

User Manual

Unlocker unit

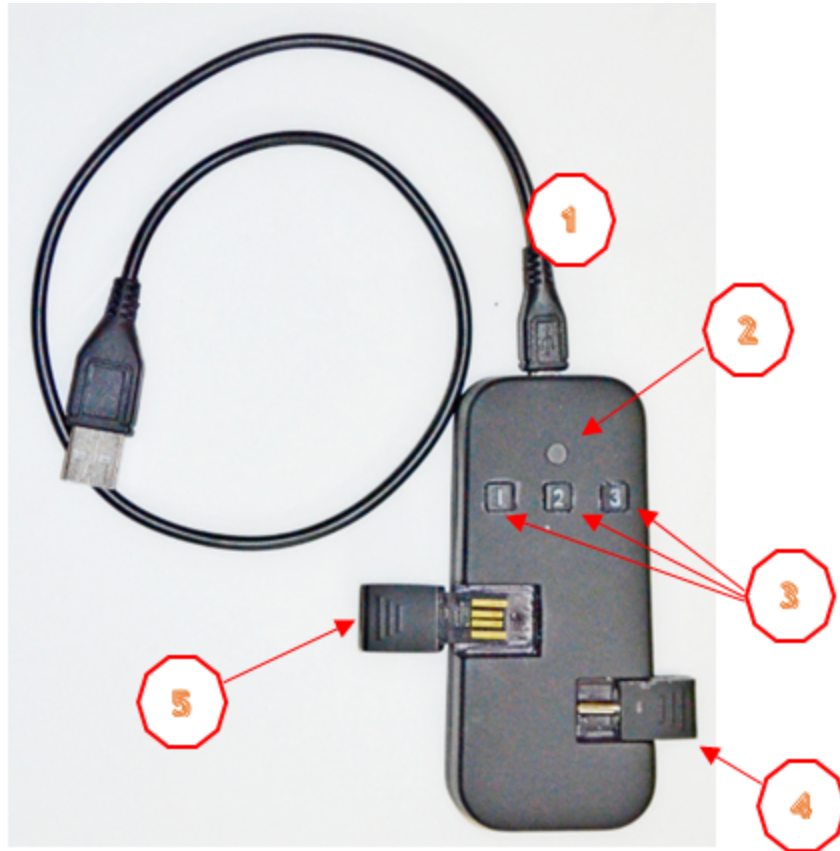
June 2014



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1. Unit description



- 1 - USB cable
- 2 - Indication Led
- 3 - Three button keypad
- 4 - Audio Jack
- 5 - USB Flash drive

2. Unlocking PC

2.1. General

The Unlocker has been designed to operate automatically, with as little user involvement as possible.

2.2. Steps to follow

To guarantee successful operation, the user is required to carefully follow the following steps:

Step A

Check the state of the target PC:

- If the PC is powered off - start PC (power on), and wait for the logon screen to appear. Once the logon screen appears, wait an additional two minutes for background services to complete loading, then continue to Step B.
- If the PC is powered on but not locked, you can use the Unlocker to achieve privilege escalation. To do so, start by locking the PC (via the windows menu or by hitting windows key + L) and then continue to Step B.
- If the PC is locked - continue to step B.

Step B

Plug in micro side of USB cable (supplied) into micro USB port on unit

Step C

Plug in other side of USB cable into any free USB port on the target PC.
If possible, use a USB2 port and not USB3 (blue) port.

Step D

Follow the steps as detailed in the table below:

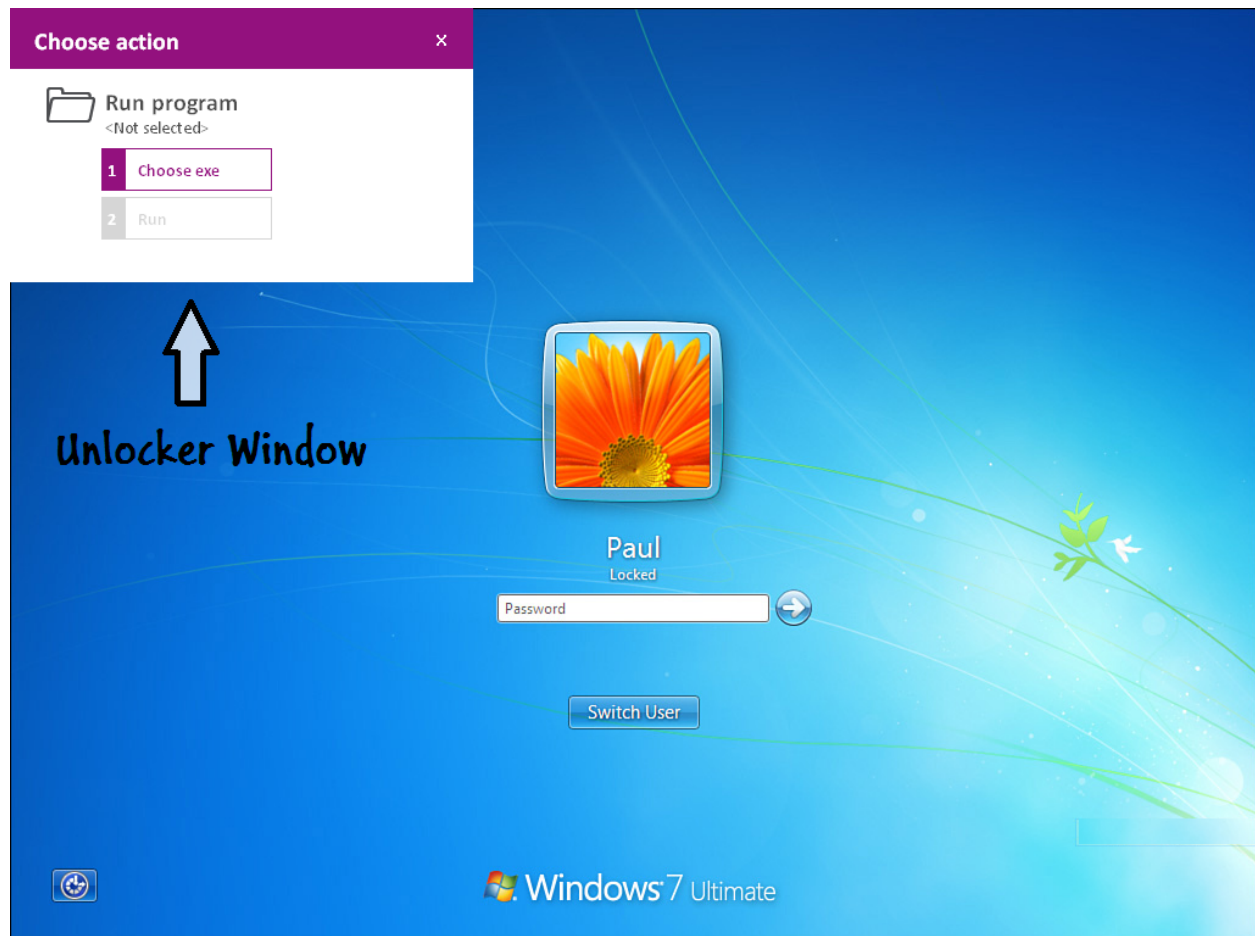
Action	Light status	Meaning	Action to take
Plug Unit in USB	Multicolor light on	Power cycle start	Wait up to 30 sec
	Red light flashing 2 seconds on, followed by 2 seconds off	Power-on fail	Disconnect and reconnect unit
	No light	Power-on fail	Disconnect and reconnect unit
	Constant red light	Power-on fail	Disconnect and reconnect unit
After up to 30 sec	Green light flashing = 0.5 seconds on followed by 0.5 seconds off	Unit is ready	Please enter 4 digit PIN code
	Red light on	Unit locked - too many wrong PIN codes entered	Contact Technical Support
	Red light flashing 0.5 seconds on followed by 0.5 seconds off	Unit has been tampered with	Contact Technical Support
Use the buttons on the unit to enter the 4-digit PIN code	Green light flashing 2 seconds on followed by 2 seconds off	Code correct, unlocking in progress	Wait for success (see below)
	Yellow light flashing twice = 0.5 seconds on followed by 0.5 seconds off, then light is back to constant green	Wrong PIN code entered	Try again with correct PIN code. you have 7 tries
	Red light on	Unit is locked after 7 wrong tries	Contact Technical Support
	Green light on	PC unlocked successfully	Use the unlocked PC
	After 4 min - Red light flashing 2 seconds on followed by 2 seconds off	Unlocking failed	Disconnect and reconnect unit, and try again. If possible, use another free USB port.
Very rare occasion	Red light flashing 0.5 seconds on followed by 0.5 seconds off	Unit has been tampered with	Contact Technical Support

3. Working on PC

When the unlocking process is successful, a new purple popup window will show on the PC screen.

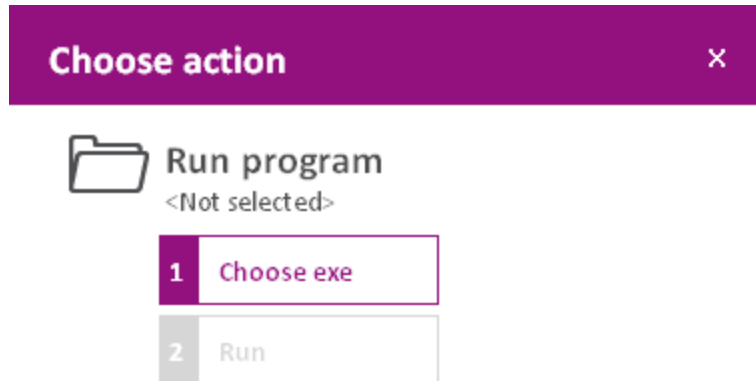
You now have 2 methods to work on the PC:

- Launch Executables
- Logon Bypass



3.1. Launch executables

The recommended and stealthiest method to use the Unlocker is through the “Run program” option. Click on “Choose exe” under “Run program” to open a standard “File Open” dialog from which you can navigate to any file or folder on PC. Use the dialog to select a built-in Windows executable, like CMD.EXE (Windows Command Prompt), or your own custom tool executable from an external USB drive.



Use this option to launch custom forensics and data collection tools directly from the logon screen.

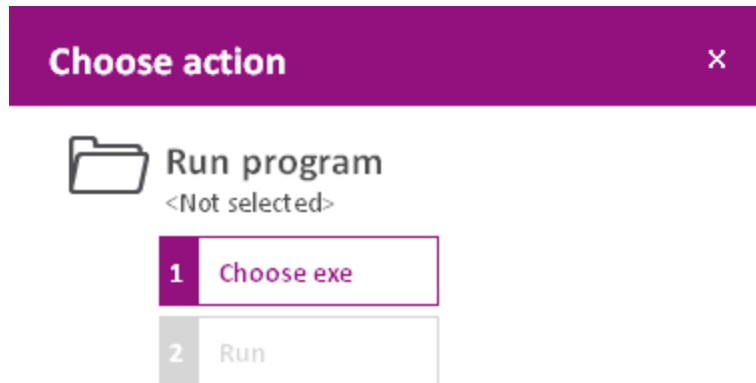
All executables launched using the “Run program” option run under the “LOCAL SYSTEM” account and on the current desktop.

Avoid running programs that are normally run by a normal user on the Default desktop, like Windows Explorer (explorer.exe), as they may not operate correctly or leave unwanted leftovers on the PC.

3.2. Logon bypass

You can use the Unlocker to bypass the Windows password and use the PC like a regular user. This option should be used with extreme care if stealth is required, and it is the user’s responsibility to put the PC back in the same state as before the unlocking once done.

Before bypassing the password, check if there’s a warning at the bottom of the purple popup screen stating that the PC is part of a Domain.



Warning - This PC is part of a domain

Logging-in or unlocking this PC can lead to severe, unwanted side effects. It is advised to refrain from unlocking this PC. Instead run any required tools directly from this popup using the "Choose Exe" option.

Please consult the manual for further information.

It is strongly recommended to refrain from bypassing the password on PCs that are part of a domain, as it may lead to severe, unwanted side effects, including the domain account getting locked.

If bypassing the password is absolutely necessary, please refer to section 3.2.3 for detailed notes.

3.2.1. Bypassing passwords

Click on password input text box.

NOTE: the purple popup will disappear (lose focus). To show it again, press Alt-Tab.



Enter at least one character - any character will do, and click Enter

The PC will be unlocked, and Windows will switch to the user desktop. The Unlocker purple popup will show in the top right corner.

NOTE: On Windows 8 PCs, the Unlocker purple popup shows on the Desktop and not on the Modern start menu. Click on the Desktop tile to show the desktop and make the popup visible.

3.2.2. Bypassing password on multi-user PCs

If there are multiple users on a PC, you can bypass the password on each one by clicking the Change User button and choosing the the user you want.

You can move back and forth between users for as long as the unit is connected.

3.2.3. Behavior and considerations for bypassing passwords on PCs that are part of a domain

NOTE: The recommended and stealthiest method to use the Unlocker is through the “Run program” option. If bypassing the password is absolutely necessary, read the following carefully:

- Bypassing passwords on PCs that are part of a domain will only work if Cached Credentials are enabled in the Group Policy of the Domain Controller.
- Bypassing passwords on PCs that are part of a domain will cause a brief network disconnection. As a result, any existing VPN connections will likely disconnect.
- Trying to bypass the password on a domain PC when it is locked (as opposed to when a user has yet to log-on) will work, but will set the user’s cached password to the password entered during the bypass. **It will therefore be impossible to log-on or unlock the PC in the future with the *correct* password if the Domain Controller is unavailable. This password re-set will last until the correct password is used to unlock or logon AND the Domain Controller is available through either LAN/WAN or a VPN.**

This means that in most real-world scenarios, bypassing the password on a PC that is part of a domain AND is connected to the domain through a VPN **will lock the legitimate user out of their PC until they connect to the organisation’s LAN/WAN.**

- Trying to bypass the password on a domain PC with a user that is not currently logged on may work, **but is likely to cause the PC account to be locked on the domain, so that only the Domain Administrator can release the account and make the PC usable again.**
- Some typical enterprise client side software, for example Outlook, Sharepoint client, Lync and others may behave unexpectedly, and in particular require re-authentication.

4. Disconnecting Unlocker

When you disconnect the unit, make sure that:

- The purple popup disappears and the screen is in the same state as it was when you first connected the unit.
- Close any popup windows that may have appeared as a result of the unit's or your operation (e.g. some backup programs show a popup window asking if you want to backup a drive every time a new drive is detected).
- **If you are forced to disconnect the device mid-operation**, press the left “alt” and “Windows” keys once (after you have disconnected the device) to release them, as they may get stuck and prevent the keyboard from functioning until released.
- Put the PC back in the state it was before connecting the unit, locking, logging the user off, or powering the PC off if necessary.

NOTE: To quickly lock the PC you can use the Windows - L key combination.

5. Unit extras

5.1. Audio jack

When an audio device is present on the target PC, the normal unlocking process will cause some sounds, like the USB device connection and disconnection sounds, to be played.

To enable silent operation, we have included a physical mute plug with the device. Insert the plug into either the Headphone-out or Speaker-out ports of the target PC to make it silent.

NOTE: on some laptops there is a mute key on the keyboard. If it exists, use it rather than the plug.

5.2. USB flash drive

For your convenience, we have included a USB flash drive with the unit. You can use the drive to store forensics software and other tools you may wish to use on target PCs, and/or save downloaded data onto it.

6. Troubleshooting

#	Situation	Action	Remark
1	USB plugged-in but no white light shows	Unplug and try again. If still no light, try on a different USB port. If still no light, try on another PC	
		If light OK on other USB port.	The target PC USB port is not working properly.
		Still no light on another PC	The unit may be damaged, please contact Technical Support
2	After plugging the device to the target PC's USB port, the white light comes on but doesn't change to flashing green after 60 seconds	Unplug and try again If still no light, try on another PC	
		If light OK on other USB port	The target PC USB port is not working properly.
		If light still doesn't change to flashing green on another PC	The unit may be damaged, please contact Technical Support
3	The unlocking fails (light changes from flashing green to flashing red after 4 minutes)	Unplug and try again. If still doesn't work, try a different USB port. Try again for 3 times.	If still no success - the PC is unlockable
5	Unlocker's purple popup window disappears.	Press and hold the Alt key, then press the Tab key to navigate between all opened windows. Release the Tab key when you see Unlocker's window.	
6	The keyboard stops working after unplugging the unit mid-operation	Press the left Alt and Windows key	
7	During the process before purple popup appears, other popups appear requesting action	Ignore the popups do not follow any action until the unlocker has finished = got purple popup	

7. Compliance testing and anti-tampering

Do not attempt to use any tools to test the unit, as this will likely make the unit self-destruct.

Only use on computers running windows OS. Using on computers running other OS may cause unit to self-destruct.

The way the Unlocker works is protected intellectual property (IP), and to keep that IP safe the unit implements advanced anti-tampering methods. Any tampering attempt will cause the unit to self-destruct, and any damage caused will not be covered by the warranty.

If you wish to test the unit for compliance or other reasons, please contact our local distributor/representative with your test plan, and we will check which tests can be run safely, and offer alternatives to tests that cannot.

8. Working with support site

The Unlocker support site was designed to provide authorized users with instant answers to most of their technical support needs, as well as direct, unlimited online access to updates and manuals.

The site is divided into two main areas (see image below):

- The area marked in green is where you will find the latest Unlocker publications, manuals, and applications.
- The area marked in blue is the user specific area, where you will find the latest firmware, unlocking, files should you need them.


[Sign out](#)




Management Console


Use the controls below to access Information and Firmware Upgrades


Downloads

 **Download Latest Firmware**
1.0.0 | March 31, 2014

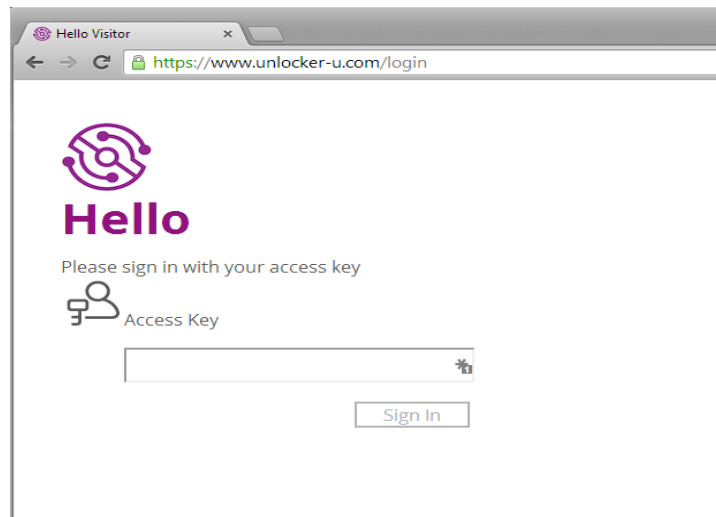
Resources

 **User Manual**
PDF | March 31, 2014

 **Frequently Asked Questions (FAQ)**
PDF | March 31, 2014

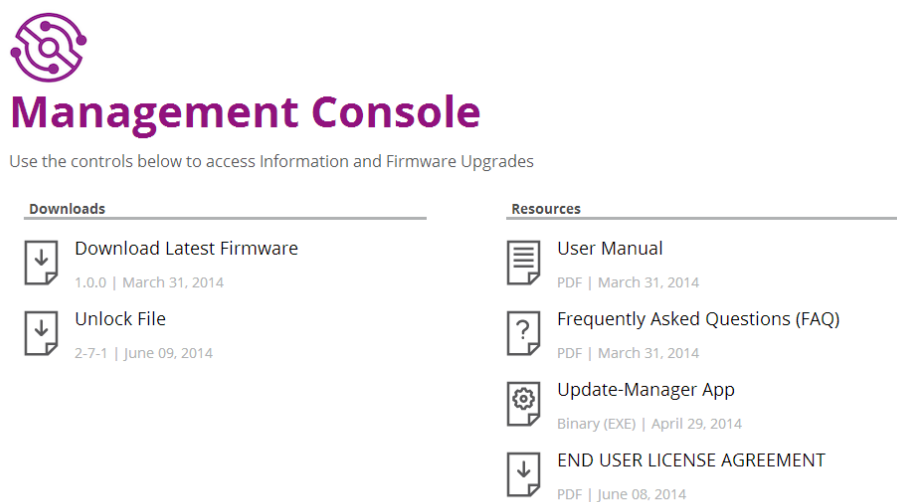
 **Update-Manager App**
Binary (EXE) | April 29, 2014

8.1. Logging in



Enter your unit specific access key that you received with your unit.
If you do not have the key please contact your local distributor with your unit number.
The access key should be in the following format:
DDDD-LLLL-_-_-_- Index - D = digit; L = letter; _ either letter or digit.

Click “Sign in” and you should see the site interface as shown below



8.2. Working with Resources

In the Resources area you can download the following:

- Publication such as the FAQ and warranty in PDF format
- Unit manuals in PDF format
- Applications such as the Update Manager in Executable (.exe) format

Click the resource you need to start the download.

Remarks:

- Check the Resource publication date, if you are downloading a newer version, we suggest that you first delete the old version files from your hard drive to avoid conflicts.
- Since the update manager is in .exe format, some browsers may request your permission to download the file, please make sure to allow the download.

8.3. Working with Downloads

In this area you will find specific files for your unit only:

- Your unit latest firmware file (see the Firmware Update instructions later in this manual)
- Your unit unlocking file, to be used in case the unit was locked after 7 wrong PIN code entries (see the Unit Unlocking instructions further in this manual)

Click the relevant file to start the download.

8.4. Firmware Update

The Unlocker unit has the ability to be updated offline should it be needed. Whenever a new update is available, we will notify all users via our distribution ring.

To carry out an update you will need:

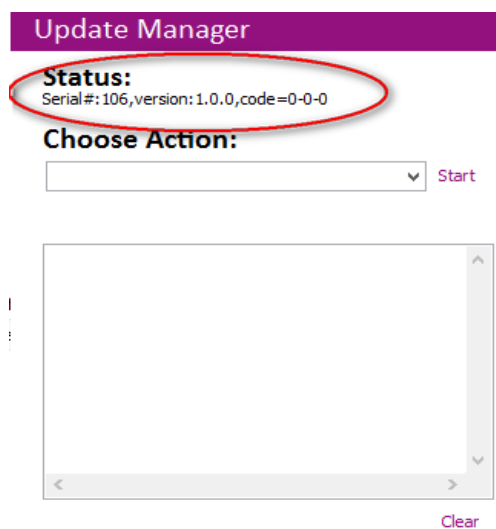
- The Unlocker Update Manager Application (to download and save it on your PC, see Section 3: Working with Resources).
- The latest unit firmware (to download and save on it to your PC, see Section 4: Working with Downloads).

8.4.1. Run the update manager application (some PCs, depending on their security settings, may request your permission to run the .exe, make sure to allow it)

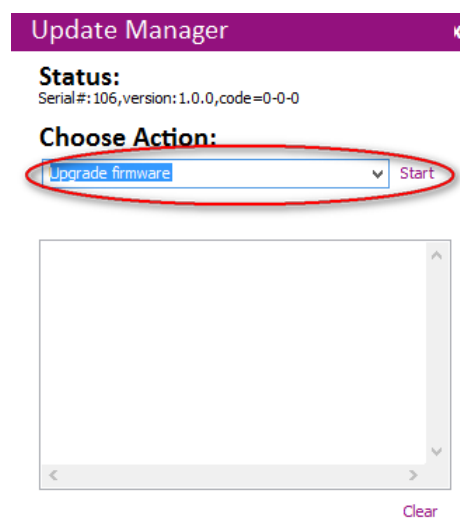
The screenshot shows the 'Update Manager' application window. The title bar is purple with the text 'Update Manager' and a close button. Below the title bar, the status is displayed as 'Status: Device Not Found'. Underneath, there is a section titled 'Choose Action:' followed by a dropdown menu and a 'Start' button. At the bottom of the window, there is a large empty rectangular area with a scrollbar on the right and a 'Clear' button at the bottom right.

8.4.2. Follow these steps:

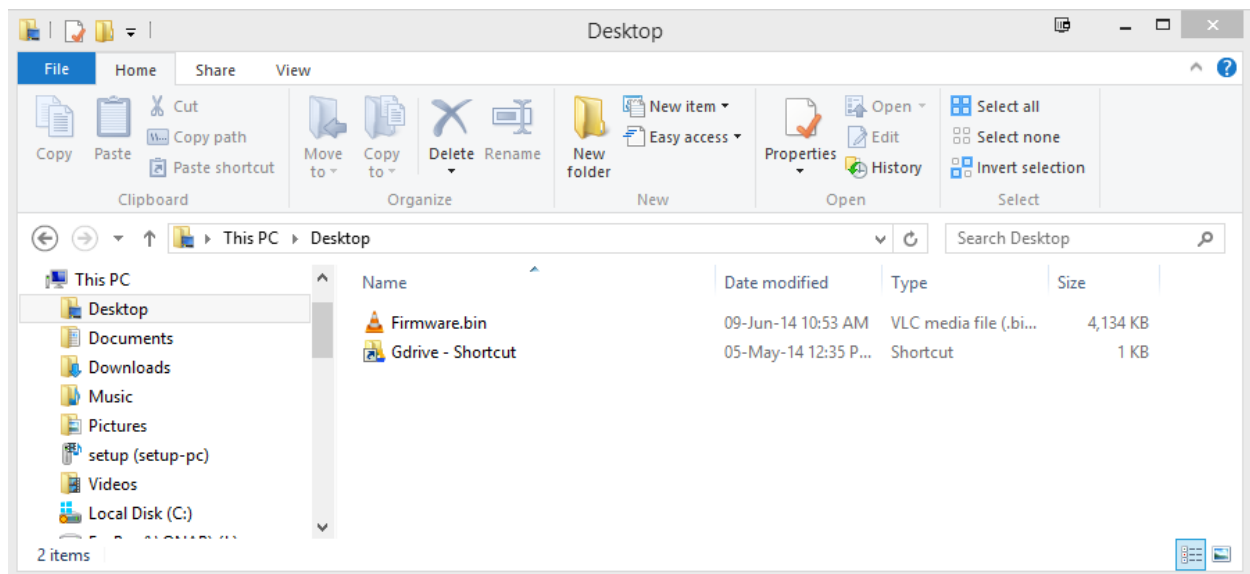
1. Connect the unit to the PC via USB cable.
2. Wait for the multicolor light to turn into a flashing green light.
3. Enter the PIN code: 3333.
4. The light will turn blue.
5. You may get a Windows popup suggesting that you format the disk - close it or ignore the popup.
6. The Update Manager will recognize the unit, and you should see your unit's serial number, software version, and status code (indicating the unit's health - should be 0-0-0 for a healthy unit) in the status line (marked red in the image below).



8.4.3. Click on the down arrow (to the left of Start) and choose Upgrade firmware, then click start



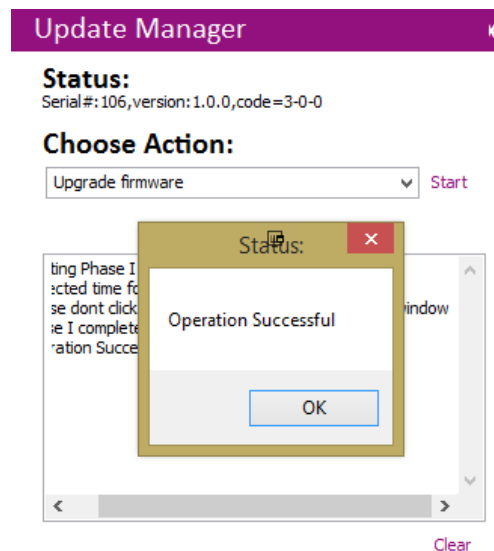
8.4.4. A file system window will open, browse to the place where you have saved the downloaded firmware file, select the file, and click Open



8.4.5. The Firmware Update process will start, and the process log will be shown in the background.

Once the update is completed you will get an Operation Successful popup. Click OK to close it, then disconnect unit.

The unit is now ready for use, with the original PIN code (the update process does not change the PIN).



8.5. Unlocking the unit

The Unlocker unit incorporates a PIN code mechanism to make certain only authorized users can use the unit. After 7 wrong PIN code entries, the unit will lock itself.

An authorized user can unlock the unit through the web site, without the need to contact support.

To carry out the unlocking you will need:

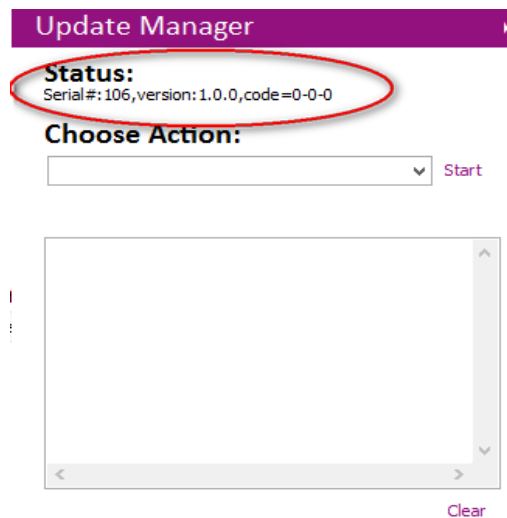
- The Unlocker Update Manager Application (to download and save it on your PC, see Section 3: Working with Resources).
- The latest unit unlock file (to download and save on it to your PC, see Section 4: Working with Downloads).

8.5.1. Run the update manager application (some PCs, depending on their security settings, may request your permission to run the .exe, make sure to allow it)

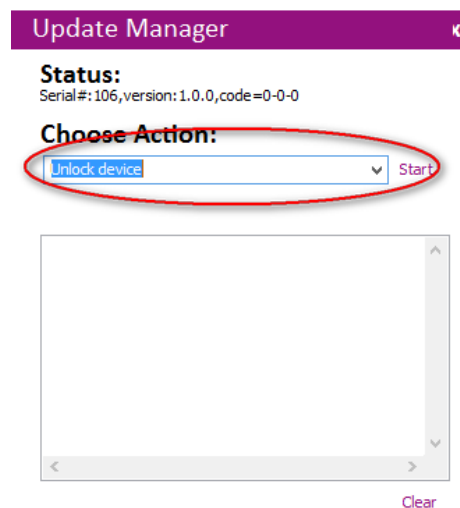
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8.5.2. Follow these steps:

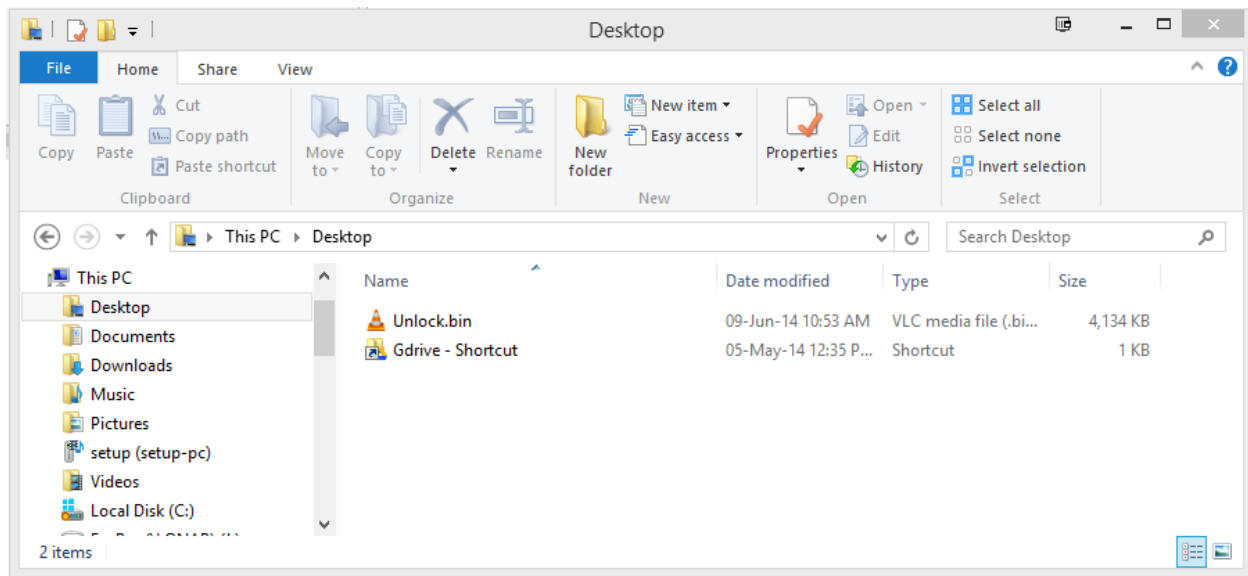
7. Connect the unit to the PC via USB cable.
8. Wait for the multicolor light to turn into a flashing green light.
9. Enter the PIN code: 3333.
10. The light will turn blue.
11. You may get a Windows popup suggesting that you format the disk - close it or ignore the popup.
12. The Update Manager will recognize the unit, and you should see your unit's serial number, software version, and status code (indicating the unit's health - should be 0-0-0 for a healthy unit) in the status line (marked red in the image below).



8.5.3. Click on the down arrow (to the left of Start) and choose Unlock device, then click start



8.5.4. A file system window will open, browse to the place where you have saved the downloaded unlock file, select the file, then click Open



8.5.5. The Unlocking process will start, and the process log will be shown in the background.

Once the unlocking is completed you will get an Operation Successful popup. Click OK to close it, then disconnect unit.

The unit is now ready for use, with the original PIN code (the unlocking process does not change the PIN).

