# 3.10 Update firmware and/or bootloader



The following firmware versions have to be updated by saving additional files to the projector using the WinSCP application: build 58 to 67! These files are packed into a zip-file GH2\_fmwupgrade.zip. Make sure to get this file!

To save these additional files to the projector proceed as follows:

Unzip GH2\_fmwupgrade.zip to a local folder.

Start Winscp, and connect to the projector by entering its IP address into the host field and using the scp protocol. Click on **Login**.

WinSCP Login				? ×
Session Session Stored sessions Logging Environment Directories SCP/Shell Connection Proxy Tunnel SSH Key exchange Authentication Bugs Preferences	Session Host name 150.158.180.68 User name root Private key file Protocol Eile protocol	3 SCP	Password	Po <u>t</u> number 22 *
Advanced options				
About Langu	lages	Login	Save	Close

A dialog opens. On its left side, the file system of the PC is displayed, on the right side the one of the projector.

<b>a</b> support usr_bin - root	@150.158.180.68 - WinSC	P				
Local Mark Files Comma	nds <u>S</u> ession <u>O</u> ptions <u>R</u> en	note <u>H</u> elp				
🌘 🛛 🖓 🔹 🟦 🗳	💀 📼 🛃 😫 🗉		Default 💌	<b>5</b> -		
🕪 C: Local Disk 📃	(= • ⇒ • 🗈 🔝 🙆	5 😰 😂 📴	🔁 sbin 🔽 🖉 🔶	• 🔿 • 🗈 🙆	a 🚮 👩 🤤	2 <sup>2</sup> 8
C:\BARCO\GH2\FMW 1.12 E	uild 79\support usr_bin		/usr/sbin			
Name 🔺 Ext	Size Type	Changed	Name 🔶 Ext	Size	Changed	
<b>È</b>	Parent direc	tory 14.01.2008	<b>È</b>		28.09.2006	
🖻 arm_boot	4.473 File	13.12.2007	🗀 unused		31.03.2007	
🖬 i2c_write_bit	11.801 File	13.12.2007	🖬 arm_boot	4.535	21.09.2007	
🖬 update	31.938 File	13.12.2007	🖬 🖬 bidprom	5.744	09.07.2007	
			न न chroot	17	01.08.2007	
			ddcprom	4.749	19.01.2007	
			ddr_read	34.412	28.09.2006	-
•		•	1			
48.212 B of 48.212 B in 3 of 3			0 B of 1.278 KB in 0 of 73			
📲 🤌 F2 Rename 📑 F4 Edit	📫 F5 Copy 📑 F6 Move	💣 F7 Create Directory	🗙 F8 Delete 🛛 🚰 F9 Prope	rties 🧵 F10 Qui	t	
			<u></u>	SCP	0:02	:33

On the left side (local PC) navigate to the folder the zip-file GH2\_fmwupgrade.zip has been unpacked to.

On the right side, navigate to the folder ... /usr/sbin

Select the files arm\_boot, I2C\_write\_bit, and update

To copy the files to the projector, click on F5 (see explanation of the function keys at the bottom of the WinSCP window)

The following dialog opens where the permissions have to be set to be allowed copying and replacing files:

'usr/sbin/*.*						
Transfer mode Text (plain text, html, scripts,) Binary (archives, doc,) Automatic Transfer following files in text mode "."html; ".htm; ".txt; ".php"; ".cgi; " Other Exclude Task	Filename mo	dification ge ase IZ R   IZ R   IZ R   0755 X to directo	Attri V V V V	butes Set per rwxr-xr V X V X V X	missions *x Set U Set G Sticky Close	ID ID JD JD
Clear source file 'Archive' attribute New and updated file(s) only	•					mask h
Use same settings next time						
Use same settings next time Transfer on background (add to tra	insfer queue)	1	No <u>c</u> o	nfirmatio	ms	

Adjust the permission settings according the picture above and click on **Copy**. In case files with identical file names already exist on the projector you are asked to overwrite these files. Confirm overwriting with OK.

Now you can start with updating the firmware.

The update of the bootloader requires expert privileges. If only a firmware update has to be done, service privileges are sufficient.

Enter the IP Address of the respective projection system into a web browser. The home page of the web application is displayed.

Log in with the required privileges.

On the navigation bar, navigate to and click on **Firmware**.

The following page shows up.

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Barco Security & Monitoring	You a	re currently logged in at <b>service level</b> . <u>Log in</u>
	Barco   OverView D2 Firmware	
	Firmware Version Details	
	Firmware	01.03
	Build Info	0060
Barco   OverView D2	FPGA	00CB
<ul> <li>Home</li> <li>Projector</li> <li>Lamps</li> <li>Inputs</li> <li>Color &amp; Brightness</li> <li>Runtimes</li> <li>System Health</li> <li>Firmware</li> <li>Hardware</li> <li>Maintenance</li> </ul>	Ramdisk	2.4.28
	Kernel	2.4.32-2.6
	iIU	AA.21
	U-Boot	1.1.4.1.3
	OV2 Disk	00.72
	OEM Flash	not available
	API	0.6.0
	Web GUI	00.39
	Software Integrity Status	
	Software Integrity Status	🔽 ok
	Software Update	

For updating firmware or u-boot, the projector needs to be switched to a updating mode.

This includes shutting down the projector to standby and preparing the firmware for updating.

To switch the projector to updating mode, press 'Prepare Updating' button.

Prepare Updating	
BARCO	
Visibly yours	



Make sure that you have a valid firmware and/or bootloader file (\*.bin file)

### Click on the button **Prepare Updating**.

If the projector is running, it switches to standby. All firmware processes are stopped. These sequences are indicated (make sure that the checkbox **Keep this page alive** is ticked)

Carefully read the information on the page and act accordingly (be patient, do not switch off or reboot, etc.)

#### barco.com





Subsequently (in the expert mode) the following page pops up

# Barco Security & Monitoring You are currently logged in at expert level. Log in Barco | OverView D2 Firmware Firmware Update Do not switch off or reboot the projector! It will reboot automatically after updating. Refreshing the webpage can take some time during update, so please be patient! You might even see an error message from your browser, that the host, the projector, is unreachable. This is because of the projector already rebooting. Barco | OverView D2 Home Projector To update Firmware, locate the proper update file on your harddisk and press 'Update Firmware' button. Lamps Inputs Color & Brightness Browse.. Runtimes System Health Update Firmware Firmware Hardware **U-Boot Update** Maintenance ▸ Logging Attention! Updating U-Boot is a risky procedure! A failed U-Boot update can Command Line cause the projector to refuse starting! To update U-Boot, locate the proper update file on your harddisk and press 'Update U-Boot<sup>i</sup> button. Browse.. Update U-Boot **Cancel Software Update** If you don't want to upgrade any software, you need to reboot the projector now. Press 'Cancel Software Update' button to Reboot and reboot the projector now. Reboot Projector Reboot BARCO



In service mode, the section of the U-Boot Update (bootloader) is not visible

Click on the respective button to perform the required update or to abort the procedure.

If the (firmware or bootloader) update is continued, the standard Windows dialog to choose for a file is displayed.

Browse to and select the update file. The update continues.



You are informed about a successful update. Subsequently the projector automatically reboots.





Depending if Autostart is enabled or not, the projector will start or remain in standby until started manually.

# 4 Graphical user interface

To address a projection system, proceed as follows:

Enter the IP address of the projection module into a web browser.

The home page of the projector will be displayed with operator privileges. To log in as e.g. service use the link on the red top bar.

In the following chapter the individual pages of the service (expert) mode are introduced and explained. Entries which are not visible or editable in the operator mode are written in italics.

The pages are openend via a click on the respective entry on the navigation bar. The content of the selected and activated page is displayed in the right part of the window; the name of the page shows up as read heading.