EMS TopGun II user manual

1. TopGun packaging list

1.1 EMS TopGun II

1.2 PC driver CD

1.3 LED stand A
   (with infrared LEDs on
    top and at bottom)
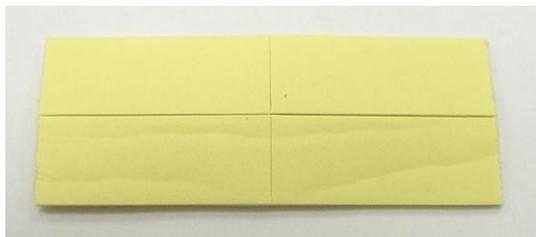   LED stand B
   (with infrared LEDs on
    top and in the middle)

1.4 LED stand hooks

1.5 Y shape mini cable
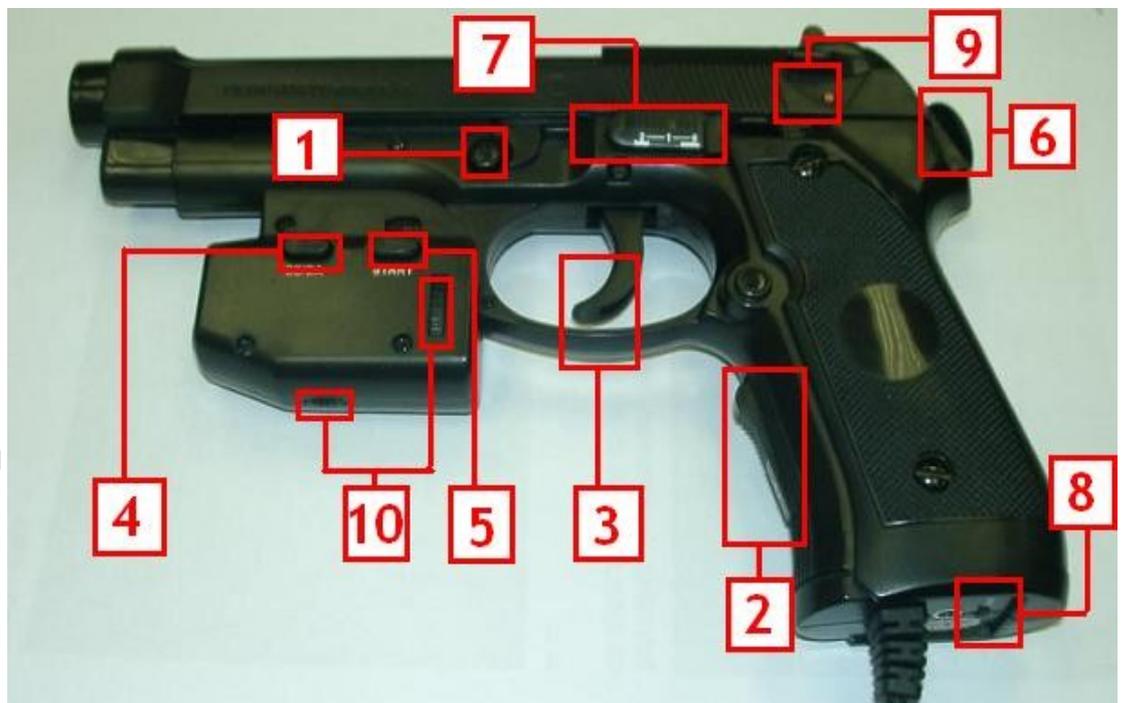
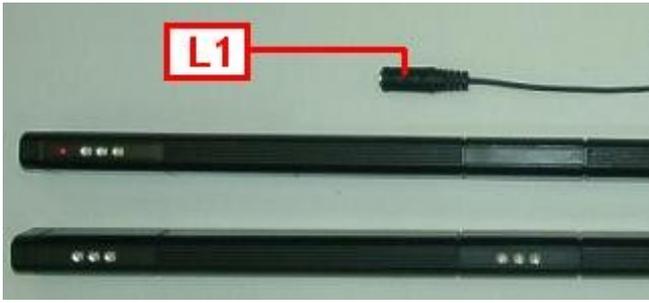1.6 Double sided tape

2. TopGun buttons list

1. A (B at the back)
2. C
3. D
4. SE/BA
5. START
6. Cross pad
7. Auto fire switch
    0 – normal
    1 – Auto Fire
    2 – Auto Fire/Auto reload
8. X / P
    "P" for PS2™/PS3™/PC
    "X" for Xbox™
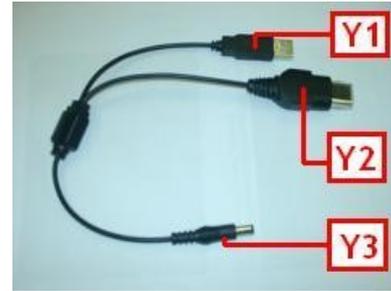9. Pointer switch
10. Pointer tuner

3. TopGun ports List (marked as different symbols below)

LED Stand cable

Y Shape mini cable

TopGun cable

4. Connect TopGun and cables

4.1 Single TopGun installation

4.1.1 Set the switch (X/P) below the TopGun handle to the right position: "P" for PC/PS2™/PS3™, "X" for Xbox™.

4.1.2 Connect (G1)to(G2). (Ignore this step if recoil function is not needed)

4.1.3 For PC/PS2™/PS3™, connect (G4) to USB port. For Xbox™, connect (G3) to Xbox™ joypad port.

4.1.4 To provide power for the LED stands, for PC/PS2™/PS3™, connect (L1) to (Y3), and (Y1) to PC/PS2™/PS3™ USB port.
For Xbox™, connect (L1) to (Y3), and (Y2) to Xbox™ joypad port. If the console is too far away from the screen,
user could connect (L1) to a AC – DC power transformer instead. (not included in the package).
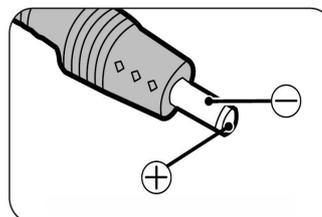Refer to **(4.3)AC - DC Transformer output requirements**.

4.2 Dual TopGun installation

4.2.1 Please refer to 4.1.1, 4.1.2 and 4.1.3

4.2.2 To provide power for the LED stands, for PS3™/PC, connect (L1) to (Y3), and (Y1) to PS3™/PC USB port. For Xbox™,
connect (L1) to (Y3), and (Y2) to Xbox™ joypad port. For PS2™, as there are only two USB ports on the console,
please connect (L1) to an AC – DC power transformer. Refer to **(4.3)AC - DC Transformer output requirements**.
If the console is too far away from the screen, usercould connect (L1) to a AC – DC power transformer instead.
Refer to **(4.3)AC - DC Transformer output requirements**. (note : power transformer is not included in the package.)

Note: 1. No matter single TopGun or multiple TopGun installation, only one pair of LED stands is needed for a screen.

2. For dual TopGun setup of PS2™, in case you don't want to buy an extra AC-DC transformer, you could connect (L1)
to (G1) in step 4.2.2. In this way, the recoil function of that gun would be sacrificed.

3. For the first time to install the TopGun in PC, PC would pop up a driver installation wizard.
Please refer to the below guide **(6)Install the driver**.

4.3 AC – DC Transformer output requirements

600mA or above, 5V

5. Mount the LED stands

5.1 Mount the two LED stand hooks onto the LED stand A and B. Please refer to the guide below for details:

      5.1.1 Mount the hooks on top of the LED stands   5.1.2 Finished diagram

5.2   Either mount the LED stands beside the screen as shown in figure 1, refer to 5.2.1,
       or mount the LED stands above and below the screen as shown in figure 2, refer to 5.2.2.
       For huge projectors, mount the LED stands inside the screen as shown in figure 3, refer to 5.2.3.

5.2.1 Mount the LED stands A & B beside the screen. The position of the two LED stands could be swapped. See figure 1.

5.2.2 Mount the LED stands A & B above and below the screen. The position of the two LED stands could be swapped. See figure 2.

5.2.3 Mount the LED stands A & B inside the screen. The position of the two LED stands could be swapped. See figure 3.

5.3   No matter single TopGun or multiple TopGun installation, only one pair of LED stands is needed for a screen.

5.4   All 4 sets of infrared LED on the LED stands are not visible, while the red LED will indicate if power is ON.

Note : 1. The distance between the TopGun and the screen should be 2-3 times of the distance between the two LED stands. (for LED stands mounted beside the screen)

      2. For 16:9 or 16:10 screens, or screen of size 42 inches or above, it is recommended to mount the LED stands above and below the screen. This enables TopGun to work nearer to the screen. (e.g. For 42 inches 16:9 screen, if the LED stands is mounted above and below the screen, the minimum workable distance between TopGun and the screen is 180cm. If the LED stands is mounted beside the screen, the minimum distance becomes 220cm.)

      3. For huge projectors, or for screens of 52 inches or above and the provided LED stands does not function well, user may consider to buy our TopGun Blaze stand II (#0802) to replace the provided LED stands.
         TopGun Blaze Stand II official site: http://www.hkems.com/product/xbox/TopGunBlazeStand2.htm

      4. User could use the double sided tape provided to mount the LED stands. See **(1.6)TopGun packaging list** .

         figure 1   figure 2

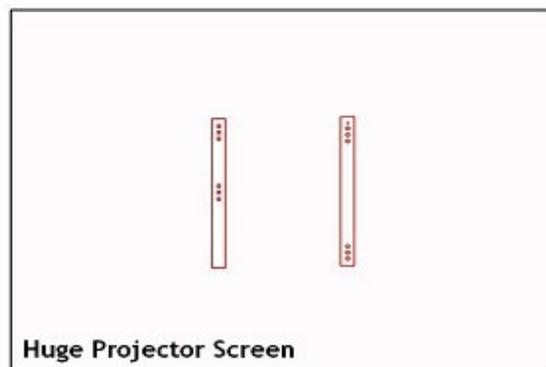figure 3

6.Install the driver

6.1 Note

6.1.1 This step is only for PC. Skip this if you are using PS2™, PS3™ or Xbox™.

6.1.2 In case you have installed any other 3rd party TopGun driver, you must un-install them first before you install the official driver. Otherwise it will result in driver crush.

6.1.3 For the 1st time you connect the TopGun to PC, the PC should ask you for driver. If it doesn't ask you for driver but find an unknown USB device instead, please try another USB port or use a USB hubs.

6.2 Install procedures

6.2.1 Download the latest driver from the link below: http://www.hkems.com/download%20-%20TopGun.htm

6.2.2 unzip the compressed file.

6.2.3 Set the switch(X/P) at the bottom of the gun to "P", and connect the gun to PC.

6.2.4 It would find the **"HID mini driver for EMS TopGun"**, hardware installation wizard would pop up. Please let it search for the most suitable driver automatically from the directory where the file is decompressed.

6.2.5 It would find a **"HID-compliant mouse"** and hardware installation wizard would pop up again.
Click "install the device automatically (recommended)" to install the driver.

6.2.6 It would find a **"HID-compliant device"** and hardware installation wizard would pop up again.
Click "install the device automatically (recommended)" to install the driver.

6.2.7 Visit "device manager", you could find "HID mini driver for EMS TopGun", which indicate that the installation is successful.

6.2.8 Run the "TopGunPanel.exe" program, "EMS TopGun 1" would be shown at the top left corner.
Please configure it according to your preference, and click "submit settings".

Note : The above guide is for windows XP. For the detailed and latest driver installation guide, please visit the link below.
http://www.hkems.com/download%20-%20TopGun.htm

7.TopGun Calibration

7.1 Note

7.1.0 Before the first time to use the TopGun, user have to calibrate the TopGun.

7.1.1 The distance between the TopGun and the screen should be 2 to 3 times of that between the two LED stands.
(for LED stands mounted beside the screen)

7.1.2 TopGun has two mode: "Normal mode" and "Calibration mode".
"calibration mode" is only for calibration process. During normal game play, TopGun should enter the "Normal mode".
User could hold button A and B for 5 to 10 sec to enter "Calibration mode".
User could quit the "Calibration mode" by either finishing the calibration process or pressing START and SE/BA buttons.
In "Calibration mode", the pointer would light no matter where the TopGun is pointing at.
In "Normal mode", the pointer would light only when it is pointing at the screen.
(i.e. Could see all 4 sets of infrared LEDs at the same time)

7.1.3 For PC, TopGun could not enter "Calibration mode" if the driver is not well installed.
Please refer to the above guide **(6)Install the driver**.

7.1.4 For PS2™, PS3™ or Xbox™, please enter the game before entering the "Calibration mode". (* refer to 9.5)

7.1.5 If the TopGun enter "Calibration mode" automatically, and user could not quit the "Calibration mode" by pressing START and SE/BA buttons, please jump to step 7.2.4. After the calibration is finished, the gun would return to normal.
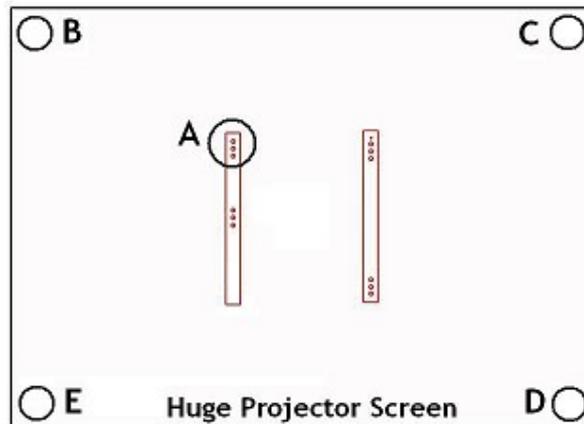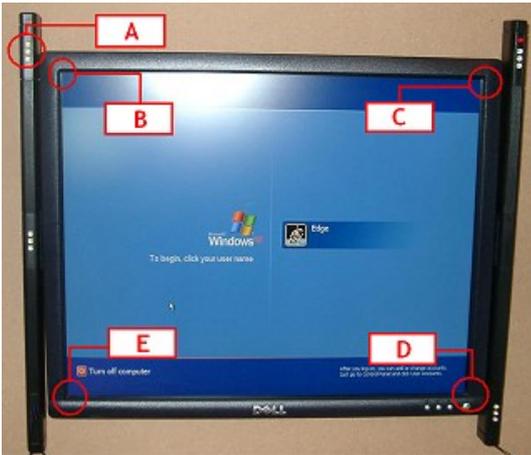
7.2 TopGun Calibration procedures

7.2.1 Turn ON the pointer switch. (refer to the TopGun buttons list)

7.2.2 Make sure the pointer lights when you aim at all corners of the screen. If the pointer flashes, there should be some interruption sources beside/behind where you are aiming at. If it doesn't light, the gun may be too close to the screen. Please stand back, remove the interruption source and try again. User could use the debug function to locate the interruption sources, but this requires the TopGun to connect with PC. Please refer to **(8)Debug function – to find out infrared interruptions**.

7.2.3 Aim the TopGun at the ceiling or floor, make sure the pointer doesn't light, hold A+B buttons for 5-10 sec to enter the "Calibration mode". In "Calibration mode", the pointer would be ON no matter where the TopGun is pointing at.

7.2.4 Shoot the following targets in this order (ABCDE):

I) Aim at the top left LED (i.e. point A of the above picture), pull trigger. (i.e. Button D, refer to TopGun buttons list)
If it success, the pointer will flash and the gun will recoil for once. If it doesn't, repeat until it does.

II) Aim at the top left corner of the screen (i.e. point B of the above picture), pull trigger. (i.e. Button D)
If it success, the pointer will flash and the gun will recoil for once. If it doesn't, repeat until it does.

III) Aim at the top right corner of your screen (i.e. point C of the above picture), pull trigger. (i.e. Button D)
If it success, the pointer will flash and the gun will recoil for once. If it doesn't, repeat until it does.

IV) Aim at the bottom right corner of your screen (i.e. point D of the above picture), pull trigger. (i.e. Button D)
If it success, the pointer will flash and the gun will recoil for once. If it doesn't, repeat until it does.

V) Aim at the bottom left corner of your screen (i.e. point E of the above picture), pull trigger. (i.e. Button D)
If it success, the pointer will flash and the gun will recoil for once. If it doesn't, repeat until it does.

VI) After success in (V) it would quit the calibration mode automatically, and you could use the gun now.

If there is anything wrong in "Calibration mode", such as wrong shooting order or in-accurate aiming, please press "START" and "SE/SB" at the same time to return to "Normal mode", and then restart the calibration from step 7.2.2.

8. Debug function – to find out infrared interruptions

Any infrared sources near the screen would interrupt the TopGun system. (refer to 9.1) As infrared is not visible, our TopGun has a debug function to find out the interrupt sources. This function requires the TopGun to connect with PC. See the procedures below for details.

8.1 Download the LCDImage program, extract it.
http://www.hkems.com/files/LCDImage.zip

8.2 Hold button B and connect the TopGun to PC.

8.3 Windows will pop up a "Hardware installation wizard" and ask for driver. Direct it to the EM3link.inf and EM3link.sys which locate at where you extract the file in step 8.1. After installation success, you could find "EMS Inter link cable" in the device manager.

8.4 Run the LCDImage.exe (which locate at where you extract the file in step 8.1)

8.5 Click "Device Connect", and it would pop up a "Connect Succeed" window.

8.6 Click "Show Image", and it would show the view of the camera at the TopGun.

Note : 1. This view will show the infrared sources only, which is shown in white color. The view is left-right inverted.

2. If the LED stands are setup as firgure 8.7.1, the image would be same as figure 8.7.2.

figure 8.7.1

figure 8.7.2.

3. Any infrared interruption would be shown in white color in this view. Any white color other then the four "white points" shown in figure 8.7.2 are infrared interruptions.

4. User should aim the gun over the whole screen and every points of the LED stands, see if there is any interruption near the screen.

9. Important note

9.1 Any infrared sources (Sun light, tungsten filaments light bulb, or any high temperature light source such as spotlight) may interrupt the TopGun System. The pointer will keep flashing to indicate that. Please make sure that no infrared sources are beside or behind the screen. User could use the debug function to locate the interruption sources, but this requires the TopGun to connect with PC. Please refer to **(8)Debug function – to find out infrared interruptions**.

9.2 The reflect image of the infrared LEDs may interrupt the TopGun System, and the pointer will keep flashing to indicate that. To solve this problem, a cloth could be placed on those smooth surfaces to prevent reflection.

9.3 The pointer is harmful for eyes, don't aim at anyone else.

9.4 No matter the pointer is ON or OFF, it would not affect the function of the TopGun.

9.5 For PS2™/PS3™, only GunCon2™ compatible games are supported.

9.6 TopGun supports those PS2™ compatible PS3™ consoles.

For any questions, please contact us.   EMS Production Ltd. official site: www.hkems.com   Email : sales@hkems.com