



# **USER'S MANUAL TACHOTERMINAL PRO**

Firmware 2.00.191

## In the Box



miniUSB-USB cable  
(1.8 metres)



2GB removable memory card  
(in the slot)



TTConfigurator  
(pre-installed in TERMINAL folder)

## Optional Accessories



AA battery charger (battery included)  
with a miniUSB power cable



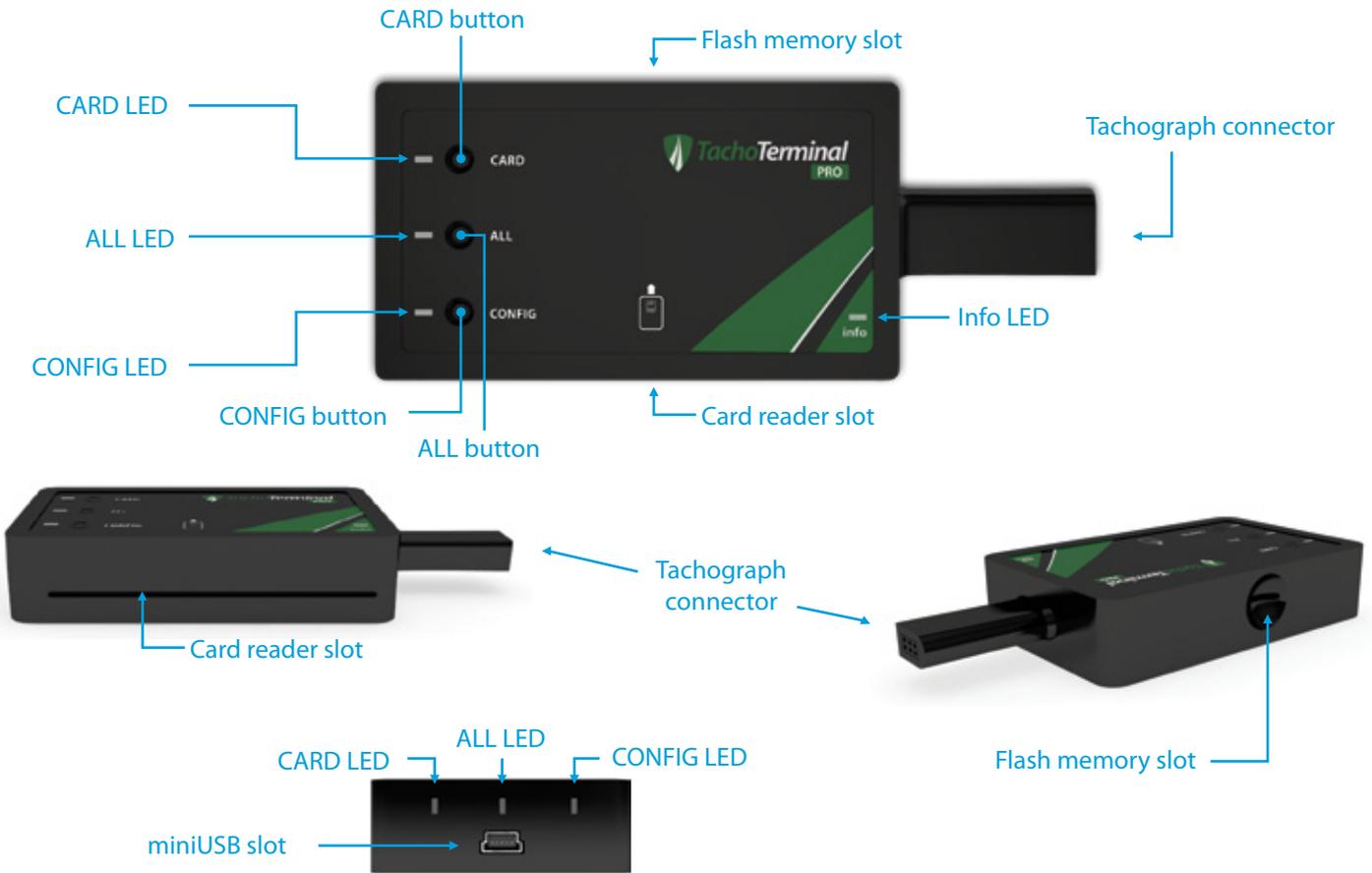
TachoTerminal App  
to transfer files from an  
Android-based mobile phone\*



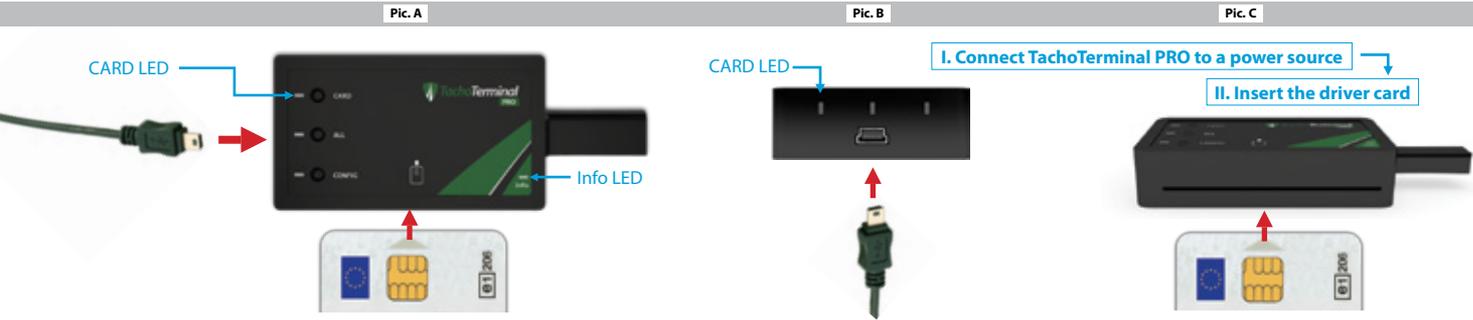
program Tachospeed DEMO

*\*presented with Samsung Galaxy Mini*

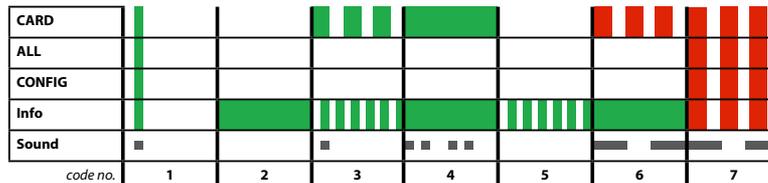
# TachoTerminal PRO Diagram



# Driver Card Data Download via the In-built Card Reader



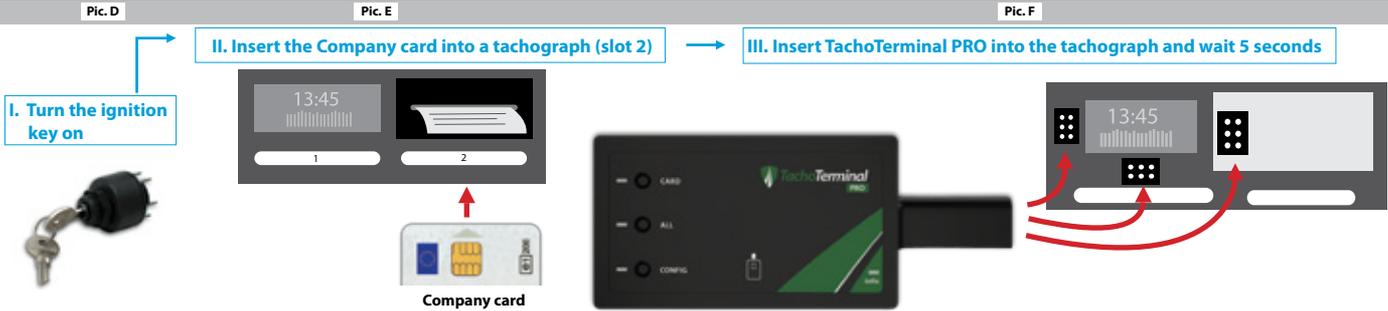
## Common Driver Card Readout LED and Sound Codes



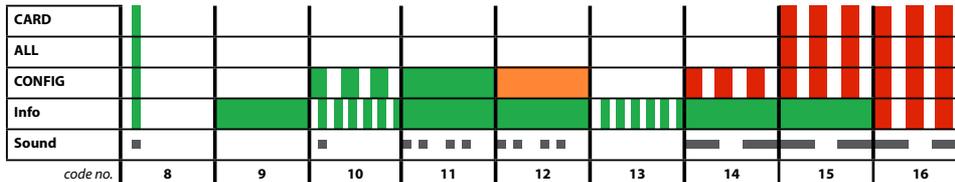
MESSAGE OR ERROR TYPE	WHAT DOES THAT MEAN?
1. TachoTerminal PRO powered via PC, USB slot, car charger or a tachograph	When powered do not remove the Flash card. It may only be replaced with the power off.
2. Device ready – properly powered	To read the card, insert it in the slot with the chip facing upwards.
3. Card readout	Do not power the device off during readout.*
4. Readout finished properly	'C_Name_Surname_Date_Hour' file is saved on memory card in the CARD folder.
5. Copying Flash card's contents onto the PC via USB cable	Do not use the Flash memory card to store other files.
6. <b>ERROR:</b> Card unknown, card inserted incorrectly, card removed too soon or the readout takes too long	Reinsert the driver card with the smart chip facing upwards as shown in Pic. A and Pic. C
7. <b>ERROR:</b> No memory card, wrong format, less than 500 kB storage space left	Insert a properly formatted (FAT 16) memory card into the TachoTerminal PRO slot.

\* If unpowered or removed from the reader too soon, the Flash card may get damaged

# Tachograph Data Readout ( Default Mode – No Buttons Used )



## Common Tachograph Readout LED and Sound Codes - Default Mode

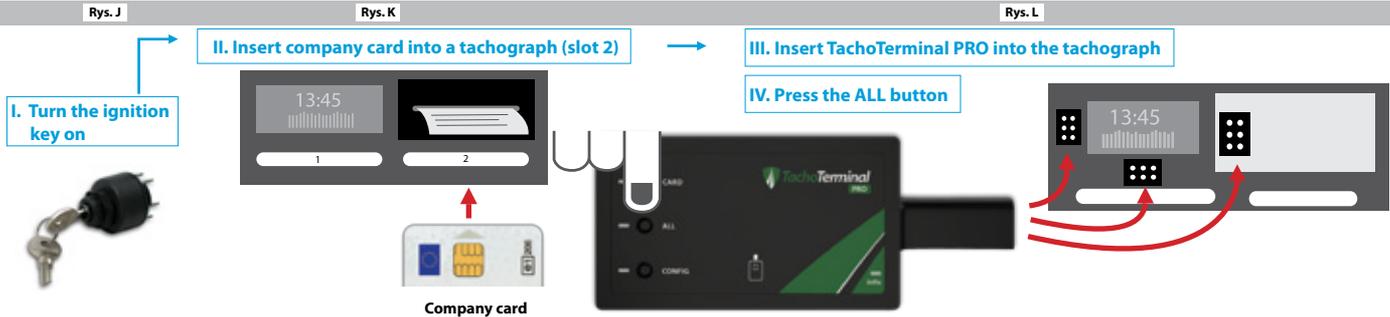


MESSAGE OR ERROR TYPE	WHAT DOES THAT MEAN?
8. TachoTerminal PRO connected properly	Be sure to turn the ignition key on, insert driver and company cards into the tachograph slots before connecting the device.
9. Device ready – properly powered	Wait 5 seconds for readout to commence. Do not remove the Flash card.
10. Tachograph memory readout	Do not remove the device from your tachograph, and do not turn the ignition key off.**
11. Tachograph readout successful	'M_Vehicle_Date_Hour' file is saved on memory card in the TACHO folder.
12. Tachograph readout finished properly <b>with speeding</b>	Vehicle speed analysis indicates speeding over 90 kph.
13. Copying Flash card's contents into the PC via USB cable	Remove the device and connect it to your PC to copy the files.
14. <b>ERROR:</b> Cannot copy tachograph data	Change the reader configuration and repeat the readout procedure.
15. <b>ERROR:</b> Cannot download driver card data – no company card	Reinsert the company card into Slot 2 – as shown in Pic. E.
16. <b>ERROR:</b> No memory card, wrong format, less than 500 kB storage space left	Insert a properly formatted (FAT 16) memory card into the TachoTerminal PRO slot.

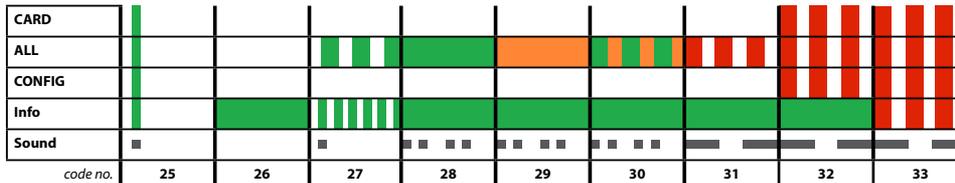
\* Disconnecting the reader too soon may damage the Flash card



# Driver Card Data Readout via Tachograph ( ALL mode )



## Common Tachograph Readout LED and Sound Codes – ALL Mode

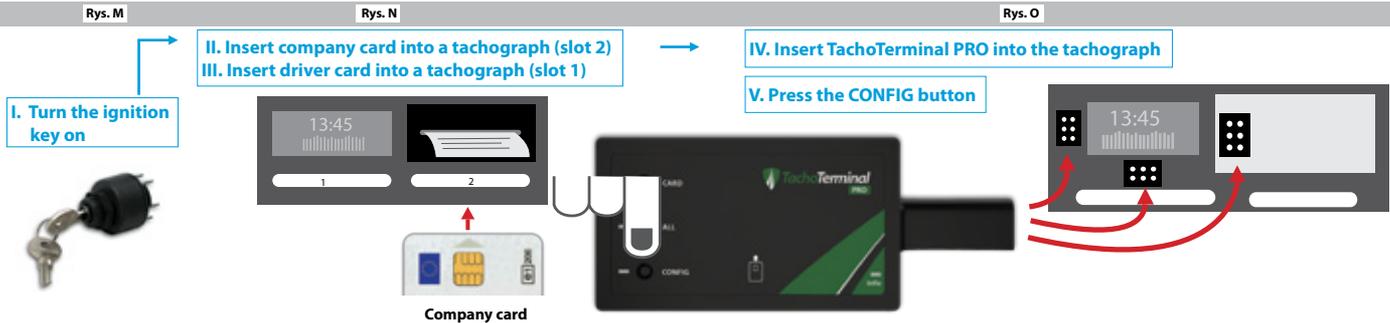


MESSAGE OR ERROR TYPE	WHAT DOES THAT MEAN?
25. TachoTerminal PRO connected properly	Be sure to turn the ignition key on, insert driver and company cards in the tachograph before connecting the device.
26. Device ready – properly powered	To read the ALL mode please press the ALL button*
27. Tachograph memory readout	Do not remove the device from your tachograph and do not turn the ignition key off.
28. Tachograph readout successful	'M_Vehicle_Date_Hour' file is saved on memory card in the TACHO folder.
29. Tachograph readout finished properly with speeding over 90 kph	The reader checks data for speeding over 90 kph
30. Tachograph readout finished without activity data	No driver activities registered in the desired timespan.
31. <b>ERROR:</b> Tachograph readout failed	Change the reader configuration and repeat the readout procedure.
32. <b>ERROR:</b> Cannot download driver data – no company card	Reinsert the company card into Slot 2 – as shown in Pic. K.
33. <b>ERROR:</b> No memory card, wrong format, less than 500 kB storage space left**	Insert a properly formatted (FAT 16) memory card into the TachoTerminal PRO slot.

\*ALL mode downloads activity data for the previous 365 days by default – you may change configuration if needed.

\*\*See page 10 for other error descriptions

# Driver Card Data Readout via Tachograph ( CONFIG+CARD modes )



## Common Tachograph Readout LED and Sound Codes – ALL Mode



MESSAGE OR ERROR TYPE	WHAT DOES THAT MEAN?
34. TachoTerminal PRO connected properly	Be sure to turn the ignition key on, insert driver and company cards in the tachograph before connecting the device.
35. Device ready – properly powered	To read CONFIG+CARD mode press the CONFIG button.
36. Tachograph memory readout	Do not remove the device from your tachograph, and do not turn the ignition key off.
37. Tachograph readout successful	'M_Vehicle_Date_Hour' tachograph file is saved on memory card in the TACHO folder, card file is saved as 'C_Name_Surname_Date_Hour' in the CARD folder.
38. Tachograph and memory card readout finished properly - with speeding over 90 kph	Disconnect the TT PRO and connect it with your PC to copy files.
39. <b>ERROR:</b> Tachograph readout failed	Change the reader configuration and repeat the readout procedure.
40. <b>ERROR:</b> Cannot download driver data – no company card	Reinsert the company card into Slot 2 – as shown in Pic. N.
41. <b>ERROR:</b> No memory card, wrong format, less than 500 kB storage space left	Insert a properly formatted (FAT 16) memory card into the TachoTerminal PRO slot.
42. <b>ERROR:</b> Function not supported, tachograph access denied, query beyond range*	Reconfigure and repeat the readout procedure – see page 11 of this manual.

# LED and Sound Code Chart – Messages



MESSAGE OR ERROR TYPE	WHAT DOES THAT MEAN?
43. TachoTerminal PRO properly connected to the tachograph, with a PC via USB, powered by socket or car charger	<i>The device requires stable voltage to work properly – it is vital that you use the USB cable recommended by the producer.</i>
44. Device ready – properly powered	<i>Do not remove Flash memory card from the device when powered.*</i>
45. Tachograph data readout in ALL mode	<i>Do not remove cards or disconnect the reader from a tachograph**, do not turn the ignition key off.</i>
46. Card data readout successful	<i>'C_Name_Surname_Date_Hour' file is saved in the CARD folder.</i>
47. Tachograph data readout in ALL mode finished properly - speeding identified	<i>Disconnect the TT PRO and connect it with your PC to copy 'M_Vehicle_Date_Hour' file from the TERMINAL folder.</i>
48. Tachograph data readout in CONFIG mode successful	<i>'M_Vehicle_Date_Hour' file contains data downloaded from your tachograph.</i>
49. File download successful – no driver activity data	<i>Change the date span, reconfigure or press another button to download activities.</i>
50. Copying and saving data on Flash memory card	<i>Do not disconnect reader from your PC until the process is finished.***</i>
51. Real-time clock battery run-down or	<i>Driver card files' download date may be set to 2000-01-01. Send the reader to your authorized service provider for battery replacement.</i>
51. Awaiting update mode	<i>After connecting to a PC and with a CONFIG button pressed for 10 seconds.</i>
52. Update mode on	<i>Use the LemkeLink to begin the reader firmware update.</i>
53. Reader updating	<i>Do not power off or disconnect your reader until the update is finished.****</i>

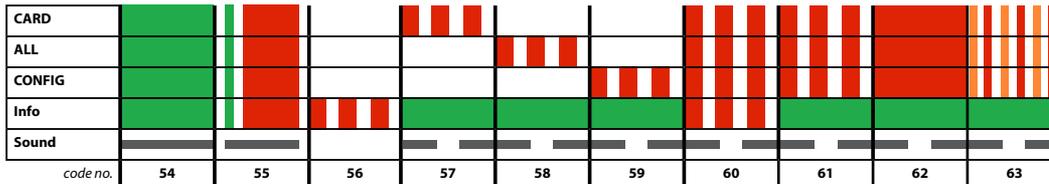
\* Removing Flash memory card with the reader on may damage the card

\*\* Removing the reader during data readout or saving may damage the memory card

\*\*\* Disconnecting the USB cable or switching off the computer may damage the memory card

\*\*\*\* Disconnecting the USB cable during update may damage or cause reader malfunction

# LED and Sound Signal Chart – Errors



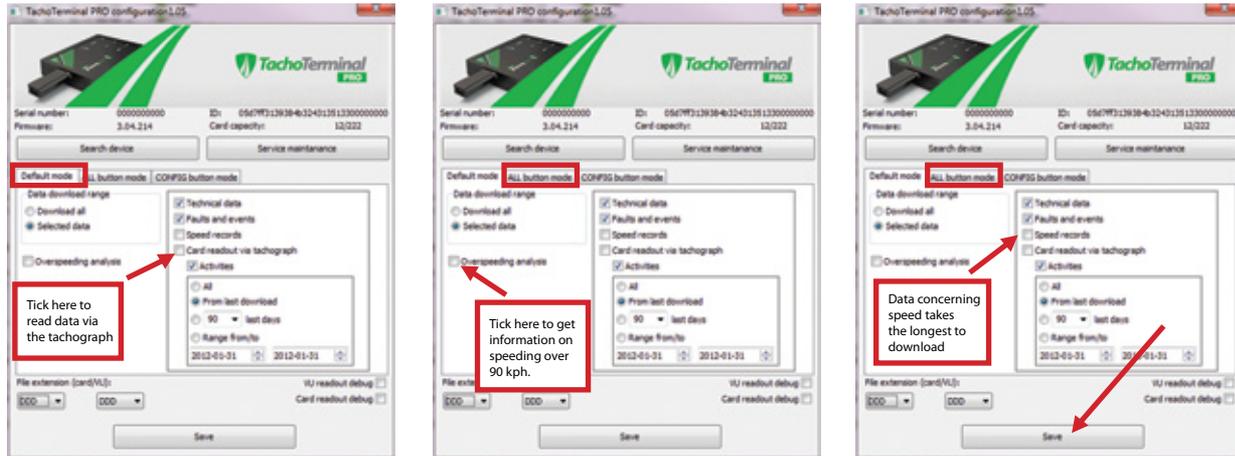
MESSAGE OR ERROR TYPE	WHAT DOES THAT MEAN?
54. Incorrect reader start-up	Reconnect the reader. Connect the reader to your tachograph.
55. Incorrect reader configuration – no device ID	Return the reader to your provider, distributor or producer in order to replace it.
56. Incorrect power supply – low voltage	Replace the USB cable for the one recommended by the producer.*
57. Driver card readout failed	No driver card in tachograph. Card removed too soon or inserted incorrectly.
58. Tachograph data readout failed in ALL mode	Reconfigure and repeat readout – see page 11.
59. Tachograph data readout failed in default or CONFIG mode	Reconfigure and repeat readout – see page 11.
60. Flash memory card error – no memory card, wrong format, less than 500 kB storage space left	Replace the memory card with the one properly formatted in FAT 16 or delete .ddd and .esm files to increase the storage space.
61. Tachograph communication error	Insert company, workshop or control card.
62. Tachograph not responding, download impossible	Reconfigure and repeat readout – see page 11. Should the problem reoccur, contact your authorized service provider.
63. Unsupported function, tachograph access denied, inappropriate query length, query beyond range	Reconfigure and repeat readout – see page 11. Should the problem reoccur, contact your authorized service provider.

\* To get the recommended USB cable visit [www.tachoterminal.net](http://www.tachoterminal.net)

\* To get the recommended memory cards visit [www.tachoterminal.net](http://www.tachoterminal.net)

# TachoTerminal PRO Configuration

Copy TTConfigurator from the TERMINAL folder to your PC and run TTConfigurator.exe



CARD					
ALL					
CONFIG					
Info					
Sound					
	code no.	64	65	66	67

MESSAGE OR ERROR TYPE	WHAT DOES THAT MEAN?
64. TT PRO PC connection via the recommended USB cable	Do not remove Flash memory card.
65. USB storage mode active	Run TTConfigurator and find the device
66. Saving configuration	Choose configuration and click on Save configuration. Wait for the signal.
67. Finishing configuration	TT PRO's real time clock updates date and time.

# Reader Firmware Update – Part One

I. Copy "TachoTerminalPRO.inf" driver from TERMINAL\TTConfigurator folder on your memory card to your PC's hard drive

II. Press the CONFIG button



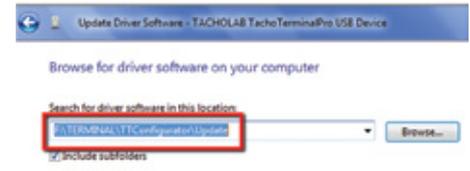
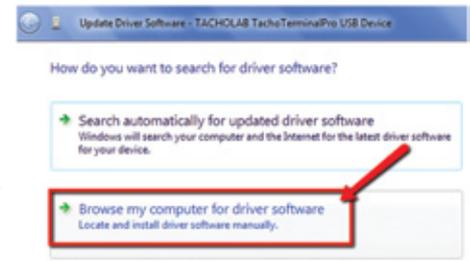
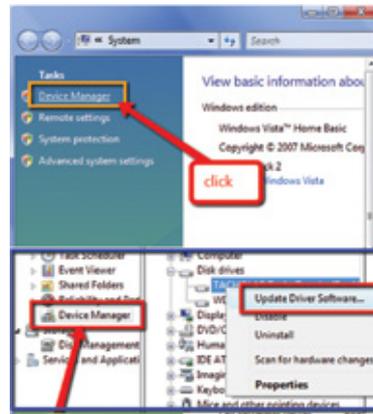
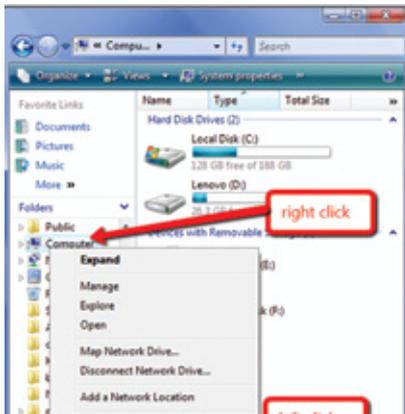
III. Plug the device into your PC



IV. Hold the button down for 10 seconds (CONFIG LED will blink red and green – code 68)



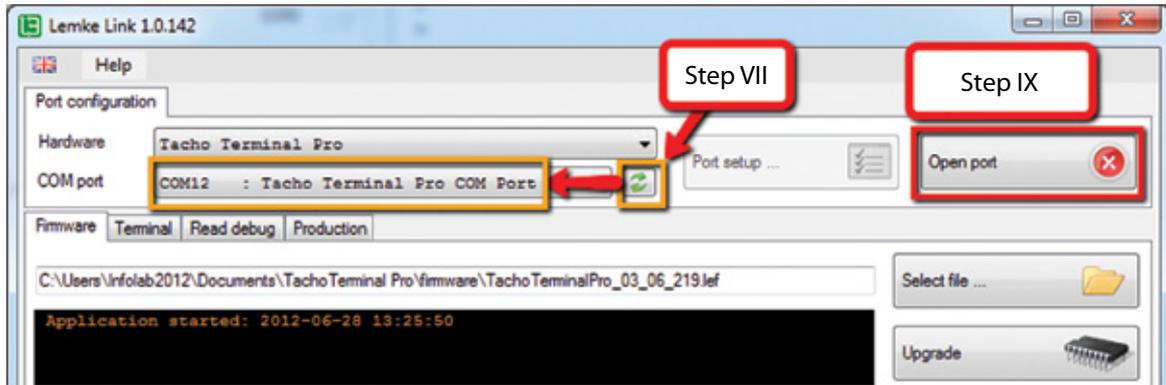
V. Install TachoTerminalPro.inf driver



# Reader Firmware Update – Part Two

VI. Run LemkeLink software  
VII. Click the Refresh Port List button

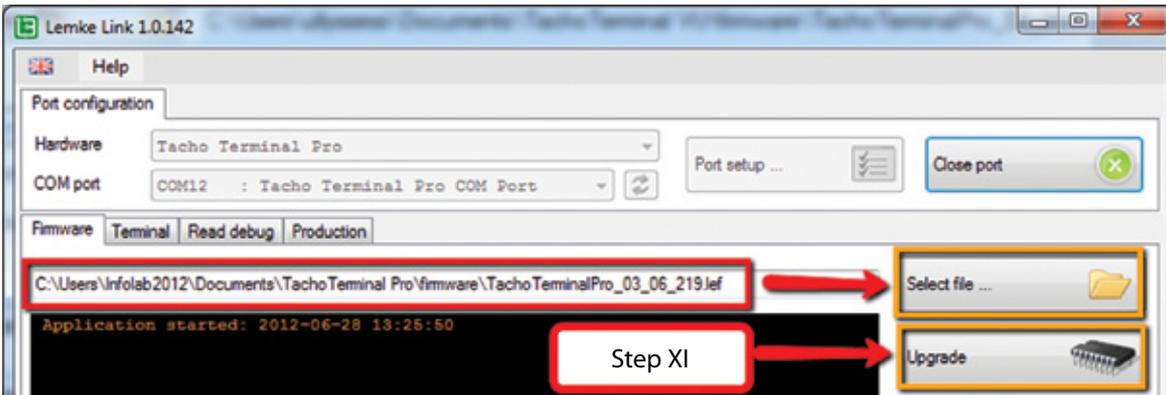
VIII. Select TachoTerminal Pro COM Port  
IX. Click on Open Port



X. Choose the desired firmware update file (.lef format)

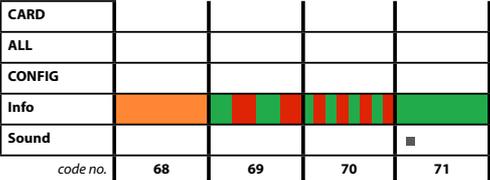
XI. Click on Update button

XII. Check the update status in the Bootloader tab



# Reader Firmware Update – Part Three

## Common Firmware Update LED and Sound Codes



MESSAGE OR ERROR TYPE	WHAT DOES THAT MEAN?
68. Update mode initiation	Hold down the CONFIG button for 10 seconds while plugging the reader into your PC via the USB-miniUSB cable.
69. Device ready to update	After 10 seconds release the CONFIG button and run LemkeLink application. Choose TachoTerminal Pro COM port and firmware update file and upload new firmware.
70. Firmware update in progress	While updating do not disconnect the USB cable or press any buttons.*
71. Finishing firmware update	Check the update information in Bootloader tab.

\*Disconnection of the USB cable during firmware update may permanently damage the reader



See our training presentations at:  
[www.youtube.com/TachoTerminal](http://www.youtube.com/TachoTerminal)

[tachoterminal.net](https://tachoterminal.net)