

Application Note AN1904 LogoLoader for Handsets HA57 SDK, HA57 EVO and HA59

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0 History

Date	Revision	Author	Comments
May 2019	1.0	CS	First Release

Table 1: History

0.1 Related Documents

Nr.	Name	Remarks
1	AN1800 HA57 EVO User Manual	Application Note 1800
2	AN1902 Description API HA57 EVO	Application Note 1902
3	AN1903 AppLoader HA57 SDK & HA57 EVO	Application Note 1903

Table 2: Related Documents



1 Introduction

This document describes the program **LogoLoader HA57 – HA59 SDK und EVO**. The **LogoLoader HA57 – HA59 SDK und EVO** is a Windows[®] program, which facilitates the upload of a logo file onto a pei tel handset HA57 SDK, HA57 EVO or HA59. This logo file can be displayed alternatively to the pei tel logo during the initialization period of the handset.

The program LogoLoader HA57 – HA59 SDK und EVO will be called LogoLoader on the following pages.

2 Needed Components

The following components are needed to upload a logo file to a handset:

- Installation file of the LogoLoader
- Logo file (see also 6 Properties of the Logo File)
- Windows[®] PC (OS Windows[®] 7 SP1 or higher) with free serial COM-port
- Alternatively to the COM-Port: USB-to-RS232-Convertor
- Handset HA57 SDK, HA57 EVO or HA59
- ECU (Eval Com Unit), which facilitates the connection between handset and PC and as well supplies power to the handset

Administrator permissions on your PC are necessary for the installation.

3 Installation of the LogoLoader

About the USB-to-RS232-Convertor:

Please note, that the USB-to-RS232-convertor comes with a driver package, which needs to get installed on the PC. These drivers are provided by the manufacturer of the USB-to-RS232-convertor.

Installation:

- 1. Start the installation by running the **setup.exe**.
- 2. Enter the **administrator password**, when asked to do so and follow the instructions on screen.

Notice

The program needs .NET Framework 3.5 SP1, which is supplied by the installation package and installed automatically when needed.

4 Short Description

COM Port	D Infobox Devi	ice 2 HA57 EVO	SW Version	 V.1.0.578		×
Customer Logo File E:\Users\user\Desktop\pei Enable Logo	_tel_Logo.bmp ose Port after Upload	Upload PEI,TEL	Logo Customer Logo Default Logo No Logo Current Logo: Customer Logo	PEI	TEL	-
					Quit	

Figure 1: Active LogoLoader-Window

1 Serial Interface:

COM Port: COMx[1] port selection

Open: Opens the connection to the handset.

Close: Closes the connection to the handset.

2 Infobox:

Device: Handset type

SW Version: Handset firmware version

3 Customer Logo:

File: Opens a window for the logo file selection.

Upload: Sends the logo file to the handset.

☑ Enable Logo: The logo file is displayed in the handset's display during initialization.

4 Logo:

Customer Logo, **Default Logo** and **No Logo:** Use these buttons to select, which logo is displayed during the initialization period of the handset.

Current Logo shows the current selection.

[1] "COMx" stands for the COM port number, which is automatically assigned by the PC;

e.g. COM1, COM2, COM3, etc.

5 Usage Instructions

5.1 Preparation of the Handset

- 1. Plug the handset into the RJ50-jack of the ECU.
- 2. Setting-up the connection between PC and ECU:
 - a) Either connect the ECU to a free serial COM port of the PC, using a suitable serial cable.
 - b) Or connect the ECU using a USB-to-RS232-convertor. If necessary, add a USB cable for extension.
- 3. Connect the ECU to the power supply.

5.2 Starting the Program

Start the LogoLoader by selecting **LogoLoader HA57 – HA59 SDK und EVO** in the Windows[®] Start menu.

If all the preparation work was done correctly (see also <u>5.1 Preparation of the Handset</u>), the LogoLoader window opens. Otherwise, an error message is generated.

Serial Interface COM Port	Infobox Device	SW Version	
Automatic	✓		
Open Close		- Logo	
Customer Logo		Customer Logo	
File	Upload	Default Logo	
		No Logo	
Enable Logo Close Port	after Upload	Current Loco:	
		Unknown	

Figure 2: LogoLoader-Window after program start-up

5.3 Set-up of the Serial Connection

- 1. In the **Serial Interface** sector, select the correct COM port.
- 2. Press Open.



Tip Select **Automatic** to let the program search for the COM port automatically. During the search the program scrolls through all available COM ports.

Once the connection to the handset is established, all functions of the LogoLoader are available. The handset displays the writing "SERVICE".

COM Port	Device	SW Version		
COM4	HA57 EVO		V.1.0.578	
Customer Logo	Upload	Logo Customer Logo Default Logo No Logo	Linknown	

Figure 3: LogoLoader-Window, all functions available

5.4 Infobox

The Infobox shows information read out of the handset.

Device: Handset type

SW Version: Handset firmware version

The software version of the **LogoLoader** program is shown in the title bar of the window.

5.5 Logo Upload to the Handset

For the preparation of the logo file see also 6 Properties of the Logo File.

Customer Logo File	Upload
C:\Users\user\Desktop\pei_tel_Logo.bmp	
☑ Enable Logo □ Close Port after Upload	PEI,TEL

Figure 4: LogoLoader-Window after selecting the path of the logo file

Step 1: Press **File** and select the required logo file.

Step 2: Confirm the selection by pressing **Open**.

The program checks the data format of the logo file. If the file is ok, path and logo will be displayed in the program window. Otherwise, an error message will be generated.

Step 3: Press Upload.

The LogoLoader window displays a green progress bar.

Customer Logo	Upload
C:\Users\user\Desktop\pei_tel_Logo.bmp	
☑ Enable Logo	PEI,TEL

Figure 5: Upload progress bar

Step 4: After the upload, a confirmation window shows: **Upload successful**.

	Х
Upload successful	
ОК	

Figure 6: Upload succeeded



Step 5: Press **OK** to close the confirmation window.

5.6 "Enable Logo" Function

☑ Check box checked	The logo file is uploaded to the handset and displayed as start logo during initialization of the handset.
Check box unchecked	The logo file is only uploaded to the memory of the handset. It is not displayed as start logo during the initialization of the handset.

Table 3: "Enable Logo"

5.7 Choosing a Logo Option

Select the logo option in the **Logo** section of the LogoLoader window. The following logo options determine which logo is displayed during the initialization of the handset.

Logo Option	Description
Default Logo	Logo of pei tel
Customer Logo	Customer logo loaded onto the handset
No Logo	No logo

Table 4: Initialization logo options

The current selection is displayed under "Current Logo:". Additionally, the logo image is shown.

Note

In some circumstances, instead of the logo image, "Unknown" is displayed in writing when the program doesn't have the logo image in memory anymore. This happens for example after the program was restarted. This is not an error!



5.8 Closing the Program

Pressing **Quit** closes the program and the handset initializes. During the initialization period, the chosen logo option is displayed in the handset's display.

6 Properties of the Logo File

Use the following parameters when creating a logo file with a graphic program.

Meeting these requirements is necessary; otherwise, an error message will be generated during the upload of the logo file to the handset.

6.1 Requirements HA57 and HA57 SDK

Parameters of the Logo Image		
Image Width	128 Pixel	
Image Height	160 Pixel	
Layers	1	
Color Depth Bits / Pixel	16	
File Format	BMP	
Compression	None	

Table 5: Parameters of the image file (HA57 and HA57 SDK)

6.2 Requirements HA59 and HA57 EVO

Parameters of the Logo Image		
Image Width	240 Pixel	
Image Height	320 Pixel	
Layers	1	
Color Depth Bits / Pixel	16 (RGB 565)	
File Format	BMP	
Compression	None	

Table 6: Parameters of the image file (HA59 and HA57 EVO)



7 Creating the Logo File Using Adobe Photoshop

Program: Adobe Photoshop

Operating system: Windows or Mac OS

7.1 Creating an Image File

	Name:	LOGO			ОК
Preset: Cu	istom		\$	[Reset
	Size:			\$	Save Preset
	Width:	128	Pixels	\$	
1	Height:	160	PixelS	¢	
Reso	olution:	72	Pixels / Inch	\$	
Color	Mode:	RGB Color \$	8-Bit	\$	
Background Co	ntents:	White		¢ 🗌	Image Size:
Advanced					60,0 KB
Color	Profile:	sRGB IEC61966-	2.1	\$	
Pixel Aspec	t Ratio:	Square Pixels		\$	

Figure 7: New image (example with values for HA57 and HA57 SDK)

- On your computer, start Photoshop.
- Select File > New.
- The **New** window opens. Enter width and height.
- You also might want to assign a name.
- Do not touch any other settings!
- Confirm your choice with **OK**.



7.2 Copy the image into the picture and align it carefully



Figure 8: Logo on white background

Note

The image size equals the size of the display of the handset. We recommend aiming for a balanced arrangement.

7.3 Saving the image

- In Photoshop, select **File > Save as**.
- Select a path for storage.
- Assign a file name.
- Select file type **BMP**.
- Select Save.

7.4 BMP Options Window

BMP Options	×
File Format Windows OS/2	OK Cancel
Depth	
🔘 1 Bit	
🔘 4 Bit	
🔘 8 Bit	
🗔 16 Bit	
💿 24 Bit	
32 Bit	
Compress (RLE)	
Flip row order	Advanced Modes

Figure 9: BMP Options

• Select Advanced Modes.

MP Advanced Modes	
16 bit	ОК
X1R5G5B5	
A1R5 G5 B5	Cancel
R5 G6 B5	
X4R4G4B4	
🔘 A4 R4 G4 B4	
24 bit	
🔘 R8 G8 B8	
32 bit	
🔘 X8 R8 G8 B8	
🔘 A8 R8 G8 B8	
Flip row order	Basic Modes

Figure 10: BMP Advanced Modes

- Select **R5 G6 B5**.
- Press OK.

END OF DOCUMENT