MANUAL

MAH* FIRMWARE UPGRADE INSTRUCTIONS





With regard to the supply of products, the current issue of the following document is applicable: The General Terms of Delivery for Products and Services of the Electrical Industry, published by the Central Association of the Electrical Industry (Zentralverband Elektrotechnik und Elektroindustrie (ZVEI) e.V.) in its most recent version as well as the supplementary clause: "Expanded reservation of proprietorship"



Reader Download Utility (RDU) for Upgrading Firmware

1. Unzip and run the file ReaderDownloadUtility.exe You will see this screen:



2. Scan the USB Downloader Code (M133_01), followed by the Save Settings Code (M188_02):





3. Attach the reader to the PC using the provided USB cable. Select "**Next**". The reader will now connect to the PC and you will see this screen:





NOTE: Your reader must already be using the following versions of Firmware and Bootloader in order to use the Reader Download Utility:

- MAH200/MAH300 Firmware: 2016 (or greater)
- MAH120 Firmware: any version
- MAH200/MAH300 Bootloader: 2170 (or greater)
- MAH120 Bootloader: any version

If your current Bootloader version does not match the second set of 4 numbers, *_boot.bdl in the '.bdl' file, scan the following **Bootloader Mode Code*** (M692_01).



*Older versions of firmware may require the reader to manually be place in Bootloader mode. See Appendix A for instructions.

 Select "Browse" and find the file named *_boot.bdl. If firmware is earlier than 3000, find the file name C002200_3266_boot_2422_upboot_ForPreVer12Hardware.dl.





Reduel Download Othity - version 0046	
File Selection	
Mode: USB; Reader ID: 0010032225; Versions	s: 3484/3104/0604
Select the file that you would like to download. Pre C:\Documents and Settings\Current Firmware\	ss Next to begin the download process.
After downloading a firmware file: ✓ Set reader to new factory defaults and save Note: This may require repeating prior custo	e. m configuration settings.
	< Back Next > Cancel
Reader Download Utility - Version 0048	
Reader Download Utility - Version 0048 File Download	×
Reader Download Utility - Version 0048 File Download Mode: USB; Reader ID: 0010032225; Version	s: 3484/3104/0000
Reader Download Utility - Version 0048 File Download Mode: USB; Reader ID: 0010032225; Version Press Back to download another file or press Finish	s: 3484/3104/0000
Reader Download Utility - Version 0048 File Download Mode: USB; Reader ID: 0010032225; Version Press Back to download another file or press Finish Current progress: Downloading V003153_3266	s: 3484/3104/0000 h to close the wizard. 6_boot.bdl
Reader Download Utility - Version 0048 File Download Mode: USB; Reader ID: 0010032225; Version Press Back to download another file or press Finish Current progress: Downloading V003153_3266	s: 3484/3104/0000 h to close the wizard. 6_boot.bdl
Reader Download Utility - Version 0048 File Download Mode: USB; Reader ID: 0010032225; Version Press Back to download another file or press Finish Current progress: Downloading V003153_326 Overall progress:	s: 3484/3104/0000 h to close the wizard. 6_boot.bdl
Reader Download Utility - Version 0048 File Download Mode: USB; Reader ID: 0010032225; Version Press Back to download another file or press Finish Current progress: Overall progress:	s: 3484/3104/0000 h to close the wizard. 6_boot.bdl
Reader Download Utility - Version 0048 File Download Mode: USB; Reader ID: 0010032225; Version Press Back to download another file or press Finish Current progress: Overall progress: Downloaded file(s):	s: 3484/3104/0000 h to close the wizard. 6_boot.bdl
Reader Download Utility - Version 0048 File Download Mode: USB; Reader ID: 0010032225; Version Press Back to download another file or press Finish Current progress: Overall progress: Downloaded file(s):	s: 3484/3104/0000 h to close the wizard. 6_boot.bdl

5. Select "Next" to update the Bootloader version before updating the Firmware file.

If you have the updated Bootloader version on your reader, or after a successful download for the current Bootloader file, select "**Back**", and scan the **Bootloader Mode Code*** (M692_01).



* Older versions of firmware may require the reader to manually be place in Bootloader mode. See Appendix A for instructions.



6. Select "Browse" in the following screen to find the file you would like to download to the reader. Locate the zipped folder called *-app-and-js.zip.



7. Please select "Next".

You can now see the download progress of the File Download Wizard Window:

Reader Download Utility - Version 0048
File Download
Mode: USB; Reader ID: 0010032225; Versions: 3484/3266/0604
Proce Pack to developed poether file or proce Sicials to close the winted
Conset as served. We like for the formulae file to be installed.
Cuirent progress: Vvaliting for the firmware file to be installed
Overall progress:
Downloaded file(s):
< Back Finish Cancel



Once the file download is complete, a message is displayed indicating download completion of the Application file:

Reader Download Utility - Version 0048
File Download
Mode: USB; Reader ID: 0010039403; Versions: 3560/3266/0604
Press Back to download another file or press Finish to close the wizard. Current progress: Overall progress: The .zip file was successfully downloaded. Downloaded file(s):
.00-app.dl .codeXmlLbijs .configure js .configure _main_comm_interface_rf.js .configure _main_comm_interface_rs232.js .configure main_comm_interface rs232_obtions.is
< Back Finish Cancel

 If reader contains a Bluetooth Radio, select "BACK" and "Browse" for the file named *_CR_Radio_Firmware_Combined.zip, else go to step 9.

Select "**Next**" to update the Radio Firmware. The *.zip file will open and load the proper files onto the reader.

Reader Download Utility - Version 0048
File Download
Mode: USB; Reader ID: 0010039403; Versions: 3560/3266/1010
Press Back to download another file or press Finish to close the wizard.
Current progress: Downloading V001842_1022_CR_Radio_Firmware_BC2.rdl
Overall progress:
Downloaded file(s):
< Back Finish Cancel



9. Finally, scan the following codes:







Your reader is now upgraded to the latest firmware.

NOTE: Remember to reload any custom codes or other programming codes required for your specific application at this time.

Your reader is now ready to scan.

Appendix A

To manually put a MAH200 and/or MAH300 into Bootloader Mode:

- 1. Remove the battery.
- 2. Reinsert the battery while holding down both red trigger buttons simultaneously.
- 3. As soon as the unit beeps, release the buttons.

Once in boot mode, both LEDs on the reader will be on. Either both will be red or one will be red and the other green. The green LED on the right of the MAH200/MAH300 indicates USB mode and red indicates RS232/Serial mode. If the right LED is red, press one of the trigger buttons to change the LED to green and into USB mode.



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