



# FireCell Control Panel Flash Upgrade



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# Introduction

The following guidelines can be followed, to upgrade EMS FireCell control panel software to the new full hybrid software version. The following upgrade procedure is the same, for both Syncro and Syncro AS control panels. Other methods of carrying out this upgrade may also be available.



**Any cause & effect functionality will require reconfiguration and verification, following the upgrade.**

**EMS takes no responsibility for any loss of data, caused by this upgrade.**

**This software upgrade must only be performed by a fully trained competent person, with a working knowledge of the control panel and Loop Explorer programme.**

If necessary; inform the monitoring station and disable sounders, outputs and buzzers etc, during the upgrade (as per normal maintenance and test procedures).

# Required Tools



**Before starting the upgrade, the following items MUST be available.**

- FC-000-KEN FireCell control panel programming lead
- Laptop with both, new (*MLoop 60082*) and legacy (*MLoop 60020*) Loop Explorer software installed.
- New control panel software .bin files (*650UK & 651\_UK*).

*Note: New and Legacy Loop Explorer software and .bin files are free to download from [www.emsgroup.co.uk](http://www.emsgroup.co.uk)*

# Software Compatibility Chart

Recommended software / panel version compatibility, is highlighted below:

Recommendations	NEW Loop Explorer <i>MLoop 60082</i>	Loop Explorer <i>MLoop 60020</i>
<b>NEW</b> Syncro Control Panel, <i>S/W Revision 650UK</i>	✓	—
<b>NEW</b> Syncro AS Control Panel, <i>S/W Revision 651_UK</i>	✓	—
Syncro Control Panel, <i>S/W Revision 642 UK or earlier</i>	—	✓
Syncro AS Control Panel, <i>S/W Revision 642AS UK or earlier</i>	—	✓

# Download & Prepare Setup File

## 1 Connect To The Control Panel

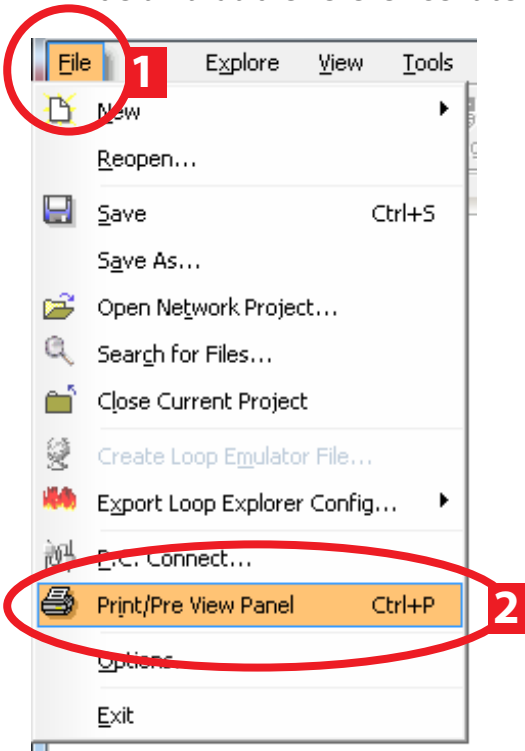
Connect the programming lead to the control panel's programming port.

## 2 Download Setup

Open the legacy Loop Explorer (*MLoop V60020*) and download a setup file. *The file should be saved as a backup setup file.*

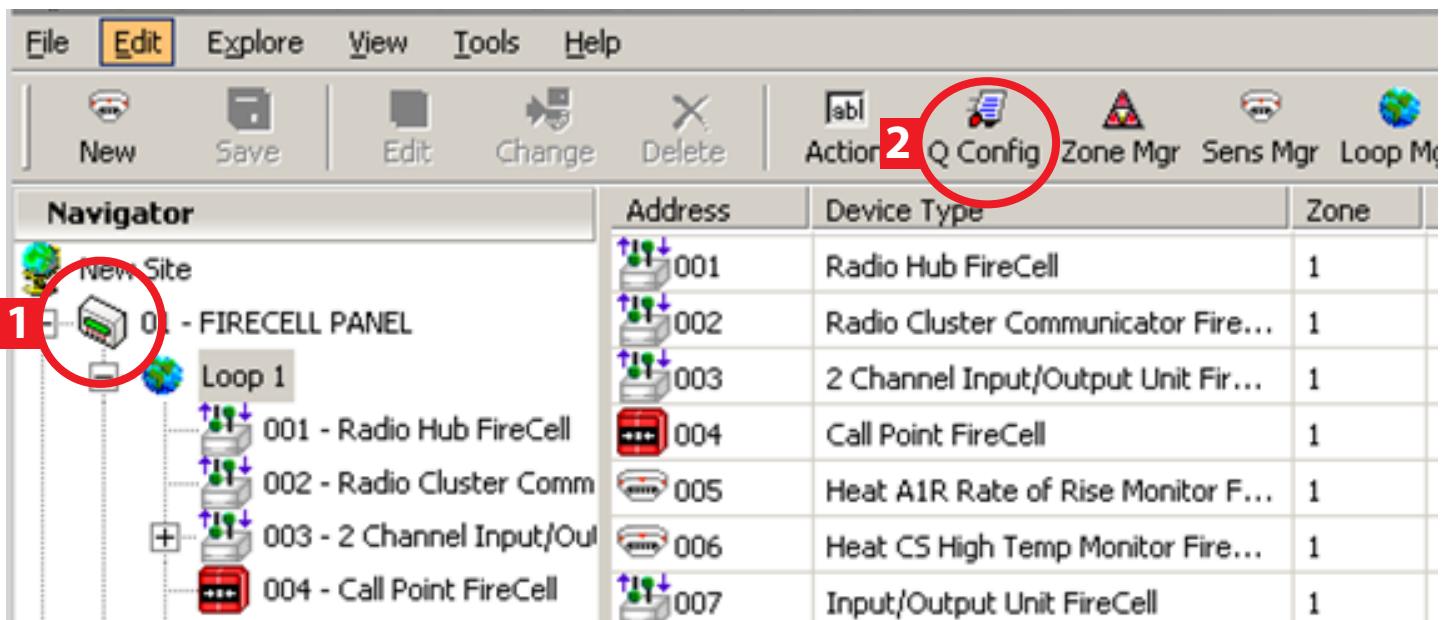
## 3 Save Printout

It is recommended that a printout is saved, via the print/ pre view panel menu. The printout will be a valuable reference later, when converting the devices to wireless.



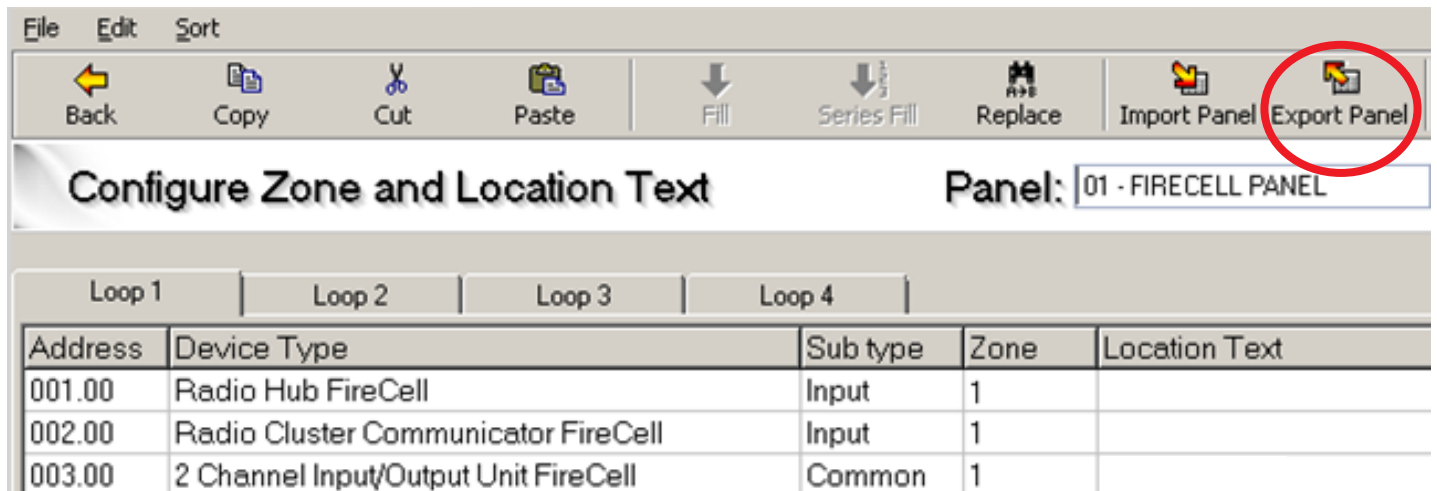
## 4 Export Loop Explorer Loop Text Information

Click on the control panel icon, then click on the 'Q Config' icon.



# Download & Prepare Setup File

Click on 'Export Panel' icon and save the loop file.



Loop 1	Loop 2	Loop 3	Loop 4	
Address	Device Type	Sub type	Zone	Location Text
001.00	Radio Hub FireCell	Input	1	
002.00	Radio Cluster Communicator FireCell	Input	1	
003.00	2 Channel Input/Output Unit FireCell	Common	1	

**5 Exit the Loop Explorer program.**

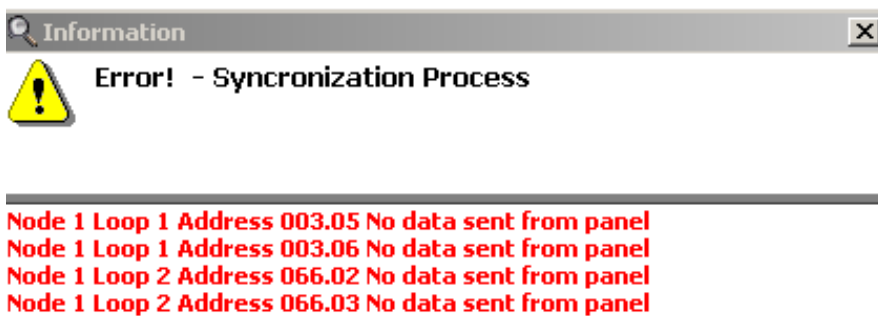
## 6 Download Setup

Open NEW Loop Explorer (*MLoop V60082*) and download a setup file. *The file must be saved as a new setup file.*

*Work can now be undertaken on this new panel setup file.*

Note 1: It is expected behaviour to see the error message below for Wireless Dual I/O and XPlorer hardwired output units. Click on close if this occurs and continue.

Note 2: XPlorer hardwired output units require their device type changing to ensure they correspond correctly.



Information

**Error! - Synchronization Process**

Node 1 Loop 1 Address 003.05 No data sent from panel  
Node 1 Loop 1 Address 003.06 No data sent from panel  
Node 1 Loop 2 Address 066.02 No data sent from panel  
Node 1 Loop 2 Address 066.03 No data sent from panel

# Download & Prepare Setup File - Continued

## 7 Convert Devices To Wireless

Click on the loop icon with wireless devices connected, then select the 'Loop Mgr' icon.

*Note: in the example below, loop 1 with wireless devices connected has been selected.*

The screenshot shows a software interface with a menu bar (File, Edit, Explore, View, Tools, Help) and a toolbar with icons for New, Save, Edit, Change, Delete, Action, Q Config, Zone Mgr, Sens M, and Loop Mgr. The Loop Mgr icon is circled with a red '2'. On the left, the Navigator shows a tree view with 'Loop 1' circled with a red '1'. The main area displays a table of devices:

Address	Device Type	Zone
001	Zone Monitor XP95	1
002	Zone Monitor XP95	1
003	Call Point XP95	1
004	Multi-sensor XP95	1
005	Sounder Control Unit XP95	1
006	3 Channel I/O Unit XP95	1
007	Photoelectric Monitor XP95	1
009	Sounder Control Unit XP95	1
010	Photoelectric Monitor XP95	1

Click on 'Select All', then select 'Convert to Wireless'.

The screenshot shows the 'Loop Manager' window with a table of devices:

Address	Type	Zone	Location Text
001	Zone Monitor XP95	001	
002	Zone Monitor XP95	001	
003	Call Point XP95	001	
004	Multi-sensor XP95	001	
005	Sounder Control Unit XP95	001	
006	3 Channel I/O Unit XP95	001	
007	Photoelectric Monitor XP95	001	
009	Sounder Control Unit XP95	001	
010	Photoelectric Monitor XP95	001	
011	Heat Monitor XP95	001	
016	Call Point XP95	001	
026	Photoelectric Monitor XP95	001	
040	3 Channel I/O Unit XP95	001	
096	Sounder Control Unit XP95	001	
125	Zone Monitor XP95	001	
126	Zone Monitor XP95	001	

At the bottom of the window, the 'Select All' button is circled with a red '1' and the 'Convert To Wireless' button is circled with a red '2'.

# Download & Prepare Setup File - Continued

When prompted, select the correct device types. i.e. Radio Hub or RCC etc. Refer to the earlier printout, to ensure the correct device types are selected.

Upon completion, the loop manager should display the correct wireless device types.

Address	Type	Zone	Location Text
001	Hub Wireless	001	
002	RCC Wireless	001	
003	Call Point Wireless	001	
004	Multi-sensor Wireless	001	
005	Sounder Wireless	001	
006	2 Channel Input/Output Unit Wireless	001	
007	Optical Smoke Detector Wireless	001	
009	Sounder Wireless	001	
010	Optical Smoke Detector Wireless	001	
011	Heat A1R Rate of Rise Monitor Wireless	001	
016	Call Point Wireless	001	
026	Optical Smoke Detector Wireless	001	
040	2 Channel Input/Output Unit Wireless	001	
096	Sounder Wireless	001	
125	RCC Wireless	001	
126	RCC Wireless	001	

Select close, to return to the main screen.

**Repeat Step 7; for all other loops with wireless devices connected, converting them all to wireless type devices as necessary.**

## 8 Import Loop Explorer Loop Text Information

Click on the control panel icon, then click on the 'Q Config' icon.

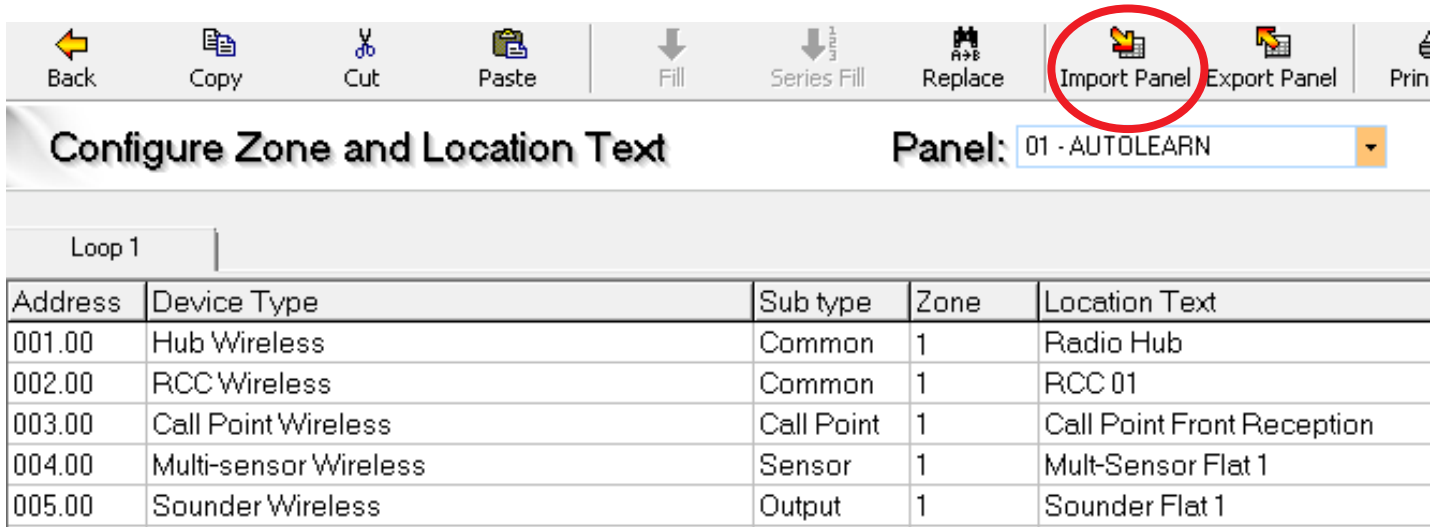
The screenshot shows the software interface with the following components:

- Navigator:** A tree view on the left containing 'New Site', '01 - AUTOLEARN', 'Loop 1', 'Panel I/O', and 'Cause & Effect'. A red circle labeled '1' highlights the 'New Site' icon.
- Action Panel:** A horizontal bar at the top right containing icons for 'New', 'Save', 'Edit', 'Change', 'Delete', 'Action', 'Q Config', 'Zone Mgr', 'Sens Mgr', and 'Loop Mgr'. A red circle labeled '2' highlights the 'Q Config' icon.
- Table:** A table on the right displaying device information:

Address	Device Type	Zone
001	Hub Wireless	1
002	RCC Wireless	1
003	Call Point Wireless	1
004	Multi-sensor Wireless	1
005	Sounder Wireless	1
006	2 Channel Input/Output Unit Wir...	1
007	Optical Smoke Detector Wireless	1
009	Sounder Wireless	1

# Download & Prepare Setup File - Continued

Click on 'Import Panel' and select previously saved loop file.



Configure Zone and Location Text Panel: 01 - AUTOLEARN

Loop 1

Address	Device Type	Sub type	Zone	Location Text
001.00	Hub Wireless	Common	1	Radio Hub
002.00	RCC Wireless	Common	1	RCC 01
003.00	Call Point Wireless	Call Point	1	Call Point Front Reception
004.00	Multi-sensor Wireless	Sensor	1	Multi-Sensor Flat 1
005.00	Sounder Wireless	Output	1	Sounder Flat 1

The necessary file configuration changes are now complete.

## 9 Save New & Completed File

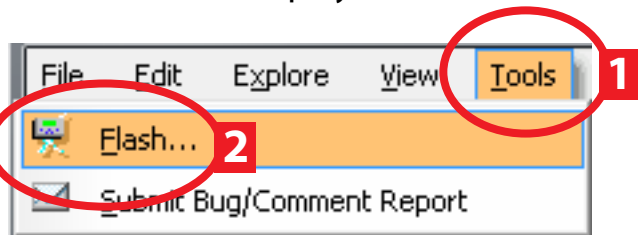
Once complete, click the 'back' button, to return to the main display and save the updated file.



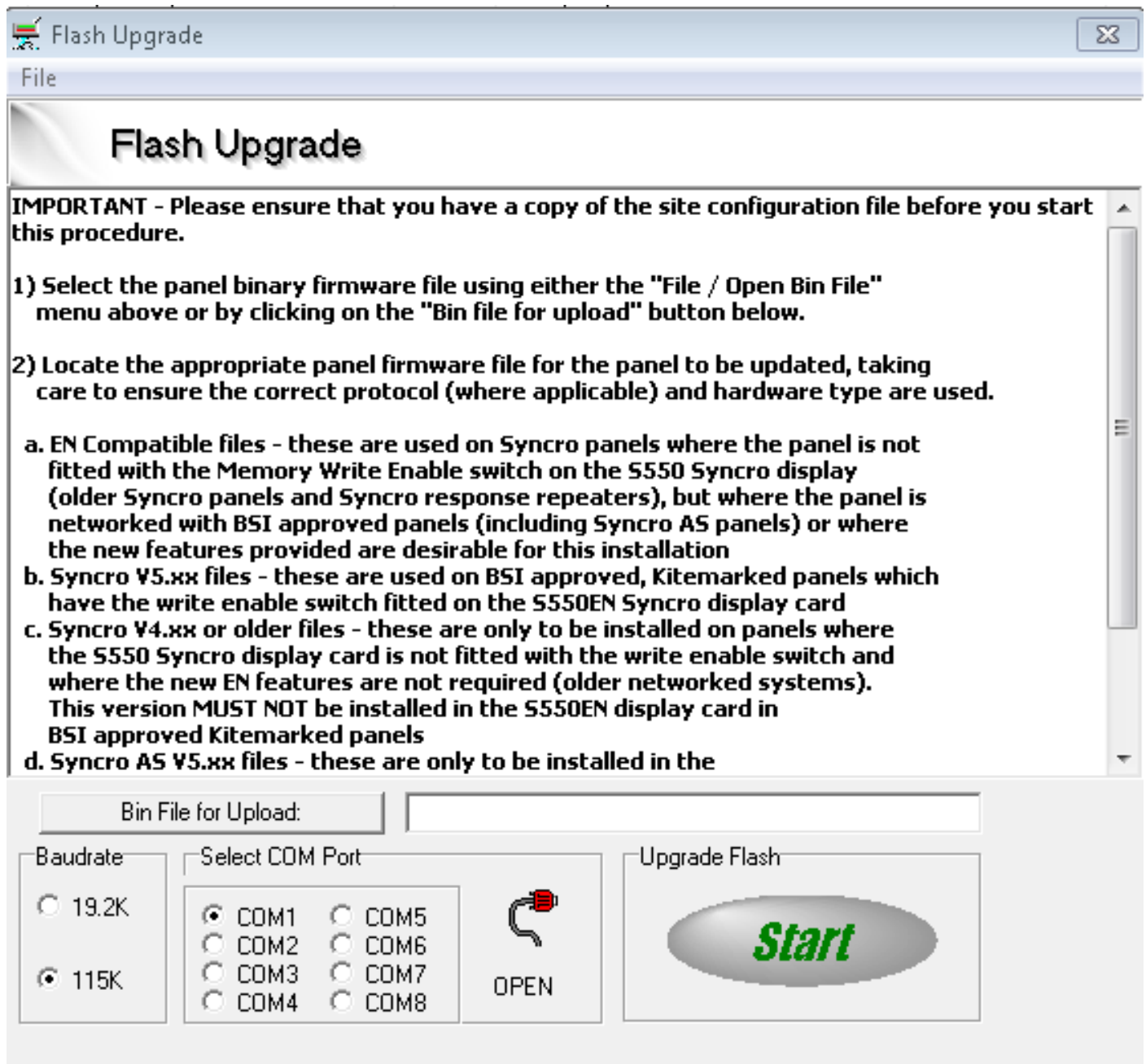
# Panel Software Upgrade

## 1 Flash Upgrade

From the main display, select the 'Tools' drop down, then select 'Flash'.



The display will change to show:



# Panel Software Upgrade - Continued

Select 'Bin File for Upload', then select the appropriate .bin file.



**WARNING. DO NOT re-flash to wrong panel type!**

**Syncro Control Panel = Revision 650UK.**

**Syncro AS Control Panel = Revision 651\_UK.**

Follow the on screen instructions, then select 'Start'.

**Flash Upgrade**

**1** **IMPORTANT - Please ensure that you have a copy of the site configuration file before you start this procedure.**

- 1) Select the panel binary firmware file using either the "File / Open Bin File" menu above or by clicking on the "Bin file for upload" button below.**
- 2) Locate the appropriate panel firmware file for the panel to be updated, taking care to ensure the correct protocol (where applicable) and hardware type are used.**
  - a. EN Compatible files - these are used on Syncro panels where the panel is not fitted with the Memory Write Enable switch on the S550 Syncro display (older Syncro panels and Syncro response repeaters), but where the panel is networked with BSI approved panels (including Syncro AS panels) or where the new features provided are desirable for this installation**
  - b. Syncro V5.xx files - these are used on BSI approved, Kitemarked panels which have the write enable switch fitted on the S550EN Syncro display card**
  - c. Syncro V4.xx or older files - these are only to be installed on panels where the S550 Syncro display card is not fitted with the write enable switch and where the new EN features are not required (older networked systems). This version MUST NOT be installed in the S550EN display card in BSI approved Kitemarked panels**
  - d. Syncro AS V5.xx files - these are only to be installed in the**

Bin File for Upload:

Baudrate  
 19.2K  
 115K

Select COM Port  
 COM1  COM5  
 COM2  COM6  
 COM3  COM7  
 COM4  COM8

OPEN

Upgrade Flash  
**2** **Start**

Upon completion of the upgrade, the panel will re-initialise. Once restarted, enter Access Level 2, to check the new software revision number is correctly shown.

# Panel Software Upgrade - Continued

## 2 Upload Setup

The new setup file can now be uploaded to the Control Panel.

Upon completion, the panel will reinitialise and show a normal state.

Check in the view devices menu; to ensure that the text and device type information is correct.

## 3 Test Devices

Test devices on the system, to ensure information is correctly displayed. It is recommended that a minimum of one input device and one output device is tested per loop. i.e. a call point and a sounder audio device.

# Troubleshooting

Should you encounter any issues during your upgrade, contact EMS Technical Support on +44 (0) 1227 369570.



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