Reset button

Using a pin in the reset hole (adjacent to the console port) you can operate the reset button.

Hardware restart

Press the reset button for less than 5 seconds and release. The FireBrick will do an immediate hardware restart, using the existing configuration. This **does not** cleanly shutdown BGP, etc.

A *controlled* shutdown and restart can be done from the web interface, or console port.

Sending carriage return to the console port, just after a hardware restart, accesses boot loader mode. Type ? for boot loader commands.

Configuration recovery mode

Press and hold the reset button for 5 seconds - the LEDs light up blue left to right to time the 5 seconds for you. When all LEDs show, release the reset, and the FireBrick will restart.

This will start the FireBrick in a **temporary** factory reset configuration. Follow the instructions overleaf to access the configuration web interface. This allows you to recover the latest saved configuration if you have a username and password. You can edit this to correct any mistakes and save this as the new configuration. **This is temporary** - if you restart the FireBrick without having saved a new configuration then it will revert to the latest saved configuration.

Factory reset

Hold the reset button whilst powering on. The LEDs will light up in red left to right to time the 15 seconds for you. When all LEDs show, release the reset, and the FireBrick will restart.

The FireBrick will be in a complete factory reset state with no configuration.

Ports and connections

The FireBrick has two power inlets - these can be at the front, or at the rear - please ask your reseller to ensure your Firebrick is shipped in a configuration you require. Each power port has a status LED lit if power is active. To power off, disconnect all power sources.

- There is a USB3 port which provides some functions, see the manual.
- There is a status LED which can show any colour, this is configurable. Default is green.
- There are two SPF+ ports for 10G connectivity (main/standby).
- There are eight SFP ports for 1G connectivity on each port.
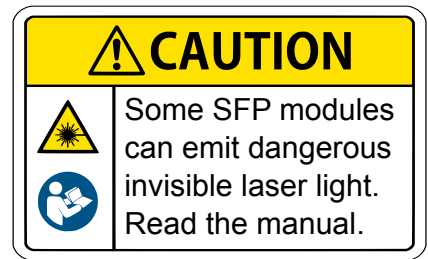- There is an RJ45 (copper) serial console port. See manual for wiring.

Note that the LEDs will cycle left/right when no Ethernet ports are connected.

Status LED — Power LED | USB | SFP+ | - SFP - | Console | Power LED — Reset

Product Safety Information - Please read				
Product	Manufacturer:	FireBrick Ltd	Model:	FB9000
Safety Standard	BS EN IEC 62368-1:2020+A11:2020			
Rated Power	100-240V∼ 50-60Hz 40W		Class I	Dual supply
Max humidity	Operating:	90% RH (non condensing)	Storage:	95% RH
Temperature	Operating:	0 to 50°C	Storage:	-40 to +85°C
Max Altitude	Operating:	2000m		
Functional range	Power	85-275V∼ 47-440Hz	Typically under 30W	

⚠ **CAUTION**

Shock hazard. Disconnect all power sources before opening case.

⚠ **CAUTION**

Some SFP modules can emit dangerous invisible laser light. Read the manual.

SFP Copper Ethernet ports are designed for connection to wiring within same building. For connections between buildings use optical links.

The FB9000 is intended to be mounted in a 19" equipment rack using the supplied rack mount brackets. Do not insert screws more than 10mm in to case - use supplied screws for rack brackets. Air flow for the fans is *out* of the rear, with intake from the sides.

Getting Started

Before you start you will need to fit a suitable SFP module.

It is recommended you fit a 1G SFP to port 3 - a copper port to connect to a laptop is ideal.

Configuration

You configure your FireBrick using a web browser - to do this, you need a local IP connection between your computer and the FireBrick. There are several ways to get started…

Method 1 - use the FireBrick's DHCP server.

If your computer is already configured (as most are) to get an IP address automatically, connect your computer to **port 3** (or any odd numbered port) on the FireBrick, and the FireBrick's inbuilt DHCP server should give it an IP address. You can then access the web control pages using your browser.

	Set PC IP	Web page
	DHCP	http://my.firebrick.uk/

Method 2 - configure a computer with a fixed IP.

Alternatively, you can connect a computer to **port 3** and manually configure your computer to have a fixed IP address. You can then use a browser to access the FireBrick's web pages as follows. The **3** in these addresses is the port, you can use any odd numbered port if you prefer.

	Set PC IP	Web page
IPv6	2001:DB8:3::2/64	http://[2001:DB8:3::1]/
IPv4	10.0.3.2 / 255.255.255.0	http://10.0.3.1/

Method 3 - use an existing DHCP server.

If your LAN has a DHCP server then do not connect port 3 to your LAN as it will clash with your server. Instead, connect **port 10** (or any even numbered port) to your LAN and the FireBrick will get an IP address automatically. Check your DHCP server to find the address allocated and access this IP address using your web browser.

What's in the box

The FB9000 as supplied includes this quick start guide, and rack mount ears, but does not include power leads or SFP modules. This is to reduce waste, as typically such leads will not be the right leads, length, or colour required. The box is recyclable cardboard. The protective plastic bag is biodegradable.

FireBrick web interface

Following these instructions you should reach the FireBrick's web control pages which prominently displays "Configuration needed". Click the "edit configuration" link, which will take you to the configuration setup - the following are good initial steps to take.

Add a new user

You now need to add a user with a password in order to gain full access to the FireBrick's user interface.

You need a username and password, but can set a *real* name as well.

You can set up two factor authentication later, see manual pages for details.

Login

Having changed the config, select "Save" and you will see a page showing the progress of storing the new configuration in Flash memory. On this page there is a *Login* link - click on this link and then log in using the username and password you chose. You can then set up the rest of the FireBrick's configuration.

Remove temporary subnets

The FireBrick can have many subnets at once. The 2001:DB8:3::1 and 10.0.3.1 addresses, and similar, are temporary and should be removed, but we recommend you add new addresses and test they work as expected before removing these temporary addresses.

Software updates

The FireBrick is constantly being improved and new features added. Software updates are automatic and free of charge. You can control if/when software updates are applied in the "Setup" / "System settings" section of the configuration.

In the unlikely event of a software issue with the FireBrick, a log and stack trace are emailed automatically to the FireBrick development team. If you do not wish this to happen, or you wish emails to be sent somewhere else, you can change the settings in the "Setup" / "Log target controls" for "fb-support".

FireBrick Manuals

The comprehensive manuals, regulatory approval declarations, and further information are available on the FireBrick web site.

www.FireBrick.co.uk