



v. 3.0

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1 Introduction

Burner software is the fulcrum around which all the SmartSystem products can be upgraded to the latest firmware available. The procedure is extremely easy and straightforward. The software will automatically connect with SmartSystem servers downloading the latest firmware releases in order to update all the SmartSystem device ever manufactured.

2 Installation

The installation process follows the standard procedure for the selected operating system.



Only for Windows operating system, it is necessary for the OS to load the relative drivers for the SmartSystem devices. To do this, please connect the device to the PC and wait the installation of the drivers **BEFORE** the very first startup of Burner. This procedure is mandatory **exclusively** for the very first startup of the software

3 Powering the devices before connection

The upgrade process could be critical. Even if all the SmartSystem device are programmed with an intrinsic fail safe mode that protect the equipment keeping it responsive even in case of firmware upgrade failure, please keep in mind that during the program stage, the product could be vulnerable.



It is imperative to check and verify the capability and stability of the power source for the device being upgraded before the starting the upgrade process

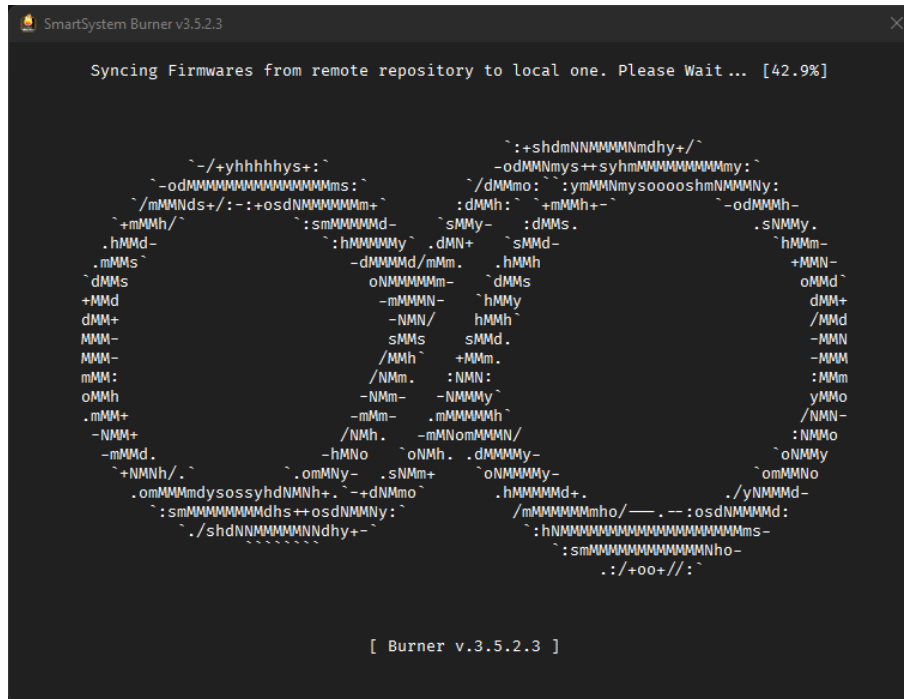
Based on the device connection type, (mini USB, USB Type-C, XTPort) the device can be self powered or need to be external powered as reported below:

Connection	Power style
Mini USB	External Power Required
XT Devices	External Power Required
USB Type-C	Self Powered

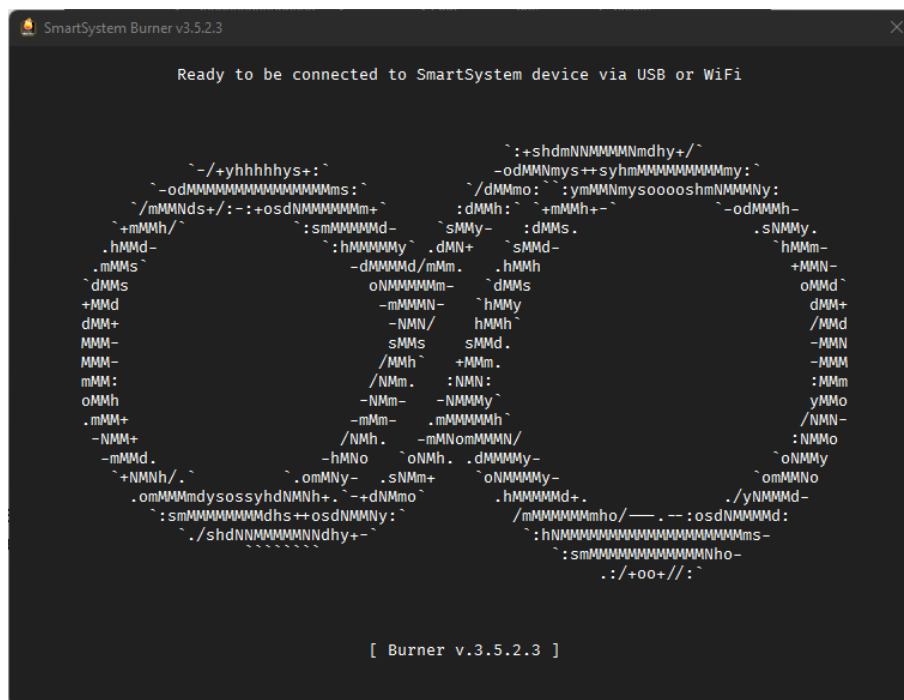
In case of Self Powered device it is **imperative** that device being upgraded is correctly powered on before connecting it to PC or mac directly or via XTDongle.

4 Starting the software

In order for Burner to download and sync all the firmwares from SmartSystem repository, it is necessary that the PC and Mac used has a stable and good internet connection.



After a complete download and sync with SmartSystem server, Burner is ready to be connected with the device that need to be upgraded.

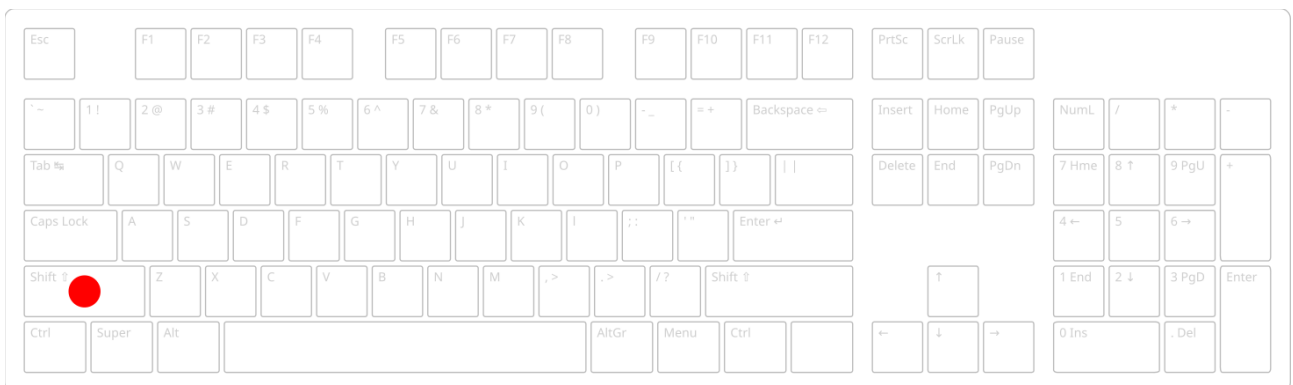


5 Operating Modes

Burner can work in two different modes aside the **Regular Mode** where the system automatically suggest to the user the latest firmware available for the device connected:

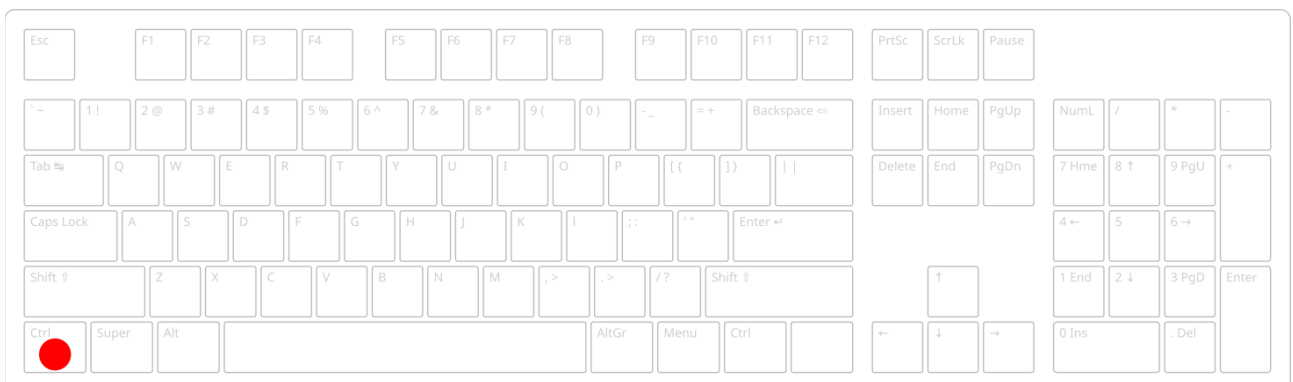
- **Beta Mode**
- **Recovery Mode**

The **Beta mode**, accessible keeping pressed the **Left SHIFT** button during the detection of the product connected to PC or Mac, let the user install on its device the very latest firmware revision still in beta stage



Please remember that BETA firmware are not intended for production use and could led the product to mis-behave during standard operation. SmartSystem is not responsible to any inconvenience caused by the use of a non stable firmware in a production environment

The **Recovery mode**, accessible keeping pressed the **Left CTRL** button during the detection of the product connected to PC or Mac, let the user force to re-install on its device, the latest stable firmware revision even if the product has already the latest version installed. This could be useful in very rare cases where the device got a corruption on its internal memory.



6 Firmware Selection Stage

After Burner discovered the device attached to PC or Mac, and **based on the operating mode**, it will ask the user to select whether or not to update the device with the proposed firmware. The process is extremely straightforward (as shown below for a Beta mode operation, as example)

```

SmartSystem Burner v3.5.0.3
-----[ XT devices discovered ]-----
[ID:0x46] SmartCAM SM7-PRO-3G [COM Board] → [BootLoader v. 1.2.1.3 - Firmware v. 1.3.2.3]
[ID:0x47] SmartCAM SM7-PRO-3G [LCD Board] → [BootLoader v. 1.0.0.0 - Firmware v. 1.2.6.3]

-----[ Beta Testing Mode ]-----
[ID:0x46] Firmware Update available → v. 1.3.5.3 [ ]
[ID:0x47] Firmware Update available → v. 1.2.8.3 [ ]
-----[ Select y/n ]-----

```

Once all the option were chosen by the user, Burner propose a last confirmation step.

```

SmartSystem Burner v3.5.0.3
-----[ XT devices discovered ]-----
[ID:0x46] SmartCAM SM7-PRO-3G [COM Board] → [BootLoader v. 1.2.1.3 - Firmware v. 1.3.2.3]
[ID:0x47] SmartCAM SM7-PRO-3G [LCD Board] → [BootLoader v. 1.0.0.0 - Firmware v. 1.2.6.3]

-----[ Beta Testing Mode ]-----
[ID:0x46] Firmware Update available → v. 1.3.5.3 [Y]
[ID:0x47] Firmware Update available → v. 1.2.8.3 [Y]
-----[ Select y/n ]-----

-----[ ALERT! : BETA VERSION - NOT FOR PRODUCTION USE ]-----
This is a critical operation: ensure a stable power supply (Battery or Line)
Don't disconnect XTDongle from computer or shut down the devices in XT Network

Do you want to proceed? [y/n] [BETA VERSION!!!] : █

```

7 Upgrading Stage

The upgrading stage is the most critical one. It is completely automatic and it could take various minutes depending by the product or the firmware dimension.

```

SmartSystem Burner v3.5.0.3
===== [ XT devices discovered ] =====
[ID:0x46] SmartCAM SM7-PRO-3G [COM Board]  → [BootLoader v. 1.2.1.3 - Firmware v. 1.3.2.3]
[ID:0x47] SmartCAM SM7-PRO-3G [LCD Board]  → [BootLoader v. 1.0.0.0 - Firmware v. 1.2.6.3]

===== [ Beta Testing Mode ] =====
[ID:0x46] Firmware Update available      → v. 1.3.5.3 [Y]
[ID:0x47] Firmware Update available      → v. 1.2.8.3 [Y]
===== [ Select y/n ] =====

===== [ ALERT! : BETA VERSION - NOT FOR PRODUCTION USE ] =====
This is a critical operation: ensure a stable power supply (Battery or Line)
Don't disconnect XTDongle from computer or shut down the devices in XT Network

===== [ PROGRESS ] =====
Update Firmware [ID:0x47] : [WRITING] ETC [08:20]
[■ [02.36% ]

```



Please remember that once the process is started, is extremely important to not stop it or disconnect the device from power source or data connection.

As a warmly suggestion, since the upgrading process can be resource intensive from data transfer, it is suggested to not use other software during the upgrade stage

8 Committing Stage

Some products with specific hardware architecture, need to commit the firmware into internal flash memory for subsequent upgrade. During this time, which can last up to 5 minutes, the device could be totally unresponsive.

Burner keep track of this stage informing the customer about what is happening behind the curtains.

```
SmartSystem Burner v3.5.0.3

-----[ XT devices discovered ]-----
[ID:0x46] SmartCAM SM7-PRO-3G [COM Board] → [BootLoader v. 1.2.1.3 - Firmware v. 1.3.2.3]
[ID:0x47] SmartCAM SM7-PRO-3G [LCD Board] → [BootLoader v. 1.0.0.0 - Firmware v. 1.2.6.3]

-----[ Beta Testing Mode ]-----
[ID:0x46] Firmware Update available → v. 1.3.5.3 [Y]
[ID:0x47] Firmware Update available → v. 1.2.8.3 [Y]
-----[ Select y/n ]-----

-----[ ALERT! : BETA VERSION - NOT FOR PRODUCTION USE ]-----
This is a critical operation: ensure a stable power supply (Battery or Line)
Don't disconnect XTDongle from computer or shut down the devices in XT Network

-----[ PROGRESS ]-----
Update Firmware [ID:0x47] : [COMMITTING UPGRADE - PLEASE WAIT :]
[-----[100.0%]-----]
```



Please remember that even unresponsive, the device is still in a working condition committing the upgrade. Please do not detach it from power source or from data line. Just wait that the process will end

9 Final Recap

Once finished, Burner will show to the user a detailed recap of the firmware version installed on the device as well as a brief change log.

```
SmartSystem Burner v3.5.0.3
-----[ XT devices discovered ]-----
[ID:0x46] SmartCAM SM7-PRO-3G [COM Board]  → [BootLoader v. 1.2.1.3 - Firmware v. 1.3.5.3]
[ID:0x47] SmartCAM SM7-PRO-3G [LCD Board]  → [BootLoader v. 1.0.0.0 - Firmware v. 1.2.8.3]
-----[ Available Updates ]-----
                Congrats! Your equipment is up to date with latest firmware.
-----[ Change log ]-----
[ID:0x46] [Beta FW v.1.3.5.3]  → [■] Minor code optimizations
                                   [■] Added support for Tally with reverse polarity
[ID:0x47] [Beta FW v.1.2.8.3]  → [■] Improved signal stability at low framerate
                                   [■] Added thickness control for Crosshair
                                   [■] Added new controls for Tally
                                   [■] Auto Backlight menu moved under Setup
                                   [■] Fixed LEDs brightness at low backlight setting
```