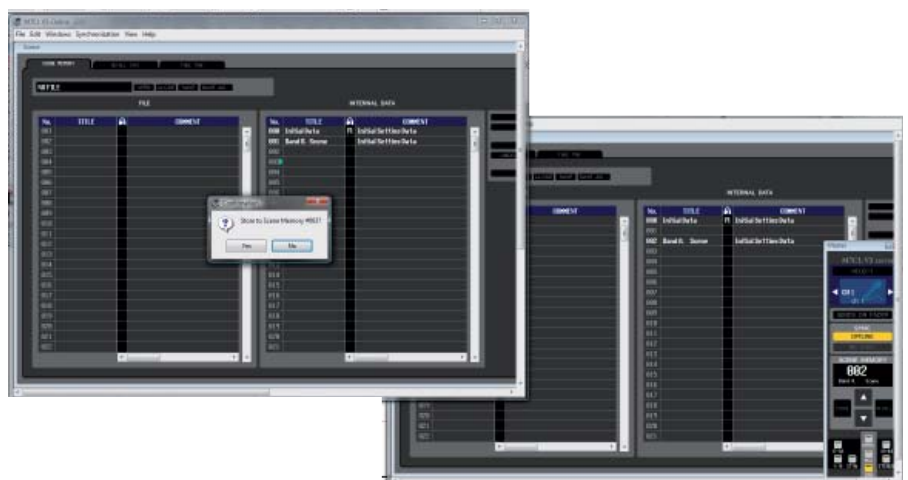
Using Focus and Recall Safe to ensure the outputs work as expected.

When merging scenes into the same session like this we should take extra care to check that patching changes are not going to happen that render the process ineffectual. For example if Band A outputs are patched to different Omni outs then possibly they won't be heard!

Careful use of the knowledge learned in this guide can ensure that outputs remain routed to the correct Omni outputs and have the correct processing applied. Use either Recall Safe or Focus to ensure this.

Focus can be set either from the scene window of the M7CL editor or the console. Use Focus to remove Output patching from recall and if necessary output processing like EQ and dynamics. Don't apply the "WITH SENDS" button or the sends levels feeding into the outputs will also be removed from recall.

Additionally you might wish to Safe any RACK GEQs from recall in the RECALL SAFE screen if you wish to use the GEQ settings set by the engineer whose session you are merging into.

If Recall Safe and Focus cannot cope with the patching requirements and changes, remember you can always use the editor to create a new patch for your old scenes.

Good luck and Enjoy mixing with Scenes!
www.yamahaproaudio.com