

# Update process for the use of the TPX4.

The new TPX4 transponder, which has recently been added to the TPX family, completes the cloning of 2nd generation Philip's Crypto (PCF7936), as well as its subsequent electronic simulations (PCF79xx).

Briefly the transponder has the following characteristics:

- 1. Fully compatible with the TPH Cloner/TRS5000 on the market, after their update.
- 2. Increase in the cover of vehicles supported by the TPX3 (2nd generation Philip's Crypto).
- 3. Elimination of all the Warning messages that appeared with the TPX3 in certain vehicles of makes like: Chrysler / Renault / Nissan / Dacia.
- 4. Recognition of the new TPX4 (on TRS) automatically as well as visually (green colour code).
- 5. Same successful physical support for the TPX family without any need for external batteries for operation.

The new models incorporated, which complete those already covered by the TPX3 are:

MARCA	MODELO	AÑO	TP ORIG	TP JMA	LLAVE	TPX3+ (Q1-2011)
CADILLAC	CTS	2008-2010	PHI/CR2	TP12GM	GM-37.P	SI
CADILLAC	STS	2004-2009	PHI/CR2	TP12GM	GM-37.P	SI
CHEVROLET (USA)	CAMARO	2010	PHI/CR2	TP12GM	OP-11.P1	SI
CHEVROLET (USA)	EQUINOX	2010	PHI/CR2	TP12GM	OP-11.P1	SI
CHRYSLER	ASPEN	2007-2009	PHI/CR2	TP12CH	CHR-15.P	SI
CITROEN	C-CROSSER	2007	PHI/CR2	TP12	MIT-8D.P2	SI
GMC	TERRAIN	2010	PHI/CR2			SI
HOLDEN	ASTRA	2004	PHI/CR2	TP12GM	OP-11.P1	SI
HOLDEN	VECTRA	2004	PHI/CR2	TP12GM	OP-11.P1	SI
HOLDEN	ZAFIRA	2004	PHI/CR2	TP12GM	OP-11.P1	SI
INFINITI (NISSAN)	G35	2003-2007	PHI/CR2	TP12NS	DAT-15.P2	SI
INFINITI (NISSAN)	QX56	2004-2007	PHI/CR2	TP12NS	DAT-15.P2	SI
MITSUBISHI	MONTERO	2006	PHI/CR2	TP12MT	MIT-12.P2	SI
MITSUBISHI	OUTLANDER	2006	PHI/CR2	TP12MT	MIT-8D.P2	SI
OPEL-VAUXHALL	AGILA	2007	PHI/CR2	TP12GM	SUZU-14.P2	SI
OPEL-VAUXHALL	ANTARA	2007	PHI/CR2	TP12GM	DAE-4.P1	SI
OPEL-VAUXHALL	ASTRA	2004	PHI/CR2	TP12GM	OP-11.P1	SI
OPEL-VAUXHALL	CORSA	2006	PHI/CR2	TP12GM	OP-11.P1	SI
OPEL-VAUXHALL	INSIGNA	2008	PHI/CR2	TP12GM	OP-11.P1	SI
OPEL-VAUXHALL	MOVANO	2002	PHI/CR2	TP12RN	NE-38.P4	SI
OPEL-VAUXHALL	SIGNUM	2003	PHI/CR2	TP12GM	OP-11.P1	SI
OPEL-VAUXHALL	SIGNUM	2003-2005	PHI/CR2	TP12GM	OP-WH.P	SI
OPEL-VAUXHALL	VECTRA	2002-2004	PHI/CR2	TP12GM	OP-WH.P	SI
OPEL-VAUXHALL	VECTRA	2004	PHI/CR2	TP12GM	OP-11.P1	SI
OPEL-VAUXHALL	VIVARO	2002	PHI/CR2	TP12RN	NE-38.P4	SI
OPEL-VAUXHALL	ZAFIRA	2006	PHI/CR2	TP12GM	OP-11.P1	SI

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In order to be able to use the TPX4 correctly, you have to update the following elements:

- 1) TRS5000 PC Software (Rev.2.70)
- 2) TPH Cloner (32.1.F).
- 3) TRS5000 firmware (Rev.trs5307.BIN).
- 4) TRS5000 TXT (Rev.3.07).

Note: Once you have downloaded TRS5000\_V270.exe you have all the files necessary on your computer.

## TRS5000 PC Software update with Windows XP.

Once you have downloaded the latest application for TRS5000 PC software, TRS5000.exe, available from the JMA website, (www.jma.es), run that file either directly from the web site, or from the location where you saved it.

The quick installation quides are also available from the same JMA download web site.

If you have a previous update of the TRS5000, the messages that will appear will be those for steps 1-8. If you have no previous version installed, the steps necessary will be those from 4-8.

1) As soon as you run the trs5000.exe program, the first menu that appears refers to the fact that our software, like many others, does not have a digital signature recognised by the manufacturer of the Microsoft operating system. Click **RUN** to continue installing the software.

	Nombre:	Trs5000.exe
	Fabricante:	Fabricante desconocido
	Tipo:	Aplicación
	De:	C:\Documents and Settings\jonkar.ALTUNA\Escrito
Preg	juntar siempre	Ejecutar Cancelar antes de abrir este archivo

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 If the program detects an installed version prior to 2.50, you can choose between automatic removal (click yes) (preferential option) or manual removal (click NO).
 If you select yes, a backup copy is made of the customer database, and all the records stored are saved.

TRS5000 - InstallShield Wizard
Preparando instalación Espere mientras InstallShield Wizard prepara la instalación.
El programa de instalación de TRS5000 está preparando InstallShield Wizard, que le guiará durante el resto del proceso de instalación. Espere por favor.
InstallShield

3) If you select the automatic option (**yes**), the following message appears. If you select yes again, all the files will be deleted **EXCEPT for the customer database**.



So automatically all the old files incompatible with the new operating systems Windows VISTA / 7 will be removed. Once the process has been completed, the following final message will appear:



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TRS5000 - InstallShield Wiza	rd
	Desinstalación completa
	InstallShield Wizard ha terminado de desinstalar TRS5000.
Install Shield	< <u>A</u> trás <b>Finalizar</b> Cancelar

Once you click **end**, **you have to run the trs5000.exe application again**, for the installation program to install the customer database, together with the files for the new version 2.70.

4) Run trs5000.exe again. It will show the same message from section 1. Then select the equipment configuration language:



5) Once you have selected the installation language, accept the terms of the licence agreement, click **next** to continue installing the version:





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Lea cuidadosamente el acue	rdo de licencia siguiente.
	IMPORTANT-READ CAREFULLY. This JMA End-User License Agreement ("EULA") is a legal AGREEMENT between you and JMA for the TRS5000 software product identified above, which product includes computer software and may include associated media, printed materials, and "online" or electronic documentation ("SOFTWARE PRODUCT"). By installing, copying, or otherwise using the SOFTWARE PRODUCT, you agree to be bound by the terms of this EULA. If you do not agree to the terms of this EULA, then DO NOT install or use the SOFTWARE PRODUCT; in such event the original purchaser may, however, return it to the place of purchase within thirty days of the date of original purchase for a full refund. SOFTWARE PRODUCT LICENSE 1) GRANT OF LICENSE. The SOFTWARE PRODUCT is licensed, not sold. This EULA grants you, the registered computer software developer, the following rights: Applications Software. The SOFTWARE PRODUCT may be used only by you. You may install and use one copy of the SOFTWARE PRODUCT, or any prior version thereof for the same operating system, on a single computer but only for use in the number of withen language(s) that you selected at time of first installation and in which you have acquired rights; provided that such use complies with all applicable laws. You agree to indemnify, defend and hold harmless JMA against any claims arising out of any the control los términos del acuerdo de licencia
InstallShield	< Atrás Siguiente > Cance

6) Enter the user name together with that of the organisation and click **NEXT**.

TRS5000 - InstallShield Wiza Información del cliente Introduzca la información necesa	rd 🛛 🔀
	Nombre de usuario: user Nombre de organización: JMA Instalar esta aplicación:
InstallShield	< <u>A</u> trás <u>S</u> iguiente > Cancelar

7) You can see at all times the status of the tasks being carried out, by looking at the process indicator bar:

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TRS5000 - InstallShield Wizard		
Estado de la instalación		
	El Asistente de InstallShield(R) está instalando TRS5000	
	Instalando	
	C:\\JMA\TRS5000\TRS Update\firmware-update-es.pdf	
InstallShield		Cancelar

8) Finally, click **END** to complete the updating process:

TRS5000 - InstallShield Wizar	d
	InstallShield Wizard completo
	InstallShield Wizard ha instalado TRS5000 con éxito. Haga clic en Finalizar para salir del asistente.
InstallShield	< <u>A</u> trás <b>Finalizar</b> Cancelar





## **TPH Cloner Firmware Update.**

Once you have installed the new version of TRS5000 PC software, run the TPH cloner update program that appears in the pull-down menu on the left as well as on the title bar at the top. To continue with the update, take the following steps into account:

- 1. Switch on the TPH Cloner (Led changes from red (Initialization) to green (ready for cloning).
- 2. You do not have to disconnect all the TPH-TPX-TRS500 wiring. However, to prevent any communication interference during the update process for the TPH Cloner, it is advisable to switch off the TRS5000.
- 3. Connect the usb between the PC and the TPH Cloner (TPH Cloner LED goes out).

**NOTE**: When the TPH CLONER is connected to the computer, the Windows operating system will detect new hardware. You have to install the driver manually, so you must **NOT** allow Windows to select the driver automatically. In the Windows wizard, select the option "no, NOT AT THIS TIME"



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Select the driver from a specific location, therefore select "Install from a list or SPECIFIC location"."



And finally you have to select the folder containing the TPH CLONER driver. First, highlight "**SEARCH FOR the BEST DRIVER in these locations**". After this option, just select the option "**include this location in the search**". By default, the DRIVER is located in the following folder: "C:\PROGRAM FILES\JMA\TRS5000\TPH Usb Drivers" which you select by clicking the browse button.

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Asistente para hardware nuevo e	ncontrado
Elija sus opciones de búsqueda o	e instalación.
<ul> <li>Buscar el controlador más adec Use las siguientes casillas de ve cual incluye rutas locales y med</li> <li>Buscar en medios extraíb</li> <li>Incluir esta ubicación en C: Varchivos de programa</li> <li>No buscar. Seleccionaré el con Mediante esta opción podrá sel puede garantizar que el controla</li> </ul>	uado en estas ubicaciones. rificación para limitar o expandir la búsqueda predeterminada, la ios extraíbles. Se instalará el mejor controlador que se encuentre. les (disquete, CD-ROM) la búsqueda: IVJMA\TRS5000\TPH Usb Drivers Examinar trolador que se va a instalar. eccionar de una lista el controlador del dispositivo. Windows no ador que elija sea el más apropiado para su hardware.
	< Atrás Siguiente > Cancelar
Asistente para hardware nuevo e	ncontrado
Fina hard El asistr	<b>lización del Asistente para</b> ware nuevo encontrado ente ha terminado de instalar el software para: USBasp
Haga c	lic en Finalizar para cerrar el asistente.
	< Atrás <b>Finalizar</b> Cancelar

4. Run the TPH Cloner Updater program, from the updated TRS5000 PC software, in the application's pull-down menu or the top bar in the "?" section.







Once the TPH Cloner update program is running, the program opening time depends on the customer's PC, you have to select the file with the .ufp extension which will be loaded into the TPH Cloner and will enable you to use the new TPX4 transponder.











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The file is selected automatically by the program, from the default location (C:\PROGRAM FILES\JMA\TRS5000\) or where you saved it, by clicking the FILE button on the UFP Filename bar. Select open on the pull-down menu to continue with the update.

FP Filename	Abaia							
FP Data	Buscar en: Documentos recientes Escritorio Mis documentos	TEST	ING_TPH-CLON_UPDT	Jufp	Una ve cargar le	Seleccior W_Updatec ción donde dado, presid seleccior ez seleccior os la opción os datos en	har el fichero I_XX.X.X.ufp'' d previamente se onando el botón on superior. nada la actualiza del menu "Abr la pantalla UFP	esde la haya n de ación, ir'' para DATA.
	Mi PC	Nombre: Tipo:	TPH_FW_Updated_32.1.D	_20110207.ufp	~	Abrir Cancelar		





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Once you have loaded the file, which you can check by simply looking at the data in the UFP DATA area, click the **PROG** option.



The program automatically deletes and loads the new version in the TPH Cloner FPGA. You can follow the progress of the installation with the progress bar and the time it is taking with the time counter.

🔚 Flash Memory Programmer [20100722]	
UFP Filename C:\JONKAR\TRANPONDER-AUTOMOVIL\TP_TXINOS\TPX3_HARD_PROJECT\PHILIPS_PROJECT\ARCAII_PHILIPS\SOFTWARE\	TPH_CLO
UFP Data	
FFFFFFF5599AA660C0001800000000         0C8006800000000000000000000000000000000	S
k -> Programming Flash 74% , Test time = 40 sec.	
	PROG

![](_page_11_Picture_6.jpeg)

![](_page_11_Picture_8.jpeg)

![](_page_12_Picture_0.jpeg)

Once the process has been completed, which can take from 1 to 3 minutes, the "program complete/program successful" message will appear.

NArchivos de programa/JMA/TRS5000/TPH_FW	_Updated_32.1.F_20110321.ufp	File
JFP Data		
FFFFFFFF559AA660C0018000000E0           IC8006800000003E0C6004800000004           IC8003804307C90C003800000004           IC00180000000000000000000000000000000000	Program complete X Program Successful Aceptar	
		Upload

Once the program shows the "Program Successful" screen click "Exit".

![](_page_12_Picture_6.jpeg)

![](_page_12_Picture_7.jpeg)

![](_page_13_Picture_0.jpeg)

### TRS5000 firmware update.

To update the TRS-5000 machine you have to connect it to the computer using the USB cable. If this is not the first time you have connected the TRS-5000 to the computer, jump to page **17**. If it is the first time you have connected the **TRS-5000** to the computer, the computer will show the Found New Hardware Wizard. You need to follow these steps:

When you connect the TRS-5000 to the computer using the USB cable, the Windows operating system will detect new hardware. You have to select the driver manually. So you must **NOT** allow Windows to select the driver automatically. In the Windows wizard select the option "**No**, **not this time**".

Asistente para hardware nuevo encontrado			
	Éste es el Asistente para hardware nuevo encontrado Windows buscará el software existente y el actualizado en su equipo, en el CD de instalación de hardware o en el sitio Web de Windows Update (con su permiso). Leer nuestra directiva de privacidad		
	¿Desea que Windows se conecte a Windows Update para buscar software? Sí, sólo esta vez Sí, ahora y cada vez que conecte un dispositivo No por el momento		
	Haga clic en Siguiente para continuar.		
	< Atrás Siguiente > Cancelar		

![](_page_13_Picture_9.jpeg)

![](_page_14_Picture_0.jpeg)

Select the driver from a specific location. To do this select "Install from a list or specific location".

![](_page_14_Picture_2.jpeg)

And you have to select the folder where the TRS-5000 driver is. First highlight "**Search for the best driver in these locations**". After this option, just select the option "**Include this location** in the search". By default the driver is located in the following folder: "C:\PROGRAM FILES\JMA\TRS5000\**TRS Usb Drivers**" which you can select by clicking the browse button.

Asistente para hardware nuevo encontrado			
Elija sus opciones de búsqueda e instalación.			
<ul> <li>Buscar el controlador más adecuado en estas ubicaciones.</li> </ul>			
Use las siguientes casillas de verificación para limitar o expandir la búsqueda predeterminada, la cual incluye rutas locales y medios extraíbles. Se instalará el mejor controlador que se encuentre.			
Buscar en medios extraíbles (disquete, CD-ROM)			
🗹 Incluir esta ubicación en la búsqueda:			
C:\Archivos de programa\JMA\TRS5000\TRS Usb Drivers			
🔿 No buscar. Seleccionaré el controlador que se va a instalar.			
Mediante esta opción podrá seleccionar de una lista el controlador del dispositivo. Windows no puede garantizar que el controlador que elija sea el más apropiado para su hardware.			
Atrás Siguiente > Cancelar			

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![](_page_14_Picture_9.jpeg)

![](_page_15_Picture_0.jpeg)

On the following screen you can select any file from the list and then click continue.

Asistente para hardware n	uevo enco	ntrado	
Seleccione de la siguient	e lista el ha	rdware que mejor se ajus	te al suyo.
Communications	Port		
Descripción	Versión	Fabricante	Ubicación
Communications Port	5.1.2600.0	Microchip Technology, Inc.	c:\windows\inf\oem20.inf
Communications Port	5.1.2600.0	Microchip Technology, Inc.	c:\windows\inf\oem26.inf
Communications Port	5.1.2600.0	Microchip Technology, Inc.	c:\windows\inf\oem27.inf
Este controlador n Por qué la firma de co	no está firm ontroladores e	<mark>ado digitalmente.</mark> <u>s importante</u>	
		< <u>A</u> trás	Siguiențe > Cancelar

In the following confirmation message, you have to click "Continue".

Instalación de hardware		
<u>.</u>	El software que está instalando para este hardware: Communications Port no ha superado la prueba del logotipo de Windows que comprueba que es compatible con Windows XP. (¿Por qué es importante esta prueba?) Si continúa con la instalación de este software puede crear problemas o desestabilizar la correcta funcionalidad de su sistema bien inmediatamente o en el futuro. Microsoft recomienda que detenga esta instalación ahora y se ponga en contacto con su proveedor de hardware para consultarle acerca del software que ha pasado la prueba del logotipo de Windows.	
	Continuar Detener la instalación	

![](_page_15_Picture_8.jpeg)

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![](_page_15_Picture_10.jpeg)

![](_page_15_Picture_11.jpeg)

![](_page_16_Picture_0.jpeg)

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And after clicking finish on the following screen, the driver installation is completed. You can now continue updating the TRS-5000 firmware.

![](_page_16_Figure_2.jpeg)

![](_page_16_Picture_7.jpeg)

![](_page_17_Picture_0.jpeg)

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#### LOADING THE FIRMWARE ONTO THE TRS-5000

Finally, and to complete this installation process for the correct use of the TPX4, you need to update the TRS5000, as you regularly do:

1. On the Options Menu, in the pull-down bar on the left, or in the title bar at the top, select the **SETTINGS** option, where you can select both the communication port and the graphic interface language.

The Communication Port pull-down bar will show all the ports available at that moment to establish communication between the TRS5000 and the PC.

You have to select the virtual serial USB port (USB logo to the left of the port number) which in the case of the figure shown below is COM22.

The number of this port will change depending on which physical USB port you connect the TRS5000 to, as well as any programs installed previously which use those ports. If, at first, the USB port does not appear, click **RELOAD COM PORT LIST**, for a new reading of the ports available.

To establish communication, select the port and click **START COMMUNICATION)** or double click on the port in question.

![](_page_17_Picture_8.jpeg)

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![](_page_17_Picture_13.jpeg)

![](_page_18_Picture_0.jpeg)

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2. To download the file (trs5307.BIN) to the TRS5000, you just have to select the **UPDATE PROGRAM** option in the Options Menu, either in the pull-down menu on the left or in the title bar at the top.

Select the file with the new version, in the location where it is (by default in this folder "C:\Documents and Settings\All Users\program data\JMA\TRS5000\TRS Update", and click FILE, download by clicking SEND.

![](_page_18_Figure_3.jpeg)

NOTE: The COM status LED must be green, which indicates there is communication between the PC-TRS5000.

3. Finally, download the .TXT file linked to each new version of firmware. To do this, as in the section above, select the **SEND TEXT** option in the Options Menu, either in the pull-down menu on the left or in the title bar at the top. Select the file based on the language you want the TRS to display.

As in the section above, select the .TXT file from the location in which it has been placed, click **FILE**, then download by clicking **SEND**.

![](_page_18_Picture_8.jpeg)

![](_page_19_Picture_0.jpeg)

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![](_page_19_Picture_2.jpeg)

NOTE: As already mentioned, the COM status LED must be green, which indicates there is communication between the PC-TRS5000.

## Points to bear in mind with the TPX4.

As already mentioned, the inclusion of the new TPX4 transponder completes the range of vehicles covered by the TPX3.

Likewise, the two transponders will coexist without any problems until all the TPX3 stock is used up.

TPX3/4 will always appear in the TRS5000 messages, as the two transponders are compatible in most cases.

The TRS will only tell us when the vehicle in question needs a TPX4.

In any case, if you do not have a TPX4 at that moment, you can make the copy just as until now using the TPX3.

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![](_page_20_Picture_0.jpeg)

The flow chart below shows in a simple way when the use of a TPX4 is required and the options the program provides.

![](_page_20_Figure_2.jpeg)

![](_page_20_Picture_5.jpeg)

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www.**jma**.es

![](_page_21_Picture_0.jpeg)

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There follows a brief explanation of how the TPH Cloner and TRS5000 work together as a unit, detailed from the flow chart provided above:

- 1. It is the TPH Cloner that automatically analyses and selects the need to use a TPX3 or TPX4 based on the reading of the key (once the secret key has been obtained, the page data are accessible for reading and subsequent copying).
- 2. Therefore the TRS5000 has to go into TPH Cloner mode, ("TPH Cloner Ready" will appear on the display together with "Ins Original Key" "pRESS READ".).
- 3. Depending on the page 3 TMCF values, more specifically the MS0, MS1 and ENC values, the TPH Cloner will indicate whether you need a TPX4 or not.
- 4. The current messages: "Warning!!! E1. see TP list" will disappear when using the TPX4.
- 5. If you do not have a TPX4, when the vehicle requires one, you can still copy onto a TPX3, as you have done until now and the warning message will then appear. (However, in this specific case you won't be able to cover the vehicles on the new list).

![](_page_21_Picture_11.jpeg)

![](_page_22_Picture_0.jpeg)

The text messages the TRS will show when the TPH CLoner detects that the vehicle is not 100% compatible with the TPX3 and needs a TPX4 are as follows:

![](_page_22_Figure_2.jpeg)

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![](_page_22_Picture_8.jpeg)

![](_page_23_Picture_0.jpeg)

Possible confusion on the part of the customer when inserting a TPX3 instead of a TPX4 and vice versa has also been taken into account.

![](_page_23_Figure_2.jpeg)

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![](_page_23_Picture_5.jpeg)