



## **Introduction**

BootTools is the new universal software for the firmware upgrading of **Domino** and **EDINTRITID** modules. The supported interfaces between the PC and the field are: *DFRS*, *DFUSB*, *DFPRO*, *WEBS* and *DFCP*, for **Domino** BUS, and *MCPXT* for **EDINTRITID** BUS. The *DFWEB* module *CAN NOT BE* used like interface for the firmware update of the **Domino** modules. *DFRS*, *DFUSB*, *DFPRO*, *DFGSM3*, *MODGS*-*M3*, *DFCP* and *MCPXT* modules, as well as *FXPRO2*, can be upgraded by the same program directly through their serial port RS232 or USB.

## Firmware updating of Domino and CONTRICT through the BUS

For **Domino**, select the name of the module to be updated from the menu "*Modules*", like in the following figure:

BootTools - Ver	1.0.0.0								×
File Modules	Communicati	on Options	Help						
FLASH Dom	iino 🕨	Input Modul	es 🕨						
Cont	tatto 🕨	Output Mod	ules 🕨	06	08	0A	0C	0E	-
00000	FFFF	Temperature	, i	FFFF	FFFF	FFFF	FFFF	FFFF	
00010	FFFF	Sensors		FFFF	FFFF	FFFF	FFFF	FFFF	
00020	FFFF	Clocks	, ,	FFFF	FFFF	FFFF	FFFF	FFFF	
00030	FFFF	Energy Mana	rannent b	FFFF	FFFF	FFFF	FFFF	FFFF	
00040	FFFF	Lighting Gat	away k	DEDMAX	FF	FFFF	FFFF	FFFF	
00050	FFFF	Interfaces/C	ontrollorr b	DEDALL	FF	FFFF	FFFF	FFFF	
00060	FFFF	Dicplay	vincioners v	DFDALL	FF	FFFF	FFFF	FFFF	
00070	FFFF	CSM	, i	FFFF	FFFF	FFFF	FFFF	FFFF	
00080	FFFF	03111		FFFF	FFFF	FFFF	FFFF	FFFF	
00090	FFFF	FFFF	FFFF	FFFF	FFFF	FFFF	FFFF	FFFF	
000A0	FFFF	FFFF	FFFF	FFFF	FFFF	FFFF	FFFF	FFFF	
000B0	FFFF	FFFF	FFFF	FFFF	FFFF	FFFF	FFFF	FFFF	
00000	FFFF	FFFF	FFFF	FFFF	FFFF	FFFF	FFFF	FFFF	
000D0	FFFF	FFFF	FFFF	FFFF	FFFF	FFFF	FFFF	FFFF	
000E0	FFFF	FFFF	FFFF	FFFF	FFFF	FFFF	FFFF	FFFF	
000F0	FFFF	FFFF	FFFF	FFFF	FFFF	FFFF	FFFF	FFFF	-
Auto USB Enabled	- DFDALI								

As shown, the modules have been grouped according to the BUS type and the function, therefore, depending on the module to be updated, select from the "*Modules*" menu the BUS and the function. For instance, to update the firmware of "*DFDALI*" module, select the item "**Domino**", then "*Lighting Gateway*" and finally "*DFDALI*". At this point open the .HEX file related to the desired firmware. Attempting to open a .HEX file not related to the selected module, the program will report an error message.

The next step is the opening of the serial communication between the PC and the field interface. Connect the PC to one of the following interfaces/controllers: *DFRS*, *DFUSB*, *DFPRO*, *DFWEB* o *DFCP* and select, from the menu "*Communication*" the item "*Enable communication*". The following window will be shown:

	DFUSB - Ver. 1.0
Serial Port	
Port:	COM10 -
BaudRate:	19200 -
Interface	
<ul> <li>DFRS</li> <li>DFUS</li> <li>DFTS</li> <li>DFCF</li> <li>DFCP</li> <li>DFW</li> </ul>	B     Automatic Detection     Timeout: 1000       ID     Address: 0
IP Connection	
Use IP Add	dress
192	2 . 168 . 1 . 1 : 1001
	Close

Select the serial port of the PC to which the field interface has been connected and then select the Baud Rate; as option, select "*Automatic Detection*". Once the communication has been opened, click on the button "*Close*".

At this point, open the programming window selecting "*Communication*" and then "*Programming*". For **Domino** BUS, the following window will be shown:

				_
Boot Tools - Ver 1.0.0.0	- Waiting for u	iser comm	and	
Boot Tools - Ver 1.0.0.0 Address 1	- Waiting for u From:	400	and To: 3FBF	

Enter the address of the module to be updated and then click on the button "*Program*". If the module having the entered address correspond to the selected module and firmware file, then the program will begin the updating; on the contrary, an error message will be shown. To stop the updating before the end, click on the button "*Cancel*".

The button "*ID Ver*" allows to check the ID code and the firmware version currently loaded into the selected module (if this function is available for that module). Once the firmware updating is finished, click on the button "*Close*".

A similar procedure applies to **CONTRITIO** modules: select the desired module (e.g. MODDALI) as in the following figure:

H D	Communicat	tion Options	Help						
LASH LATE Dom	ino 🕨								_
Cont	atto 🕨	Input Module	es 🕨	06	08	0A	0C	0E	
00000	EF22	Dimmers	•	FFFF	EF80	F002	0012	FFFF	Т
00010	FFFF	Temperature	•	FFFF	EFOO	F002	0012	FFFF	1
00020	EC31	Sensors	•	F000	FFFF	FFFF	FFFF	FFFF	
00030	FFFF	Energy Mana	igement 🕨	FFFF	FFFF	FFFF	FFFF	FFFF	
00040	9EF2	Lighting Gate	eway 🕨	MODD	XIX	F080	6AF8	9C64	
00050	SEA6	Interfaces/Co	ontrollers +	MODD	ALI	D803	D82E	EFOO	
00060	F003	Access contr	ol 🕨	0E29	6E92	0E11	6E8A	0E10	1
00070	6E93	GSM	•	6E94	6AF2	0E80	6EF1	6AF0	
00080	6A9D	Hotel	· ·	6AD7	6AD6	0E82	6ED5	6ACF	
00090	6ACE	0EB1	6ECD	6ACC	68CB	0E06	6ECA	6AB3	1
000A0	6AB2	0E80	6EB1	6ABD	6ABA	6AC2	OEOF	6EC1	1
000B0	6AC0	0E07	6EB4	6AB5	0012	OEFE	6EF6	0E03	1
00000	6EF7	6AF8	0009	50F5	6E04	0009	50F5	6E05	1
000D0	0E55	1804	E102	OEAA	1805	E101	D001	D801	
000E0	0012	0E4D	6E60	6A56	6A5F	0100	958F	0004	
000F0	A482	D022	0100	898F	0100	B58F	D01C	5056	

As described for **Domino** BUS, select the module of family **DONTATIO** (e.g. **MODDALI**) and open the related .HEX file. Open the serial communication from menu "**Communica-***tion*" and then "**Enable communication**"; for **EDITIFITIO** modules the field interface can be **MCPXT** only. The following window will be shown:

	FXP-XT Ver FW. 4.1 :	. 1.0 3.0			
Serial Port					
Port:	COM8	•			
Baud Rate:	115200	•			
Interface					
Automatic Detectio Advanced Options	n ;	Time (	Dut: [	1000	
Automatic Detectio Advanced Options	n 5	Time ( Addr	Dut:	0	
Automatic Detectio Advanced Options IP Connection O HSYCO	n IO Server	Time (	Dut: [	0	
Automatic Detectio Advanced Options IP Connection HSYCO Other	n IO Server Password	Time (	) sta	0	
Automatic Detectio Advanced Options IP Connection HSYCO © Other Use IP Address	N Server Password	Time ( Addr	Dut: [ 988: [	1000	100





Select the serial port of the PC to which the field interface has been connected and then select the Baud Rate; as option, select "*Automatic Detection*". Once the communication has been opened, click on the button "*Close*".

At this point, open the programming window selecting "*Communication*" and then "*Programming*". For **CONTRICT** BUS, the following window will be shown:

M Firmware update				-	- • 💌
Boot Tools - Ver	1.0.0.0 - Waiti	ing for u	ser comm	and	
Address 1	<ul> <li>Input</li> <li>Output</li> </ul>	From:	400	To:	3B3F
Activate Boot	Program				
ID Ver	Reset				Close

Enter the address of the module to be updated and then click on the button "*Activate Boot*". The program will check if some modules on the bus are already waiting for firmware updating and, if not, it will prepare the selected MOD-DALI module to receive the new firmware; if this procedure is successfully executed, then "*Bootloader ready*" will be shown, on the contrary an error message will be reported.

Click on the button "**Program**" to start updating; at the end, a message reporting the module name and its new firmware version will be shown, or an error message will be displayed if some problems occurred.

The button "*ID Ver*" allows to check the ID code and the firmware version currently loaded into the selected module. The button "*Reset*" allow resetting the module (if needed, this action is automatically performed at the end of updating). Once the firmware updating is finished, click on the button "*Close*".

# Firmware updating of DFRS, DFUSB and DFPRO devices

To upgrade the firmware of *DFRS*, *DFPRO* and *DFUSB*, a procedure similar to that one described before for **Domino** modules has to be applied, but these module do not need any address.

The programming window will be the following:

Firmware update			- • •
Boot Tools - Ver 1.0.0.0 - Wait	ting for u	ser com	mand
BootTools - Ver 1.0.0.0 - Wait	ting for u From:	ser com	mand To: 58B

## Firmware updating of DFTOUCH module

The firmware updating of **DFTOUCH** module <u>does not</u> <u>need any field interface and the PC must be connected dir-</u> <u>ectly to it</u>. For **DFTOUCH** updating, the special cable named **CVXT** connected to the blue connector on the rear side must be used.

After having selected **DFTOUCH** and opened the desired firmware file, open the communication selecting from main menu "**Communication**" and then "**Enable communica-***tion*". The following window will be shown:

	XP-XT Ver. FW. 3.8 : 0	1.0 .0	
Serial Port			
Port:	COM8	-	
Baud Rate:	57600	•	
Interface			
Automatic Detection		Time Out:	1000
Advanced Options		Address:	0
IP Connection			
HSYCO	IO Server		
Other	Password		
Use IP Address	192 - 168	. 1 .	1 : 100
Use Server Name:			

Select the serial port of the PC to which **DFTOUCH** has been connected and then select the Baud Rate; as option, select "**Automatic Detection**". Once the communication has been opened, click on the button "**Close**".

At this point, open the programming window selecting "*Communication*" and then "*Programming*"; the following window will be shown:

🛲 Firmware update			-	- • <mark>- ×</mark> -
Boot Tools - Ver 1.0.	0.0 - Waiting for u	Iser comm	and	
	From:	600	To:	11A3F
Activate Boot	Program			
ID Ver	Reset			Close

The updating of **DFTOUCH** module does not need any address, therefore click on the button"**Activate Boot**" and then "**Program**" to start updating; at the end, the program will automatically reset the module.

The button "*ID Ver*" allows to check the ID code and the firmware version currently loaded into *DFTOUCH*. The button "*Reset*" allow resetting the module (if needed).

#### Firmware updating of DFTOUCH2 module

Firmware updating of DFTOUCH2 module it's performed via BUS and requires one of the following communication interfaces: *DFUSB*, *DFRS*, *DFPRO* or *DFCP*.

Once the communication with the desired communication interface has been opened recall the programming window selecting "*Communication*" and then "*Programming*". The programming window will be the following:





Kirmware update					×
Boot Tools - Ver 1.0.0.0 - W	aiting for u	ser com	nand	0	
Address 252	From:	400	To:	11FF	
ID Ver Program	n			Close	

The DFTOUCH2 module has not physical address on bus therefor the procedure for the firmware updating must be activated by the touch panel. Click on the icon 💽 in the

#### special page "sysconf".

After the user had clicked on the icon there are 10 seconds to start the firmware update procedure, then click on the button "*Program*" to start firmware updating. The bus address is not necessary.

It is not possible check the ID and firmware revision of the module, using the button "*ID Ver*", because the module haven't an address on the BUS.

#### Firmware updating of DFGSM3 module

The updating of **DFGSM3** module is performed by the USB port on its front panel.

After having selected **DFGSM3** and opened the desired firmware file, open the communication selecting from main menu "**Communication**" and then "**Enable communica-***tion*". The following window will be shown:



Select the serial port of the PC to which **DFGSM3** has been connected and then select the Baud Rate; as option, select "**Automatic Detection**". Once the communication has been opened, click on the button "**Close**".

At this point, open the programming window selecting "*Communication*" and then "*Programming*"; the following window will be shown:

MR Firmware up	late	- • •
Boot Tools - From: 2000	fer 1.0.0.0 - Waiting for user comma To: 10D7E	ind
Activate Boo	Program Reset	Close

The updating of **DFGSM3** module does not need any address, therefore click on the button "**Activate Boot**" and then "**Program**" to start updating; at the end, the program will automatically reset the module. The button "*ID Ver*" allows to check the ID code and the firmware version currently loaded into *DFGSM3*. The button "*Reset*" allow resetting the module (if needed).

#### Firmware updating of MOSGSM3 module

**MODGSM3** module features 2 microcontrollers, the first one named "**MODGSM3 MAIN CONTROLLER**" and the second one named "**MODGSM3 BUS CONTROLLER**". The updating of the first one (MAIN) is similar to the procedure explained for **DFGSM3**, while the second one must be updated via BUS using **MCPXT** as field interface.

The second microcontroller is thus seen like a generic  $\Box \Box \Pi$ -TRTTD module and therefore its address must be entered before to execute the updating. For more details, see the previous paragraphs.

#### Firmware updating of DFWEB module

**DFWEB** module features 2 microcontrollers, the first one named "**DFWEB MAIN CONTROLLER**" and the second one named "**DFWEB BUS CONTROLLER**".

For the updating of the first one (MAIN), use the cable named *CVXT* connected to the blue connector on *DFWEB* as shown in the following figure:



After having selected the module and opened the desired firmware file, open the communication selecting from main menu "*Communication*" and then "*Enable communication*". The following window will be shown:

OMMUNICATION DRIVER	
DF	FXP-XT Ver. 1.0 FW. 1.5 : 1.0 WEB:192.168.1.252
Serial Port	COM9 -
FOIL	COM6
Baud Rate:	115200 -
Interface	
Automatic Detection Advanced Options	n Time Out: 1000 Address: 0
IP Connection	
HSYCO	IO Server
Other	Password
Use IP Address	192 . 168 . 1 . 1 : 1001
Use Server Name:	
	Close

Select the serial port of the PC to which **DFWEB** has been connected and then select the Baud Rate; as option, select "**Automatic Detection**". Once the communication has been opened, click on the button "**Close**".

At this point, open the programming window selecting "*Communication*" and then "*Programming*"; the following window will be shown:





	- • <b>•</b>
1.0.0.0 - Waiting for user comm	and
To: 7FDFC	
To: 7FDFC	
	1.0.0.0 - Waiting for user comm

The updating of **DFWEB** main controller does not need any address, therefore click on the button"**Activate Boot**" and then "**Program**" to start updating; at the end, the program will wait for the reinitialization of **DFWEB** (10 seconds about), then the new firmware version and the IP address of the module will be shown.

The button "*ID Ver*" allows to check the ID code and the firmware version; the button "*Reset*" allow resetting the module (if needed).

To update the "*DFWEB BUS CONTROLLER*" of *DFWEB* module, use *DFUSB*, *DFRS*, *DFPRO* or *DFCP* as field interface. Once opened the communication with the interface, open the programming window selecting "*Communication*" and then "*Programming*"; the following window will be shown:

M Firmware update		- • •
Boot Tools - Ver 1.0.0.0	) - Waiting for user	command 0
Address 252	From: 40	00 To: 11FF
ID Ver Pr	rogram	Close

Enter, as address, the last group of number of IP address assigned to **DFWEB**. For instance, if the IP address of the module is 192.168.1.252, then the value to be entered as address will be 252.

**NOTE 1:** DFWEB module does not take any address on the Domino bus; the last 3 digits of the IP address represent an "identifier" allowing to execute the firmware updating via bus and some other functions.

## Firmware updating of WEBS module

To update **WEBS** module use **DFCP** or **MCPXT** as field interface, depending on the installed BUS.

After having selected the module and opened the desired firmware file, open the communication selecting from main menu "*Communication*" and then "*Enable communication*". The following window will be shown:

	FXP-XT Ver. 1.0 FW. 4.1 : 3.0
Serial Port	
Port:	сома -
Baud Rate:	115200 👻
Interface	
Automatic Detection	Time Out: 1000
Advanced Options	Address: 0
IP Connection	
HSYCO	IO Server
Other	Password
Use IP Address	192 . 168 . 1 . 1 : 1001
Use Server Name:	

Select the serial port of the PC to which the field interface has been connected and then select the Baud Rate; as option, select "*Automatic Detection*". Once the communication has been opened, click on the button "*Close*".

At this point, open the programming window selecting "*Communication*" and then "*Programming*"; the following window will be shown:

Boot Tools - Ver 1.	0.0.0 - Waiting for user com	mand
Boot Tools - Ver 1. From: 2000	0.0.0 - Waiting for user com To: 7FDFC	mand
Boot Tools - Ver 1. From: 2000 Activate Boot	0.0.0 - Waiting for user com To: 7FDFC Program	mand

The updating of **WEBS** module does not need any address, therefore click on the button"**Activate Boot**" and then "**Program**" to start updating; at the end, the program will wait for the reinitialization of **WEBS** (10 seconds about), then the new firmware version and the IP address of the module will be shown. The button "**ID Ver**" allows to check the ID code and the firmware version; the button "**Reset**" allow resetting the module (if needed).

## Firmware updating of MCPXT module

**MCPXT** module features 2 microcontrollers, the first one named "**MCPXT MAIN CONTROLLER**" and the second one named "**MCPXT BUS CONTROLLER**". For updating of the first one (MAIN) connect to the serial port on the front panel and open the desired firmware file. Open the communication selecting from main menu "**Communication**" and then "**Enable communication**". The following window will be shown:

OMMUNICATION DRIVER	
I	FXP-XT Ver. 1.0 FW. 4.1 : 3.0
Serial Port	
Port:	COM8 -
Baud Rate:	115200 👻
Interface	
Automatic Detection	Time Out: 1000
Advanced Options	Address: 0
IP Connection	
HSYCO	IO Server
Other	Password
Use IP Address	192 . 168 . 1 . 1 : 1001
Use Server Name:	
	Close

Select the serial port of the PC to which **MCPXT** has been connected and then select the Baud Rate; as option, select "**Automatic Detection**". Once the communication has been opened, click on the button "**Close**". At this point, open the programming window selecting "**Communica-***tion*" and then "**Programming**"; the following window will be shown:

Boot T	ools - Ver 1	0.0.0 - Waiting for user co	mmand
From:	600	To: BCFF	





The updating of "*MCPXT MAIN CONTROLLER*" does not need any address, therefore click on the button"*Activate Boot*" and then "*Program*" to start updating; at the end, the program will automatically reset the module.

The button "*ID Ver*" allows to check the ID code and the firmware version; the button "*Reset*" allow resetting the module (if needed). To update the "*MCPXT BUS CON-TROLLER*", open the related firmware file, open the programming window selecting "*Communication*" and then "*Enable communication*"; the same window described before will be shown. Select the serial port of the PC to which *MCPXT* has been connected and then select the Baud Rate; as option, select "*Automatic Detection*".

Once the communication has been opened, click on the button "*Close*". At this point, open the programming window selecting "*Communication*" and then "*Programming*"; in the programming window click on the button "*Activate Boot*" and then "*Program*" to start updating. At the end, the program will reset the microcontroller.

The button "*ID Ver*" allows to check the ID code and the firmware version; the button "*Reset*" allow resetting the module (if needed).

### Firmware updating of DFCP module

**DFCP** module features 2 microcontrollers, the first one named "**DFCP MAIN CONTROLLER**" and the second one named "**DFCP BUS CONTROLLER**" exactly as for MCPXT described before; for the updating procedure refer to MCPXT.

# Firmware updating of FXPRO2 tester/Programmer

The updating of *FXPRO2* is performed by the provider special serial cable. After having selected FXPRO2 from the module list (Modules→Contatto→Interfaces/Controllers→FXPRO2) and opened the desired firmware file, open the communication selecting from main menu "*Communication*" and then "*Enable communication*".

Select the serial port of the PC to which FXPRO2 has been connected and then select the Baud Rate; as option, choose "*Automatic Detection*". Once the communication has been opened, click on the button "*Close*".

At this point, open the programming window selecting "*Communication*" and then "*Programming*"; the following window will be shown:

Firmware update		- • •
Boot Tools - Ver 1	.0.0.0 - Waiting for user com	nand
Boot Tools - Ver 1 From: 2000	.0.0.0 - Waiting for user com To: 10D7E	nand
Boot Tools - Ver 1 From: 2000 Activate Boot	.0.0.0 - Waiting for user com To: 10D7E Program	nand

The updating of FXPRO2 does not need any address, therefore click on the button "*Activate Boot*": the display of FXPRO2 will show "Firmware Updating"; click then "*Program*" to start updating; at the end, the program will automatically reset FXPRO2.

The button "*ID Ver*" allows to check the ID code and the firmware version currently loaded into FXPRO2. The button "*Reset*" allow resetting the module (if needed).

BootTools program  $\underline{\text{does not support}}$  the following modules:

- x Domino Bus
  - ✓ DFCL
  - ✓ DFSC
  - ✓ DFTS
  - ✓ DFCC
  - ✓ DFCK
  - ✓ DFCK2
  - ✓ DFGSM/DFGSM2
- CONTRITO Bus
  - DISP2
  - ✓ DISP2BUS
  - ✓ MODGSM/MODGSM2