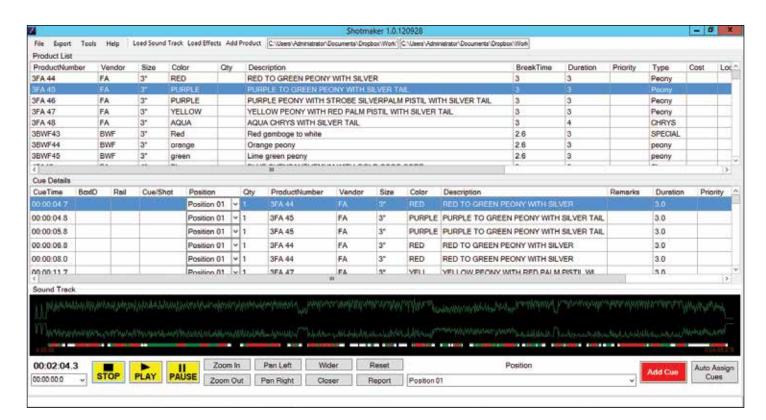


# PYROTECHNICS FIRING SYSTEM









# **TUICKITE**











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QuickFire International has over 20 years of experience in the pyrotechnics industry. Our products are designed and engineered in Australia by some of the best engineers available, resulting in affordable products that are reliable, simple to use and flexible enough to suit even ambitious applications. Through industry consultation and experience we determined that existing firing systems are often poorly made, unreliable, complex, and in some cases overpriced.

Therefore our goal has been to develop a world-class Pyrotechnics firing system that is

- easy to use
- flexible
- reliable
- and of course, affordable

Having achieved these goals, we are proud to offer the ultimate firing system -

#### QUICKFIRE PYROTECHNICS FIRING SYSTEM

Please read on to learn about our range of wired and wireless hardware, software and accessories, enabling successful pyrotechnics displays.

# THE SYSTEM

The QuickFire System consists of a minimum of two components, and software:

software

master control unit

combination of either wired and/or wireless firing units

We are proud to say that this is the first firing system in Australia to use ZigBee wireless mesh networking technology. Communication between devices is secure – data is transmitted with encryption and at a frequency of 2.4 GHz Direct Sequence Spread Spectrum (DSSS) RF transmission strategies – therefore it is not susceptible to interference from other common transmitting devices such as two-way radio or mobile phones.

Apart from allowing control signals to be repeated across multiple wireless firing units ZigBee technology has the intelligence to reroute signals to the next available firing unit instead of relying on one main transmitter.

The intelligent design doesn't stop there. The QuickFire System has been designed for reliability and fail-safe operation. We have included several safety and continuity features including:

 an intelligent automatic show recovery function that can detect a system error and restart the controllers within three tenths of a second – and then continue, in sync with the show, and the soundtrack

- enabling firing units to work independently from the master unit,
   each firing unit holding local copies of the firing instructions eliminating firing delay and improving the reliability of the show
- constant heartbeat monitoring and synchronisation the wireless
  units remain in constant contact with the firing unit and will reestablish communications links if this is lost, firing the next due cue,
  in sync with the show, and the soundtrack
- a dead-man switch that must be held in by the operator for a show to continue – once released the show will stop

Please read on to learn more about our firing hardware and software, and how they can work together to make each and every pyrotechnics show a success.







# **Nuickfire MASTER CONTROLLER II**

The Quickfire Master Controller II is a user-friendly hybrid system that can be fired manually, semi-automatically or in full automatic mode. It's simple to use, and perfect to fire low-budget displays right through to the largest pyro-musical spectaculars.

The system consists of:

- Master Unit
- Software

Four software packages are included with the controller -

- QuickFire Choreography
- Shotmaker
- TimeCode
- Show Controller

The QuickFire software is compatible with Show Sim, FireOne Cue Maker and Finally Fireworks.

- During a display each Quickfire field module is in constant communication with the Quickfire master controller via a 'heartbeat' signal. If this communication between the two fails the field modules would cease firing until the signal is re-established. Once the signal is re-established rather than just commencing at the next shot the modules commence firing when their next cue is due, skipping any cues that were due while the signal was lost
- Solid state electronics no moving parts
- Capable of firing up to 99 QuickFire 32-Channel wireless rails, giving a grand total of 3168 cues
- · Detachable goose neck panel light (adjustable brightness level)
- Detachable antenna
- A series of LEDs indicate the wireless signal strength, and communications activity
- 128+ bit encryption locks the module to its slave units to prevent any disruption
- Repeating functionality
- Two way communications between Master Unit and Wireless Modules (bio directional)
- ZigBee Wireless reliable mesh network technology using 2.4GHz
   Direct Sequence Spread Spectrum (DSSS) RF transmission strategies
- Removable key to ensure security. The key switch has 2 positions TEST and ARMED mode
- Designed to operate in diverse temperatures with built-in temperature and humidity sensors to detect if over or under temperature conditions are approaching
- Membrane keypad
- Made with industrial components to ensure the system is robust



- The Master Unit is enclosed in a roughed Seahorse SE520 case to ensure it remains dust free and water resistant
- Quick-Sync Allows manual adjustment of the pitch of the firing file, to keep in sync with the music as required
- Shot tracking this feature allows tracking of fired shots, and on which rails
- LED capture the unit displays only the 'ready' shots which are discovered in the 'test' phase
- File continuity scan compares a show file to actual connected shots, and alerts any differences
- Using manual sequencing, any rail and cues can be sequentially fired at selected timing interval, up to a programmable sequence range
- LCD Display so the operator can monitor aspects of the Wireless & 2 wire communication for redundancy

#### **System including:**

- Inbuilt rechargeable Lithium-Ion battery 16.8V 5200mAh
- An external power supply input
- Shot tracking
- Battery status
- Show file name
- Display duration and elapsed time
- Countdown timer to the next cue
- Next cue and firing module number
- The Master Unit has a dead-man switch to ensure the System can be shut down quickly
- Trigger switch to manually fire one shot at a time
- · Trigger switch to start a programed file
- · Trigger switch for manual sequencing
- The controller firmware is upgradeable using a PC and USB cable reduces downtime
- Replaceable memory
- Using the software, Show Files can be downloaded directly to the QuickFire Master Unit through a USB
- Stores up to 2 firing files
- Input DC jack for when external power is required
- Lockable rails, selectively prevent firing even in full automatic mode.
- Pause Play button enables pausing the firing and then continuing from that point
- Pause continue button enables pausing the firing and then continuing further down the line while keep the show still in sink
- Multiple processors monitor each other for proper operation.
- Proper operation of both processors is required to fire shots.
- Four output triggers which can be used in conjunction with the wireless network to provide a backup firing command signal.
- Software included
- Wireless & 2 wire communication for redundancy
- Selectable sequencing
- Temperature Sensor
- Humidity Sensor
- Quick-Sync
- · Field module monitoring
- Constant communication (bio directional)
- Signal strength indication
- TX & RX indication
- Ability to monitor receivers (eg:Battery status, Humidity, Temperature)
- Ability to change firing output voltage on the 32ch receivers from (12, 24 & 48volts)
- Firing resolution 00:00:00:000
- Dimensions (L W H) 38 x 31 x 18 cm (14.85" x 12.15" x 6.85")





# 32-CHANNEL WIRELESS RECEIVER UNIT

The 32ch Wireless Transceiver unit is one of the most versatile, user friendly systems on the market today. It is designed to work perfectly with the QuickFire Master Controller II and is also manufactured to the same standards. It's enclosed in a Seahorse SE520 case for durability in the field — ensuring the device internals are kept water and dustresistant. Use of a membrane keypad allows easy control without exposure to the elements. It monitors temperature and humidity in case of extreme weather conditions that could affect the system and alerts the master controller.

The 32-Channel wireless receiver is controlled from a master controller, or 'input trigger,' or Trigger switch' button for spectacular manual displays. Furthermore the external effects are controlled with a selectable output voltage of 12, 24 or 48 Volts at 7A. For multiple firing positions, connect wired 32-Shot rails for more firing options. These can also be manually triggered one shot at a time if required.

All 32 on-board cues can fire simultaneously! Show files can be downloaded directly to the receiver. The trigger switch or input trigger can start the show, or, can step through one shot at a time – standalone operation if required. One cue can also be used to trigger another 20-Channel or 32-Channel controller to start their own show files. Alternatively, the featured input and output triggers allow daisy-chaining of multiple units.

Safety: While the system is off, all cues are shunted to ground. A key-switch prevents unwanted firings and allows for a test mode. The test mode permits communications with the master controller to report continuity status. An internal 'charge pump' ensures power isn't available to the firing circuits until the system is armed via the key-switch. A safety discharge capacitor is fitted which shorts the charge pump to ground when not firing.

The firing files are stored on broad the 32ch and gives the master controller less work by doing so it offers a more reliable system that can fire multiple firing positions at the same time.

Other features include:

- Inbuilt rechargeable Lithium-Ion battery 16.8V 5200mAh
- An external power supply input
- Low-battery indicator
- Battery status is also sent to the master controller
- Repeating functionality
- Constant communication (bio directional)
- · Signal strength indication
- TX & RX indication
- · Replaceable memory
- LED indicators for wireless signal strength indication and data throughput
- Short circuit and supply current surge protection
- Show files can be downloaded directly to the receiver unit if required via USB cable
- User-upgradeable firmware updates using a PC via USB reduces downtime
- Connections are via the Australian-made "QuickClips" made from stainless-steel to last a lifetime
- Input trigger allowing it to commence a firing file via the master controller, 32-Channel or 20-Channel units
- Scheduled cue display for pre-programed files
- Output Trigger
- Trigger Switch
- Fire All button
- 36 pin centronics output
- · Humidity Sensor status sent to the master controller
- Temperature Sensor status sent to the master controller
- Firing resolution 00:00:00:000
- Selectable output voltage of 12, 24 5A or 48 Volts at 7.2A
- Ability to change firing output voltage on the 32ch receivers via Mater controller (12, 24 & 48volts)
- Shunting all cues to ground when off
- Safe startup mode
- Discharge capacitor in test mode or when off
- Dimensions (L W H) 38 x 31 x 18 cm (14.85" x 12.15" x 6.85").









# 20-CHANNEL WIRELESS RECEIVER UNIT

TThe 20ch Wireless Transceiver unit is one of the most versatile, user-friendly systems on the market today. It works seamlessly with the QuickFire Master I or II Master Controllers and is also manufactured to the same standards. It is enclosed in a Seahorse SE300 case for durability in the field — ensuring the device internals are kept water and dust-resistant. Use of a membrane keypad allows easy control without exposure to the elements. It monitors temperature and humidity in case of extreme weather conditions that could affect the system and alerts the master controller. As well as receiving control from the master controller, it can be fired with the "input trigger" switch on the receiver control panel.

For multiple firing positions, connect wired 24-Shot rails for more firing options. All 20 on-board cues can be fired simultaneously if required with a 32V at 4A firing out. Show files can be downloaded directly to the receiver. One cue can also be used to trigger another 20-Channel or 32-Channel controller to start their own show files. Alternatively, the input and output triggers facilitate daisy-chaining and triggering of multiple units. Safety: While the system is off, all cues are shunted to ground. A key-switch prevents unwanted firings and allows for a test mode. The test mode permits communications with the master controller to report continuity status. An internal 'charge pump' ensures power isn't available to the firing circuits until the system is armed via the keyswitch.

A safety discharge capacitor is fitted which shorts the charge pump to ground when not firing.



Other features include:

- Inbuilt rechargeable Lithium-Ion battery 16.8V 5200mAh
- · An external power supply input
- Low-battery indicator
- Battery status sent to the master controller
- Repeating functionality
- Replaceable memory
- Constant communication (bio directional)
- · Signal strength indication
- · TX & RX indication
- LED indicators for wireless signal strength indication and data throughput
- Short circuit and supply current surge protection
- Show files can be downloaded directly to the receiver unit if required
- User-upgradeable firmware updates using a SD card reducing downtime
- Connections are via the Australian-made QuickClips made from stainless-steel to last a lifetime
- Input trigger allowing it to commence a firing file via the master controller, 32-Channel or 20-Channel units
- Output Trigger
- Scheduled cue display for pre-programed files
- 25 pin SUB-D output
- Humidity Sensor status sent to the master controller
- · Temperature Sensor status sent to the master controller
- Output voltage 36 Volts at 4.2A
- A external power supply input
- · Shunting all cues to ground when off
- · Discharge capacitor in test mode or when off
- Safe startup mode
- Firing resolution 00:00:00:000
- Dimensions (L W H) 22 x 24 x 12 cm (8.67 x 9.45 x 4.73 inc) SE300 case







# SINGLE CHANNEL WIRELESS RECEIVER UNIT

The 1ch Wireless transceiver unit is an inexpensive way to remotely fire a shot or relay a wireless signal.

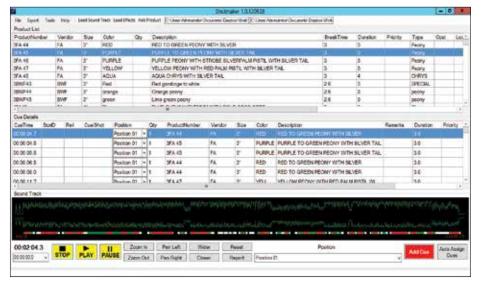
Safety: When the system is off the cue is shunted to ground. A keyswitch prevents unwanted firings. The test mode determines continuity of the shot, and permits communication between the control unit and receiver. An internal 'charge pump' ensures power isn't available to the firing circuit until the system is armed. A safety discharge capacitor is fitted which shorts the charge pump to ground when not firing.

#### Other features include:

- Inbuilt rechargeable Lithium-lon battery
- Low-battery indicator battery status is also sent to the master controller
- Repeating functionality
- LED indicators for wireless signal data activity
- · Short circuit and supply current surge protection
- · Show files can be downloaded directly to the receiver unit
- Connections are via the Australian-made "QuikClips" made from stainless-steel to last a lifetime
- Dimensions (L W H) 11.5 x 6.0 x 3.2 cm.



# SOFTWARE - CHOREOGRAPHIC SOFTWARE

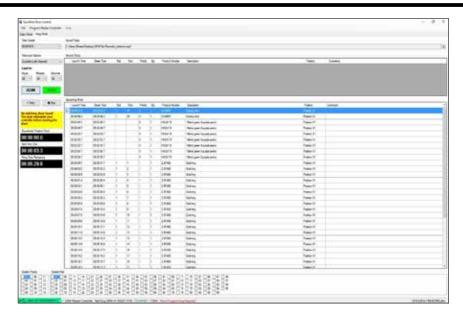


- Visualise the music beat for accurate effects synchronisation
- · Insert cues easily
- Select effects easily
- · Manually adjust timing as desired
- Quickly assess the performance for any "black spots"
- · User customisable effects database
- Generate reports and labels
- Program shows into the QuickFire Master controllers
- · Save shows for future use
- Cut, copy and paste the entire music score and cues into a new or an existing project
- SMPTE 25 & 30
- · Auto save mode
- Auto assigning of cues
- Display resolution 00:00:000
- And much more





# SHOW CONTROLLER SOFTWARE



This program allows you to Fire your display with a PC

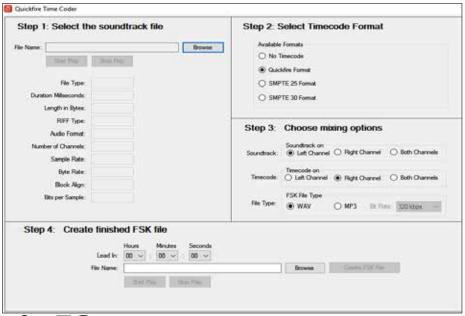
- Edit display
- Upload programs
- · Keep track of fired shot
- · Keep track of up coming shot
- · Create a TimeCode on the fly
- Create a lead In time
- And much more

## SOFTWARE - CUE ARRANGING SOFTWARE



- Label printing
- Report printing
- Cut, copy and paste function
- · and much more functions

# SOFTWARE - TIME CODE SOFTWARE



- Allows you to create a SFK time code.
- SMPTE 25 & 30
- convert WAVE to MP3
- Convert MP3 to Wave
- Lead in time
- · Chanel mixing options
- Mp3 kbps selection





#### 36 PIN ALL IN ONE TESTER

- Test your e-matchers
- Test your cable
- Firing out put
- Dimensions (L W H) 14.7 x 8.8 x 2.6 cm (5.8" x 3.5" x 1").



#### UNIVERSAL 32 CUE THROUGH RAILS

- Compatible with QuickFires 32 channel
- Works with any 36 pin Centronics system
- Fire One, Fire Lynx, Pyro Magic, Ace Pyro,
- Pyromaster, And Others
- It's enclosed in a Seahorse SE520 case for durability in the field ensuring the device internals are kept water and dust-resistant
- Dimensions (L W H) 38 x 31 x 18 cm (14.85" x 12.15" x 6.85")



# QUICK RELEASE FIELD MODULE CONNECTOR

Quick releases field module connector is a great way to mount your field module in our Universal 32 Cue Rail with the ability to quick release the field module for the rail should you need to replace it or use the field module in the different configuration

#### **Features**

- Stainless steal string loaded plunger
- Stainless steal reverts
- Black powder coating



#### GALAXIS QUICKCLIPS ADAPTER

Here is a new Gold plated product from QuickClips Adapter for Galaxis or any other system that users Banana plug type connector.

Simple to use just screw our QuickClips or SlimClips in to the adapter than place it in the banana plug

to convert your wire connector to our world famous and reliable e-match connector







# **QUICK CLIPS ACCESSORIES**

#### **COMPACT RAIL**

With many people asking us to build a small economical compact rail using our QuickClips or Slips Clips.

We at QuickClips are proud of offer our 32 cue Compact Rail using our new SlimClips.

This new Compact rail is the worlds smallest 32 cue Compact rail and still offers the same reliability as our QuickClips connectors.

The over size measures in at

- L 24cm x W11.9cm
- H 12.8cm with out the lid
- H 13.8cm with the lid

All Stainless screws and nuts Centronics cable includes



#### 4ch AB SELECTOR

This 4ch AB selector is a must have for company's that like to run 2 master controllers at the same time.

Enclosed in a water proof SE300 case and the stainless steal 2 wire connectors and water proof switchers this item is well built and making it easy for you to switch from primary to back up master controller.

#### Features:

- Water proof case SE300
- Stainless steal 2 wire connectors
- Dust & water proof switchers
- 4 Primary inputs

4 Backup inputs



#### **UNIVERSAL 32 CUE MINI RAIL**

When an extremely small foot print is required the QuickClips Universal 32cue Mini Rail will be the one you go looking for Works with most 36 pin Centronics system

- QuickFire
- FireOne
- Fire Lynx
- Pyro Magic
- Ace Pyro
- **Pyromaster**
- And Others
- Drill guide jig can be purchased at an additional cost with press fit



#### 36 PIN CENTRONICS CABLE

Length 40cm, 5m, 10m & 20m with right angle connection on 1 end or both ends

These cable has been specialty designed for QuickClips for our 32 Cue rails but can be used with any other brand of system









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