

MIRAScript v03.50 – User guide

MiraScripts are a set of scripts for Magneti Marelli navigation system model RT4 and RT5, to let you perform directly in your car some useful action just like well done by third party PC utilities.

The primary step is to burn these scripts on a CD **to be kept in the car, without the need to do the three step operations** (read in a car, modify on PC, write back in the car), as generally required by the PC utilities. Just unpack all the files you found in the distribution archive, and burn a normal ISO9660 finalized CD. If you wish, you can copy them into the root of a USB device.

MiraScript is now distributed in two versions:

- **MiraScript 8.1x** this is for system with software version lower than 8.20
- **MiraScript 8.20** this is mandatory for system with software version from 8.20 to up, but work good also in system with software version from 8.00 to up

In MiraScript for sw:8.1x, after copying to CD/USB, you must have four files in root and one folder:

- **BUILTINS.OUT**
- **BUILTINS.OUT.inf**
- **CD_VER.NAV**
- **NAV_UPGRADE.CMD**
- **/CMD** (containing all the scripts as listed below)

In MiraScript for sw:8.20, after copying to CD/USB, you must have three files in root and two folders:

- **BUILTINS.OUT**
- **BUILTINS.OUT.inf**
- **POI_VER.POI**
- **/CMD** (containing all the scripts as listed below)
- **/UPG** (containing the upgrade script only)

Just insert the CD in your RTx (or plug the USB device in), and it will be recognized like an update disk. The user interface is very limited due to the RTx operating system limits, so expect a question dialog to appear with simple YES or NO options. **MiraScripts starts with the CMD launcher**: it asks you what script to run. **The scripts are listed sequentially** and when you select the one you wish, the launcher stops and runs the script. Some scripts reboot the system at the end. Please, remember to disconnect any USB device and/or eject CD before confirming the reboot. System reboot with a media inserted is not a serious problem, but **the boot time is longer** than normal because the system checks if the connected media is an upgrade disk and the **MiraScripts will start immediately**. Scripts included are:

- **AGENDA.CMD**
- **CONFIGFLAG.CMD**
- **GPH_COPY.CMD**
- **HD_COPY.CMD**
- **HRDISPLAY.CMD**
- **JBX_COPY.CMD**
- **JBX_EXTRACT.CMD**
- **LRDISPLAY.CMD**
- **READ_CFG.CMD**
- **RRDISPLAY.CMD**
- **RT_COPY.CMD**
- **RTBI.CMD**
- **RTXSERVICE.CMD**
- **RTxSET.CMD**
- **RTXud.CMD**

- **SMS.CMD**
- **SPY.CMD**

Start from this version of MiraScript, there is no more the script USB_DIRPLAY.CMD, because it is no more useful, since upgrading the system software to version 8.11, will give you a full functional usb mp3 player.

Upgrade CD for system software version 8.11 is available on PSA service, at very low price.

USEFUL TRICK

To run a single script immediately, that means without need to select it from the list of the available scripts, delete all files in the /CMD folder and leave just the script you wish.

In this case (only one script in the /CMD folder) the script launcher don't ask to you for confirmation and run the **unique script present** immediately.

AGENDA.CMD

This script is a simply way to retrieve the phone book file “**Agenda.dat**” to be used subsequently on PC with programs like my RTXAGENDA.exe.

If an **Agenda.dat** file exists in the USB root, you are prompted to "**WRITE Agenda.dat ?**". Just answer **NO** to retrieve the actual file from RTx system with the request "**READ Agenda.dat ?**".

Note: if no **Agenda.dat** file is in the root of your USB device, the only question is "**READ Agenda.dat ?**".

After you accept the write question, script ends with message "**Copy completed**", reboot is no more needed.

When you attempt to write back to RT4 your modified Agenda.dat file, don't forget to put in usb root also the correct control file Agenda.dat.inf.

CONFIGFLAG.CMD

This script is written for **sw:8.xx**.

It can change the configuration flag like the other program of mine, 811_configflag do, but it work directly on RT4, and **without** need to execute again the **update** process.

Changed flag are:

- **USB** enable mp3 direct play from internal usb port (it isn't the usb-box)
- **DVD** maybe in the future it enable DVD video reproduction
- **BT** enable Bluetooth for RT5 with correct hardware inside
- **BT_AGENDA** enable use of internal RT4 agenda with external BT device (I'm not sure)

Script prompt to you, in sequence, for the all the flags, the actual value and ask to change to new value.

You must answer YES if you wish to change.

Answering NO for all flags, don't produce any write operation to the system files, so it can be useful to check the current status of the flags.

At the end confirm **reboot** of RT4 to let new setting become active.

GPH_COPY.CMD

This script can copy the graphics database files to RTx /C partition.

IT SUPPORT ONLY RTX SOFTWARE VERSION 8.xx.

On USB drive (or also on the CD) you must put your gph file to copy (and don't forget the associated .inf file), in one, or more, of the following folder, as they should be in the /Data_base/Graphic folder on the /C partition:

- /Common
- /Day
- /DE
- /DU
- /EN
- /ES
- /FR
- /HARM00
- /HARM01
- /HARM02
- /HARM03
- /HARM04
- /HARM05
- /HARM06
- /IT
- /Night
- /PO
- /SC
- /TU
- /800x446/Common
- /800x446/Day
- /800x446/DE
- /800x446/DU
- /800x446/EN
- /800x446/ES
- /800x446/FR
- /800x446/HARM00
- /800x446/HARM01
- /800x446/HARM02
- /800x446/HARM03
- /800x446/HARM04
- /800x446/HARM05
- /800x446/HARM06
- /800x446/IT
- /800x446/Night
- /800x446/PO
- /800x446/SC
- /800x446/TU

For all known files found in the listed folder you receive a question to confirm the copy to the RTx drive. Reboot at the end is not mandatory, for example you can load a new color theme without reboot.

WARNING:

Do not replace the theme you are currently use, because if something goes wrong during copy, your RTx system will can't boot up. If you wish to update your current theme, **change it to something else **today**, and execute the **update tomorrow**.**

HD_COPY.CMD

This script does a complete or partial backup of RTx partitions. It asks you what to copy by following a sequence of questions:

- **"Copy Main Disk?"** is the /C partition
- **"Copy Flash Disk?"** is the /F flash disk
- **"Copy User Disk?"** is the /I partition
- **"Copy Navy Disk?"** is the /H partition
- **"Copy Jukebox Disk?"** is the /J partition

All the answers (both YES and NO) you selected, will be processed at the end of the question list as above mentioned. The total number of files and the total size in Mb, will be displayed, then, asking you to continue. Copying is done with the technique to stop after every 50 MB data copied (but it can be changed editing the /CMD/HD_COPY.cmd at line *#define MAX_SIZE (50*_IMBYTE)*), then asking for user input to continue. This is very useful to permit segmented copy, given that the complete copy process may take several hours (the USB protocol of the RTx device is 1.1). Some additional files are saved on USB device, so if you decide to stop and restart the HD_COPY script, copy operations will be resumed from where it was stopped.

HRDISPLAY.CMD

This script set the display mode to High Resolution (800x480).

It can be use only on system with software version upper than or equal to 8.00.

When start it ask confirmation to “set to HR mode”, then it reboot.

To revert to low resolution video, use the script LRDISPLAY.CMD

Be careful:

Enable HR mode on a low resolution video don't produce any damage to your system, but you can't see the whole image, so it will be a bit difficult to came back.

So **use this script only if your display type is a High Resolution display.**

JBX_COPY.CMD

This script updates the Jukebox from any USB device. If you have MiraScripts on CD you can insert a USB device with mp3 song and **copy them from USB**.

The first question JBX_COPY asks you is: "**Only Rebuild Catalogue.dat?**".

- 1) If you answer **YES** the script doesn't start the mp3 copy function, but it **rebuilds** the catalogue information, scanning the actual content of jukebox disk.
Answering **NO** will take you to the following step.
- 2) "**Copy all Albums?**" is the first question. If answering **YES** you won't receive other questions.
If you select "**NO**" you may desire a partial copy so you have to confirm the copy process for each album. Select "**Album /album_name?**", then what copy "**All songs of /album_name?**" or confirm each song. As soon as the songs selection is terminated, a report with total number of songs to copy and their total size, will appear to let you confirm the copy process start.

Copy is done with segmented technique (like HD_COPY) to permit the copy of large quantity of songs that may take several hours.

Regard the previous version no more reboot of the system is needed to use the updated catalogue.

JBX_COPY adjusts the folder name of copied mp3, to one level folder deep, as RTx system requires, by simply changing the folder separator symbol '/' with a minus '-'. If you have a /author/year/album/song.mp3 it then becomes /author-year-album/song.mp3.

Songs stored in root folder of USB device will be copied on a fixed name album on jukebox, called /JBXCMD.

JBX_EXTRACT.CMD

This script is essentially the opposite of the previous JBX_COPY. It transfers mp3 song from jukebox HD to USB device. You will be prompted to choice what to copy: **"Copy all Albums?"** is the first question. If you answer **YES** you won't receive any other questions. If you answer **NO** you are going to select a partial copy, so for each album you have to confirm the operation. **"Album/album_name?"**, then what to copy: **"All songs of /album_name?"** or check each song. As soon as terminating the songs selection, a report will appear showing the total number of songs to copy and their total size. It must be acknowledged to start the copy operation. Copy is done with segmented technique (like HD_COPY) to permit the copy of a large quantity of songs that may take several hours. Catalogue.dat format for sw:710 and sw:7.11 is supported by JBX_EXTRACT.

LRDISPLAY.CMD

This script set the display mode to Low Resolution (480x234).
It can be use only on system with software version upper than or equal to 8.00.
When start it ask confirmation to “set to LR mode”, then it reboot.

To revert to high resolution video, use the script HRDISPLAY.CMD

READ_CFG.CMD

This simple script interrogate the system to retrieve information about Hardware and Software configuration. Value read from system are displayed on RT4 screen, and also written to usb device in file "configuration.txt". User prompt is not used, don't matter if you answer yes or no, just press the button to skip to next value.

Possible Hardware configuration are:

	0	1	2	3
CFG_HW_BT	PBA_31308	NO_BT_HW	PBA_31308	PBA_31308
CFG_HW_GSM	WISMO_Q24AU	WISMO_Q24AU	WISMO_Q24AU	NO_HW_GSM
CFG_HW_RADIO	RB410	RB400	RB410	RB410
CFG_HW_FOR_SIRIUS	NO	NO	NO	NO
CFG_HW_GPS	ATMEL	ATMEL	ATMEL	ATMEL

	4	5	6	7
CFG_HW_BT	NO_BT_HW	NO_BT_HW	NO_BT_HW	NO_BT_HW
CFG_HW_GSM	WISMO_Q24AU	NO_HW_GSM	WISMO_Q24AU	NO_HW_GSM
CFG_HW_RADIO	RB410	RB400	CLARION	RB400
CFG_HW_FOR_SIRIUS	NO	NO	NO	NO
CFG_HW_GPS	ATMEL	ATMEL	ATMEL	ATMEL

	8	9	10	11	12	13
CFG_HW_BT	NO_BT_HW	NA	NA	PBA_31308	PBA_31308	NA
CFG_HW_GSM	WISMO_Q24AU	NA	NA	NO_HW_GSM	WISMO_Q24AU	NA
CFG_HW_RADIO	CLARION	NA	NA	RB410	RB410	NA
CFG_HW_FOR_SIRIUS	NO	NA	NA	YES	NO	NA
CFG_HW_GPS	ATMEL	NA	NA	ATMEL	ATMEL	NA

	14	15	16
CFG_HW_BT	NA	NA	PBA_31308
CFG_HW_GSM	NA	NA	NO_HW_GSM
CFG_HW_RADIO	NA	NA	MB500
CFG_HW_FOR_SIRIUS	NA	NA	NO
CFG_HW_GPS	NA	NA	SIRF

Possible Software configuration are:

	APPLICONFIG	7.10	7.05	8.00
CFG_SW_BRAND	PSA	PSA	PSA	PSA
CFG_SW_G2P	OFF	OFF	OFF	OFF
CFG_SW_GPH_DEM	OFF	OFF	OFF	OFF
CFG_SW_PASS_NEAR	OFF	OFF	OFF	OFF
CFG_SW_RDS	ON	ON	OFF	ON
CFG_SW_TMC	OFF	ON	ON	ON
CFG_SW_ZONE_APPLI	EUROPE	EUROPE	CHINE	EUROPE
CFG_SW_LOOP_MENU	TRUE	TRUE	TRUE	TRUE
CFG_SW_GPH_BASE	PSA_EUROPE	PSA_EUROPE	PSA_CHINE	PSA_EUROPE
CFG_SW_ROAD_BOOK	OFF	OFF	OFF	OFF
CFG_SW_FAST_DR	OFF	OFF	OFF	OFF
CFG_SW_AAC	OFF	OFF	OFF	OFF
CFG_SW_OGG	OFF	OFF	OFF	OFF
CFG_SW_DVB	OFF	OFF	OFF	OFF
CFG_SW_CAN_NETWORK	PSA_2004	PSA_2004	PSA_2004	PSA_2004

	8.10	8.50	M2008	DEMO
CFG_SW_BRAND	PSA	PSA	MASERATI	PSA
CFG_SW_G2P	OFF	OFF	OFF	ON
CFG_SW_GPH_DEM	OFF	OFF	OFF	OFF
CFG_SW_PASS_NEAR	ON	OFF	OFF	ON
CFG_SW_RDS	ON	ON	ON	ON
CFG_SW_TMC	ON	ON	ON	ON
CFG_SW_ZONE_APPLI	EUROPE	WORLD	WORLD	EUROPE
CFG_SW_LOOP_MENU	TRUE	TRUE	FALSE	TRUE
CFG_SW_GPH_BASE	PSA_EUROPE	PSA_CHINE	MASERATI	PSA_EUROPE
CFG_SW_ROAD_BOOK	OFF	OFF	OFF	ON
CFG_SW_FAST_DR	OFF	OFF	OFF	ON
CFG_SW_AAC	OFF	OFF	OFF	ON
CFG_SW_OGG	OFF	OFF	OFF	ON
CFG_SW_DVB	OFF	OFF	OFF	ON
CFG_SW_CAN_NETWORK	PSA_2004	PSA_2004	MASERAT	PSA_2004

	RNEG2010- EUROPE	M2009	RNEG2009- CHINE	RNEG2010- CHINE
CFG_SW_BRAND	PSA	MASERATI	PSA	PSA
CFG_SW_G2P	OFF	OFF	OFF	OFF
CFG_SW_GPH_DEM	OFF	OFF	OFF	OFF
CFG_SW_PASS_NEAR	OFF	OFF	OFF	OFF
CFG_SW_RDS	ON	ON	ON	ON
CFG_SW_TMC	ON	ON	ON	ON
CFG_SW_ZONE_APPLI	EUROPE	WORLD	CHINE	CHINE
CFG_SW_LOOP_MENU	TRUE	FALSE	TRUE	TRUE
CFG_SW_GPH_BASE	RNEG_PSA_EURO PE	MASERATI	RNEG_PSA_CHI NE	RNEG_PSA_CHI NE
CFG_SW_ROAD_BOOK	OFF	OFF	OFF	OFF
CFG_SW_FAST_DR	ON	OFF	ON	ON
CFG_SW_AAC	ON	OFF	ON	ON
CFG_SW_OGG	ON	OFF	ON	ON
CFG_SW_DVB	OFF	OFF	OFF	OFF
CFG_SW_CAN_NETWORK	PSA_2010	MASERAT	PSA_2004	PSA_2010

RRDISPLAY.CMD

This script **invert** the rotation screen flag,
When rotation flag is active, image will be displayed rotate by 180 degrees.
It can be use only on system with software version upper than or equal to 8.00.
When start it ask confirmation to “Rotate display”, then it reboot.
Two execution of the script restore the original value of the rotation screen flag.

RT_COPY.CMD

This script is a configurable copier. You can use it to copy data to or from your RTx unit, but a copy method must be configured before using the script in your car. Simply **create some folders READn and/or WRITEn and/or DELETEn** in a USB device. 'n' is a number ranging from 1 to 9 and must be sequential (eg. READ1,READ2,READ3), thus providing a total of 27 different jobs (9 read + 9 write + 9 delete). Such tasks can be programmed simultaneously on the USB device and you may decide to run every single task.

READn, WRITEn, DELETEn folders (any or all of them – it depends on the tasks you're planning to run) shall contain **the exact folders structure of the files (and the files themselves)** you want to read/write/delete from/on RTx unit. Here you have some more information:

- if you want to **Write** files on the RTx unit, the files to be copied must be in the **WRITEn** folder structure of the USB device as the example shows
- If you want to **Read/Delete** files from RTx unit you should create as many **dummy files** as necessary in the **/COPYn /DELETEn** folder structure of the USB device as the example shows

Examples of folders structure

```
/WRITE1/ USER_DATA/USER_PROFILE/User_com.dat (this is the real one)
/READ1/I/USER_DATA/USER_PROFILE/User_com.dat (dummy file)
/DELETE1/ USER_DATA/USER_PROFILE/Phone/SMS_book.dat (dummy file)
```

User_com.dat and SMS_book.dat in READ and DELETE sections of the above examples are the **dummy files** and follow the RTx data structure. The dummy file is essentially a placemark and its length or content are not essential: even a 0 byte file will be fine. It simply reminds the script which file to search and when found it overwrites/deletes it on/from RTx unit.

Another essential file is **DESCRIPTION.TXT** . **It must** exist in the root of every task folder you created. If absent, the folder content will not be processed by the script. It contains pure ASCII text (any notepad will do its job greatly) and its purpose is to describe the actual task being carried out by showing it on the user display (eg: "Copy P.O.I. to RT4").

RT_COPY usage is very simple: just follow the on-screen instruction to perform the tasks previously created. Simple questions will lead you through the whole process and the "Reboot?" question represents the end of all.

RT_COPY is able to execute heavy tasks, copying 250 MB of data a time (this limit can be modified by editing the /CMD/RT_COPY.cmd script at line *#define MAX_SIZE (250*_1MBYTE)*), and lets the user decide whether to continue or suspend the operations. Just remember that the USB protocol used by RTx is 1.1, so the copying process is very slow. The script writes the following additional files on USB device in order to remember the interruption copy point:

- **/LASTJOB.TXT**: stores the last READn or WRITEn used folder
- **/READn|WRITEn|DELETEn/RTCPY_FILELIST.TXT** : stores a complete list of files found in the folder
- **/READn|WRITEn|DELETEn/RTCPY_LASTCOPIED.TXT** : stores line numbers of last copied file in the list.
- **/READn|WRITEn|DELETEn/RTCPY_NOTCOPIED.TXT** : stores files not copied due to read or write error.

The copying process will be resumed as soon as the user runs the script again.

ATTENTION: Existing files in the destination folder will be overwritten without any user input.

RTBI.CMD

This simple script **IS ONLY FOR SOFTWARE VERSION 8.xx.**

Starting on software version 8.00 Marelli has introduced a boot speed technique called “**Turbo Boot**”, it saves a dump of memory on disk, and reloads it on the next boot.

When you modify a system file, you need to boot reading the real files on disk, and not the “Turbo Boot” memory image. To do that, this script simply calls the internal function **RemoveTurboBootInfo**.

You are asked to confirm execution before start.

RTXSERVICE.CMD

This script is the same script generated by the PC program RTXservice.exe.

It can read and write the file SERVICE.DAT to and from RTx drive.

If the service.dat file is present on the USB source device, you will prompted to write it to the RTx drive, only if you answer NO, the script ask you to read from RTx.

Otherwise if no service.dat file is present on USB, the only question you have is for read from RTx.

After write to RTx, the script let you choice if reboot the system.

RTxSET.CMD

This script **lets you modify** the “User_com.dat” file **directly on RTx device**. When starting it asks you to do a backup copy of current User_com.dat file, or, if a backup is already present, to restore it. RTxSET recognizes and modifies configuration file for sw:7.02 sw:7.10 sw:7.11 sw:8.00 sw:8.10 sw:8.11 sw:8.20. The editable values are divided in sections, and have the same name used by PC program RTXud.exe. Here is the list:

"View/modify GENERAL section?"

"Video speed" 5 or 225. It's the Km/h upper speed limit for video-in disabling.

"View/modify AUDIO section?"

"Ampli present" 0 or 1 if enabled and the amplifier doesn't exist, the output power will be reduced.

"Front beep" 1 or 4 or 7 level for park assist beep

"Rear beep" 1 or 4 or 7 level for park assist beep

"View/modify MENU section ?"

"Audio aux in" 0 or 1 enables the AUX in voice in the system menu.

"View/modify TRIP section ?"

"D295" 0 or 1 unknown

"D296" 0 or 1 unknown

"OBD page" 0 or 1 enables the cooler, temperature and tire pressure page in the TRIP display

"TRIP page" 0 or 1 enables On Board Computer pages

"Diagnostic menu" 0 or 1 enables the Diagnostic page in the System menu

"Service list menu" 0 or 1 enables Service list page in the Diagnostic menu

"View/modify VAN section ?"

"CD Changer" 0 or 1 enables CD changer support

"CDT" 0 or 1 unknown

"B323" 0 or 1 unknown

"B324" 0 or 1 unknown

"B325" 0 or 1 unknown

"B326" 0 or 1 unknown

"B327" 0 or 1 unknown

"B328" 0 or 1 unknown

"D329" 0 or 1 unknown

"D330" 0 or 1 unknown

"VTH" 0 or 1 unknown

"D332" 0 or 1 unknown

"Reset Tire U.P." 0 or 1 enables reset tire under pressure in Diagnostic menu

"D334" 0 or 1 unknown

"D335" 0 or 1 unknown

"D336" 0 or 1 unknown

"Rear park assist" 0 or 1 enables rear park assist, graph and sound

"Front park assist" 0 or 1 enables front park assist, graph and sound

"D339" 0 or 1 unknown

"Hydr.susp.frame " 0 or 1 unknown

"EMF config " 0 or 1 unknown

"VMF/VCCF" 0 or 1 or 2 related to button on steering wheel commands

"View/modify VIDEO section ?"

"D353" 0 or 1 unknown

"D354" 0 or 1 unknown

"D355" 0 or 1 unknown

"Video 1 in" 0 or 1 enables Video in system menu

"D357" 0 or 1 unknown

"D358" 0 or 1 unknown

"View/modify AIRC section ?"

"Turn off L/R reg"	0 or 1 enables turn off L/R regulation in A/C menu
"A/C menu"	0 or 1 enables A/C menu in system menu, and A/C status windows
"D387"	0 or 1 unknown
"D388"	0 or 1 unknown

"View/modify VEICLE CONF section ?"

"Overtake help"	0 or 1 or 2 or 3 unknown
"Near obstacle det"	0 or 1 or 2 or 3 unknown
"Driver wellcome"	0 or 1 unknown
"Boot perm locking"	0 or 1 unknown
"Remote doors lock"	0 or 1 unknown
"Adaptable light"	0 or 1 unknown
"Auto headlight"	0 or 1 unknown
"Automatic brake"	0 or 1 enables Automatic brake in vehicle configuration menu
"Conf.Light menu"	0 or 1 enables Light configuration in vehicle configuration menu
"Ambient light"	0 or 1 enables Ambient light in light configuration menu
"Rear wiper"	0 or 1 enables Rear wiper in wiper menu
"Securoscope"	0 or 1 unknown
"Doors selectivity"	0 or 1 enables Vehicle access in vehicle configuration menu
"Diurnal headlight"	0 or 1 enables Diurnal Headlight in light configuration menu
"COE locking mode"	0 or 1 unknown
"Window partial open"	0 or 1 unknown
"D417"	0 or 1 unknown
"D418"	0 or 1 unknown
"Driving assistance"	0 or 1 enables Driving assistance in vehicle configuration menu
"D420"	0 or 1 unknown
"D421"	0 or 1 unknown
"D422"	0 or 1 unknown
"D423"	0 or 1 unknown
"D424"	0 or 1 unknown

"View/modify DISPLAY section ?"

"External temp"	0 or 1 unknown
"conf"	0 or 1 change configuration menu layout

"View/modify DIAG section ?"

"Speed limit"	0 or 1 unknown
"Speed trap"	0 or 1 enable "dangerous zone" in Navigation/options menu

"View/modify again ?"

Select YES if you wish to view again the previous configuration value.

After modifying all options the script will end asking you **"RTxSET Terminated! Reboot?"**.

YES is necessary for changes to be effective.

NOTE: Items feature and number listed above may depend on software version running on your RTx unit. Not all of them are really known at the moment and if you discover the meaning of any of them, please contact me and I will add your useful information to the script. Be aware that this script is very fast to use but many more hidden features of the User_com.dat file can be managed more deeply through any specific editor. The one I suggest is RTXud.exe.

RTXud.CMD

This script was written by RTXud.exe PC program with Init USB function. It is a simply way to retrieve the configuration file "User_com.dat" to be used subsequently on PC with programs like RTXud.exe.

If a **User_com.dat** file exists in the USB root, you are prompted to "**WRITE user_com.dat ?**". Just answer **NO** to retrieve the actual file from RTx system with the request "**READ user_com.dat ?**".

Note: if no **User_com.dat** file is in the root of your USB device, the only question is "**READ user_com.dat ?**".

After you accept the write question, RTXud asks you to reboot with the question "**Files copied. Reboot ?**". Reboot is always needed to permit the system to load changed configuration file.

When you attempt to write back to RT4 your modified user_com.dat file, don't forget to put in usb root also the correct control file user_com.dat.inf.

SMS.CMD

With this script all your SMS saved in the **SMS_book.dat** file is converted and written on the target USB device.

It create as many text files as the message present inside the sms_book.dat file.

Created files have name composed like:

DATE-TIME-NUMBER.TXT

Where:

DATE: 6 characters YYMMDD

TIME: 6 characters HHMMSS

NUMBER: up to 22 characters

SPY.CMD

For an exhaustive explanation of SPY data read the wiki page from **dmatos** at <http://rt4.wikidot.com>

With this script you can copy to USB device the content of the SPY folders, and clear them to free disk space on the /I drive.

All founded folder is copied completely, you are not able to copy a single file from a folder.

The script ask to you what to copy and then if you wish to delete the folder.

Useful SPY data are:

/UPG	there are some text file generated during update
/21403	the .bin file stored here, are standard bitmap (just rename it) of screenshot

Useful trick:

To generate a complete set of spy data (with screenshot), hold for more than 5 seconds (until you hear a beep) the audio setting button (on the upper right side of RTx). You must hear three beep to be sure collection of spy data was terminate (it take about 40 sec).

Notes

I remind everyone that my work was possible because others peoples before me have discovered and made public, the basic knowledge about the RTx Magneti Marelli world, it is my duty to mention and thank:

dmatos for the info given to me in private, and those present in his wiki page
<http://rt4.wikidot.com>

Janfi67 for the info given to me in private and for all programs and documents he made public on
<http://www.planete-citroen.com>

all users of the forums that I attend, that shared with the others information in their possession
<http://www.passionepeugeot.it> <http://www.citroen-c-club.com>
<http://www.c4atreros.es> <http://www.eurovan2.com>