



**Airsoft MCOM**  
Instruction Manual

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## Introduction

The Harry Badger MCOM is an Airsoft / Paintball Mission Control platform to aid and enrich gameplay, offering new and exciting game options to site owners.

## Models

This is the list of MCOMs currently available with more being developed. Please check the [harrybadger.com](http://harrybadger.com) website for the latest information

Each MCOM model creates its own unique set of game play options, styles and narrative. For example - The Search & Destroy game on a MCOM Fuse Edition would have a difference game narrative to the same Search & Destroy game being played with the MCOM Hostage Vest.

### MCOM Mini Box

The MCOM Mini Box is the smallest, lightest and the straightforward no frills edition, but has all the games and features of its larger **Fused** and **Wired** editions.

### MCOM Fused Edition

A large tough case with central MCOM controls and coloured Team Buttons. Its unique feature is a pair of giant **Fuses** that have to be inserted in order for the Team Buttons to be active.

### MCOM Wired Edition

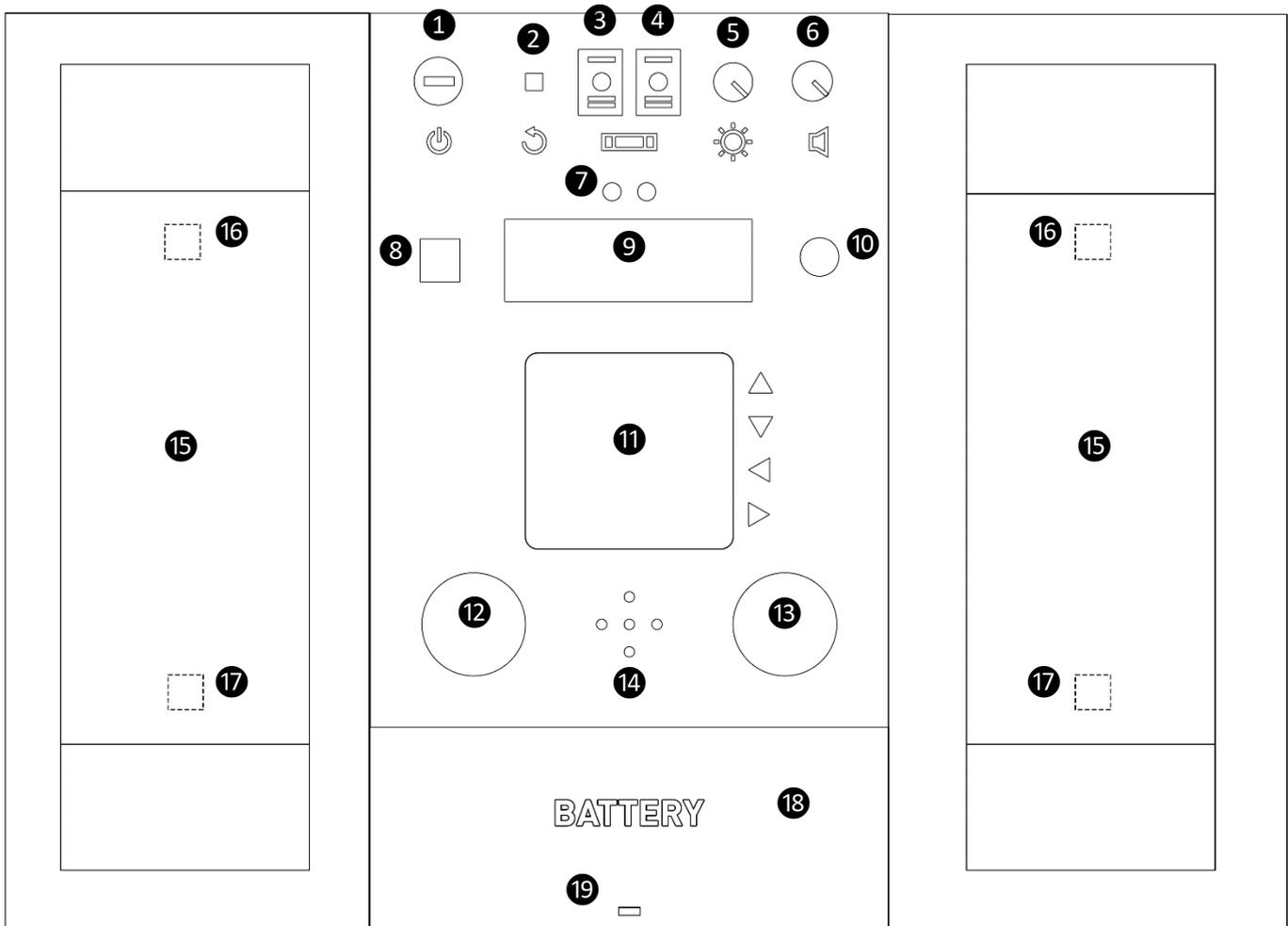
A similar large tough case with central MCOM controls and coloured Team Buttons. Its unique feature is a set of 6 removable wires which can be used to arm the device. Just make sure you remove the right one!

### MCOM Hostage Vest

Has all the features of the **MCOM Wired Edition**, but in the form of a hostage vest and can be worn by a Non Player Character during the game.

Whilst the set up and usage of the MCOM boxes are designed to be as simple and intuitive as possible, this user manual explains all the control, game modes and settings in detail. Please use the index at the start of this manual to skip directly to the section required.

## MCOM Fuse Features



- |    |                                |    |                           |
|----|--------------------------------|----|---------------------------|
| 1  | Power ON/OFF Key switch        | 11 | Keypad                    |
| 2  | Reset Button                   | 12 | Green/Blue Team Button    |
| 3  | Left Function Selector Switch  | 13 | Red Team Button           |
| 4  | Right Function Selector Switch | 14 | Speaker                   |
| 5  | Display Brightness Control     | 15 | Fuses                     |
| 6  | Volume Control                 | 16 | Enable Team Button Switch |
| 7  | Team LEDs                      | 17 | Fuse LED Switch           |
| 8  | USB Port                       | 18 | Battery Compartment       |
| 9  | LCD Display Screen             | 19 | Fuse LED Override Switch  |
| 10 | Power IN / Charging Socket     |    |                           |

## 1 Power ON/OFF Key switch

Insert the key and turn 90°. The key can be removed in both the ON and OFF positions to prevent tampering

## 2 Reset Button

To cancel a game or reset the MCOM press the recessed reset button. The ON/OFF key or other blunt object can be used

## 3/4 Left and Right Function Selector Switches

The left and right function switches control whether the **Team Buttons** (12/13) or **Fuses** (15) are in play during a game

0 (Middle position): Only the centre keypad (11) is in use. The **Team Buttons** (12/13) and **Fuses** (15) are disabled.

1 (Top position): The large coloured **Team Buttons** (12/13) are active as well as the **Keypad** (11). The **Fuses** (15) are disabled.

2 (Bottom position). The **Fuses** (15) are active and have to be present in order for the **Team Buttons** (12/13) to be active. See **Enable Team Button Switch** (16)

## 5 Display Brightness Control

Controls the brightness of the centre **LCD Display Screen** (9).

## 6 Volume Control

Controls the volume of the **Speaker** (14).

## 7 Team LEDs

The **Team LEDs** will flash according to the game in play and which team is in control, or if the MCOM is armed or disarmed.

## 8 USB Port

The MCOM can be powered with an external USB power bank. This USB port can also be used to connect the MCOM to a PC in order to receive software updates.

**NOTE** - The relay used to trigger external pyrotechnics is powered from the internal **Battery** (18). Powering the MCOM via the USB port only without an internal battery, will not trigger the pyros.

The USB port will not recharge the internal **Battery**. See (10)

## 9 LCD Display Screen

Central LCD Display. Adjust the brightness via the **Display Brightness Control** (5)

## 10 Power IN / Charging Socket

Use the short lead provided to charge the internal Ni-Mh Battery.

**NOTE** - It is not advised to charge the battery whilst the MCOM is in use. Please turn off the MCOM via the Power **ON/OFF Key switch** (1) before charging.

## 11 Keypad

The 4x4 keyboard is used to select games and settings from the menu. The keypad can also be used in game to enter passcodes if configured

The \* and # are not used

**A:** Menu Up

**B:** Menu Down

**C:** Back/Cancel and left **Team Button** (12)

**D:** Select and right **Team Button** (13)

## 12/13 Green/Blue and Red Team Buttons

The left Green/Blue or right Red **Team Buttons** are pressed in game to either dominate the MCOM or disarm/arm. These buttons are only active if the **Function Selector Switches (3/4)** are set to position 1 or 2.

If the **Function Selector Switches (3/4)** are set to position 2 then the **Fuse (15)** has to be inserted for the **Team Buttons** to be active

The C and D key on the **Keypad (11)** also act as left and right **Team Buttons**

## 14 Speaker

If sound is enabled for a game via the menu, a beep will be played during the game. The volume of the speaker is controlled with the **Volume Control (6)**

## 15 Fuses

The **Fuses** are held within the holder with magnets location at the top and bottom. When the **Fuse** is inserted, it turns on the **Enable Team Button Switch (16)** and the **Fuse LED Switch (17)**.

If the **Function Selector Switches (3/4)** are set to position 2, then the **Fuse** must be inserted into the MCOM in order for the **Team Buttons (12/13)** to be active. Without the Fuse the **Team Buttons (12/13)** will be disabled

## 16 Enable Team Button Switch

The micro switch is located underneath the fuse.

Fuse inserted: ON

Fuse removed: OFF

## 17 Fuse LED Switch

There are 7 coloured LEDs under each **Fuse**. When the **Fuse** is inserted, the **Fuse LED Switch** is turned on and the LEDs will illuminate. This can be overridden by the **Fuse LED Switch (19)**

## 18 Battery Compartment

Within this compartment is an AEG Ni-Hm Battery. To access the compartment, remove the 4 screws location at each corner of the cover. The Battery has a Mini Tamiya connector.

Please use either a 7.4, 8.4 or 9.6v Ni-Hm Battery. The MCOM has a battery operating range of between 5 and 12 volts.

NOTE - This battery is directly connected to an internal relay switch which is used to trigger external pyrotechnics via the speaker connector at the rear of the MCOM. Most Theatrical Maroons pyros are fired using 8-9 volts. Therefore, if pyros are in use, please use an 8.4v or 9.6v battery.

Although it is recommended that the MCOM is powered via a Ni-Hm battery, it *could* be powered with an AEG 7.4v or 11.1v Li-Po battery. Please take care when charging and only use a Li-Po charger.

Expected battery duration:

1200 mAh: 6 hours

1600 mAh: 8 hours

2000 mAh: 10 hours

3000 mAh: 15 hours

4000 mAh: 20 Hours

5000 mAh: 25 hours

## 19 Fuse LED Switch

This **Fuse LED Switch** can be used to turn off all LEDs underneath the Fuses (15). If the MCOM is being used in daylight or a brightly lit environment, the LEDs can be turned off using this override switch.

# Games

The follow table shows which games are available on a specific MCOM model:

Game	Standard Fused Edition	Standard Wired Edition	Mini Box	Hostage Vest	Dynamite
Search & Destroy	✓	✓	✓	✓	
Sabotage	✓	✓	✓	✓	
*Domination	✓	✓	✓	✓	
Engineer	✓	✓	✓	✓	
Cut the Wire		✓		✓	
Countdown					✓

\* Domination is the only game that is not designed to trigger an external pyrotechnic via the relay switch.

## Search & Destroy

**Overview:** The Search & Destroy game has a set time duration and within this time an attacking team must locate the MCOM and press the RED button to arm the device. A countdown will then start to destroy the MCOM. If the MCOM is armed, the defending team can press the GREEN/BLUE button to stop the countdown and disarm the device. Disarming an armed MCOM will end the game.

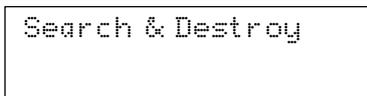
### Game ends:

The **Search & Destroy** game ends when:

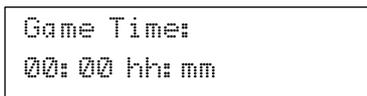
- When the game duration lapses GREEN/BLUE defending team wins
- MCOM is successfully destroyed RED attacking team wins
- MCOM is disarmed GREEN/BLUE defending team wins

### Set Up:

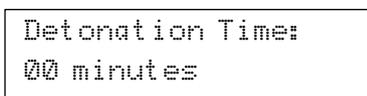
- Turn on the MCOM
- The first game displayed will be the Search & Destroy game



- Alternatively use the **A** and **B** buttons on the keypad to scroll up and down
- Press **D** to select game
- Enter the Game Time in **HOURS** and **MINTUES**. This sets the overall game duration



- Press the **D** button to progress or the **C** button to re-enter the Game Time
- Enter the Detonation Time in **MINTUES**. Once the MCOM is armed, this is the countdown before the device is detonated.



- Press the **D** button to progress or the **C** button to re-enter the Detonation Time

- Enter the Arm Time in **SECONDS**. This is the length of time a player has to hold down the arm/disarm buttons. The maximum number of seconds is 99.

```
Arm Time:  
00 Seconds
```

- Press the **D** button to progress or the **C** button to re-enter the Arm Time
- Select **A** or **B** to enable / disable in game sounds

```
Enable Sound?  
A : Yes B : No
```

- Select **A** or **B** to enable / disable in the end of game Relay. The relay is the electronic trigger for external pyrotechnics.

```
Enable Relay?  
A : Yes B : No
```

- Select **A** or **B** to set an arm/disarm code. This is a 4 digit numerical passcode.
  - NOTE - this will override and arming / disarming with the **Team Buttons**.

```
Enable Code Arm?  
A : Yes B : No
```

```
Enter New Pass  
XXXX
```

- Repeat and retype the passcode

```
Retype New Pass  
XXXX
```

- If the passcodes do not match you will be prompted to try again

```
ERROR Dont Match
```

- If the passcodes match the menu will progress

```
Password Set OK!
```

- If the Passcode arm was skipped or successfully set, the game will now be ready to start

```
Ready to Begin  
Push ANY Button
```

## Sabotage

**Overview:** The **Sabotage** game is similar to **Search & Destroy** but disabling an armed MCOM does not end the game.

The game has a set time duration and within this time an attacking team must locate the MCOM and press the RED button to arm the device. A countdown will then start to *destroy* the MCOM. If the MCOM is armed, the defending team can press the GREEN/BLUE button to stop the countdown and disarm the device.

### Game ends:

The **Sabotage** game ends when:

- When the game duration lapses GREEN/BLUE defending team wins
- MCOM is successfully destroyed RED attacking team wins

### Set Up:

- Turn on the MCOM
- Use the **A** and **B** buttons on the keypad to scroll up and down to the **Sabotage** game

```
Sabotage
```

- Press **D** to select game
- Enter the Game Time in **HOURS** and **MINTUES**. This sets the overall game duration

```
Game Time:  
00: 00 hh: mm
```

- Press the **D** button to progress or the **C** button to re-enter the Game Time
- Enter the Detonation Time in **MINTUES**. Once the MCOM is armed, this is the countdown before the device is detonated.

```
Detonation Time:  
00 minutes
```

- Press the **D** button to progress or the **C** button to re-enter the Detonation Time
- Enter the Arm Time in **SECONDS**. This is the length of time a player has to hold down the arm/disarm buttons. The maximum number of seconds is 99.

```
Arm Time:  
00 Seconds
```

- Press the **D** button to progress or the **C** button to re-enter the Arm Time
- Select **A** or **B** to enable / disable in game sounds

```
Enable Sound?  
A : Yes B : No
```

- Select **A** or **B** to enable / disable in the end of game Relay. The relay is the electronic trigger for external pyrotechnics.

Enable Relay?  
A : Yes B : No

- Select **A** or **B** to set an arm/disarm code. This is a 4 digit numerical passcode.
  - NOTE - this will override and arming / disarming with the **Team Buttons**.

Enable Code Arm?  
A : Yes B : No

Enter New Pass  
XXXX

- Repeat and retype the passcode

Retype New Pass  
XXXX

- If the passcodes do not match you will be prompted to try again

ERROR Dont Match

- If the passcodes match the menu will progress

Password Set OK!

- If the Passcode arm was skipped or successfully set, the game will now be ready to start

Ready to Begin  
Push ANY Button

## Domination

**Overview:** The Domination see two teams fighting over control of the MCOM.

The game has a set time duration. At the start of the game the MCOM is in a **NEUTURAL** state. i.e. it is not captured.

Both teams must locate the MCOM and press their assigned coloured button to capture the device.

If the MCOM has already been captured, the opposing team must first **NEUTURISE** the MCOM by pressing their **Team Button** (15) and then press the **Team Button** a second time to capture the MCOM.

At the end of the game, the team who has captured and dominated the MCOM the longest wins

### Game ends:

The **Domination** game ends when:

- When the game duration lapses The team with the longest domination time wins

### Set Up:

- Turn on the MCOM
- Use the **A** and **B** buttons on the keypad to scroll up and down to the **Domination** game

```
Domination
```

- Press **D** to select game
- Enter the Game Time in **HOURS** and **MINTUES**. This sets the overall game duration

```
Game Time:  
00: 00 hh: mm
```

- Press the **D** button to progress or the **C** button to re-enter the Game Time
- Enter the Arm Time in **SECONDS**. This is the length of time a player has to hold down the arm/disarm buttons. The maximum number of seconds is 99.

```
Arm Time:  
00 Seconds
```

- Press the **D** button to progress or the **C** button to re-enter the Arm Time
- Select **A** or **B** to enable / disable in game sounds

```
Enable Sound?  
A : Yes B : No
```

- The game will now be ready to start

```
Ready to Begin  
Push ANY Button
```

## Engineer

**Overview:** The **Engineer** game has a set time duration. A designated **Engineer** (normal a Marshall) has to take the MCOM to a specified location, arm the device with the **RED Team Button** and defend it for the duration of a countdown before detonation. Whilst in transit, the MCOM can be set to beep at set intervals to give away the location.

The defending team has to either prevent the Engineer from reaching his destination before the game time lapses or disarm the MCOM if it has been armed with the **GREEN Team Button**. Disarming an armed MCOM will end the game.

### Game ends:

The **Engineer** game ends when:

- |                                  |                                |
|----------------------------------|--------------------------------|
| ▪ When the game duration lapses  | GREEN/BLUE defending team wins |
| ▪ MCOM is successfully destroyed | Engineer team wins             |
| ▪ MCOM is disarmed               | GREEN/BLUE defending team wins |

### Set Up:

- Turn on the MCOM
- Use the **A** and **B** buttons on the keypad to scroll up and down to the **Engineer** game

```
Engineer
```

- Press **D** to select game
- Enter the Game Time in **HOURS** and **MINTUES**. This sets the overall game duration

```
Game Time:  
00: 00 hh: mm
```

- Press the **D** button to progress or the **C** button to re-enter the Game Time
- Enter the Detonation Time in **MINTUES**. Once the MCOM is armed, this is the countdown before the device is detonated.

```
Detonation Time:  
00 minutes
```

- Press the **D** button to progress or the **C** button to re-enter the Detonation Time
- Enter the Arm Time in **SECONDS**. This is the length of time a player has to hold down the arm/disarm buttons. The maximum number of seconds is 99.

```
Arm Time:  
00 Seconds
```

- Press the **D** button to progress or the **C** button to re-enter the Arm Time

- Enter the Beep Interval time in seconds.  
When the Sound is enabled (in the next step), during the game a beep will be played at the set interval. This helps locate the MCOM box.

```
Beep Interval:  
00 Seconds
```

- Press the **D** button to progress or the **C** button to re-enter the Beep Interval time
- Select **A** or **B** to enable / disable in game sounds

```
Enable Sound?  
A : Yes B : No
```

- Select **A** or **B** to enable / disable in the end of game Relay. The relay is the electronic trigger for external pyrotechnics.

```
Enable Relay?  
A : Yes B : No
```

- The game will now be ready to start

```
Ready to Begin  
Push ANY Button
```

## Cut the Wire

**Overview:** The **Cut the Wire** has a set time duration.

The MCOM starts with a countdown and is armed. Within the set game time a disarming team must locate the MCOM and remove **one** of the 6 wires **MCOM Wired Box** or **one** of the 9 wires on the **MCOM Hostage Vest** to disarm the device. Removing the wrong wire will *destroy* the MCOM and end the game. If the game time lapses, the MCOM will detonate.

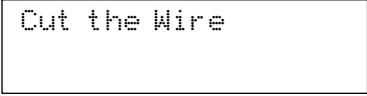
### Game ends:

The **Cut the Wire** game ends when:

- When the game duration lapses RED defending team wins
- MCOM is successfully *destroyed* RED defending team wins
- MCOM is disarmed GREEN/BLUE disarming team wins

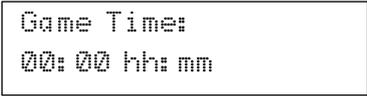
### Set Up:

- Turn on the MCOM
- Use the **A** and **B** buttons on the keypad to scroll up and down to the **Cut the Wire** game



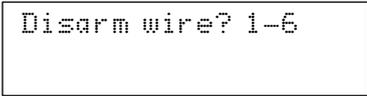
Cut the Wire

- Press **D** to select game
- Enter the Game Time in **HOURS** and **MINTUES**. This sets the overall game duration



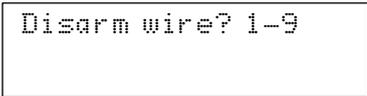
Game Time:  
00: 00 hh: mm

- Press the **D** button to progress or the **C** button to re-enter the Game Time
- Enter the number of the disarm wire
  - On a MCOM Wired Edition, the wires are 1 to 6 from left to right



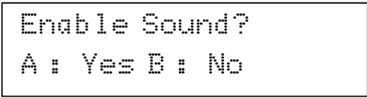
Disarm wire? 1-6

- On a MCOM Hostage Vest, the wires are:  
Front row: 1 -2 - 3  
Back top row: 4 - 5 - 6  
Back bottom row: 7 - 8 - 9



Disarm wire? 1-9

- Press the **D** button to progress or the **C** button to re-enter the Wire disarm number
- Select **A** or **B** to enable / disable in game sounds



Enable Sound?  
A : Yes B : No

- Select **A** or **B** to enable / disable in the end of game Relay. The relay is the electronic trigger for external pyrotechnics.

```
Enable Relay?
A : Yes B : No
```

- The game will now be ready to start

```
Ready to Begin
Push ANY Button
```

## Countdown

**Overview:** The **Countdown** has a set time duration.

The MCOM starts with a countdown and is armed. Within the set game time, a disarming team must locate the MCOM and simply flick the toggle switch to disarm the device. If the game time lapses, the MCOM will detonate.

## Game ends:

The **Cut the Wire** game ends when:

- |                                         |                     |
|-----------------------------------------|---------------------|
| ▪ When the game duration lapses         | Defending team wins |
| ▪ MCOM is successfully <i>destroyed</i> | Defending team wins |
| ▪ MCOM is disarmed                      | Disarming team wins |

## Set Up:

- Turn on the MCOM with the toggle flip switch
- The countdown timer is displayed in Hours | Minutes | Seconds but only the hours and minutes need to be set
- Press the SET button to select the first hour digit. It will flash when selected.

```
00:00:00
```

- Press the CHANGE button increase the value
- Press the SET button to select the second hour digit. It will flash when selected.

```
01:00:00
```

- Press the CHANGE button increase the value
- Press the SET button to select the first minutes digit. It will flash when selected.

```
01:01:00
```

- Press the CHANGE button increase the value
- Press the SET button to select the second minutes digit. It will flash when selected.

```
01:02:00
```

- Press the CHANGE to return to the first hour digit
- Once all digits are set, press the START button