

XPID 200 Series Android 13 Update Revision 04/18/2024

For use with the XPressEntry Mobile Access Control System

By



Contents

3
3
3
3
4
4
7
9
9
9
2
7

Purpose

This document is intended to instruct users on how to upgrade their XPID200 devices from.

Pre-requisites/Requirements

- 1. XPID 200 Device
- 2. USB Type C cable
- 3. Windows 10+ PC
- 4. Android 13 upgrade kit:
 - a. Updating Software: SP_Flash_Tool_exe_Windows_v5.1936.00.000
 - b. Updating Driver: MTK_USB_All_1.0.4
 - c. Operating System File: Telaeris_C6TV13.0.X_NO_EEA
 - d. TEE Upgrade Tool: SN_Writer_Tool_exe_v1.2020.0.0-4500
- 5. 7zip (https://www.7-zip.org/download.html).

Android 13 Upgrade

Start by unpacking the XPID Android 13 upgrade kit. 7zip works to unpack .7z, .zip, and .rar files. You can download 7zip from the link above.

Order of Operations

- 1. Install the MTK Driver
- 2. Update the Android Operating System
- 3. Perform TEE Upgrade
- 4. Set up XPID and install Telaeris Applications

Install the MTK Driver

Installing the MTK Driver only needs to occur once per PC used to upgrade the XPID200s. Once you have completed this step, you may skip it for other XPID200 devices on this PC.

1. Navigate to the MTK_Driver_Installer_.1352 ext folder and run DriverInstaller.exe.

			Manage	MIK_Driver_Installer1352 ext		- 0	~	
Driver	File Home	Share View	Application Tools				~ 😲	
	$\leftarrow \rightarrow \cdot \uparrow$	« MTK Usb Driver v	1.0.4 > MTK_Driver_	Installer1352 ext	✓ ひ Search MTK_	Driver_Installer1	35 , p	
	DISC-Re ^	Name	^	Date modified	Туре	Size	_	
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	🚉 hardwar	Driver_Auto_In:	taller_EXE_v1.1352.00	2/9/2024 1:33 PM	File folder			
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Have	Live	SP_Drivers_EXE	_v1.6	2/9/2024 1:33 PM	File folder			
	RFID-Gu	SP_Drivers_v2.0		2/9/2024 1:33 PM	File folder			
Have	Training	xp_usbser		2/9/2024 1:33 PM	File folder			
Have		20151214.log		2/9/2024 1:33 PM	Text Document	1 KB		
	User	20240209.log		2/9/2024 1:33 PM	Text Document	2 KB		
Have	wetransi	📧 adb.exe		2/9/2024 1:33 PM	Application	800 KB		
Have	OneDrive	🗟 AdbWinApi.dll		2/9/2024 1:33 PM	Application exten	94 KB		
laver		AdbWinUsbAp	i.dll	2/9/2024 1:33 PM	Application exten	60 KB		
	This PC	🗟 difxapi.dll		2/9/2024 1:33 PM	Application exten	317 KB		
	🔰 3D Obje	DriverInstaller.e	xe	2/9/2024 1:33 PM	Application	2,428 KB		
1	Desktop	DriverInstaller.i	ni	2/9/2024 1:33 PM	Configuration sett	1 KB		
Statue	🔮 Docume	C DriversDB.xml		2/9/2024 1:33 PM	Microsoft Edge H	3 KB		
Status	🕹 Downloi	fastboot.exe		2/9/2024 1:33 PM	Application	176 KB		
	Music	readme.txt		2/9/2024 1:33 PM	Text Document	1 KB		
	Pictures	unins000.dat		2/9/2024 1:33 PM	DAT File	12 KB		
-	Videos H	🥹 unins000.exe		2/9/2024 1:33 PM	Application	734 KB		
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	Contoniy	anstal privers		iu ivenstali				
							Exit	

2. Select *Install Drivers* and then click Start. Once drivers are installed, this application may be closed.

Please note that if drivers need to be reinstalled. Please select *Clean and Reinstall* instead.

Update the Android Operating System

- 1. Power down the XPID200 device and leave the battery in. Please note that battery level should be 20% or above before powering down for best results.
- 2. Open flash_tool.exe.

📊 💆 📙 🖛	Manage	SP_Flash_Tool_exe_Windows_v	/5.1936.00.000	— C	ı ×
File Home	Share View Application Tools				\sim
← → • ↑	« 2024-01-16 » SP_Flash_Tool_exe_V	Vindows_v5.1936.00.000 >	✓ ט Search SP_Fla	ash_Tool_exe_Wir	ndo 🔎
Fred ^	Name	Date modified	Туре	Size	
🧟 hardwar	BackupData	3/7/2024 10:57 AM	File folder		
ISOs	codecs	1/16/2024 1:47 PM	File folder		
Live	📊 imageformats	1/16/2024 1:47 PM	File folder		
RFID-Gu	sqldrivers	1/16/2024 1:47 PM	File folder		
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liser	📓 BromAdapterTool.ini	9/13/2019 4:39 AM	Configuration sett	1 KB	
- User	a console_mode.xsd	9/13/2019 4:39 AM	XML Schema File	28 KB	
wetransi	📓 CustPT.ini	9/13/2019 4:39 AM	Configuration sett	1 KB	
OneDrive	📥 DA_PL.bin	9/13/2019 4:39 AM	VLC media file (.bi	13,548 KB	
TILDO	📥 DA_PL_CRYPTO20.bin	9/13/2019 4:39 AM	VLC media file (.bi	13,548 KB	
	📥 DA_SWSEC.bin	9/13/2019 4:39 AM	VLC media file (.bi	3,963 KB	
🧊 3D Obje	📤 DA_SWSEC_CRYPTO20.bin	9/13/2019 4:39 AM	VLC media file (.bi	3,963 KB	
📃 Desktop	💽 dl_without_scatter.xml	9/13/2019 4:39 AM	Microsoft Edge H	2 KB	
🔮 Docume	📓 download_scene.ini	9/13/2019 4:39 AM	Configuration sett	1 KB	
🖶 Downloi	flash_tool.exe	9/13/2019 4:39 AM	Application	10,301 KB	
Music	📄 flashtool.qch	9/13/2019 4:39 AM	QCH File	6,432 KB	
Dictures	📄 flashtool.qhc	9/13/2019 4:39 AM	QHC File	12 KB	
Videos	🚳 FlashToolLib.dll	9/13/2019 4:39 AM	Application exten	1,453 KB	
Videos	FlashToolLib.v1.dll	9/13/2019 4:39 AM	Application exten	2,868 KB	
🏪 Window 🗸	FlashtoollibEx.dll	9/13/2019 4:39 AM	Application exten	4,867 KB	
43 items 1 item s	elected 10.0 MB				

 Choose the Scatter-loading file MT6765_Android_scatter.txt in the 20240229_Telaeris_C6TV13.0.16_NO_EEA directory. Set the Dropdown to Firmware Upgrade. Then Click Download.

**The Download-Agent should already be selected. But If needed, Select the MTK_AllInOne_DA.bin file from the SP_FlashTool Directory. **

DO NOT Select **Format All + Download as this will wipe IMEI, serial number, and other data which would need to be restored.**

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3M	-				Do	wnload	O Stop				
					Downlo	ad-Agent Iroid	13 OS\2024-01-16_0158	Android_13_0_15\SP_i	Flash_Tool_exe_Windows_	v5.1936.00.000\\MTK_AllInOne_DA.bin	choos
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					Firmwa	re Upgrade Name	Begin Address	End Address	Region	Location	^
						preloader	0x000000000000000000	0x00000000003e293	EMMC_BOOT1_BOOT2	C:\Android 13 OS\20240229_Telaeris	C6TV
						recovery	0x000000000108000	0x000000002107fff	EMMC_USER	C:\Android 13 OS\20240229_Telaeris	_C6TV
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_				_		spmfw	0x000000016100000	0x00000001610fa6f	EMMC_USER	C:\Android 13 OS\20240229_Telaeris	_C6TV
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xt Clock:		EXT_26	5M			gz1	0x000000016600000	0x0000000168b35ef	EMMC_USER	C:\Android 13 OS\20240229_Telaeris	;_C6TV
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Extern RAI	M Size:	0x1000	00000	-							

4. Plug in the XPID200. The Device will automatically connect and start downloading. The process is completed when you see the Success checkmark. Do not start the Device yet.



Perform TEE Upgrade

- 1. Unplug the XPID200 from USB. The battery should be kept inside the XPID200.
- 2. Run the *SN_Writer.exe* in the SN_Writer_Tool Directory.

File Home	Manage Share View Application Tools	SN_Writer_Tool_exe_v1.2020.	0.0-4500		_	□ × ~ (?
← → • ↑	« wetransfer_c6_androi » SN_Writer_	_Tool_exe_v1.2020.0.0-4500	~ 0	Search SN_W	riter_Tool_exe_	/1.20 ,0
Fred ^	Name	Date modified	Туре		Size	^
🧟 hardwar	🗟 mfc100.dll	2/8/2023 3:18 PM	Applic	ation exten	4,241 KB	
ISOs	Microsoft.VC90.CRT.manifest	2/8/2023 3:18 PM	MANI	FEST File	1 KB	
Live	Microsoft.VC90.MFC.manifest	2/8/2023 3:18 PM	MANI	FEST File	1 KB	
REID-Gu	🗟 msvcm90.dll	2/8/2023 3:18 PM	Applic	ation exten	220 KB	
Training	🗟 msvcp90.dll	2/8/2023 3:18 PM	Applic	ation exten	556 KB	
	🗟 msvcp100.dll	2/8/2023 3:18 PM	Applic	ation exten	412 KB	
User	🗟 msvcr90.dll	2/8/2023 3:18 PM	Applic	ation exten	641 KB	
ovetransl 🚽	🗟 msvcr100.dll	2/8/2023 3:18 PM	Applic	ation exten	753 KB	
OneDrive	MTRACE.dll	2/8/2023 3:18 PM	Applic	ation exten	17 KB	
_	SLA_Challenge.dll	2/8/2023 3:18 PM	Applic	ation exten	11 KB	
💻 This PC	SN_AutoGen.ini	3/15/2024 3:57 PM	Config	juration sett	1 KB	
🧊 3D Obje	SN_Setup.ini	3/15/2024 3:57 PM	Config	juration sett	3 KB	
C6	SN_Writer.exe	2/8/2023 3:18 PM	Applic	ation	362 KB	
Desktop	SNDATA	2/8/2023 3:18 PM	File		1 KB	
Docume	SNFstream.dll	2/8/2023 3:18 PM	Applic	ation exten	200 KB	
D D	USBCOMFinder.dll	2/8/2023 3:18 PM	Applic	ation exten	52 KB	
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J Music	USBSwitchTool.exe	2/8/2023 3:18 PM	Applic	ation	84 KB	
Pictures	📓 USBSwitchTool.ini	2/8/2023 3:18 PM	Config	guration sett	1 KB	
🚼 Videos 🗸	🗟 xboot.dll	2/8/2023 3:18 PM	Applic	ation exten	100 KB	~
35 items 1 item s	elected 362 KB					

3. Set the ComPort as **USB VCOM** and Target Type as **Smart Phone.** Then click *System Config*.

le Option Key f	iles Identify Help				
ComPort:	USB VCOM	Total:			
Target Type:	Smart Phone	Pass:			
	System Config	Fail:	[
Quit				Start	

4. Upload the AP DB and Modem DB files and uncheck everything except *Load AP DB from DUT* and *Load Modem DB from DUT*. Click Save.

System Config	×						
Write Option	Header Option						
IMEI	Barc Header: 🗌 🗆 On/Off						
🗖 BT Address	BT Header: 🗆 On/Off						
Wifi Address Ethernet Mac Address	Wifi Header: 🗆 On/Off						
	IMEI_1 Header:						
	IMEI 2 Header:						
E ESN	IMEI 3 Header:						
IMEI Option							
Dual IMEI							
Three IMEI	MCID Header:						
Four IMEI	MEID: Dn/Off						
	MSN: On/Off						
DataBase File	Load Modem DB from DUT						
C:\Android 13 OS\wetransfer_	C:\Android 13 OS\wetransfer_c6_android13_database-rar_2023-12-13 MD1_DB						
MD2_DF							
C:\Android 13 OS\wetransfer_	C:\Android 13 OS\wetransfer_c6_android13_database-rar_2023-12-1: AP_DB						
Log Dir C:\SNWriter_LOG\							
	Save						

- 5. Click Start.
- 6. **Immediately** plug the device into USB. You should hear the connection sound in Windows immediately followed by the disconnect sound. After a few more seconds you should hear the connection sound again.
- 7. Wait until you see *PASS* for success.

SN Writer V1.2020.0.0-TEE-v4500		– 🗆 X
File Option Key Files Identify Help		
ComPort: USB VCOM	Total: 2	
Target Type: Smart Phone 💌	Pass: 2	
System Config	Fail: 0	
Quit	SS	Start
All Operate successfully!!	Ģ	

Set up the XPID

Starting the XPID200

Once the OS update and TEE upgrade has been applied. Start the XPID200. After a few minutes, you will see the Android Welcome page. Then follow part a or b:

- a. Set up the device according to your Mobile Device Manager's (e.g. Intune) instructions.
- b. Proceed through the Welcome instruction. Please note that it is not required to connect to Wifi, Cellular through SIM card, or sign into a Google account during any of these steps and you may skip any or all of these.

Installing the XPID XPressEntry Applications.

- Download the XPressEntry Application from <u>https://telaeris.com/downloads</u> You will need to download both **XPressEntry Android** and **Keylink Android** apk files. Download the latest versions.
- 2. If connected to the internet on the XPID200s, you can download directly on the device.
- 3. If not then transfer the apk installers over USB:
 - a. Connect the USB Type C cable. Then swipe down from the status bar at the top. Expand the *Android System* Notification and tap *Charging this device via USB*

4:55 Fr	i, Mar 15	₽ 1 46%
•	Internet > 🛠 Bluetooth	
	Screenshot Flashlight	
0	Android System	^
	USB debugging connected Tap to turn off USB debugging	~
	Charging this device via USB Tap for more options.	~
Silen	t	×
•	Need time to focus? Use Focus mode to pause distracting ap	~
8	Scan3Service • 30m	~

b. Select File Transfer



🚘 🕑 📙 🗢 Internal shared storage						_		×
File Home Share View								~ ?
\leftarrow \rightarrow \checkmark \uparrow \blacksquare \Rightarrow This PC \Rightarrow C6 \Rightarrow Internal shar	red storage			ٽ ~	Search Internal	shared sto	orage	Q
DISC-Reports Fred	^	Alarms		Android				
🔯 hardware	i	Audiobooks	ī	DCIM				
Live RFID-Guys Training		Documents		Download				
User		Movies		Music				
 OneDrive - Personal This PC 		Notifications		Pictures				
3D Objects		Podcasts		Recordings				
Desktop Documents Downloads	L I	Ringtones	O	KeyLink-211.apk APK File 12.8 MB				
Music		test_USSS_TSD_EFACS.bix BIX File 607 KB		TWN4_464_XPID178_ HID_PROX.bix BIX File	MIFARE_SEOS_			
Videos		TWN4_464_XPID178_TWIC_MIFARE_ SEOS_HID_PROX.bix BIX File	0	XPressEntry-Android APK File 23.3 MB	I.3.4.776.apk			
SYSTEM (D:) Local Disk (E:)			2					
RECOVERY (F:)	~							
18 items								::: E

c. Transfer the files to the internal shared storage directory on the device.

d. Swipe up on the bottom and open the Files App. Navigate to the internal shared storage, and click on the copied apk files to install both XPressEntry and Keylink.



Set up Keylink and Barcode

If using Barcode, we need to disable the Key listeners in the Demo Barcode App:

1. Swipe up from the bottom and open the Scan3Service App.

5:04 8 🕅				Ŷů
G			ļ	0
-	4	•	6	
KeyLink	Files	Messages	XPress E	Play Store
- x + =	51	•	Q	Y
Calculator	Calendar	Camera	Chrome	Clock
		0	M	G
Contacts	Files	Find Devi	Gmail	Google
	+	9	•	C
GPS Test	KeyLink	Maps	Messages	Phone
*		*	9/x2 6016	\$
Photos	Play Store	Safety	Scan3Se	Settings
	-	۲		
SIM Tool	Vysor	XPress E		

2. Toggle the Scanner switch to ON



3. Scroll down and Click Key Configuration



4. Uncheck all F1-F7 buttons

5:08 👌 🎉	Key Configuration	₽ ₿
F1		
F2		
F3		
F4		
F5		
F6		
F7		

5. Click the back arrow, then switch off the Barcode.

5:09 👌 🎉		€0
Sca	an3Service v1.0.	15 ⑦
	Settings	Code
Scanner switch		
Scanner switch Closed		
Decoding preference	ces	
Voice Opened		
Vibrate Closed		01
Lights Configurat Alternating	ion	
Filter invisible ch Closed	8f	
Filter pre/suffix b Closed	lank	
Decode Time Lin 5000	nit(ms)	
Result char set utf-8		
•	٠	

Next, we will set up the RFID reader and Barcode in Keylink:

1. Click the Home (*circle, bottom middle*) button to return to the home screen. Swipe up again and open the Keylink Application.

5:12 & 國				₩
G			Ŷ	0
-	-		۲	M
KeyLink	Files	Messages	XPress E	Gmail
- × + =		0	0	9
Calculator	Calendar	Camera	Chrome	Clock
Contacts	Files	Find Devi	Gmail	Google
GPS Test		Q Maps	Messages	C Phone
Photos	Play Store	* Safety	Scan3Se	Settings
SIM Tool	Vysor	XPress E		

2. Connect the RFID reader. For most, the internally mounted RFID is the XPressProx module. Set the Device to *XIPD* and the RFID to *XPressProx*. Then click open.

5:14 👌 躑				₽ ₿
Device XPID				•
RFID XPres	sProx		2	-
3 OPEN	CON	CONFIG TE		L
Last Tag				
Prefix Data	None			-
Postfix Data	None			*
Output Mode	Intent B	roadcast		*
Include Length				
🗹 Beep 🔲 Reverse UID Bytes				
Iurn RFID Off On Sleep				
Try Faster Baud Rate				
CARD TRACER				
				1.1.211
Main	Device	Barco	de Ext.	Device
•	•			

3. After a few seconds, you should see *XPressProx Connected* and can confirm by scanning

:19 ≎ ≱6			U
Device XPID			Y
RFID XPress	Prox		Ŧ
CLOSE	CONFIG	TERMINAL	
XPressProx Reader	Connected		
Last Tag 0x2056	212E6B		
Prefix Data	None		Ŧ
Postfix Data	None		Ŧ
Output Mode	Intent Broade	cast	Ŧ
🗹 Include Length			
🗹 Beep 🗌 Reve	rse UID Bytes		
Turn RFID Off C	n Sleep		
Try Faster Bau	l Rate		
CARD TRACER			
		1.1.	21
1.1. 4	De la compañía de la	Fit De	

your RFID enabled badge. You should see badge data populate the Last Tag Field.

4. If using Barcode, switch to the barcode tab. Set the barcode reader type, Default Barcode module is *Honeywell*, and toggle *Enable*. Check the appropriate hardware buttons for the barcode trigger.

5:40 参 調			₹ 1
Device XPID Barcode Device	Honeywell		Ψ Ψ
Enable Barcoo	de 🌘	Enable	Multi-Scan
Enable Keys:	F3 (Tr	igger Button)	F4
	F 5	F6	F7
Prefix Data			
Postfix Data			
Last Tag			
Main	Device	Barcode	Ext. Device

5. Keylink Services are now connected and set up. These setting will persist through device restarts and will automatically reconnect the RFID and Barcode services upon boot without needing to open Keylink.

Setup XPressEntry Application

- 1. In order to connect to XPressEntry Server, you will need to set up a network connection. This can be through WIFI, docked Ethernet, or cellular. Set up the XPID200 with the appropriate network connection before continuing.
- 2. Return to the home screen and open the XPressEntry Application. Accept any permission requests and you will be greeted by the following page

6:04 ÷ 🕅 🗣 🕯
v776
Reader Setup
CONNECT
QUICK SETUP QR CODE
IP Address
10.10.2.110
Login
Login
Password
Password
HTTP Port
30000
Use HTTPS 🗆
HTTPS Port
30001
Reader Name
4efa5540879bf295
GUID
4-4-554007056005
< ● ■

3. Enter the appropriate IP address and port of the XPressEntry Server as well as the Admin Login and Password, or use the *Add Handheld Wizard* within XPressEntry Server and click *CONNECT*. You should see a green box appear on the XPID200 screen showing the Full sync download with the XPressEntry Server. Once completed you should see the *Present Badge* screen.



4. Test Scan your badge to confirm functionality.