

FALCON

Manuale utente del programma :

User's manual for:

Falcon DUMP v.1.03.500/650

per la console digitale Falcon
for the Falcon digital console Falcon

ENGLISH <

> ITALIANO



<http://www.lemaudio.com>

DESCRIPTION

Falcon DUMP is a program (for Windows® 95/98/NT) supplied with LEM's **Falcon** digital console; it's used to upload/download Library Presets, Snapshots and Global Machine Setups from/to the **Falcon** and Personal Computers. In the same way, it allows complete and/or partial storage/loading of the Libraries.

It's extremely easy to use: after having physically connected the **Falcon** to a Personal Computer with the [minimum necessary requisites](#) to carry out this procedure, using the cable supplied (via serial port), just activate the program from the PC and request the necessary function.

Once started, the program should appear as follows on the desktop:



Technical Requirements

Falcon DUMP can be run in the following Operating Systems:

- Microsoft Windows® 95 (all versions) **any language**
- Microsoft Windows® 98 (build 4.10 and later) **any language**
- Microsoft Windows® NT 4.0 + Service Pack 1 e successivi (with or without IE4) **any language**

Any hardware configuration is valid, providing it's able to manage a 16450 or 16550 type serial port; default data transmission speed is 38,000 bauds/s.

INSTALLATION

Falcon DUMP is installed using the usual "setup.exe" installation file, which can be found in the Falcon Dump directory (backup disk). Once the "setup.exe" executable file has been activated, the procedure will prompt for confirmation of the directory in which it has to be installed: it's normally: **C:\Programs\Lem\Falcon\Dump**.
If necessary, change the path according to your requirements and confirm the choice.

After installation, a directory named **Dump** will be created and will be normally accessible from **Start in Windows® 95 and Windows® 98** via the following path: **Programs> Lem > Falcon > Dump**.

As with all software specifically written for **Windows® 95/98/NT**, **Falcon DUMP** can be uninstalled by simply removing it from the list of installed programs, which can be reached as follows: **Start > Settings > Control Panel > Add/Remove Programs > Add/Remove**.

In any case, **Falcon DUMP** doesn't add files to the system (*.DLL or *.VXD), so can always be easily removed.

The directory used to hold the Dump files is the same one as the program; however, its path can always be changed.

Lastly, it must be remembered that the installation of **Falcon DUMP** doesn't require a system reboot to complete the procedure.

NB: The Falcon DUMP files which can be downloaded from [our Internet site](#) are zipped using [Winzip®](#) or [Rar®](#); it might be necessary to unzip them in a temporary directory.

COMMUNICATION

The **Falcon** and the PC are connected using the appropriate cable supplied with the digital console: to be precise, between the PC's serial port (COM1, COM2, COM3 or COM4) and the **Falcon**'s serial port.

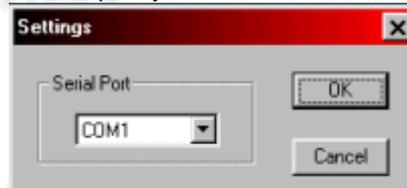
It must be checked that the **RS232 SETUP (IN)** is set as follows in the **Falcon**'s MIDI menu:

- Channel = 1 (as required)
- Control change=ON (value unimportant)
- Program change=ON (value unimportant)
- System Exclusive=ON *
- ...whereas the RS232 SETUP (OUT) section must have:
- Channel=16 (or, at least, different from that set in RS232 SETUP (IN))
- Control change=OFF (value unimportant)
- Program change=OFF (value unimportant)
- System Exclusive=ON *
- Console=OFF (value unimportant)

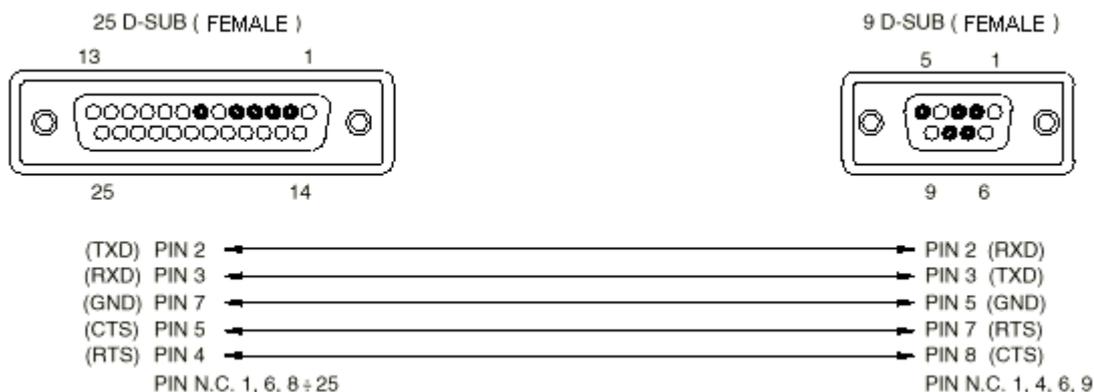
* = compulsory value

Should you require to change the Falcon DUMP serial communication port (the default port is COM1), for example because a serial mouse and/or modem is connected to it on the PC, procedure is as follows:

1. Select the **OPTION** menu item in the **Falcon DUMP** program.
2. Select **SETTINGS** and enter the menu.
3. A dialog box will appear which allows to change the serial port you want to use.
4. Open the pull-down menu using the small arrow on the right of the small box containing the default COM (COM1).
5. Select the COM required.
6. Confirm your choice with OK.
7. The dialog box closes and from that moment on, **Falcon DUMP** is set to communicate with the PC via the COM you have chosen.



Serial cable connection diagram



MENUS AND FUNCTIONS

- [Description of menus and functions](#)
 - [Use: Transmit and Receive](#)
 - [General Rules and restrictions](#)
 - [Capturing Bitmaps of the graphic display](#)
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Description of the functions

Falcon DUMP has 3 choice menus and 3 control functions that can be accessed immediately:



DUMP >

- **Transmit**
- **Receive**
- **Abort**
- **Exit**

Transmit (whose immediate access command is also found on the program's main panel) allows to transmit the file selected in the appropriate loading box ([see section](#)) to the **Falcon**.

Receive (whose immediate access command is also found on the program's main panel) allows to receive data according to the type chosen in the appropriate dialog box: Snapshot, Global, Preset etc..etc...(see [relative section](#)) from the **Falcon**.

Abort (whose immediate access command is also found on the program's main panel) allows to abort data transfer even if it hasn't been completed.

Exit finishes **Falcon DUMP** procedure.

OPTIONS >

- **Settings**

Settings allows to change the [serial communication port](#) to be used for connecting the Falcon and PC.

HELP >

- **About**

About About displays some information on the program and the current version of the software.

The **3** function keys (**Transmit Receive Abort**) are for immediate access to the commands already described.

Use

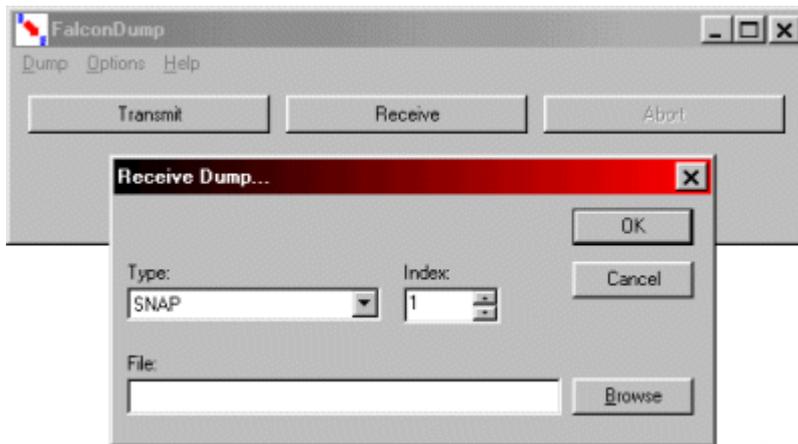
Once the **Falcon DUMP** has been activated, it can handle all the operations of transfer to/from Falcon, so you will not need to operate the machine in any way (unless the serial port is set incorrectly - [see relative section](#)).

Falcon DUMP can make the following selections:

1. SNAP + **nr**- Snapshot / Single
2. GLOBAL + **nr**- Global Machine / Single
3. CH.ENV.PRESET + **nr** - Environment Setup / Single
4. CH.EQ.PRESET + **nr** - Equalisation Setup / Single
5. CH.PROC.PRESET + **nr** - Processor Setup / Single
6. EFF.1 PRESET + **nr** - Effect Presets 1 / Single
7. EFF.2 PRESET + **nr** - Effect Presets 2 / Single
8. ALL SNAP - all the Snapshots in the list
9. ALL GLOBAL -all the Machine Globals in the list
10. ALL CH.ENV.PRESET - all the environment Setups
11. ALL EQ.PRESET - all the equalisations Setups
12. ALL PROC.PRESET - all the processors Setups
13. ALL EFF.1 PRESET - all the Effect Presets 1
14. ALL EFF.2 PRESET - all the Effect Presets 2
15. TOTAL BACKUP - the entire contents of the user storage
16. BITMAP - capture the bitmap on the display at the moment of the request.

Receive

The choice of the type of object you want to transfer from the Falcon > PC is made using the pull-down menu (called "Type") in the Receive Dump panel, which appears immediately after having pressed the key relative to the main Receive function from the program's main panel:



The selection of **nr** (number) is made by specifying the number of memory to be transferred by means of the "Index" pull-down box; this of course is the case for all those libraries that have more than one location number.

This category includes:

Snapshots (1-128)

Globals (1-8)

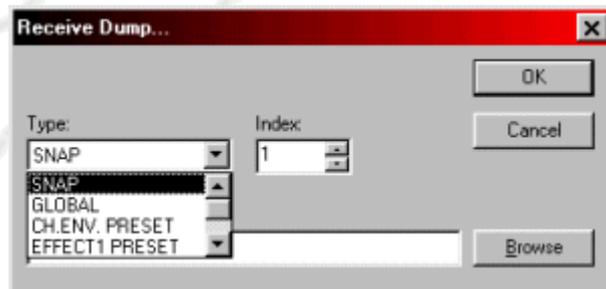
Ch. Env. Presets (1-32)

Ch. EQ. Presets (1-32)

Ch. PROC. Presets (1-32)

Effect1 Presets (1-32)

Effect2 Presets (1-32)

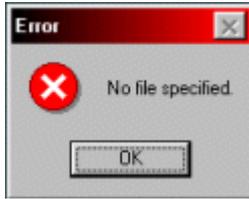


So, when it's decided to carry out the total transfer of a library, for example ALL GLOBAL, the **nr** value will no longer be selectable (the relative choice box will no longer show any location number).

After having selected the type of object and its memory location number (i.e. the list number it has), a name must be given to the file and its storage path specified; just press the "Browse" key, at the bottom right in the **Receive Dump** function's dialog box for access to the **Save Received dump as...** box, which allows you to choose the storage path and the name to give the file: there's no need to specify its extension (*.DMP).



At this point, after having confirmed the file's name with "Save", **Falcon DUMP** automatically returns to the main **Receive Dump....** box. By pressing **OK**, transfer begins, and **Cancel** stops Dump procedure, returning to the program's main panel.



Should you try to begin a **Receive Dump** without having specified the name of the file, **Falcon DUMP** warns you with the following error box and stops the current operation.

During the transmission of data from **Falcon > PC**, the following screen will appear (or a similar one, depending on the type of data being transferred):

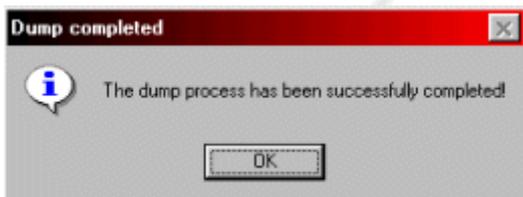


The number #n relative to the Packet value is of absolutely no practical use to users.....apart from being able to see if the program is actually carrying out the operation!

By pressing the **Abort** key at this point, the current operation is stopped immediately.

Attention: if a large amount of data is being transmitted (for example with the Global Machine) the program message (bottom left) might not even be seen "Running.....(Packet#nn)" because of the system's high transmission rate.

If the Dump has been carried out without any problems, when procedure is finished, this dialog box will appear:



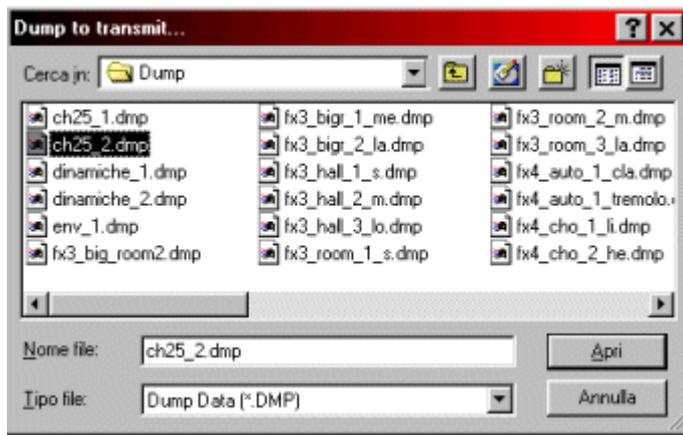
If not, another dialog box will inform you of the error and its nature.

NB: the value **nr** in Index always has a range of 1 to 128 even when the type of object you require to transfer doesn't have locations higher than 8 or 32; if you select an invalid value (e.g.: Global + 16), when it carries out this operation, the program will simply show the dialog box: This box might appear even if for some other reason, it's not possible to correctly finish data reception. Should this be the case, consult the appropriate section of this manual.



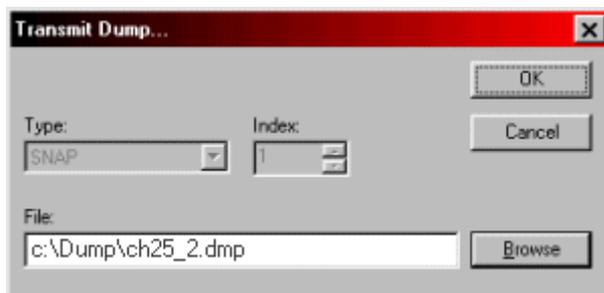
Transmit

When you want to transmit a file already previously stored on your PC to the **Falcon**, the only selection required is that of the file to reload; this is done by navigating in the usual system browser, accessed by pressing the



"Browse" key, located bottom right in the **Transmit Dump** function's dialog box..

The type of file to transmit and its **original memory position** (the storage location originally occupied) are automatically recognised by the **Falcon**, so you don't have to worry about defining whether the datum is a Snapshot, Global, Effect or another type; this is confirmed by the fact that the two "Type" and "Index" choice windows are no longer accessible.



Here again, there will be the same events already seen in the Receive stage.

If the operation is successful, **Falcon DUMP** will inform you of the positive result with the appropriate dialog box:



If not, another dialog box will inform you of the error and its nature.

NB: when a Preset from the Snapshot, Global, Environment and Effects libraries is loaded into the internal storage of the Falcon, there are some limits: these are described in the next section.

General rules and limits for Transmit e Receive functions

There are some limits governing **Falcon DUMP** Transmit and Receive procedure; here they're described in detail, along with the practical effects they have.

- **Falcon** agrees to *transmit* (Transmit) **Falcon DUMP** the Dump of a single Snapshot only if it actually exists (i.e. written and allocated) in the internal storage.
- **Falcon** only agrees to *receive* (Receive) the Dump of a single

Global from **Falcon DUMP** if it really exists (written and allocated) in the internal storage.

- **Falcon** agrees to *receive* (Receive) the Dump of a single Snapshot from **Falcon DUMP** if it's empty (nothing written in it) or full (written), different from the current one and not the only one for the Global it's associated with.
- **Falcon** agrees to *receive* the Dump of a Global from **Falcon DUMP** if it's empty (nothing written in it) or full (written) and different from the current one; in this specific case, all the Snapshots regarding the overwritten Global will be deleted.

Therefore:

- During **PC > Falcon** transmission procedure, it's not possible to assign a destination number to an object belonging to Snapshot, Global, Environment, EQ, Proc and Effect categories, apart from the one it was originally stored with.
For example: if preset no. 23 of Effect 1 has been stored, this preset can only be uploaded in position no.23 of Effect 1.
With the current version of **Falcon DUMP** this restriction is necessary to prevent incongruities of **Falcon**'s internal storage, which could be potentially dangerous for the integrity of all the user storage, not just the section involved.
- Up to 1.5 release of Falcon O.S.it's not possible to carry out a single "Delete" of the abovementioned objects; so care must be taken with the type of single storage carried out, to avoid the risk of having perfectly integral data in a file, but being unable to upload them because the target position is already occupied.
- There's an exception to this rule: the Presets of the effects and Environments are always loaded, even overwriting the memory location in question without any warning.
- **Attention:** it will be impossible to use a Global Machine if it doesn't have any Snapshot associated with it.
So, as well as the required Global, always remember to save at least one of its Snapshots (which will become the default snapshot for that Global); if not, it won't be possible to use it again, although it will be regularly reloaded into the **Falcon**.
- Lastly: never overwrite the only Snapshot left for a Global. Here again in this case, as with the previous one, it wouldn't be possible to use it ever again.

Generally speaking, it's advisable to carry out ALL backups periodically, in order to retain the unit's current status, and only use single backups for restoring presets after a General Memory Reset, loading them one at a time into the **Falcon**.

Capturing the display's bitmaps

One peculiarity of **Falcon DUMP** is the possibility of acquiring the screens that appear on the Falcon Display in digital format

Even although this isn't apparently very interesting, it must be considered that this feature could be useful in diagnosis procedure by the user, as a graphic Memo of EQ curves or particular processor settings.

The procedure is the same as used previously for Receive: select **BITMAP** in the appropriate pull-down menu in the **Receive Dump** panel...

Choose the name of the file and directory in which to save the file, confirm with **OK**.....and in a few



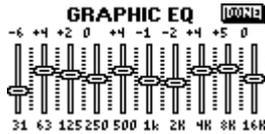
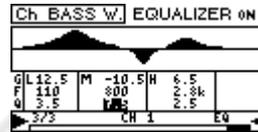
seconds you'll have captured the screen you were interested in!



The format resulting from a display Capture is:

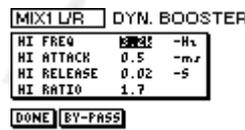
- Black&White (1 bit)
- 128x64 pixel.

For example, you could "capture" the graphic curve of the channel EQ of a particularly nice bass sound.....



or the setup of a MASTER's graphic filter.....

...or again, the setting of a processor of which you want to keep a graphic (not just digital) track in the form of a Snapshot or Preset.



PROBLEMS

During the test relative to the various user configurations of **Falcon DUMP**, some application problems occurred, essentially due to [serial communication](#), which were as follows.

Microsoft Windows® CE 2 .0 e 2.1 - Remote Services

In some Personal Computers on which the **Windows® CE**, remote connection package was installed, there have been problems with correct communication between **Falcon DUMP** and the **Falcon**. These difficulties seem to have been due to excessive polling of the serial port by the Microsoft software and when rather lengthy data were being transferred. In these cases, there's a breakdown in the communication between Falcon DUMP and the mixer, which meet with incorrect interpretation of partial and incomplete data (or anyway unusable).

The problem can be solved by obliging the **Windows® CE** Connection Services to temporarily use a parallel port instead of the serial port assigned by default (or an IRDA port - infrared): consult your **Windows® CE** manual (Connection Services) for the correct procedure for changing the communication port.

Symantec Winfax® 8.0 - 9.0

Here again, the communication problem is created by excessive polling of the software on the serial ports to intercept any arriving Faxes or data transmission.

Solutions haven't yet been found in alternative to trying to use a different port to the one assigned to **Winfax** for communication between **Falcon DUMP** and the **Falcon**.

See [COMMUNICATION](#) section for instructions regarding changing the port.

In general

Try to set up communication between **Falcon DUMP** and the **Falcon** using a serial port that isn't already occupied.

If this is not possible and in the event of transmission problems, identify the software that (in your opinion) could interfere with communication; if possible (disable it) even temporarily.

The majority of problems are found in the use with **Windows® 98** in combination with programs that use the serial port intensively.

Make certain that the Microsoft serial communication drivers are correctly installed in the system.

Should all attempts to communicate be in vain, try replacing the cable supplied with another serial cable connected as shown in the [diagram](#) in the Communication section.

In any case, should the problems persist, contact us at the following address: tech@lemaudio.com.

Lastly, consult our Internet site in the [SOFTWARE](#) section to check if there are new versions of **Falcon DUMP** or warnings of other irregularities and relative solutions.

Our Team is continually at work on perfecting and optimising this software, the utilities and the **Falcon Operating System**.

UPGRADES

Upgrades of this program can be carried out on-line connecting to our Internet site at the following URL:

<http://www.lemaudio.com>

In the site's **SOFTWARE** section, you can find all the information and upgrades for this utility and others written specially for the **Falcon**, along with updated versions of the **O**perating **S**ystem.

Any changes made to the user's manual will also be available on-line in **HTML** and **PDF** format.

In the event of explanations and/or problems unable to be solved without specific support, it's possible to contact **LEM** directly by writing to:

tech@lemaudio.com