

XL-1000 Remote Firmware Update Procedure

The XL-1000 series of multi-function vehicle detectors supports remote firmware updates over the Ethernet connection of the Server Card. The ETG Site Monitor PC program is used to perform the update procedure.

It is important to ensure that the firmware versions for all cards in a chassis are part of the same firmware release set. This needs to be checked manually. Firmware revisions are only tested within the same release set and mixing incorrect firmware revisions can lead to undefined behaviour that may require a site visit to remedy.

If a currently installed firmware revision is unchanged in the new firmware release set, then it does not need to be updated.

It is important to always upgrade the Detector Cards before the Supervisor Card, and the Supervisor card before the Comms Card.

Step 1: Connect to the remote site

Open the ETG Site Monitor program and connect to the remote site. Once a connection is established, the following screen should be displayed (note the green Connected and Synced buttons).

ETG Site Monitor v2.1.9

Selected Site: site

Connected Synced TX RX

Site List

Site Name	Description	Detector Type	Lanes	IP Address	Port
site	Default description	Loop Piezo Classifier	4	10.77.0.51	10

Edit Site Parameters

Site Name: Description:

IP Address: Port: Lanes:

Reset Card Add

Firmware Remove

Update Time Save

Cabinet Temperature: -
Road Temperature: -
Battery: -

Current Site Time: 21/11/2013 10:11:02 AM

Add, remove and edit sites

Step 2: Press the Firmware button

Pressing the Firmware button on the Sites screen will open a dialog box (as shown in the next image) containing the details of the current firmware revisions of the connected site.

The ETG Site Monitor program is capable of interfacing with older XL-500 classifiers. These older units do not have the capability of updating the Supervisor and Detector cards remotely. The PCB revision field can be used as an indication of whether the connected device is one of these older XL-500 classifiers. A PCB revision of 19isup00 for the Supervisor and the 19icpu00 for the Detector card is an indication that the connected unit is a XL-500 and cannot be remotely updated.

The screenshot shows the ETG Site Monitor v2.1.9 interface. A 'Versions' dialog box is open, displaying the following table:

Card	PCB	Firmware
Supervisor	19isupAA	13.11.14
Comms Hardware	19ircc00	12.03.27
Comms Firmware	19ircc00	13.09.23
Detector 1	19icpuAB	13.05.30
Detector 2		
Detector 3		
Detector 4		

The background interface shows the 'Site List' table with the following data:

Site Name	Description	Detector Type	Lanes	IP Address	Port
site	Default			10.77.0.51	10

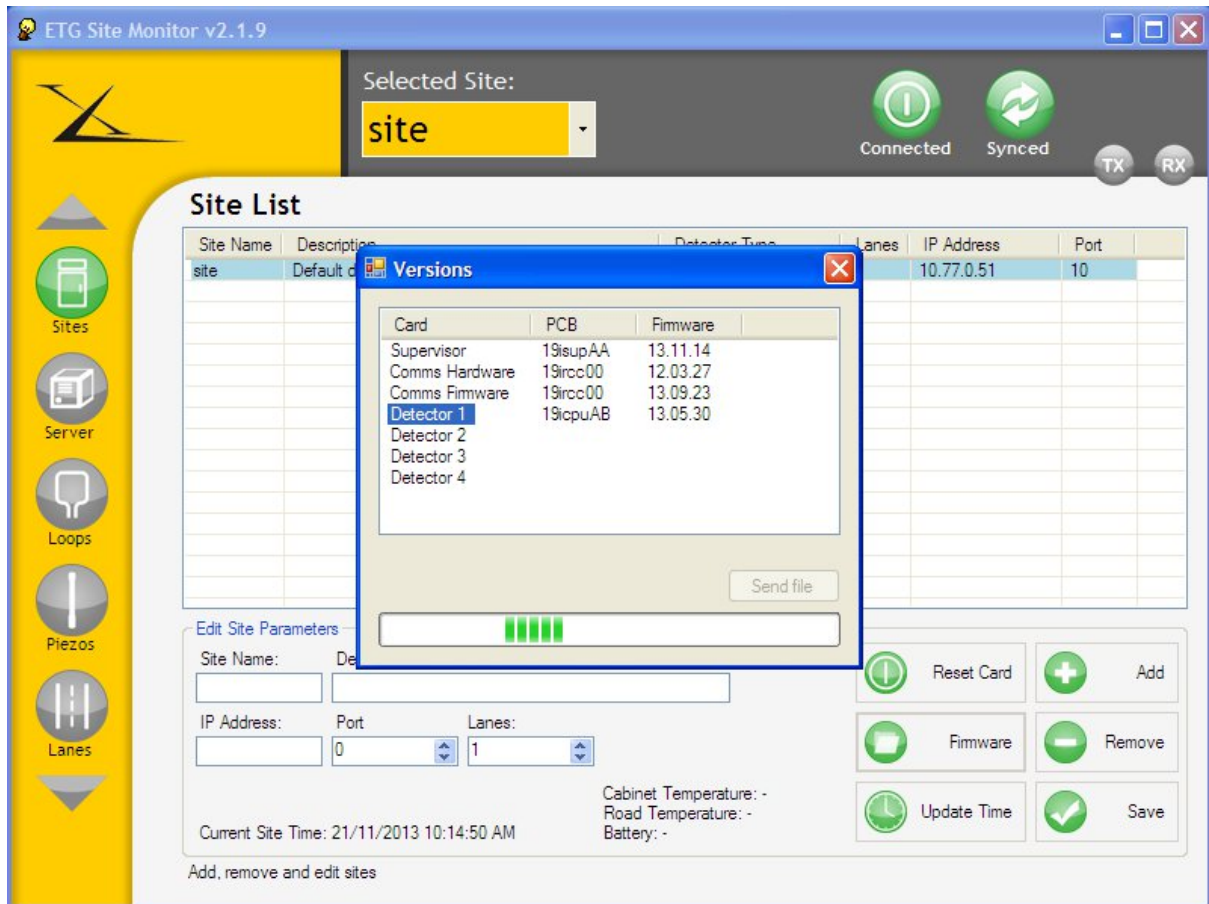
The 'Edit Site Parameters' section shows the following fields:

- Site Name: []
- IP Address: []
- Port: [0]
- Lanes: [1]

Status indicators: Connected, Synced, TX, RX.

Step 3: Update the firmware on a card

Check whether a card needs to be updated by comparing the displayed firmware and the revision of the supplied firmware file. If the revisions do not match, select the card from the list and press the Send File button. Navigate to, and select, the supplied firmware file. The status bar will be active (as shown in the next image) until the update procedure has completed. This may take several minutes, depending on the card being updated and the quality of the network connection. Once the update is complete the card will show the new firmware revision.



Repeat this step until all cards have been updated.