

## Syncro & Syncro AS panels – firmware update procedure

**IMPORTANT** – Before attempting to perform the firmware update, ensure you have a backup copy of the site network configuration for all panels on site.

*Note* – Some USB to RS232 serial port devices can cause a failure during the firmware transfer process, which results in the panel failing to restart. Even if the panel is in this state, the process below can be used to attempt to load the file into the panel.

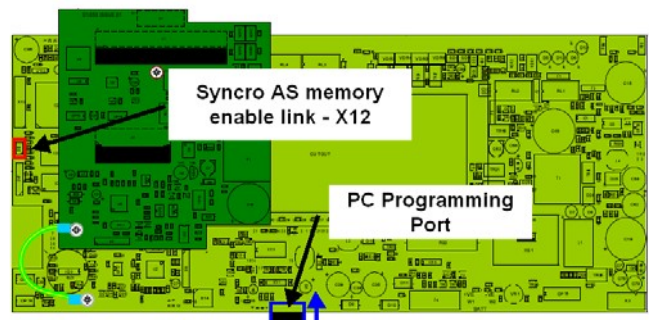
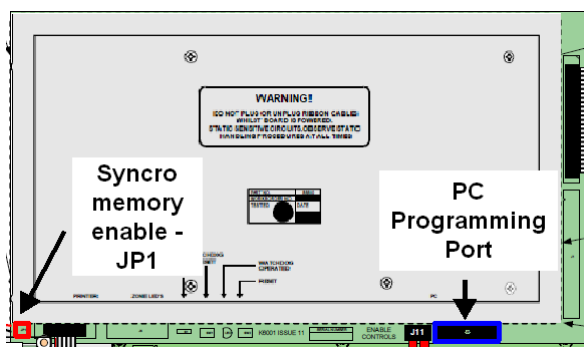
It is recommended that a direct RS232 computer port is used, as these are proven reliable and robust

### 1 Firmware Update Procedure

#### 1.1 Install the system memory write enable jumper link

Syncro – the write enable link is located in the bottom left corner on the back of the Syncro display card and is labelled **JP1**

Syncro AS – the write enable link is located on the left hand side of the PCB (viewed from the back of the panel and is labelled **X12**



#### 1.2 Make sure enable controls key is off

If the control panel has an enable controls key switch fitted, make sure this is switched off For Syncro panels without the Enable Controls key, make sure there is not a link installed in the Enable Controls terminals.

#### 1.3 Connect the computer to the control panel

Using the standard Syncro programming lead (S187 or X187LS), connect the computer to the PC port on the Syncro / Syncro AS control panel

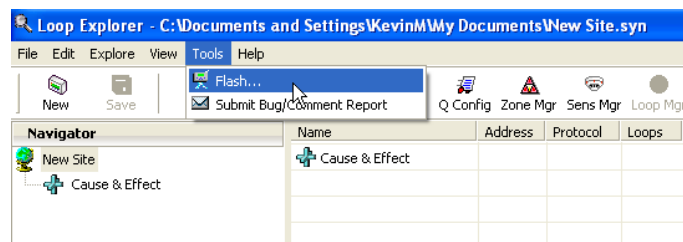
## 1.4 Start Loop Explorer

The Flash update program is included in the Loop Explorer programming application.

Start Loop Explorer and select “blank project” (or open the existing project file) to get to the main editing screen.

## 1.5 Select the Flash Update utility

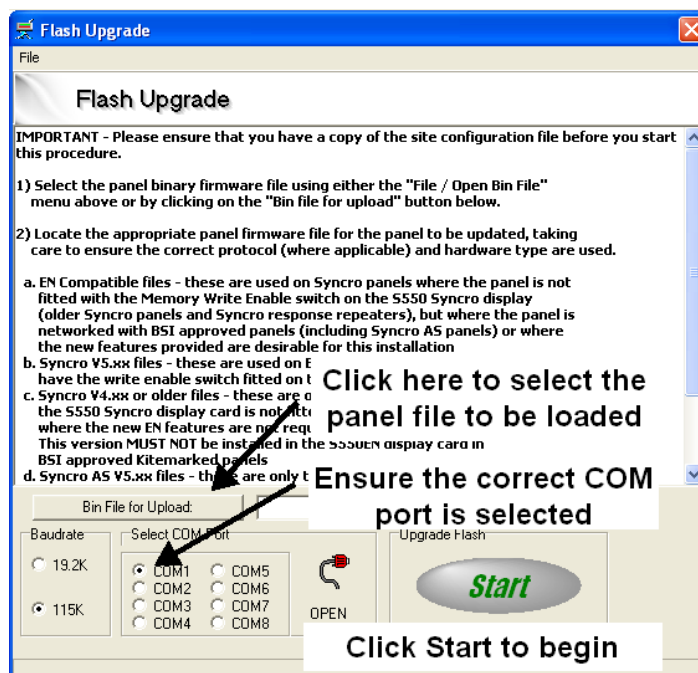
In the main Loop Explorer editing screen, select the “Tools” menu option then select the “Flash” sub-option



## 1.6 Select the binary file to be loaded into the panel

In the flash upgrade screen, instructions will be given for the full process, depending on the panel file selected.

Click on the ‘BIN file to upload’ button and navigate to the appropriate file for the panel type and loop protocol to be updated.



Check COM port setting is correct for the serial port used for the panel connection.

## 1.7 Prepare the panel for the update

The panel needs to be put into programming mode by a special button press sequence. Press and hold **Enter** and **Reset** on the front of the panel, then momentarily press the internal panel **CPU reset** button to reboot the panel.

*Reset is on the back of the display card marked SW2 on the Syncro panel or is the small 'reset' microswitch on the front of the display PCB for the Syncro AS panel*

Keep the **Enter** and **Reset** buttons held down (*about 10 seconds*) until the screen goes blank. A message is shown in the title bar of the Flash Upgrade screen, advising the panel is in programming mode and is ready for the update.

## 1.8 Start the update

Click **Start** button on the flash tool.

Two progress bars will be shown, a "sector progress" and a "total progress" bar. When the "Total" progress has got to 100% the update is complete.

## 1.9 Automatic Restart

The panel should reboot automatically after the transfer has completed.

If it does not, reboot the panel manually by pressing the CPU reset button. (You can remove the jumper link once this step is reached).

When the panel restarts, the firmware version and language will be shown in the start-up screen to confirm the update is successful. Auto-learn the panel.

Because the updated firmware may have revisions to the configuration memory allocation, it is necessary to format the memory.

This is performed using the Auto-learn function as described below.

Note: For Syncro AS panels, clear the event log before performing the auto learn process.

## 1.10 Reload configuration file

After the panel has been auto-learned, re-load the original configuration to the panel.

This completes the update process. For networked systems, ensure all panels are updated with the same firmware version to ensure reliable and robust operation.

**\*Note\*** The **EN54 compatible** firmware version is for panels **WITHOUT** a write enable switch fitted.

Upgrading Syncro panels that have an **Issue 06** Display board is NOT recommended, as this may result in watchdog faults.

**!! Loop Explorer Version 6 MUST be used for V6.xx Firmware control panels!!**

## 2 AUTOLEARN Procedure

Warning: The Autolearn procedure will erase ALL previous panel configuration information. Ensure that you have a copy of the site configuration before attempting this process.

### 2.1 Syncro Autolearn:

- Switch the write enable on and make sure the level 2 key switch (If fitted) is off.
- Press and hold **'Enter'** and **'Function 2'**, then momentarily press the CPU reset button (SW2).
- Keep **'Enter'** and **'Function 2'** held until the panel says **'Auto learn in progress'**
- Release the **'Enter'** and **'Function 2'** buttons.

### 2.2 Syncro AS Autolearn:

- Switch the write enable on and make sure the level 2 key switch (If fitted) is off.
- Press and hold **'Enter'** and **'Function'**, then momentarily press the CPU reset button.
- Keep **'Enter'** and **'Function'** held until the panel says **'Auto learn in progress'**
- Release the **'Enter'** and **'Function'** buttons.