## User Guide

# Bluetooth module Firmware Update via nRF Connect App

### **1 TASKS IN DOCUMENT**

The document presents a brief explanation of how to update the Bluetooth-Firmware of HCT tools via HCT mobile App and nRF Connect App.

**Info:** Only example images of one device are shown. All steps are also valid to any connected device that is able to perform the update process.

### **2 EQUIPMENT**

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Device Description	Bluetooth-enabled and "updatable" HCT device		
2.2 Mobile Device			
Model Any mobile (Android or iOS) model can be used			
Operating System	Android or iOS		
Software	HCT mobile App, <i>nRF Connect</i> App		

### **3** APP INSTALLATION

#### 3.1 Hoffmann Connected Tools (HCT) App

To install this application, go to *Google Play Store* for Android or *App Store* for iOS and search for "*Hoffmann connected tools*" and click on install.



### 3.2 nRF Connect App (for mobile)

To install this application, go to *Google Play Store* for Android or *App Store* for iOS and search for "*nRF Connect* for mobile" and click on install.



#### 4 Bluetooth Module Firmware Update - iOS

**Note:** If the Bluetooth connection or the update process is interrupted during the following steps, please restart the HCT device and the HCT mobile App and repeat the procedure.

#### **Preconditions:**

HCT mobile App Version 3.5.0 or higher is installed.

nRF Connect App is installed.

HCT mobile App is open and the device is connected with the HCT mobile App.



- Click on the connected device and open the "Settings" tab.
- Click on "Firmware Update".



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- Click on Bluetooth Firmware "Update".



- Click on "Search for firmware update".
- Select "nRF Connect" in the pop-up window.
   Info: If the nRF Connect Symbol is not listed in the preselection, please click on "More".



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- After the nRF symbol was clicked, the **nRF Connect App opens** automatically.
- Switch back to HCT App and click on "Continue".



- Click on "Enter DFU Mode".

**Note:** Only possible to update one device at a time. Preferably act quickly (on the first 30 seconds after device was set to DFU Mode) to avoid any problems.

- Wait until upper button is fading and lower button is colored in bright orange.
- Click on "Open nRF Connect (third-party)".





- The App Store with nRF Connect for Mobile opens automatically.
- Click on "Open".



- In nRF Connect App, the HCT device should now be displayed as "DfuTarg".
- Click on "Connect" next to DfuTarg.
   Info: If "DfuTarg" is not displayed, please refresh the screen by swiping downwards.
   Note: Only possible to update one device at a time.
   Preferably act quickly (on the first 30 seconds after device was set to DFU Mode) to avoid any problems.



- **Open** the drop-down of "Inbox" folder.
- Select the Zip file for your Bluetooth module firmware.
   Attention: Make sure the correct ZIP file is selected! To prevent selecting the wrong file, save only the required document on the mobile device.



- Click on "Start".



- Wait for the update to complete and **DON'T** close the applications or turn off any of the devices in use.
- Once the update is done, select "Clear".

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Close Ad Cli Se Log DFU Disconnect	Close Adv Clie Ser Log DFU Connect
IMAGE NRF52_bt001_s140_sd_7.2.0	IMAGE NRF52_bt001_s140_sd_7.2.0
<ul> <li>Single Core</li> <li>301 KB</li> <li>N/A</li> <li>DFU System</li> <li>Nordic</li> <li>Application</li> <li>Bootloader</li> </ul>	<ul> <li>Single Core</li> <li>301 KB</li> <li>N/A</li> <li>DFU System</li> <li>Nordic</li> </ul> Application Bootloader Preview
STATUS	STATUS
🖞 Uploading	Success!
	Clear
DfuTarg Connected	DfuTarg

- After the update has been successfully completed, please **restart** the **HCT App** and the **HCT device**.
- To check the installed Bluetooth-Firmware version, open the menu → "info" on the Torque Tester device or connect with HCT mobile App and select "Settings" tab.



Setting tab – HCT mobile App



Update process successfully finished.

### 5 Bluetooth Module Firmware Update – Android

**Note:** If the Bluetooth connection or the update process is interrupted during the following steps, please restart the HCT device and the HCT mobile App and repeat the procedure.

#### Preconditions:

HCT mobile App Version 3.5.0 or higher is installed.

nRF Connect App is installed.

HCT mobile App is open and the device is connected with the HCT mobile App.



- Click on the connected device and open the "Settings" tab.
- Click on "Firmware Update".

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Name		HCT-TT012 >
Serial Number		3219100002
Firmware Version		1.0.10
Hardware Version		1.0.0
Bluetooth-FW Versio	'n	1.3.7
Last calibration		24/07/2023
Next calibration		23/07/2024
Firmware Update		1 >
) Display	History	<b>O</b> Settings

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- Click on Bluetooth Firmware "Update".



- (Click on "Search for firmware update".) Not needed for some devices.
- Click on "Continue".



- Click on "Enter DFU Mode".
   Note: Only possible to update one device at a time.
   Preferably act quickly (on the first 30 seconds after device was set to DFU Mode) to avoid any problems.
- Wait until upper button is fading and lower button is colored in bright orange.
- Click on "Open nRF Connect (third-party)".



- The nRF Connect App opens automatically.
- In nRF Connect App, the HCT device should now be displayed as "DfuTarg".
- Click on "Connect" next to DfuTarg.

**Info:** If **"DfuTarg"** is **not displayed**, please **refresh** the screen by **swiping downwards**. *Note: Only possible to update one device at a time*.

*Preferably act quickly (on the first 30 seconds after device was set to DFU Mode) to avoid any problems.* 



- Click on the DFU icon in the top right corner.



- Choose the option Distribution packet (ZIP) and click "OK".



- Click on the menu-symbol in the top left corner.
- Select folder "Hoffmann CT Firmware Files".



- Select device folder → "garant" → "tt", for torque tester.
   OR "HOLEX" → "DI" for Dial Indicator or "DC" for Digital Caliper".
- Select the zip file of the latest Bluetooth-firmware (bt\_firmware...) to start the update.
   Attention: Make sure the correct ZIP file is selected! To prevent selecting the wrong file, save only the required document on the mobile device.

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garant	tt t		v137-v102	0



- Wait for the update to complete and **DON'T** close the applications or turn off any of the devices in use.



- After the update has been successfully completed, please **restart** the **HCT App** and the **HCT device**.
- To check the installed Bluetooth-Firmware version, open the menu → "info" on the Torque Tester device or connect with HCT mobile App and select "Settings" tab.

Setting tab -



HCT mobile App Settings Name HCT-TT350 > Serial number 3219120001 Software version 1.00.01 1.0.0 Hardware version **Bluetooth-FW Version** 1.3.8 Last calibration 22.07.22 25.07.23 Next calibration Firmware Update > £

Update process successfully finished.

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