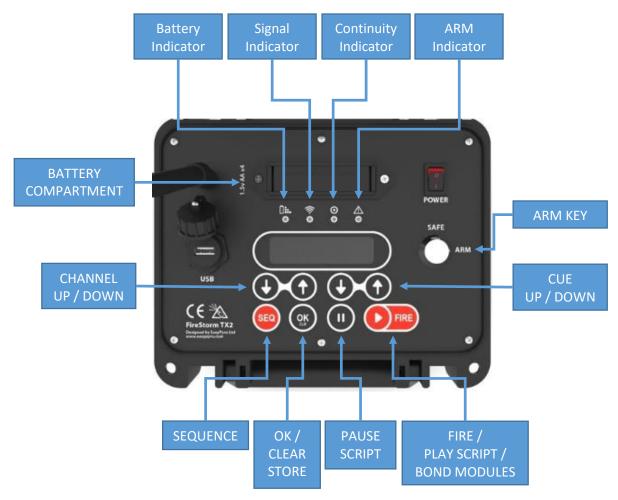


## Introduction

The TX2 Control Desk is an advanced remote control for the FireStorm Firing System.

## **Controls & Indicators**



# **Bonding Modules**

Modules must be bonded to the TX2 Control Desk before they can be used. This sets the channel that a module will respond to. It also sets the starting cue for the module.

Modules only need to be bonded one time.

Modules can be re-bonded to set a different channel and starting cue to reconfigure the system. This is one of the powerful features of the FireStorm system; modules can be bonded to the remote control in many different configurations to suit your show design.

**Note:** Modules must be bonded one-by-one. Do not try to bond several modules at once.

- 1. Hold the BOND Button on the RX1, RX6 or RX18 for about 5 seconds until the Bond light on the module is yellow.
- 2. Set the desired CHANNEL and STARTING CUE on the TX2.
- 3. Ensure the TX2 key switch is set to SAFE otherwise bonding will not work.
- 4. Press and release the FIRE button on the TX2. The Bond light on the module will go out. The Link light and Continuity Light on the TX2 should now turn on to indicate successful 2 way communication with the

module. The Link light should be green and the Continuity Link will be either Green / Red depending on if there any igniters connected to the module.

# **Clearing Modules**

This will delete all stored modules from the TX2. This is useful when re-bonding lots of modules. It effectively resets the control desk and all modules will have to be bonded again.

1. Hold down the OK button for about 10 seconds until the display shows:



# **Battery Information**

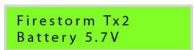
The TX2 uses 4 x AA 1.5 volt <u>alkaline batteries</u>. Rechargeable batteries are not recommended due to their lower voltage. Only use good quality alkaline batteries in the TX2. We recommend Energised Industrial brand, although any good quality alkaline battery will work.

They are installed in the removable drawer in the front panel. You can use the ARM keys or a flat blade screwdriver to remove the battery drawer. Always ensure the battery drawer is securely pressed down and locked in place.

The battery indicator light will always show you the approximate battery level.

Light	Description
3 flash	Battery full
2 flash	Battery partially used, change soon.
1 flash	Change battery.

The exact battery voltage is shown in the screen when the unit is switched on. Fresh batteries should read more than 6V.



# **Signal Link Indicator**

The signal indicator shows you if there is good two way communication between the TX2 and the firing module.

Colour	Description	
OFF	Nothing bonded to this channel and cue combination.	
GREEN	Good link to ALL modules bonded to this channel and cue combination.	
YELLOW	Good link to <b>SOME</b> modules when multiple modules are bonded to this cue and channel combination.	
RED	Bad link to ALL modules bonded to this channel and cue combination.	

You want the light to be GREEN.

**Note:** The continuity light updates one time per second. It is normal to notice some flickering of the light between GREEN and YELLOW / RED when at maximum range or where there is momentary interference. When manual firing, many redundant firing commands are sent and it is normal for the module to work for some

distance farther after the RED light starts to show. However for maximum confidence, we recommend users aim to have a solid GREEN light before firing.

# **Continuity Indicator**

The continuity indicator shows you if there is good continuity on this channel and cue combination.

Colour	Description	
OFF	Nothing bonded to this channel and cue combination.	
GREEN	Good igniter continuity on <b>ALL</b> modules bonded to this channel and cue combination.	
YELLOW	Good igniter continuity to <b>SOME</b> modules when multiple modules are bonded to this channel and cue	
	combination.	
RED	Bad igniter continuity to <b>ALL</b> modules bonded to this channel and cue combination.	

You want the light to be GREEN.

# **Module Discovery during Switch On**

When you switch the control desk on, it will scan (discover) available firing modules. These are the modules that it is bonded to and **that are switched on and in radio range**. The example below uses 3 modules. The display will show:



Once OK is pressed, the control desk **will only display information from these discovered modules** during this session. For example if you have 3 modules bonded to the control desk, but only take 2 to a show, then the control desk will assume you are only working with those 2 discovered modules for this show.

**Note:** The undiscovered modules can still be fired. For example if the control desk is switched on and has run discovery, and another bonded module is then switched on, then the module can be armed and fired. However no continuity and link status information will be displayed for the new module because it hasn't been "discovered" but the control desk. We don't recommend doing this as things can get confusing.

If adding or removing more modules always restart the control desk to discover all available modules.

## **ARM Indicator**

The ARM indicator shows if the control desk is armed and ready to fire.

Colour	Description	
OFF	Remote is DISARMED and will not fire.	
RED	Remote is ARMED and ready to fire.	

#### **ARMING the Control Desk**

The ARM KEY must be switched to ARM to make the control desk ready for firing.

When the control desk is ARMED the ARM Indicator will be RED and the control desk will constantly send ARM commands to the modules.

Switch the control desk ARM KEY to SAFE when you are not firing a show.

The firing module's status light should be solid RED when the control desk is ARMED.

There is no two-way communication between modules and control desk when the control desk is ARMED.

The control desk takes a snapshot of continuity information from the modules at the moment when it is ARMED. To refresh the continuity information switch the key to SAFE and then ARM again. This will reload all the continuity information from the firing modules.

- 1. Switch the ARM KEY to the ARM position.
- 2. The control desk will try to ARM all discovered modules. The example below shows 3 modules armed of an expected 3 modules.



3. If the control desk can not ARM all discovered modules, the display shows:



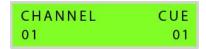
Pressing OK allows you to continue anyway and fire cues.

**Note:** It may be possible that the control desk has missed the ARM acknowledgement from the "missing" module. In this case, try re-positing the control desk (for example moving it higher up or closer to the modules) and re-arming the control desk. In an emergency you can still fire the "missing" module as long as it is bonded to the control desk.

# Firing a Cue

A single cue may be fired very easily.

- 1. ARM the Control Desk by rotating the ARM KEY.
- 2. Set the desired channel number using the CHANNEL UP & CHANNEL DOWN buttons.
- 3. Set the desired cue using the CUE UP & CUE DOWN buttons.



**Note:** The Link Status LED and Continuity LED will show if a module is bonded to the selected channel and cue and if it has been fired already.

4. Press the FIRE button and hold the button until the cue has fired. When the FIRE button is released the Cue will automatically increment to the next cue. This feature makes it easy to keep pressing the FIRE button and sequentially fire cues.

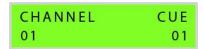
**Note:** Holding the FIRE button sends many redundant fire commands to ensure that there is a high probability of firing the cue. We recommend holding the FIRE button until you see the effect being fired. Remember, releasing the FIRE button will automatically increment to the next cue. You can easily return to the desired cue using the CUE UP and CUE DOWN buttons.

# Firing a Sequence

A subset of sequential cues can be fired on a module (or across modules bonded to the same channel) with a fixed time delay between each cue. This is commonly called a "chase" and is useful for rapid single shot effects or simulated gunfire etc.

The following can be done when the TX2 is SAFE or ARMED. To actually fire cues the TX2 must be ARMED.

- 1. Set the desired channel number using the CHANNEL UP & CHANNEL DOWN buttons.
- 2. Set the desired start cue using the CUE UP & CUE DOWN buttons.



- 3. Press SEQ button.
- 4. Set the desired time delay using the CHANNEL UP & CHANNEL DOWN buttons.
- 5. Set the desired end cue using the CHANNEL UP & CHANNEL DOWN buttons.



6. Press and hold FIRE button and the sequence will fire for as long as the FIRE button is pressed. The sequence will stop on the end cue or whenever the FIRE button is released.

Note: You can fire a sequence across multiple modules by bonding the modules to successive cues on the same channel. For example an 18 cue module bonded to Channel 1, Cue 1 and then another 18 Cue module bonded to Channel 1, Cue 19 would allow a 36 cue sequence to flow from Cue 1 to Cue 36. There are 99 cues available on each channel. For longer or more complex sequences we recommend using a Firing Script on a USB memory stick.

# **Firing an Automatic Script**

Please see the **TX2 Script Instructions** for how to fire a script. It's very easy!

# **Deadman Switch Operation**

This is an option for the TX2 Control Desk. The Deadman Switch provides extra safety by enabling two button "Grip Switch" style of operation for the TX2 Control Desk. The ergonomic "Grip Switch" also allows convenient one handed operation and will stop any automatic operations (Sequence or Scripted Firing) when released.

When Deadman Mode is enabled and the Deadman Switch is connected the TX2 will operate in the following way:

Mode	Description
Normal Manual Firing	Deadman Switch must be used to fire a cue. Repeatedly pressing Deadman Switch will
	fire successive cues.
Sequence Firing	Deadman Switch must be used to start a sequence. Sequence will stop if Deadman
	Switch is released.
Scripted Firing	Deadman Switch must be used to start a Script. Script will stop if Deadman Switch is released. The PLAY button can still be used to skip ahead to the next event in the Script.
	The CHANNEL UP / DOWN buttons can still be used to skip ahead to the next segment in
	the script.

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## **Connect Deadman Switch**

The Deadman Switch must be connected to the TX2 Control Desk for it to operate.

Simply plug the connector into the socket on the right hand side of the TX2.





# **Enable / Disable Deadman Mode**

Deadman Mode must be enabled for the Deadman Switch to operate. To enable or disable Deadman Mode follow the procedure below.

- 1. Ensure the TX2 Control Desk is OFF.
- 2. Hold the CHANNEL DOWN button.
- 3. Switch the TX2 Control Desk ON.
- 4. You may release the CHANNEL DOWN button as soon as the unit has started to switch on.

The usual sequence of start-up screens will be displayed. The third screen shows if Deadman Mode is on.

Firestorm TX2 Deadman ON

To disable Deadman Mode and return to normal operation, repeat the above procedure. The **third** start up screen will now show that Deadman Mode is off.

Firestorm TX2 Deadman OFF

## **Test Deadman Switch**

You can test if the Deadman Switch is connected correctly. When Deadman Switch is **connected correctly**, Deadman Mode is **enabled** and TX2 is **disarmed**, any press of the Deadman Switch will cause the ARM LED to switch on.

If the ARM LED does not switch on, then there is a problem. Check if Deadman Switch is connected correctly and check if Deadman Mode is enabled.