AE MAESTRO INTEGRATED CONTROLLER

SOFTWARE UPDATING MANUAL

Document Version : 2.1
In The Reference Softwares of : 2.XX ICT, 2.XX ICM, 2.XX ICS

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PREFACE

This document is a guide how to update the software of AE-MAESTRO integrated lift controller.

You need an AE-MAESTRO hand terminal with an SD card with minimum 1GB memory to carry on software updates.

DEFINITION OF THE FILE TYPES

There are three programmable processors ICM, ICS and ICT in AE-MAESTRO integrated lift controller. The software types related to the boards and their variations regarding to the state of the device is shown below.

		CURRENT FILE TYPE With Bootloader
ICM	Controller Board	--------.bem Version: 2.xx
ICS	Motor Driver Board	--------.bes Version: 2.xx
ICT	Hand Terminal	---------.ict

Upgrade files (**mbi** and **sbi**) include current board software (**bem** and **bes**) and additionally special software to upgrade the board to the bootloader version (2.xx).

Please note that "xxxx", "xx", "yy" or "------" stands for do not care character strings.

STEP 1: File Transfer to Memory Card

First step is getting new files to be used for software update. Generally the files are sent with mail to you. If they are received in compressed form such as Winrar, Winzip, 7-zip, …etc, then you should first extract the files into a folder in your PC.
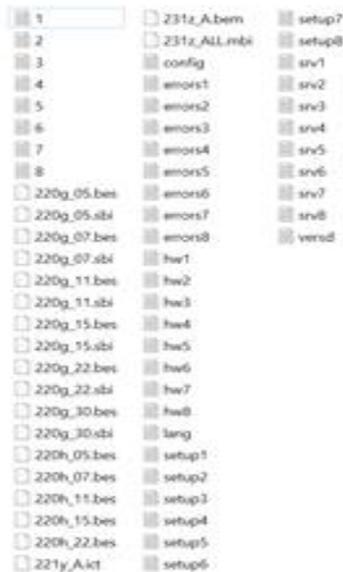
Then transfer the files into the memory card. The memory card slot is at the right side of the hand terminal as seen below. After copying files into the SD card insert it into the slot as shown below.

STEP 2: Checking current Versions

Before starting anything, you should first check current software versions of the device and terminal. Because the updating procedures varies depending on the difference of the current version and new versions to load.

You can see current versions of the device softwares in the information screen by pressing **ESC button on the main screen**.

Main screen

PARAMETER	VALUE	PARAMETER	VALUE
Serial No:	33688787	Date:	05.01.2000
Control Board:	2.31z	Clock:	00:22
Motor Driver:	2.20h	Total Start	3560
Hand Terminal:	2.22f	Start:	0
SD Version:	2.0c	Weight:	0
Line Voltage:	400 V		
KW:	7.5		

Current versions info

First compare the software of the hand terminal shown on the screen with the file in SD card.
The software version of terminal you are current using is under the header **Hand Terminal.**
The software in SD card is in the file with the extension xxxxx**.ict**.

If your terminal has a **lower version** number then the one in SD card then you should **upload the file into the hand terminal. G**o to the next section **STEP3**.

If your hand terminal has a **higher or the same** version number as the file in SD card then **skip** ICT UPDATE and proceed to **STEP 4.**

STEP 3: ICT Update (Hand Terminal Software Update)

In order to update your Hand Terminal, please follow the steps below:

1. Switch off AE-MAESTRO Controller.
2. Insert the hand terminal into the slot on the integrated device.
3. **Press and hold F1 button** on the hand terminal while switching on the device again.

4. 4.Keep F1 button pressed until you see the update screen.

5. Select the file with xxx.ict extension and highest version number by using UP and Down arrow buttons and press ENT button to start the ICT update process.

6. The hand terminal will automatically start normal operation with the new software when the update process is completed.
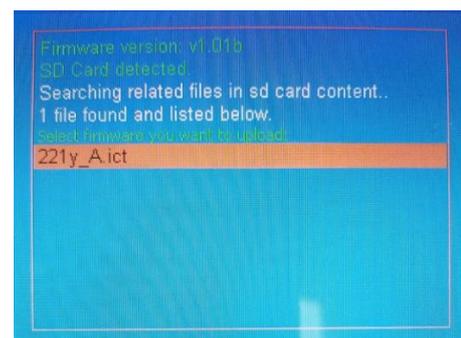
STEP 4: ICM Update (Controller Board Update)

Compare the software version of **Control Board** shown in info screen with the controller file (xxx.**bem**) in SD card.

If controller has a **higher or the same** version number as the file in SD card (xxx.**bem**) then **skip this section** and proceed to **step 5.**

If the controller has a **lower version** number then the controller file in SD card then you should **upload the controller file into the device.**

[0]	-	0.00m/s	INSP	-	E:	0/0

PARAMETER	VALUE	PARAMETER	VALUE
Serial No:	33688787	Date:	05.01.2000
Control Board:	2.31z	Clock:	00:22
Motor Driver:	2.20h	Total Start	3560
Hand Terminal:	2.22f	Start:	0
SD Version:	2.0c	Weight:	0
Line Voltage:	400 V		
KW:	7.5		

This procedure is only applicable for devices which have **Controller Boards software version above2.00.** If it is 1.xx then you should firstly load bootloader. Consult technical support to continue.
Before starting this step, please switch to inspection mode.

[0]	-	0.00m/s	INSP	-	E:	0/0

Test Menu   Errors   Settings
Input States   Data,Software   Graph

Select **Data,Software** icon.

[0]	-	0.00m/s	INSP	-	E:	0/0

ICM Upload   ICS Upload   Read From SD
Write to SD   Save Graph   Version
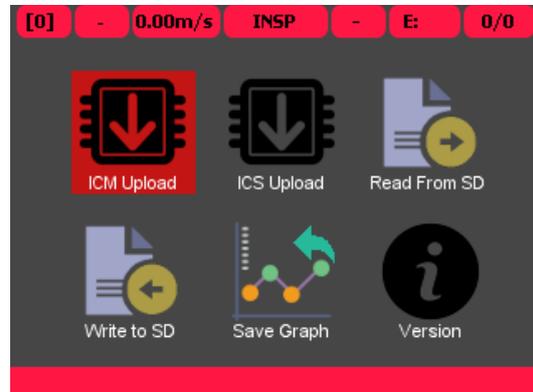
Then select **ICM Upload** icon.

Select the file with xxx.**bem** extension and highest version number by using UP and Down arrow buttons and press **ENT** button to start the ICM update process.
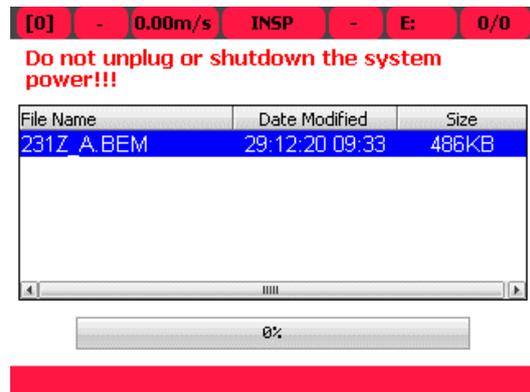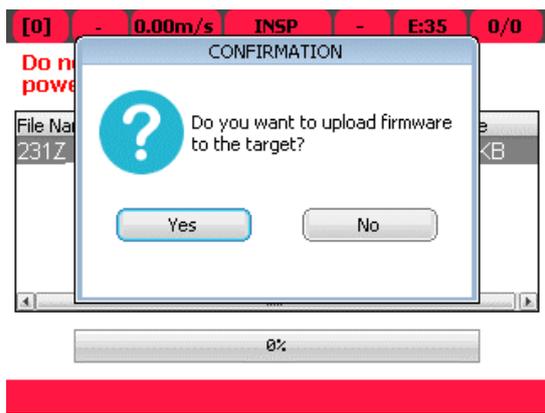
[0]	-	0.00m/s	INSP	-	E:	0/0

Do not unplug or shutdown the system power!!!

File Name	Date Modified	Size
231Z_A.BEM	29:12:20 09:33	486KB

0%

The process will start after your confirmation.	
When the operation is completed successfully then restart the device to activate the new software.	
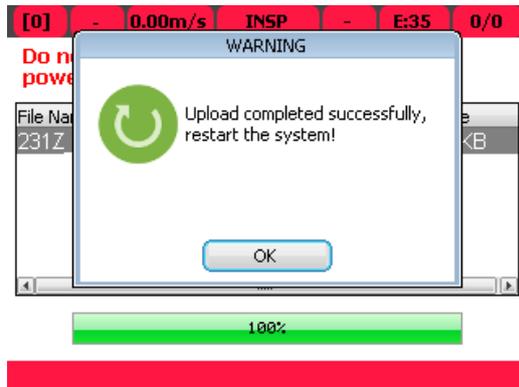
STEP 5: ICS Update (Motor Driver Board Update)

Compare the software version of **Motor Driver** shown in info screen with the motor driver file (xxx.**bes**) in SD card.

If motor driver has a **higher or the same** version number as the file in SD card (xxx.**bes**) then **skip this section.**

If the motor driver has a **lower version** number then the controller file in SD card then you should **upload the motor driver file** into the device**.**

In order to update motor driver board, first of all you **must know the power of the device**.

You can learn it either from **info screen** or **label** of the device.

It is given under the header **kW** or **Power**. The file used in uploading must match the power of your device.

This procedure is only applicable for devices which have **motor driver software version above2.00.** If it is 1.xx, then you should firstly load bootloader. Consult technical support to continue.
 Before starting this step, please switch to inspection mode.

Go to **Data,Software** icon and open it.
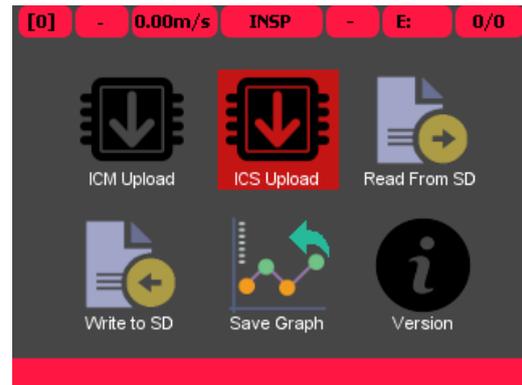
Select **ICS Upload** icon.

Power	BES File Name
5 KW	2XXX_**05**.bes
7.5 KW	2XXX_**07**.bes
11 KW	2XXX_**11**.bes
22KW	2XXX_**22**.bes
30 KW	2XXX_**30**.bes
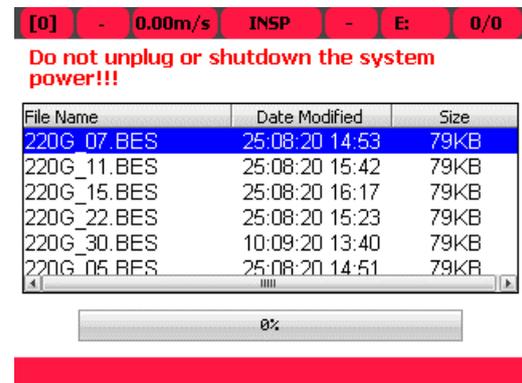
Select the file with xxx.bes extension and highest version number and also having the same **kW value with your device** by using UP and Down arrow buttons and press **ENT** button to start the **ICS** upgrade process.

Using a file which has not the same power value as your device will result in inproper operation. Please give attention for this subject.	
The process will start after your confirmation.	
When the operation is completed successfully then restart the device to activate the new software.	