

Preliminary requirements

- All SLS Enhanced with firmware version 3.1.x can be updated to version 3.2.0.

Download files from Datasensing website

- Download the new 3.2.0 DLSentinel GUI release at the following link:
https://www.datasensing.com/Media/Software/DL_SENTINEL_GUI_3.2.0_MSI.zip
Unzip the file and install the 3.2.0 DLSentinel GUI on your PC by clicking on "SetupDISentinel.msi".
- Download the new firmware at the following link:
https://www.datasensing.com/Media/Software/Upgrade_to_3.2.0-RTM.zip
Unzip the .zip file on your PC Desktop, the unzipped file will be "sls_STM32F373VC-3.2.0.866_all_components.package".

Update

Choose the procedure that corresponds to the condition of your system from those listed below, then follow the update instructions step by step.

1. Single unit update (Master or Stand Alone)

- Power on the device and connect it to the PC (it is recommended to make a point-to-point connection between PC and device, avoiding hubs or switches).
- Start the 3.2.0 DLSentinel GUI, click on "Scanner" on the menu bar and then click on "Discovery"; select the device to update in the left column of the window.
- Check the device's current firmware version in the highlighted area in the following image:



- If the firmware version is 02.xx.xx.xx or 01.xx.xx.xx the device cannot be updated!
- If the firmware version is **03.01.xx.xx** you can proceed with the update.
- In the DL Sentinel GUI, click "Scanner" in the menu bar and select "Update firmware" option.
- Enter the device password (if it has not been modified, the default password is "admin") to access the firmware update function.
- Select the "**sls_STM32F373VC-3.2.0.866_all_components.package**" file on the PC desktop, click on "Load" and then on "Accept".

2. Replacing the Master unit in a Master + Slave(s) system

- a. Make sure you have saved the SLS configuration file on your PC before uninstalling the old Master.
- b. Connect the new Master with FW 3.2.0 in place of the old one. Power on the scanners and connect the Master to the PC (it is recommended to make a point-to-point connection between PC and device, avoiding hubs or switches).
- c. The display of the new Master will show "WAITING CONF". Briefly press one of the 2 arrow keys next to the display and verify that "ALIGN SW REQ" (firmware alignment required) is displayed. This condition will also be displayed in the "Diagnostics" window of the GUI.
- d. Start the DL Sentinel 3.2.0 GUI, click on "Scanner" on the menu bar and then click "Discovery"; select the new Master in the left column of the window and make sure that the Master and all connected Slaves are displayed in the central part of the window.
- e. In the DL Sentinel GUI, click "Scanner" in the menu bar and select the "Update firmware" option.
- f. Enter the device password (if it has not been modified, the default password is "admin") to access the firmware update function.
- g. Select the "**sIs_STM32F373VC-3.2.0.866_all_components.package**" file on the PC desktop, click on "Load" and then on "Accept"
- h. This action updates to version 3.2.0 also all the Slaves connected to the newly replaced Master.
- i. Return to the GUI Home page, select "Open a Safety System configuration from PC", open the configuration file saved in step a. and download it to the Master + Slave(s) system.

3. Replacing the Master unit in a Master + Slave(s) system, keeping the old Memory Group connected to the machine

- a. Power off the Master, remove the Memory Group from the old Master and reassemble it on the new Master (from which the original Memory Group has been previously removed), then power on the scanners and connect the Master to the PC (it is recommended to make a point-to-point connection between PC and device, avoiding hubs or switches).
- b. The display of the new Master will show "WAITING CONF". Briefly press one of the 2 arrow keys next to the display and verify that "ALIGN SW REQ" (firmware alignment required) is displayed. This condition will also be displayed in the "Diagnostics" window of the GUI.
- c. Start the DL Sentinel 3.2.0 GUI, click on "Scanner" on the menu bar and then click "Discovery"; select the new Master in the left column of the window and make sure that the Master and all connected Slaves are displayed in the central part of the window.
- d. In the DL Sentinel GUI, click "Scanner" in the menu bar and select the "Update firmware" option.
- e. Enter the device password (if it has not been modified, the default password is "admin") to access the firmware update function.
- f. Select the "**sIs_STM32F373VC-3.2.0.866_all_components.package**" file on the PC desktop, click on "Load" and then on "Accept".

- g. This action updates to version 3.2.0 all the Slaves connected to the newly replaced Master.
- h. Once the update is complete, the Master displays “Waiting Conf”. Power cycle the scanners, now the Master displays “DEVICE EMPTY”.
- i. Press the square pushbutton on the Master, select “Restore cfg” and then “Confirm”: the display shows “RES IN PROGRESS”. The restore takes about 2 minutes, at the end the display shows “PRESS □ -> TEST” e “PRESS ↓ -> EXIT”: press the square pushbutton and check that the device displays GO, STOP and WARNING (with white background) according to the previously set areas. If everything is fine, press one of the arrow pushbuttons and select “Validate Conf”. The display shows “RES VALIDATION” then device starts working correctly.

4. Replacing the Slave unit in a Master + Slave(s) system

- a. Disconnect the Slave(s) from Master, then proceed with the Master upgrade according with the instruction at the chapter “1. Single unit update (Master or Stand Alone)”.
- b. Replace the damaged Slave unit with a new one.
- c. Reconnect the Slave(s) to the Master unit then power on all the scanners, verify that the message “ALIGN SW REQ” (firmware alignment required) is displayed.
- d. Start the DL Sentinel 3.2.0 GUI, click on “Scanner” on the menu bar and then click “Discovery”; select the new Master in the left column of the window and make sure that the Master and all connected Slaves are displayed in the central part of the window.
- e. In the DL Sentinel GUI, click “Scanner” in the menu bar and select the “Update firmware” option.
- f. Enter the device password (if it has not been modified, the default password is “admin”) to access the firmware update function.
- g. Select the “**sIs_STM32F373VC-3.2.0.866_all_components.package**” file on the PC desktop, click on “Load” and then on “Accept”.
- h. This action updates all the scanners to the version 3.2.0 already present on both the Master and the new Slave that we have just installed.
- i. At the end of the procedure the Master displays “DEVICE EMPTY”.
- j. Press the square pushbutton on the Master, select “Restore cfg” and then “Confirm”: the display shows “RES IN PROGRESS”. The restore takes about 2 minutes, at the end the display shows “PRESS □ -> TEST” e “PRESS ↓ -> EXIT”: press the square pushbutton and check that the device displays GO, STOP and WARNING (with white background) according to the previously set areas. If everything is fine, press one of the arrow pushbuttons and select “Validate Conf”. The display shows “RES VALIDATION” then device starts working correctly.