

# **DB04r Firing System Manual**

# Transmitter Instructions

## Operation

1. Insert the 12V (A23/23A) battery into the back of the transmitter, and switch the power button to 'ON'.
2. This transmitter should only be used with the provided fireworks firing system receivers. It will operate the receivers by pressing buttons on transmitter. Please keep a safe distance from the receiver when you press on the transmitter remote buttons.

## Technical parameters

Working voltage: DC12V (use A23/23A 12V Battery)

Working frequency: 433MHZ

Working current: 34MA

Coding scheme: Learning code(EV1527)

Transmitting range: Maximum of **300~500M** (open ground, direct, line-of-sight, sensitivity of receiver board is more than 103dBm).

Range will be reduced if there are obstructions.

Output power: 16dBm(40mW)

Transmitting speed: <10Kbps

Modulation system: OOK(AM)

Working temperature: - 10C ~ +70C

## Caution!

- You can use two or more of these systems at the same time, so your show has 24 or 36 cues however we recommend you test your system prior to live firing, so that you prevent any unwanted simultaneous detonation of fireworks. The Frequency is set in the factory and there is statistically about a **one in a million** probability that your system is on the same frequency as another system.
- The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user authority to operate the equipment.

## Receiver Instructions

The product is designed for small fireworks displays including stage, cake and other fireworks display.

### Operating Method:

1. Insert the batteries into receiver, and then turn on the power.
2. Turn on power switch of transmitter. Then press the receiver button one by one, one through to twelve. Transmitter has good power if the LED on receiver is red.
3. Please connect igniters products in red & black terminals. There is no polarity required. It indicates the circuit is ok if LED turns green. If the LED didn't turn on, it means the product is not connecting well. You will need to check the circuit.
4. Press the transmitter button (1-12) to fire the products.

Hot Tip: It is a smart idea to test your system if you have never used it before by obtaining some green fuse (cut off some excess green fuse from a firework), twist the green fuse 3-5 times to expose some black powder and then conducting a test fire. **The talon igniters will not often ignite a green fuse that has not been twisted to expose the black powder! So make sure you twist the green fuse, 3-5 times for best performance!** Do not conduct your show until you are confident with igniting the green fuse using this method. Your kit will include some free talon igniters for this purpose!

### How to make the receivers programmable

Receivers are programmable - program any receiver of any system to any button of the remote transmitter. Program all channels to fire on one remote button, or add new receivers or replace receivers. It is very flexible.

Method: For example, making remote button "5" to control receiver NO5 and NO6. Please pay attention that NO5 is run by

remote"5" originally. Now we only need making NO6 run by remote"5"

Please find a small hole on the back side of the No.6 channel's receiver, and then put a stick in the hole by one hand. Another hand keep pressing remote button "5". In this case, the power lamp will flash. After flashed for more than 3 times. First release the hand with stick, then release the hand for remote. Now if you press remote "5" and receiver NO5 and NO6's power lamps both light .It means two channels could controlled by one button. Using the same method and you could run more receivers by a button.

Another way is just program one time to add or replace new receivers. Method: For example, if you want to control a new receiver (1~4 channels), please find a small hole on the top of the front side of the receiver, and then put the stick in the hole by one hand. Another hand keep pressing remote button "1". In this case, the power lamp will flash, after flashed for more than 3 times, first release the hand with stick, then release the hand for remote. Now if you press remote "1 to 4" one by one, then the channel 1 to 4 on the new receiver will light accordingly. That means this new receiver can controlled by the remote now. Using this method, you can add more receivers.

### **Products Features**

1. Transmitter- with power switch.
2. Receivers- with antenna, signal more stable.
3. Fire capacity: each channel could fire 5-6pcs display igniters (e-match) and 1pcs safety igniter (talon).
4. Programmable- one transmitter could control many receivers; a button on a transmitter could control many receivers.
5. Interchangeable: If there is one receiver was broken, you could use other receivers instead, but only if the receiver

belong to the same series. Or you just need to buy more receivers, don't need to buy transmitter.

**Attention:**

1. Please connect the products in series, ie one by one
2. Please do not shake devices aggressively.
3. Use caution when positioning the receivers close to fireworks so that it is not damaged when the fireworks are discharged.
4. Please take the batteries out the products are not in use, to prevent potential damage of the system.
5. Do not store the system in a damp, sour, alkali or polluted environment.
6. Keep your head and body clear of the fireworks direction of fire at all times when preparing your display.

**Receiver Parameters:**

1. Dimension: 11\*7\*2.5 cm
2. Channels: 12
3. Power: 10.8W
4. Battery: 4pcs AA batteries (each receiver)
5. Fire current: 1.8A
6. Test current: 3 mA
7. Weight: 0.1kg

**Package**

Plastic case: 25\*22\*7cm