



CH1-1 / CH1-4 / CH1-12

WIRELESS FIRING SYSTEM

USER MANUAL v.3

DISCLAIMER

The manufacturer(s), distributor(s) and / or seller(s) accept no responsibility whatsoever for any damage, injury or loss, financial or otherwise, resulting directly or indirectly from the use, misuse, function or malfunction of this device. By purchasing and using this device you understand and accept this disclaimer. Safety is the user's responsibility. All pyrotechnic effects and manufacturer safety guidelines should be followed explicitly. This device is to be used solely for firing fireworks and pyrotechnics in a legal and safe manner. This device should only be used by trained and competent operators.

INTRODUCTION

The receiver and transmitter combination are for remotely firing pyrotechnics and fireworks.

The receiver can fire up to 1 standard igniter at a time.

Each receiver will only fire when programmed to a button on a transmitter. Many receivers can be programmed to fire from 1 button on a transmitter for simultaneous effects.

POWER

Receiver (CH1-R)

Each receiver uses 4 x AAA batteries. Use fresh batteries for best performance. Ensure batteries are inserted the correct way around. The red LED will blink when the batteries are low.

1 Button (CH1-T1) and 4 Button Transmitter (CH1-T4)

The transmitter uses 1 x A23 (23A, MN21, 8LR23) 12v battery. This can be replaced by removing the screws on the back of the transmitter and removing the back panel. Ensure the battery is inserted the correct way around.

12 Button Transmitter (CH1-T12) and Sequence Transmitter (CH1-T12-SEQ)

The transmitter uses 1 x PP3 9v battery. This can be replaced by removing the battery door on the rear of the transmitter. Ensure the battery is inserted the correct way around.

PROGRAMMING

Each receiver can learn any button on any transmitter. Once programmed the receiver will only fire when that button is pressed. Ensure that no pyrotechnics are connected to the receiver when programming.

Programming a receiver with a transmitter

1. Switch the receiver into FIRE mode.
2. Press the LEARN button until the yellow light turns on.
3. Release the LEARN button and immediately press a button on the transmitter.

The yellow SIGNAL light will blink 2 times to indicate the receiver has been successfully programmed.

Clearing a programmed receiver

A receiver can be cleared of its stored transmitters.

1. Switch the receiver into FIRE mode.
2. Hold the LEARN button until the yellow SIGNAL light blinks 2 times.

All transmitters have now been cleared from the receiver.

SEQUENCE

The optional Sequence Transmitter (CH1-T12-SEQ) can be used to set up a sequence on the receivers.

The available delays are 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1.0, or 2.0 seconds.

Use the 12 Button Transmitter (CH1-T12) to set the Group Order.
Use the Sequence Transmitter (CH1-T12-SEQ) to set the delay between Groups.

To do this program each receiver with the 12 Button Transmitter (Button 1 for Receivers in Group 1, Button 2 for Receivers in Group 2 etc) and then program each receiver with the Sequence Transmitter (you can use any button for this).

Now when you press a button on the Sequence Transmitter, the receivers will fire in order with a delay between them.

Example

(15 receivers in 4 groups)

GROUP 1		GROUP 2		GROUP 3		GROUP 4
Receiver #1	>>> Delay	Receiver #6	>>> Delay	Receiver #9	>>> Delay	Receiver #13
Receiver #2		Receiver #7		Receiver #10		Receiver #14
Receiver #3		Receiver #8		Receiver #11		Receiver #15
Receiver #4			Receiver #12			
Receiver #5						

CONTINUITY TEST

Each receiver has a continuity test to show if the pyrotechnic igniter is connected correctly. When in TEST mode, the green light will turn on if there is continuity in the circuit.

SAFETY LIGHT

Each receiver has a red safety light inside the plastic case. You can see the light through the plastic case. The red safety light will turn on when there is power to the igniter terminals. This is useful to check if there is a malfunction before connecting an igniter. Do not confuse the red safety light inside the case with the red power light on the front of the case.

NEVER CONNECT ANYTHING TO THE TERMINALS WHEN THE RED SAFETY LIGHT IS ON!

INSTRUCTIONS FOR USE

1. Ensure the receiver and transmitter are off.
2. When safe to do so, connect a pyrotechnic effect to the terminals of the receiver.
3. Switch the receiver into TEST mode. Check to see if there is continuity indicated by the green light.
4. Extend the receiver antenna.
5. Switch the receiver into FIRE mode.
6. Retreat to a safe distance and ensure it is safe to fire the pyrotechnic effect.
7. Extend the transmitter antenna.
8. Fire the pyrotechnic effect by pressing the correct button on the transmitter.

If the effect does not fire, do not keep pressing the transmitter button. Once the receiver receives a signal, it will not be able to fire again for 5 seconds. This is to prevent a short causing damage to the receiver.

Do not approach an unfired pyrotechnic effect for at least 15 minutes after an ignition attempt.