COBRA Universal Quick Guide

1 – Insert batteries

Insert firing module batteries – Insert 3 x 9v batteries into firing module. The single 9v battery (1P) towards the center of the case powers the operation. The double 9v batteries (2P) towards the edge of the case fire cues using 6 Amps at 18 Volts. You can replace the single 9V battery separate from the double 9v batteries.

Insert remote batteries – Insert 3 x AA batteries into the remote.

Note: If you receive Er3 upon start-up, you pressed a button while the system started-up. Turn off and turn on while not pressing any buttons.

2 – Power on and sync systems

Power on remote and firing module - Place the remote toggle switch to the ON position. P0 – P9 displays battery power where P9 is full power. Rotate the module key switch counter-clockwise to the TEST position. 1P (single 9v) and 2P (double 9v) display battery life separately. Press LIGHT to toggle between night and day modes.

SYNC systems –Hold down SYNC on the 18R / 18R2 remote until P displays. Hold SYNC on 18M until P displays. Press SYNC on 18R / 18R2and 18M at same time. 18M will re-start. Repeat for additional modules. Re-start remote when complete. See www.cobrafiringsystems.com/sync

Wake up system - The 18R and 18M fall asleep automatically after 60 seconds. On the 18M, press and hold any button to wake up. The 18M will automatically wake up if the 18R or 18R2 to which it's synced is awake. The 18M will never fall asleep when armed by the 18R or 18R2.

3 – Test continuity

Insert e-matches / igniter clips - Insert up to 10 series wired e-matches or 4 parallel wired e-matches / consumer igniter clips into desired cues.

Test continuity from module - Press and hold the module TEST button. Results will display on 18-cue LED grid for 2 seconds. Repeat as desired.

Test continuity from remote - Set remote channel to same channel as module(s) you wish to test. Results will display on remote 18-cue LED grid. Change channel to test different modules. Partial continuity across multiple modules on same channel will blink green LED. Using the 18R2 only, repeatedly press TEST to cycle through modules on the same channel.

4 – Test range / signal strength

Position firing modules - Mount the firing modules in the exact position they will be firing from. Raising the module will improve signal strength.

Test signal strength from module – Press and release the SYNC button to display a value between 0 and -99. Any value between 0 and -75 will support single button press firing, anything lower we recommend holding down the fire button until visual confirmation is received.

Test signal strength from remote – Press and release the SYNC button to display strength for module(s) set to the selected channel only. Using the 18R2 only, repeatedly press SYNC to cycle through modules on the same channel. Release SYNC on poor signal strength to display module address.

5 – ARM modules

Set channel on module(s) - Set the desired channel on each module. Different modules can have same channel.

ARM firing modules - Rotate module key switch clockwise to the ARM position.

Set all modules to ARM mode - Press remote ARM button on remote to place all systems into ARM mode. The red fire LED blinks red and then turns solid. The 18R2 displays the number of awake / armed modules.

Note: If the red LED does not stop blinking, a module has the key left in the TEST position. The 18R2 will note which module address is unarmed.

Note: To change systems back to TEST mode, press and release the TEST button. This will also disarm the systems and display the # of modules awake / in test.

6 – Ready to fire

Set channel - Set the remote to the desired firing channel.

YOU ARE READY TO FIRE CUES!

1. **Manual fire -** Press individual 1-18 cue buttons in any desired order.

2. **Step fire -** Press and release STEP button to fire and auto-increment cue #. After 18 cues are fired, the channel is automatically incremented.

3. **AUTO-FIRE/SEQ -** Set a desired delay (0.1s to 99s) and press AUTO-FIRE/SEQ button, then the starting cue, then the ending cue, then AUTO-FIRE/SEQ button to start the sequence. Hold down the AUTO-FIRE/SEQ button through the sequence to automatically re-start the sequence on the next channel.

Error Codes

Er1: 18M only, first check battery orientation / life. Second, a cue is bad and when un-wired the system will power up normally. Skip this cue and contact COBRA.

Er2: 18M only 1) Replace batteries / check orientation. 2) Incorrect voltage mode, to fix press TEST and CH+ or TEST and CH- to toggle to 9.0. Re-start 18M.

Er3: 18R / 18R2 / 18M. Stuck button test failed, do not press buttons when system is starting up, re-start unit.

Er4: 18R2 only, Your script upload failed / you don't have the word "end" on the last line of your script file.

Er5: Hold SYNC for 15+ seconds on remote until SYNC flashes. Re-sync all modules.

Battery Recommendations

Non-rechargeable: Use name-brand Energizer, Duracell Alkaline batteries. Do not use cheap no-name brands. Professional series batteries not required.

Rechargeable: Use Lithium Polymer or Lithium Ion minimum 500 mAh+ rating. For example, the Hi-tech brand Lithium Ion battery.

Active hours remaining

	1	2	3	4	5	6	7	8	9
18R	1	3	5	7	9	11	13	15	16
18R2	1	2	3	4	5	6	7	8	9
18M	1	2	2	3	4	5	5	5	6

Note: When asleep, multiple hours remaining x 3

Max e-Match / Igniters

22 AWG / 0.644 mm thick

Wire Length	Max Series	Max Parallel
50 ft . / 15m	10	4
100 ft. / 30m	9	3
260 ft. / 80m	8	3
820 ft. / 250m	6	2

24 AWG / 0.511 mm thick

Wire Length	Max Series	Max Parallel
50 ft . / 15m	6	3
100 ft. / 30m	5	2
260 ft. / 80m	4	2
820 ft. / 250m	3	1

Note: Full 2P battery recommended when firing in parallel.

READ THIS DOCUMENT

(especially if you're using Talon clips)

1) Using Talon consumer igniter clips? Read below or your clips won't ignite

If you plan on using Talon igniter clips, you must set the module to Talon clip mode in order to pulse 2 seconds of current to the cue vs. 1/10th seconds which is the default e-match mode the units are shipped in. To change to Talon mode, press SYNC and CH+ at the same time on the **MODULE**, not the remote. This will display "2.0" when complete. Repeat for each module you wish to use Talon clips on. To change back to e-match mode, simply press SYNC and CH-. This will display "0.1" when complete.

2) My 18R / 18R2 key is lost or the key switch is damaged

If you have lost your remote key or have damaged the key switch for some reason, the 18R or 18R2 can be easily hot-wired. To perform this, simply remove the four screws from the back of the 18R or 18R2. Remove the back enclosure and find the two wires that connect from the main PCB board to the key switch. Cut these wires using a knife or wire cutter, strip about 1" wire and connect the bare wires together. Make sure to use a piece of tape to cover any exposed wire that could come in contact with the PCB board and cause a system malfunction. Contact info@cobrafiringsystems.com to get a replacement key switch assembly.

3) Er1 is showing on my module, why?

Make sure your 9V (PP3) batteries are in the proper orientation based on the diagram shown on the inside of the battery door. Also confirm your 9V batteries are not dead and that the battery tab contacts are pressed firm against the batteries. If a battery contact is pressed in too far, simply bend it back. If your batteries are good, then you may have a bad cue assuming the error only occurs when your cues are wired. To find the bad cue, simply remove wires one-by-by and power the system off, then on seeing if you still see the Er1 code. Once you find the bad cue, skip this for your show. Then, contact info@cobrafiringsystems.com immediately for warranty repair on the system.

4) Er3 is displaying on my module, why?

Er3 is a stuck button error that displays if any button is pressed during the 18M power on process. This happens commonly when syncing systems. If you see Er3, simple re-start the 18M and don't press any buttons during the start-up process. If you see this error during the sync process, simply re-start the 18M as it's most likely already synced and you did not let go of the SYNC button quickly enough when it re-started during the sync process.

5) Er2 is displaying on my module, why?

The 18M voltage mode is likely incorrect. To correct, press TEST and CH+ or TEST and CH- at the same time to toggle the mode. Set this value to 9.0 and re-start the 18M to remove the error.

6) I am trying to load a script using the USB thumb drive, but am getting an error code and all red LEDs.

This is due to your script filename not being cobra.csv. Or, if your filename is correct, the USB thumb drive is not compatible with the 18R2. Please try another USB thumb drive, or purchase the cheapest Sandisk brand at Walmart. These will always work.

7) Use brand name 9V / PP3 batteries such as Duracell or Energizer

Make sure you use brand-name batteries such as Duracell or Energizer. Do not use non-brand name brands such as Rayovac, Eveready, or any other brands. We do not suggest using re-chargeable batteries for the 2P firing batteries.