

CATFIRE



CFTFU-S1618

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DIGITAL

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CATFire CFTFU-S1618 Quick operation reference

Go to main display: (Hold 2Sec+) =>

U01	B100%
DISARMED	

Adjust display contrast: (Hold 2Sec then keep holding) & /

Set unit address: , / =>

Select menu item
Addressing

=> , / =>

Unit address
UA: 001

=> =>

Set unit address
UA: 001

=> / , =>

Unit address
UA: 039

Cue test: , / =>

Select menu item
Cue testing

=> =>

Do cue test?
<SET> to begin

=> =>

TESTING CUES
TESTING CUES

=> (Wait) =>

U01	B100%
< NOT DISARMED >	

(Wait) => / =>

123456789 ₀ 1 ₁ 2 ₁ 3 ₁ 4 ₁ 5 ₁ 6
0000 0 0 0

Battery test: , / =>

Select menu item
Battery testing

=> =>

Do load test?
<SET> to begin

=> =>

TESTING BATTERY
TESTING BATTERY

=> / =>

Battery result:
EXCELLENT

Remote Arm UNLOCK: , / =>

Select menu item
Remote arm lock

=> =>

Arming lock:
LOCKED

=> =>

Set arm lock:
LOCKED

=> / =>

Set arm lock:
UNLOCKED - TEMP

=>





CATFire – CFTFU-S1618 Firing unit

Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS, FEATURES, FIRMWARE AND ITS FEATURES, SOFTWARE AND ITS FEATURES, DOCUMENTATION AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE.

Errors and Omissions Excepted (E&OE).

Revision history

Revision	Changes
1	First; Support hardware version 1; Firmware version 4.
2	Business address change

About your firing unit – intended usage



Keep children, pets and animals away from this unit.



Only competent adults should operate this unit.



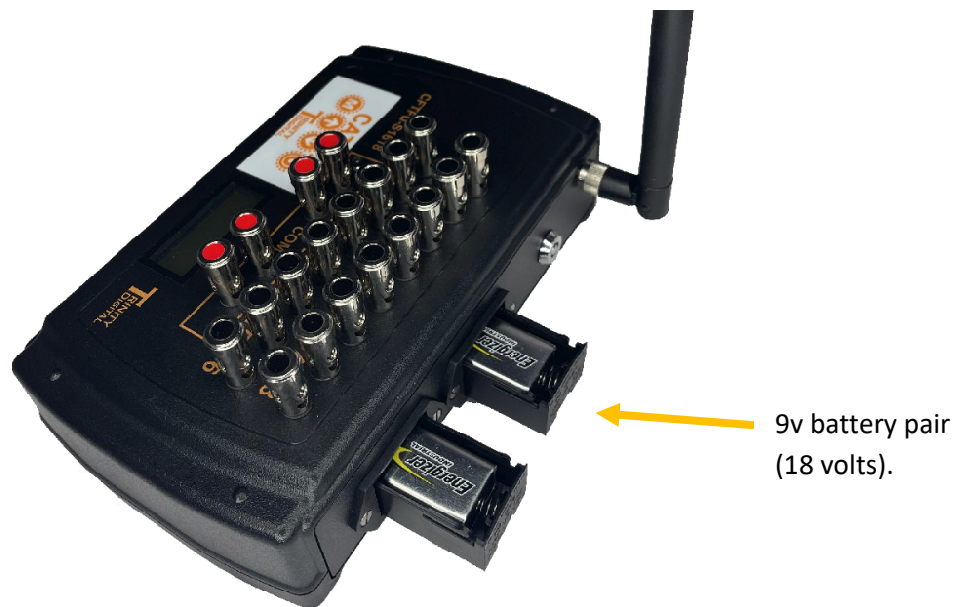
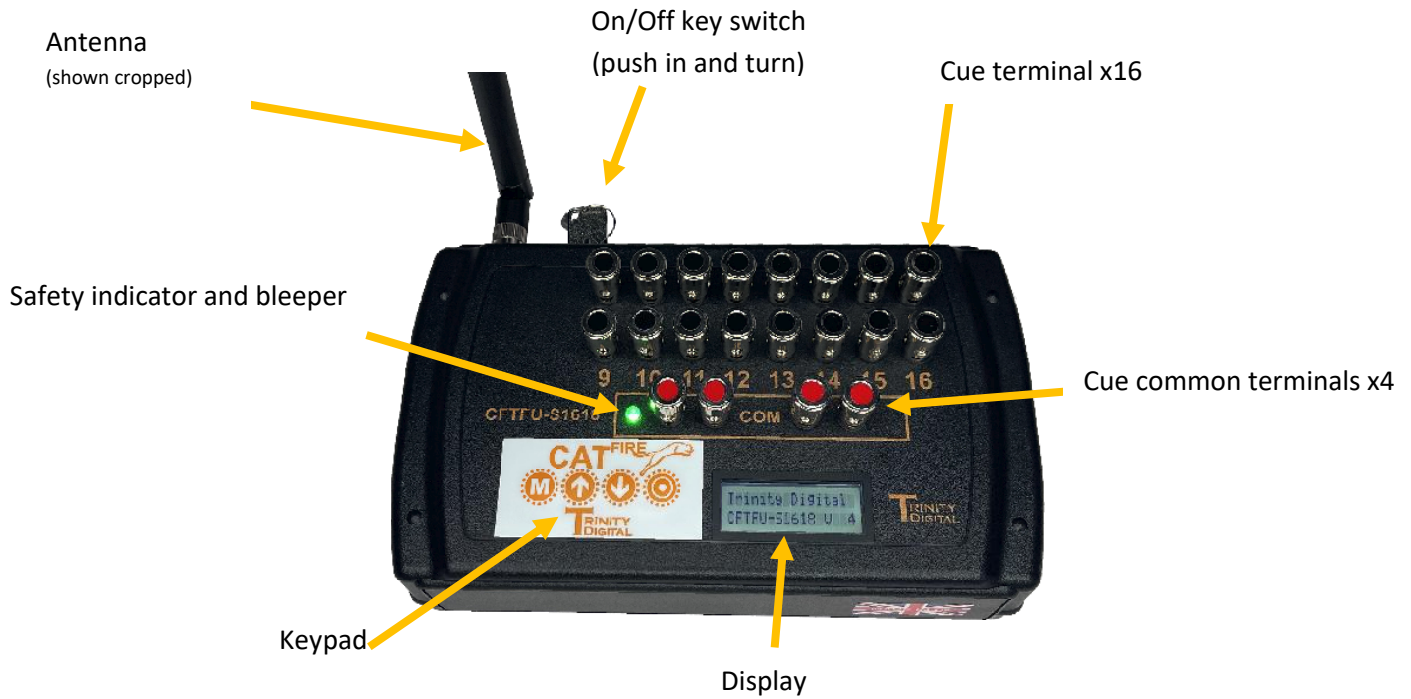
Do not operate this equipment if you are unwell or under the influence of drugs or alcohol.

This digital firing unit is primarily intended to be used to ignite fireworks and other pyrotechnic material for display, re-enactment, theatrical and battle simulation purposes.

Throughout this manual when we mention pyrotechnics we are also referring to fireworks.

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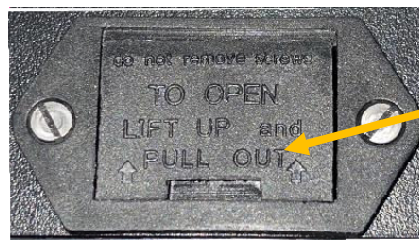
Familiarising yourself with the CFTFU-S1618



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Polarity indicators



Battery compartment.

DO NOT REMOVE SCREWS

Push upwards using notch and pull carrier outwards.

Install the batteries by first removing the power key switch.

Remove the two battery carriers by pushing upwards from the notch and then pulling outwards.

The battery carriers fully remove.

Checking polarity of the battery insert a battery into each carrier, noting that the spring force keeps the battery firmly secured.

Insert the carriers, ensuring that once located home the carrier is pushed back down to engage its locks.

Storing

If the unit is not to be used for an extended period, we recommend you remove the batteries to prevent leakage and terminal corrosion.

Types of igniters

It is intended to work with the following types of igniter:

- Electrical matches (also known as e-matches, i-matches or pyrotechnic igniters) that typically require a 1 ampere firing current and have a characteristic resistance typically of 2 ohms. Such igniters are well used in this industry and are familiar to trained operatives.
- "Solar Flare Igniters" (SFI)™ which are a safer non-pyrotechnic article used to ignite quick match or similar fuse.

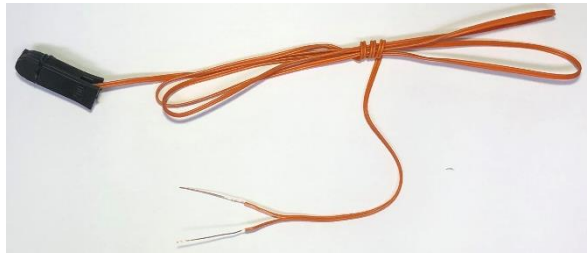
- Talon™ igniters typically used to attach to Visco™ fuse on consumer fireworks for hobbyist use.

Each cue of the unit can deliver up to 5 amperes of current, this depends on the capability of the batteries.

Connecting igniters

Igniters have two connections, electrical current passes through the electrical loop and causes the igniter to operate.

Typical igniter



Showing Talon® igniter with its two connections at the end of the wire.

The igniter wires have no 'polarity' – there is no + (positive) or – (negative) here, one will connect to a cue terminal 1 to 16, the other to a COM terminal, as described as follows.

Igniter connection



STEP 1: From the above picture, press down on the cue terminal. Insert one of the igniter wires. Release the terminal – spring force will clamp the wire.

NOTE: Ensure that bare wire does not touch anything else.

STEP 2: The other end of the igniter wire (the 'return wire') should connect to one of the COM terminals.

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NOTE: COM terminals are all the same, electrically, connecting to any will do.

The following picture shows a unit with igniters connected to all cues, it is perfectly okay to connect several igniter return wires together to the same COM terminal.



Supply voltage

The unit operates from a pair of 9v batteries, producing up to 18 volts.

We recommend using Energizer® industrial 9v batteries for best performance.

Power saving features

The CFTFU-S1618 contains extensive power saving features.

These features activate when the unit is not interacted with at all.

When any interaction with the unit occurs, the power saving features are turned off, the unit runs at full power until interaction stops. For example, when armed, when running tests, when a button is pressed or there are radio communications with a remote firing computer.

This latter condition catches people out – leaving a remote firing computer communicating with firing units will keep units on full power and run down their batteries.

Expected run time


Many factors affect run time, including battery type and age, temperature and how you use the unit.

The following table indicates expected run times in typical situations at 20 degrees Celsius.

Power source	Run hours active	Run hours power saving***
1 Pair 9v Battery	6	18

*** Unit switched on, not being interacted with, firing computer not operating.

Safety considerations

	This unit uses low DC voltage of 18 volts. DO NOT supply AC or higher voltages.
---	--

Although these very low voltages are used, when handling the unit in wet conditions you should exercise caution and ensure power is OFF.

NEVER work with pyrotechnics while the unit is switched on.

Ensure you are well away from the pyrotechnic material when the unit is on, even during testing.

When arming the unit ensure you are well away from the pyrotechnic material - walk away from the firing site.

Untrained operators / Hobbyists

Many fireworks suppliers offer training days to help familiarise yourself with fireworks and how to enjoy them safely and we highly recommend you attend one of these informative and fun days out.

Always set up your fireworks properly in accordance with the manufacturer instructions and best industry standard practice, electrical connection to the firing unit is the last thing to be done, then walk away.

Be aware that some fireworks are angled / fanned, so working at the side of fireworks may not be the safest location, the safest location to place the firing unit is usually in front of the fireworks they are attached to.

Use long leaded igniter wires allows you to site the firing unit away from the fireworks it is connected to and allows you to make those electrical connections, and run tests, at a distance.

Always be aware of “where your head and hands are” at all times.

How this unit works

This unit uses electronics and software to control electrical pulses which cause an igniter to get hot and/or burst into flame, the heat igniting the pyrotechnic material to which it is attached.

The unit incorporates a radio transceiver so that a remote computer can communicate with it and control it.

It is not impervious to damage from things like explosion, fire or misuse, and as with any electronic or software product, could malfunction.

Over several years, every effort to design a safe and reliable system has been made, this unit contains many fail safe elements.

These statements are not intended to frighten you but to hammer home that safe working practices are essential when working with electronic devices around explosive material.



Never use a unit that looks damaged or is behaving in a way you are not expecting it to. Turn it off and walk away from the danger immediately.



The unit must not be used in an area where static electricity is expected or present.



The unit must not be used when an electrical storm is expected or present.



The operator must wear suitable protective clothing that is also safe work wear around explosive material and electrical devices.



Always REMOVE the power key switch when working on the unit. This prevents the unit from testing, arming and firing.



Keep mobile radio communicators, mobile telephones, and external power sources away from the unit and pyrotechnics.

Environmental

This unit is constructed to IP54, when flat on its base it can withstand light rain during setup, the top surface is water resistant.

Wipe dry as soon as possible and cover, perhaps with plastic bag, box or bucket as necessary. Ensure the antenna is not fouled by this.

When exposed to rain limited ingress is permitted as per the design, the electronics having been physically positioned under the top surface of the enclosure and tropicalised for this purpose. After use remove the base cover and allow to dry out.

It is intended to be used from -20 to 60 degrees Celsius with 90% relative humidity non-condensing.



WHEN THE UNIT IS POSITIONED OTHER THAN FLAT ON ITS BASE A COVERING IS NEEDED THROUGHOUT USE.

It is intended that the firing unit be placed away from the pyrotechnic material and shielded from heat, burning material and explosion - use of long leaded igniters assists with these latter items.



WHEN THE CASE IS OPENED DO NOT TOUCH THE ELECTRONIC CIRCUIT BOARD AS DAMAGE COULD RESULT.

Best practice for setting up

Best practice tells us to work progressively away from the danger.

Ensure the power is off and the key is removed from the CTFU-S1618 unit before working with pyrotechnic material and this unit.

Connections

After rigging of the pyrotechnic material, connect the igniter to the material.

Then, moving away from the material, connect the igniter lead wires to the CATFire cue terminals.

Once all material is connected to the unit, ensure that no personnel are near the material but are aware of what is happening, and then perform diagnostic testing.

NOTE: If diagnostic testing indicates a problem, turn OFF the unit before making adjustments.



NEVER APPROACH PYROTECHNIC MATERIAL WHEN THE ELECTRICAL CONNECTION TO THE CTFU-S1618 HAS BEEN MADE. ALWAYS DISCONNECT.

Radio communication

For best communication you should ensure that the antennas on every CTFU-S1618 and the CFCIU-1 interface unit are pointed upwards.

Where practical ensure that every antenna is at equal elevation and clearing any obstructions on site (racking, trees etc.). Ideally units should be raised from ground level – this helps to maximise range and clear any unlevel ground between the CFCIU-1 and the CTFU-S1618's that may obstruct signals.

Tip: CTFU-S1618 units do not need line of sight between each other as they do not communicate with each other. The communication is between the CFCIU-1 and the CTFU-S1618 units.

Keep within the communication distances specified for CATFire CTFU-S1618 (500m line of sight).

Where obstructions are inevitable (trees etc.) radio range will be reduced. Metal and structures such as railings and buildings can block the signals altogether so avoid these.

For more information on radio communication refer to our document "Understanding radio communication" downloadable from our web site or contact support@trinitydigital.co.uk to obtain a copy.

Cleaning your unit

The unit is IP54 rated, do not get the unit excessively wet during cleaning.

Clean the unit with a soft damp cloth that has been rinsed in a weak soapy washing up solution.

Use a soft brush to brush away debris from the terminals.

Cloth dry the unit.

Features of your unit

1. IP54 enclosure. Tropicalised electronics for increased moisture protection.
2. Firmware updating via radio.
3. On/off key switch, removable in the off position only.
4. Sixteen output (electrical cue) digital firing unit.
5. Operates from a pair of 9v PP3 type batteries.
6. 5 Ampere peak per cue.
7. Battery load test function.
8. Electrical cue testing.
9. Remote Arm lock / unlock – prevents remote arming of the unit for safe working.
10. LCD display with 16x2 lines with backlight; adjustable contrast.
11. Advanced 70 channel hopping radio with 500m range line-of-sight with encrypted communication.
12. Four tactile button key panel for control and configuration.
13. 1ms timing interval precision.
14. Fire any number and any combination of electrical cues at any time.
15. Heartbeat bleeper and safety indicator lamp.
16. 64 safety groups for advanced firing control during firing.

Radio

This unit communicates with the master control console using a 70 channel, hopping radio system in the 868MHz band (863MHz to 870Mhz).

Encryption is provided for additional security.

The unit can transmit to 500m line of sight.

Antenna



The antenna is a grounded and sensitive device. Never allow wiring or other metal objects to come into contact with the antenna, short circuit or other malfunction could occur.

The antenna as supplied is an 868MHz dipole omni-directional antenna.

The antenna should be fixed to the threaded port finger tight only, do not overtighten.

The antenna should always be pointed vertically upwards.

If the unit is positioned other than horizontal and flat on its base, the antenna can be gently rotated, the hinged joint allowing for the antenna to always be put into the vertical upright position.

Keep metal objects and other obstructions away from the antenna. This includes placing the unit on metal surfaces or near to metal structures (storage containers, sheds, buildings, fencing etc.).

If necessary, for best reception, raising the unit off the floor will increase signal quality.

States of the unit

The unit has different 'states' of operation, these are broadly described here.

State	Purpose
POWER OFF	The unit has no power. No firing will occur, no function will operate.
SELF TEST	After power on the unit performs a diagnostic of the circuitry. If the self test fails the fault is shown and the unit will not operate.
DISARMED	The unit is on, the unit is in its safest operating state. The visual green lamp flashes and the heart beat bleeper bleeps every 3 seconds.
ARM UNLOCKED	The unit is DISARMED but can become ARMED at any time by a remote master.
NOT DISARMED	The unit is not armed but does not consider itself in a disarmed state. This occurs after testing or after arming ends. When this condition clears the unit will typically enter DISARMED state. If this state shows, when unexpected, it has detected a voltage anomaly on its cue power terminals, check there is no short circuit to these.
ARMED	Unit is armed, cues may fire. This is the most 'dangerous' state and approach the unit and material connected to the unit with extreme caution.

Safety indication

The unit contains an audible heart beat bleeper which bleeps briefly every 3 seconds.

It also contains a bright green lamp that flashes.

The unit considers itself in a DISARMED condition when the lamp flashes and the heart beat bleeper operates.



Rule of thumb: When you do not hear the bleeper or see the green lamp
APPROACH WITH CAUTION.

LCD

Backlight

The LCD display contains a backlight illumination.




Due to power conservation the display is only illuminated at power on or after any key press.


The illumination is turned off after a short interval of button inactivity.

Contrast adjustment

Sunlight, temperature and age of the display can affect its contrast making the characters harder to see.

You can adjust the contrast easily as follows:

1. Hold the  button down for two seconds and continue to do so
2. Use  &  to adjust the contrast
3. Release buttons when done

NOTE: Holding  button in this way will also cancel any sub menu you are in and return to the MAIN screen.

ARMinG

Arming the unit is the act of putting the unit into a mode where it can readily fire, it is the most 'dangerous' of conditions as some of the safety mechanisms are disabled and power is applied to the cue terminals.

Remote Arm unlocking

The unit will NOT allow itself to be armed remotely (via the radio) until unlocked for this purpose.

This feature enables the operator to set up the unit, connect to power and perform tests with confidence that the unit cannot become armed by a remote operator unaware of your presence.

See later for unlocking the ability of the remote firing computer to arm the unit.

Initial diagnostics (SELF TEST)

As soon as the unit is powered on, it checks itself.

```
Self Test...  
CFTFU-S1618 V 4
```

The main display shows the *SELF TEST* state indication, the model and the firmware version.

During this time check that the beeper is sounding, the green safety indication is illuminated, and the LCD backlight is turned on.

If testing succeeds the welcome screen is displayed:


```
Trinity Digital  
CFTFU-S1618 V 4
```

If testing fails the unit will not operate and the fault will be shown.

```
Self test failed  
Supply too low
```

Main display

The main display shows system state.

If you are unsure as to the display you are viewing, repeatedly press the  button or hold it down for 2 seconds returns you to this main display.

```
U01          B100%  
  
DISARMED
```

U is the unit / firing address and is from 1 to 64. Each unit must have a unique address.

B shows the battery voltage as a percentage of charge.

The second line shows the condition of the unit.


Menu system navigation

The menu system provides access to settings and operating state of the unit.


It is a multi-level menu system.



It consists of an LCD display that has two lines, each with 16 characters.

It also has four buttons:



 - Enter menu system; exit a menu sub level; abandon a change being made.

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 - Enter a menu sub level; change a setting; or save the change being made.

 &  - Scroll through menu options or change a setting.

From the main display you press  to enter the menu system.

Once in the menu system pressing  will 'back out' of whatever sub level you are in, ultimately re-treating back to the main display. Holding  for 2 or more seconds will immediately cancel your current operation and return to the main display.

Inactivity of 90 seconds will cancel the current operation and return you to the main display.

Menu summary

Sub level	Purpose
Main display	Main display
+ Addressing	Configure remote master addressing
+ Unit address	Unit address
+ Join network?	Connect to a radio master
+ Cue testing	Test cues
+ Do cue test?	Perform a cue test
+ 123456789 ₁₀ ¹¹ ₁₂ ¹³ ₁₄ ¹⁵ ₁₆	Test result summary
+ Battery testing	Battery testing
+ Do load test?	Test battery performance
+ Battery result	Show battery test result
+ Remote arm lock	Allow remote master to arm unit
+ Arming lock	Display and set current lock state

Addressing the unit

Each unit must be given a unique number called the Unit Address (UA).


This unit address (UA) is used to send firing commands.

This number can be from 1 to 64.


For those familiar with the CTFU-X16 and other products in the Trinity Digital line the Unit Address (UA) and the Firing Address (FA) are treated the same in the CTFU-S1618. It is not possible to have independent UA and FA in this product.



Setting the unit (firing) address

The UA is a value from 1 to 64.

From the main display, press  to activate the menu.

```
Select menu item
Addressing
```



Press  to enter the addressing menu sub level, more options are now shown.

Use  &  to cycle through the options until you see "Unit address".


```
Unit address
UA: 001
```


Press  to change the address.


```
Set unit address
UA: 001
```

Use  &  to cycle through the addresses.

```
Set unit address
UA: 032
```

Press  to set the Unit address selected.

Press  to exit this sub menu.

Continue to press  to exit the sub levels until you return to the main display. Alternatively hold the menu button down for two seconds to exit the menu system and return to the main display immediately.

The main display will now show:

```
U32          B100%
DISARMED
```

Joining a remote master



The radio communication is secured.

The unit must join a remote master to share its security key and respond to its commands.


Once joined to a remote master the unit will remember this even after being turned off.



You only need to perform a Join operation when the master changes its security key or you need to join a new master that has a different security key.

A join operation is started on both the unit and the CFWFS-1 app, these should be started in quick succession or joining may fail to complete.


From the main display, press  to activate the menu, use  &  to select the Addressing menu.

```
Select menu item
Addressing
```

Press  to enter Addressing sub level.

Now use  &  to show "Join master?".

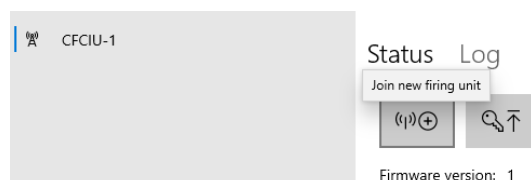
```
Join master?
<SET> to begin
```

And press  to select it and begin a Join operation

This screen is now shown:


```
JOIN IN PROGRESS
Any key to stop.
```

Using the CATFire PC software go to the CFCIU-1 interface unit settings and click "Join a new firing unit" button:






The join operation will begin and take a few seconds to complete, observe the CATFire PC software for result of the join operation.

Cue testing




CUE TESTING IS A DANGEROUS OPERATION – PYROTECHNICS COULD IGNITE
 Personnel should retreat to a safe location during any testing of pyrotechnics.

From the main display, press  to activate the menu, use  &  find Cue testing menu sub level.


Select menu item

Cue testing

Press  to enter Cue testing menu sub level, the following screen is shown:

Do cue test?

<SET> to begin

Press  to begin a test, the following screen is shown during testing, which takes a few seconds:

TESTING CUES

TESTING CUES

During testing a small electrical current is passed through each cue and the resistance is monitored.

After completion of the test you will briefly see the following screen as the circuits are drained of energy and is completely normal:

U01 B100%

< NOT DISARMED >

The following screen will show the results of the test.

123456789₁⁰₁¹₁²₁³₁⁴₁⁵₁⁶

0000 0 0 0

Press the  to back out of testing sub level when you are done.

Understanding test results

Summary

A summary screen looks as follows:


123456789₁⁰₁¹₁²₁³₁⁴₁⁵₁⁶

0000 0 0 0

Indicator	Meaning
O	Cue tests OK.
<BLANK>	There appears nothing connected that can be fired. NOTE: The circuit may be electrically sound but there may be a high resistance.

Arming and disarming the unit

Remote firing computer arming







When a remote firing computer is connected to the unit using radio, it is possible for a remote operator to arm and fire.

The remote operator may be unaware of your presence and could put you in danger.

You must unlock the ability for a remote firing computer to arm and fire.

This feature prevents a remote operator, who may be unaware of your presence, from arming and firing. To unlock the unit for remote arming and firing:

Enter the menu with , and use  &  to find the “Remote arm lock” screen and enter the sub level with :

Select menu item

Remote arm lock

The sub level screen is shown:




Arming lock:

LOCKED

To make a change press  and the screen becomes:

Set Arm lock:

LOCKED

Use  &  to change it, and set the selection with , described in the following table:

Arming lock state	Meaning
LOCKED	Remote firing computer cannot arm and fire
UNLOCKED - TEMP	Remote firing computer is allowed to arm and fire. This state is lost when the unit is switched off (temporary) and will be LOCKED again on next power on.

When unlocked the main display shows:

U01 B100%

ARM UNLOCKED

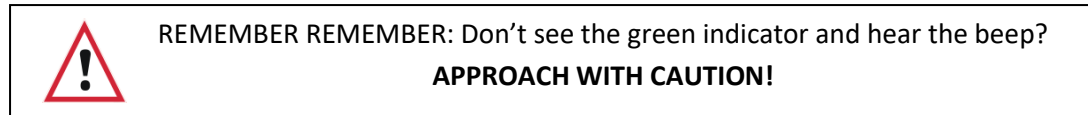
This display is showing you that the unit is not armed, but is unlocked to allow arming.

Armed indication

When the unit is armed – either locally or remotely, the main display changes as follows:

SYSTEM ARMED
Any key DISARMS

The safety green indicator and bleeper fall silent.



Disarming

The following actions will cause the unit to disarm.

If the unit is being controlled by a remote firing computer it can disarm the unit.

You can press any key on the keypad to immediately disarm the unit – even when controlled by a remote firing computer and during a show, if you need to.

An instruction from the remote firing computer has not been received for 30 seconds.

When the unit has become disarmed by a button press the unit will return to the ARM LOCKED state – preventing the firing computer from re-arming.

This is not the case where the unit has become disarmed from a remote firing computer (or loss of instruction).

You can manually unlock arming once more even during a show, if the master is still sending arm commands the unit will immediately arm and begin firing.

Load testing the battery

The load test feature detects the true capability of the batteries.

This is a far more reliable way to determine if a battery is in good condition, most other firing systems only determine the battery voltage - which can recover after a period of non-use - and appear good, but then flag dramatically during firing – causing disaster for your show.

Never assume brand new batteries will function well either, manufacturing defects can cause batteries to falter under load.





When running load tests on a unit you should do this at a time when it will be convenient to change batteries as may be needed.

If a load test indicates a poor result even after trying new batteries, try using those batteries on another unit to compare against.

If the problem seems related to a specific unit it could indicate a malfunction so you should contact Trinity Digital as soon as possible.

The load testing is only performed when you want to, if performed too many times, will weaken the battery.


To perform a load test:

Enter the menu with , and use  &  to find "Battery testing" and enter the sub level with .

```
Select menu item
Battery testing
```



The sub level screen is shown:

```
Do load test?
<SET> to begin
```

Press  to perform a load test, the screen changes as follows:

```
TESTING BATTERY
TESTING BATTERY
```

Once complete the previous display will reappear.

Use  &  to scroll through the sub level screens to show the results of battery testing.

```
Battery result:
EXCELLENT
```

NOTE: You do not have to run a load test in order to analyse the battery. You can go straight to the "Battery result" screen above at any time. The unit will use only the battery voltage to report on its condition in this case. Once a load test is performed the battery test results will incorporate the latest load test result into its calculation.

Press the  to back out of testing sub level when you are done.

Brownout

When the battery is in a very weak state running a load test can cause the battery to falter such that the unit will reset itself (also known as "brownout") – it will be obvious that the unit has done this as it will go back through its self-test sequence.

If this happens change the batteries immediately.

Safety groups

Safety groups are a way to enable and disable firing according to conditions during your show.



CATFire supports 32 safety groups for types of material and 32 position related safety groups, 64 groups in total.

Each group is given a meaningful name such as “Rockets” or “Rooftop”.

Pyrotechnic material is assigned to one or more material-related safety groups.

Positions are assigned to one or more position-related safety groups.

A cue is associated with a material at a position and so gets the combinations of these groups.

During firing a cue may fire only if all safety groups assigned to it are enabled.

Coarse and fine grained control over firing is possible with safety groups.

For example, shells are associated with the “All Shells” safety group.

This group must be enabled for any shells to fire. Should wind conditions during the show become high risk, “All Shells” can simply be disabled to stop firing any more.

Another example might be “Rockets position 1”. Should the rocket position become damaged, it is possible to stop any further firing from that position simply by disabling the group.

Refer to the CFWFS-1 (Windows Firing Studio) user manual for more information on safety groups and their use.

End of life

Recycling

Sadly, this product will not last forever, wear and tear will eventually bring about its end of life.

This product contains precious earth metals and other recyclable material.

You should dispose of the product in accordance with your local authority rules on recycling electronic devices – please do not dispose of this product in general waste.

Alternatively, you may return your end-of-life equipment to Trinity Digital for correct recycling. Please contact support@trinitydigital.co.uk or call +44(0)1782 977500 to do so before returning equipment so that we may track its recycling properly.



Guarantee

The Guarantee is provided by Trinity Digital, the owner of the CATFire® brand.

Terms and conditions

These terms and conditions do not affect your statutory rights.

You must register your product within 14 days of purchase to receive this guarantee, please contact support@trinitydigital.co.uk or call +44(0)1782 977500 to do so.

Have your product model and serial number to hand including the date and place of purchase. If the product is a gift, register the intended owner details.

This product carries a 12-month parts and labour guarantee against defects in workmanship.

These terms and conditions are only applicable within the United Kingdom and is subject to provision(s) that your product:

1. Has been used solely in accordance with the instruction manual.
2. Has not been subject to misuse or accident; modified or repaired by anyone other than our own service engineers.
3. The product is in the United Kingdom.
4. The product has been registered and the person claiming is the registered owner.

If you wish to make a claim contact support@trinitydigital.co.uk or call +44(0)1782 977500.

Please provide the model number, the serial number, and a description of the fault. When emailing you can also provide images or video footage of the issue you are experiencing.

Trinity Digital will, at its discretion, repair or replace the unit.

Please do not send anything to Trinity Digital without first contacting us, nothing can be accepted without prior authorisation, this is so we can track the product and its problems properly.

Declaration of conformity

- UKCA: Electrical Equipment (Safety) Regulations 2016
- UKCA: Radio Equipment Regulations 2017
- 2014/30/EU Electromagnetic Compatibility
- 2014/53/EC Radio Equipment Directive
- 2011/65/EU RoHS
- 2012/19/EU WEEE

Trinity Digital hereby certifies that the product

CATFire CTFU-S1618

Conforms to the essential requirements of the above listed regulations and directives on this day Thursday 21st September 2023.



Mr. Gareth Williams.

Company:

Trinity Digital
Unit 14A
Spring Bank Farm
Arclid
Cheshire
CW11 4UD



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