FIRESTORM TROUBLESHOOTING GUIDE

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We strongly suggest you take some time to get familiar with your new firing system **before the show.** Most issues are easily solved with a few moments of calm thought.

Here's a quick list of things to check if your FireStorm Firing System isn't behaving as expected.

You are welcome to contact us for help and support by emailing sales@easypyro.com or calling +44(0)845 468 2419 (office hours) or +44(0)7940 397871 (out of hours).

PROBLEM: No link light (middle light) on TX1 Remote Control

Is the module key switch / slide switch set to ARM?

If the module key switch is set to OFF or TEST the module does not communicate with the remote control. Most of the electronics inside the module are effectively OFF. This is to ensure the module is in the safest possible condition when the operator is testing igniters.

Is the TX1 Remote Control DISAMRED?

If the remote control is ARMED then all 2 way communication stops to allow a quiet radio network and provide the highest possibility that FIRE commands will be received by the module. You can switch back and forth between ARMED and DISARMED mode by pressing the ARM button on the remote control. The red light on the top right of the remote signifies if it is armed or not. When DISAMRED, the link status light will show the continuity / link status. When ARMED, the link status light will be orange whenever there is FIRE command sent.

Is there interference?

Distances over the stated range and random interference on the frequency could cause the link light to be off. This is what the link light is for - to warn you of potential problems with the radio link. Try moving closer to the module or re-positioning the module. The link light will update once per second.

Do you have more than 1 module that shares a Channel & Cue combination?

The FireStorm TX1 Remote Control can't display correct continuity and link status information for more than 1 module on the same Channel & Cue. You <u>CAN</u> have multiple modules on the same Channel & Cue, but the link status light won't give a true reading, and might be off or change from green to red randomly.

Note that the TX2 Control Desk <u>DOES NOT</u> have this issue, and successfully displays link and continuity information from multiple modules on the same Channel & Cue combination. In summary, if you have any overlapping cues then there will not be correct link status information when that cue is selected on the TX1 remote control.

Have you bonded the module to the remote control?

Each module needs to be bonded to a Channel & Cue combination on the remote control. You only need to do this once and the module and remote will <u>NOT</u> lose bonding information when switched off or batteries removed. However, is it good practice to re-bond modules to the remote control before use so that there is no doubt which Channel & Cue a module is bonded to. You can also clear the stored bonding information by holding the module BOND button for 15s until the bond light goes out.

Is the correct channel and cue selected?

The link light will show the link status and continuity information for anything that is bonded to that specific Channel and Cue combination. If an incorrect cue or channel is selected then then the link status light will be off. Press the power button on the TX1 remote control and the display will show "c1" - "c9". These are the 9 logical channels the remote can operate on. Simply select the desired channel using the UP and DOWN arrows and tap the power button again to go back to the home screen. The remote control will also show the current channel for a few seconds when it is switched on.

Is there more than 1 FireStorm Remote Control on the same site?

In rare cases there can be more than 1 FireStorm remote control operating on the same site. This can cause some issues as the system architecture is intended for everything to be controlled from 1 central point. The system is secure and another remote will not cause any unexpected cues to fire. However, it can cause issues with congestion on the radio link and intermittent communication between modules and remote. If you require multiple remote controls to be used on the same site, please contact us for a custom solution.

PROBLEM: Module won't bond to remote control

Is the Module key switch or slide switch set to ARM?

Is the remote control DISARMED? (top right light should be OFF)

Are there good batteries in the remote control AND module? (Ideally you want 3 flashes on the battery indicator) Do both Remote and Modules have the same firmware version?

Pre August 2015 was V1 firmware, Post August 2015 was V2 firmware. The different versions are incompatible. We can easily upgrade all your module and remotes to the latest firmware free of charge.

You can check on the TX1 remote control by holding the UP arrow while switching it ON. All lights will be on. Press any button and the remote will show you the firmware version (usually V2.1 as of Nov 2015). Remove batteries to reset and return to normal operation. Contact us to tell us your firmware version. Note that this only applies if you have bought FireStorm equipment post August 2015 and want it to work with Pre August 2015 equipment that has not already been upgraded.

PROBLEM: Continuous flashing red light on module (do not confuse with intermittent 'battery level' flash)

This indicates a possible error condition that we detect with our intelligent self-test. However, it is possible to get false positive results. Simply switch the module off, wait a second, and switch is on again. In most cases, the error will disappear. If the error continues, please do not use the module and contact us for a repair or replacement.

Error Check 1 - Check for High Side MOSFET stuck ON.

Flashes red bond LED ON 50% / OFF 50% 5x per second.

Error Check 2 - Check for any low side MOSFET stuck ON.

Flashes red bond LED ON 20% / OFF 80% 1x per second.

Error Check 3 - Check for any low side MOSFET stuck OFF.

Flashes red bond LED and red cue LED ON 20% / OFF 80% 1x per second.

PROBLEM: I can't fire as many igniters as expected

We strongly recommend Energizer Industrial 9V batteries for the firing modules. They batteries have a very high short circuit current and are ideal for firing pyrotechnic igniters. You can buy them in bulk packs of 12 from Amazon or other online retailers and they are very cost effective. **DO NOT USE** low quality "zinc chloride", "heavy duty" or "unbranded" alkaline batteries - performance will not be as expected.

TIPS & TRICKS

- If storing the TX1 remote control long periods of time, remove the batteries to prevent them going flat.
- Store all FireStorm equipment in a warm, dry environment such as in a house. Like all electronic items, large fluctuations in temperature and humidity can shorten the life of the equipment.
- Wipe the FireStorm equipment with a damp cloth after each use. This will remove potentially corrosive firework residue and help keep the equipment in good working order.