



***User's Manual***

# *DAS Loader*

*versión 1.7*



Antes de utilizar el equipo, lea la sección "Precauciones de seguridad" de este manual. Conserve este manual para futuras consultas.

Before operating the device, please read the "Safety precautions" section of this manual. Retain this manual for future reference.



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## INTRODUCTION

Thank you for trusting in our products!!!!

At DAS Audio, we work daily to develop reliable, high quality and “easy to use” products. Don’t hesitate to contact us if you need further assistance by our website [www.dasaudio.com](http://www.dasaudio.com).

In order to favor continuous improvement and a proactive approach to the customer, DAS Audio has developed DASLoader software. DASLoader software allows the user to upgrade the firmware included in DAS Audio products that incorporate DASnet, thus assuring that your product includes our latest improvements.

Today, these products are:

CONVERT15A	AERO-40A	AERO20A	AERO-20.120A
LX-218CA	LX-118A	UX-218A	UX-221A
UX-30A	SF-30A	SF-20A	SF-1521A
ROAD-12A-NET	ROAD-15A-NET		

Each of these audio systems include inside two different firmwares:

- the microcontroller firmware, which takes care of the monitoring and networking operations;
- the DSP firmware, which takes care of the signal processing of the model.

Any firmware’s version of the mentioned DAS Audio systems refers to the combination between both firmware, the microcontroller firmware and the DSP firmware. Any firmware’s version is distributed in a single HEX encrypted file. The user only needs to perform one easy step to update the cabinet.

DASLoader supports Windows (XP and higher) operating system.

DASLoader works under DASnet protocol (USB-RS485) and shares the hardware structure. No extra hardware is needed.





DASnet is a control and monitoring software developed by DAS Audio and included in the referred cabinet's models. For more information about DASnet please read the DASnet user manual available in the following link:

<http://www.dasaudio.com/soporte/software/dasnet-software/>,

You can freely download the latest version of DASnet here:

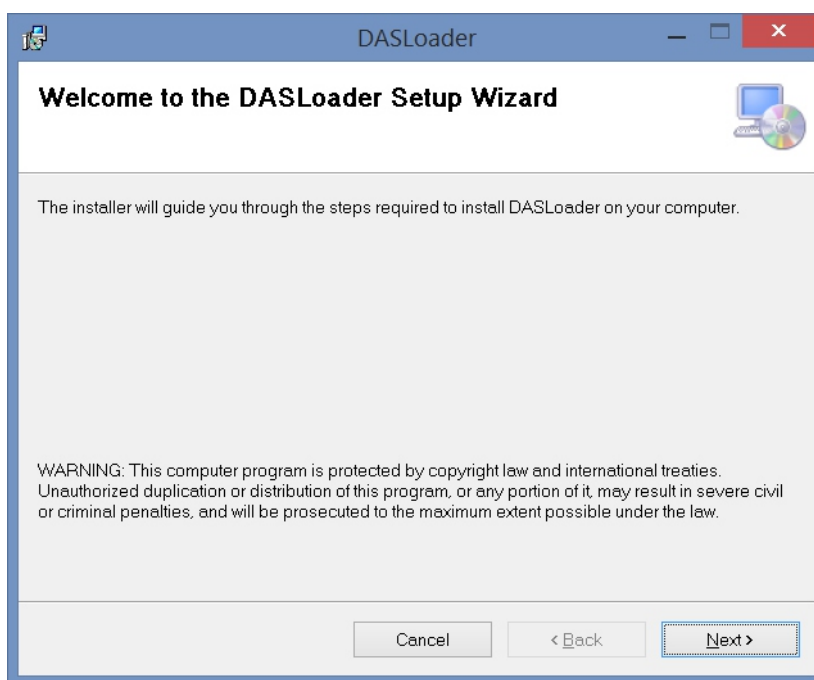
<http://www.dasaudio.com/soporte/software/dasnet-software/>.

DASnet also checks for the latest version of the connected devices, showing a warning message if there is a non-updated unit. The user can force this checking through the menu Tools / Show Device Firmware Status. DAS Audio will notify about the availability of new firmware versions through our website [www.dasaudio.com](http://www.dasaudio.com), Facebook, Twitter and Newsletters.

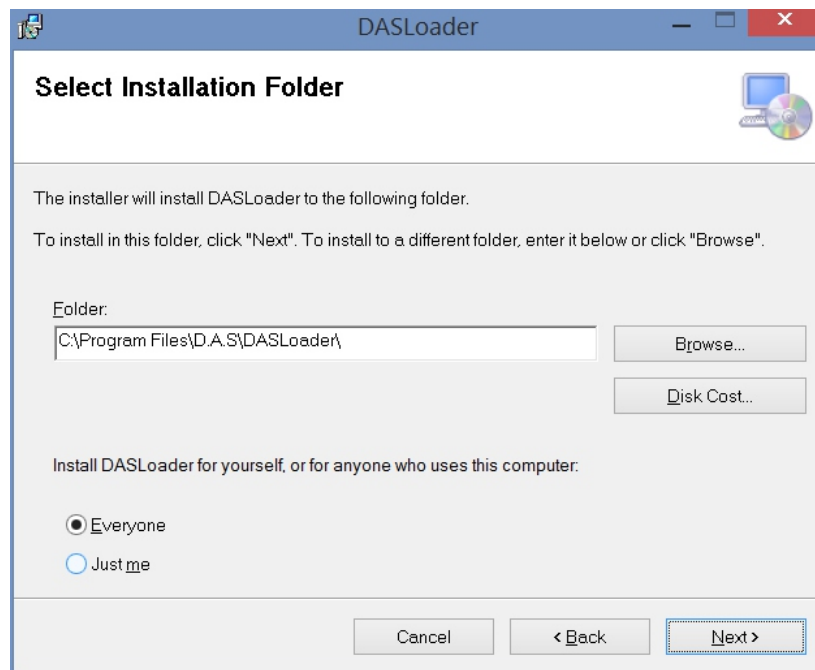
## INSTALLATION

Free download of the latest version of DASLoader software is available in our website <http://www.dasaudio.com/soporte/software/dasnet-software/>

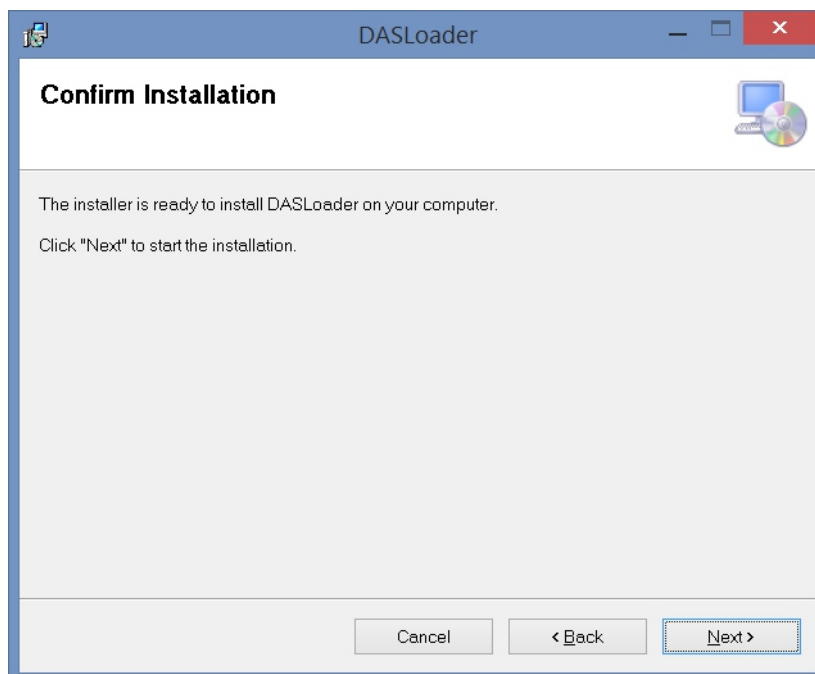
After downloading, run the installer and follow the wizard:



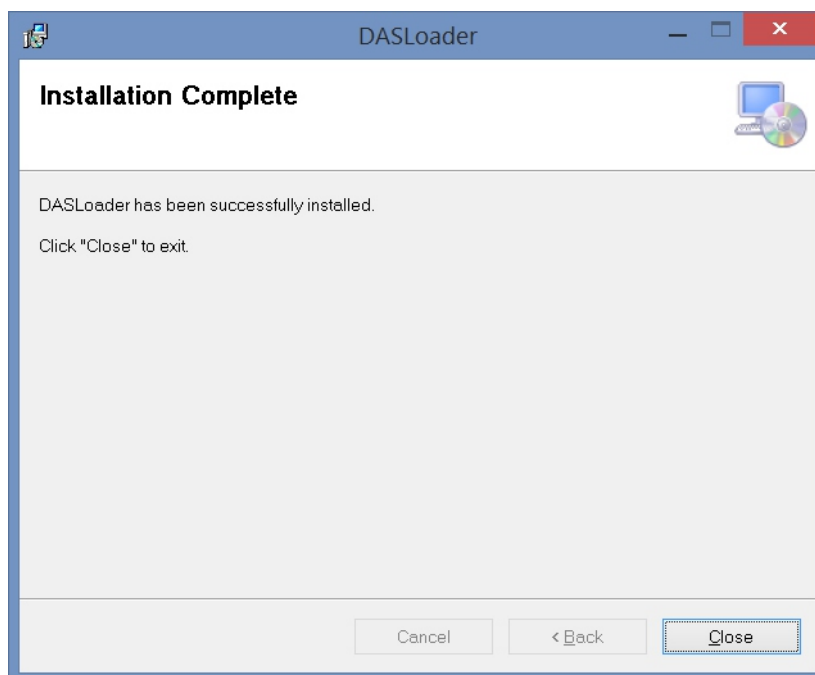
Click *Next* to go to the next window.



Choose the destination folder (it is recommended to maintain the one proposed) and select the preferred access right to the software (*Just me* or *Everyone*). Press *Next* to follow with the installation.



Windows may ask for some installation permissions, maybe it has to be running under Administrator rights, or an Administrator user must allow the installation.



Once finished, just *Close* the window.

## EXECUTING DASLoader FOR THE FIRST TIME



When running the software for the first time, **the computer has to be connected to the Internet**. DASLoader will download all the needed files with the latest version of the supported cabinets.

DASLoader will download the **dasnet\_verinfo.xml** file, which includes a complete list of the actual firmware versions of all DAS Audio supported systems.



DON'T MODIFY THE **dasnet\_verinfo.xml** FILE  
TO AVOID ANY WRONG PERFORMANCE OF THE SOFTWARE

DASLoader will also download the encrypted \*.hex files, one for every supported system with the latest firmware versions.

For safety reasons, the \*.hex files are encrypted and codified and it is not possible to update a cabinet with a wrong \*.hex file.

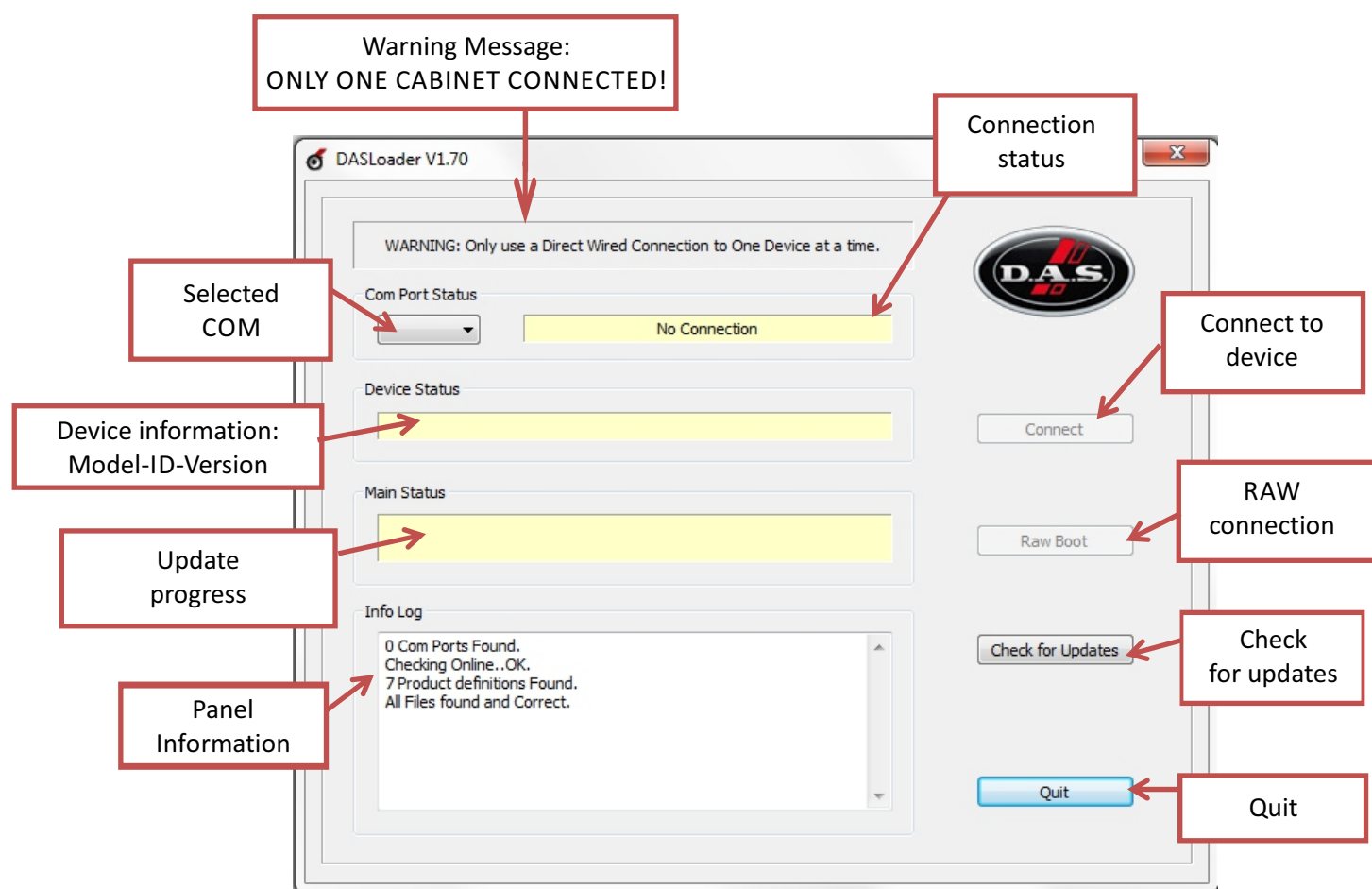
***WARNINGS: Updating the cabinets is a delicate procedure***

- ***The update should be done connecting only ONE cabinet at a time in the DASnet network.***
- ***The process should be done cabinet by cabinet.***
- ***Never update a system just before a show.***
- ***Update the system in a quiet and relaxing conditions with enough time.***
- ***Do not unplug or turn off the cabinet during the update process.***



## DASLoader Description

The information that you will find in the main window of DASLoader is detailed below.

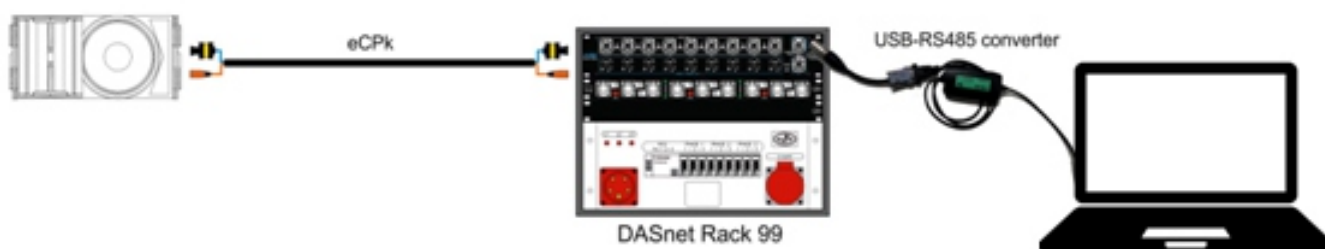


DasLoader will automatically look for an available Com Port for performing the communication. Verify that the Com Port selected corresponds to the one where the USB-RS485 converter is installed. If necessary, go to the Control Panel.

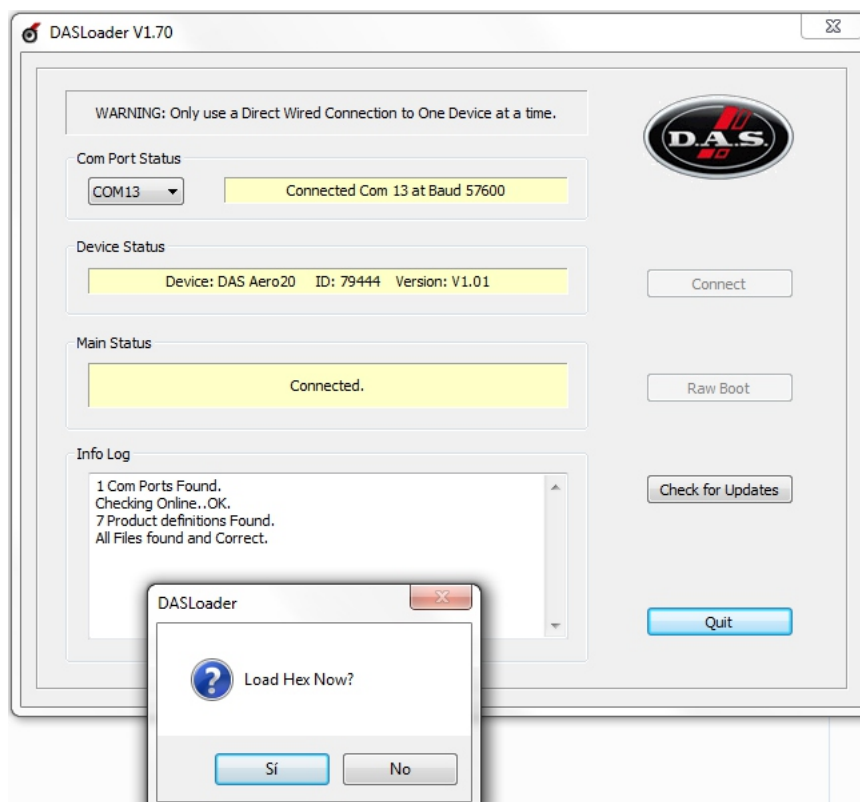
## UPDATING A CABINET

To upgrade a cabinet follow the next steps:

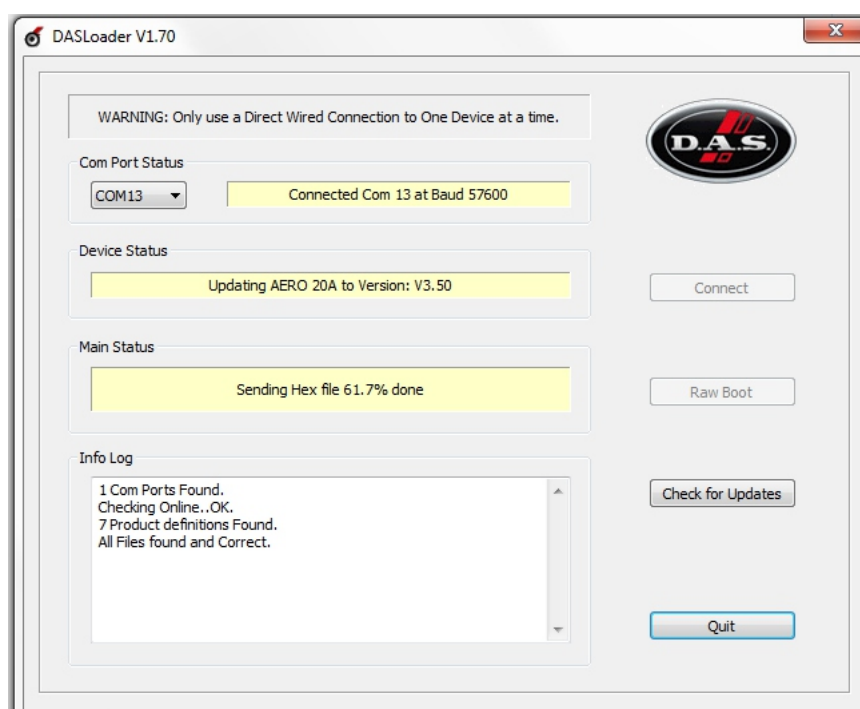
- 1.- Connect the USB side of the USB-RS485 converter provided by D.A.S. Audio to a free USB port on the computer.
- 2.- Connect the cabinet which will be upgraded to one zone of the DASnet Rack using the Ethercon cable.
- 3.- Connect XLR side of the USB-RS485 converter provided by DAS Audio to the zone of the DASnet Rack where the cabinet is.



- 4.- Run the DASLoader software.
- 5.- Select the Com Port associated to the USB-RS485 converter.
- 6.- Switch on the device.
- 7.- Wait for the device to be fully operative and press *Connect*.
- 8.- DASLoader will:
  - a. Be connected to the device under DASnet protocol.
  - b. Detect automatically the model of the connected device.
  - c. Check the version of the firmware of the detected device.
  - d. If the firmware's version is the last one, DASLoader will show the message: "Device has latest Version" in the panel info and will disconnect the device automatically.
  - e. If the firmware's version is not the last one, DASLoader will ask if you want to update the device now.

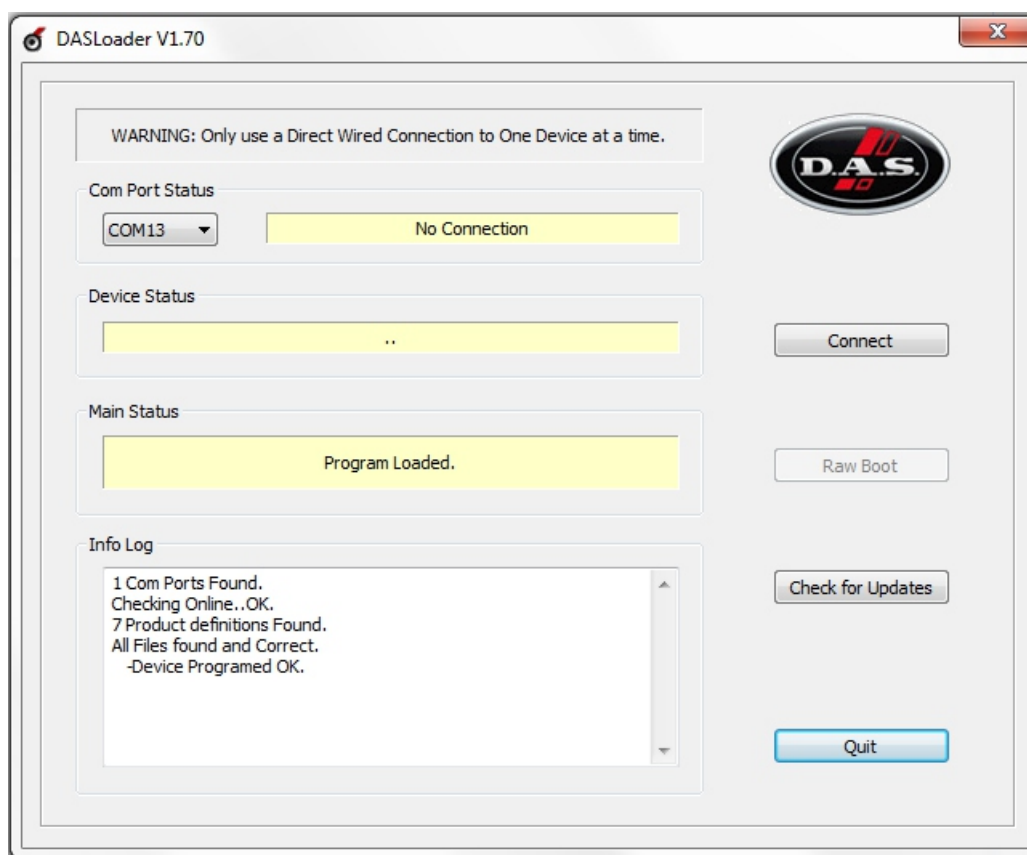


- 9.- Click “YES” to proceed. The progress bar will show you the status of the upgrade procedure.





- 10.- When completed, the device will be reset with the new firmware, and updating the DSP software. DASLoader will try to establish a new connection with the device. If everything is OK the panel info will show the message: "Device Programmed OK". The device is now updated with the latest firmware version.





- 11.- Turn off the device and unplug the Ethercon cable. To update a new cabinet, connect the Ethercon cable into the new device, turn on the unit and proceed again with the update procedure.

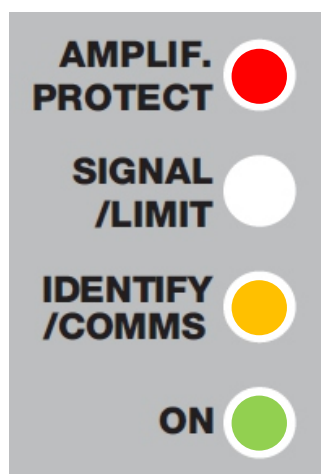
### UPDATING IN RAW MODE

In case of trouble during the updating procedure such as:

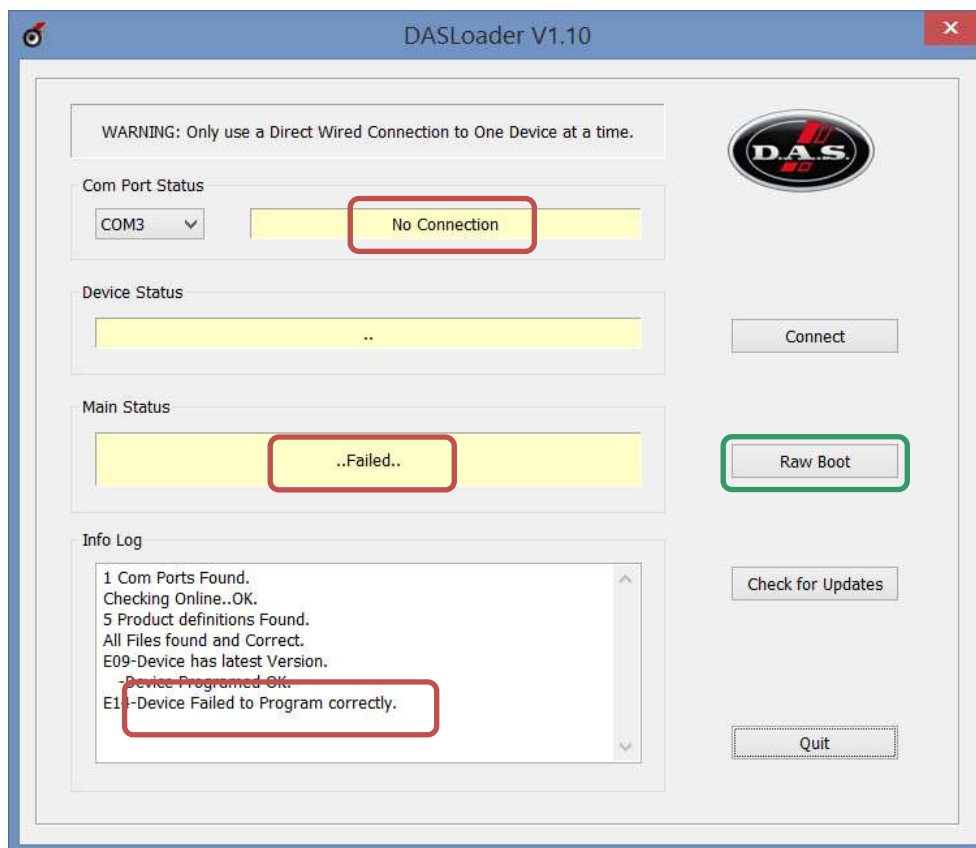
- unintentional disconnection of the Ethercon cable,
- unintentional switch off of the main power,
- a communication error during the update process,

the internal software (bootloader software) of the device will detect this anomalous situation when it will be turned on again. It will not initialize the cabinet. It will remain in a standby condition waiting for the firmware version.

This standby condition will be shown on the rear panel of the cabinet. The IDENTIFY/COMMS led (orange one) and the PROTECT led (red one) will light up.

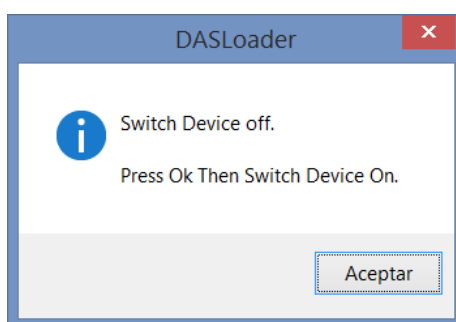


If this happens, either when connecting the device or after finishing the update process, DASLoader will inform you of that there is no communication with the device and the **RAW** button will be available:

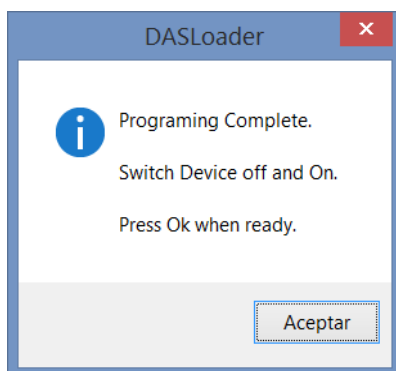


The procedure will be:

1. Press Raw Boot button. The following message will appear.



2. Switch off the device.
3. Press OK and switch on the unit.
4. After a few seconds, the DASLoader and the device will be connected in RAW mode and the PROTECT led turns off.
5. DASLoader will send the firmware to the device.
6. When completed, the message below will appear.



7. Switch off and again on the device.
8. The device has been updated.

DAS Audio has included all the needed procedures in the hardware and software for guarantying this delicate process in any case. In all cases, the cabinets will be ready to receive again the new firmware.



**[www.dasaudio.com](http://www.dasaudio.com)**

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