#0508 EMS TopGun complete guide

1. TopGun packaging list

1.1 EMS TopGun

1.2 PC driver CD

1.3 LED stand A
   (with 2 sets of LED)
   LED stand B
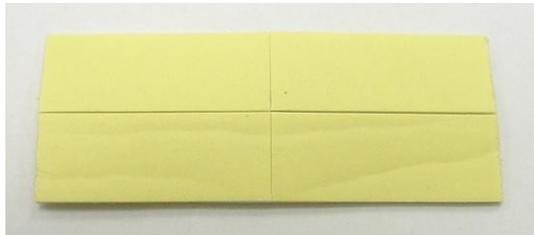   (with 3 sets of LED)

1.4 LED stand hooks

1.5 Y shape mini cable
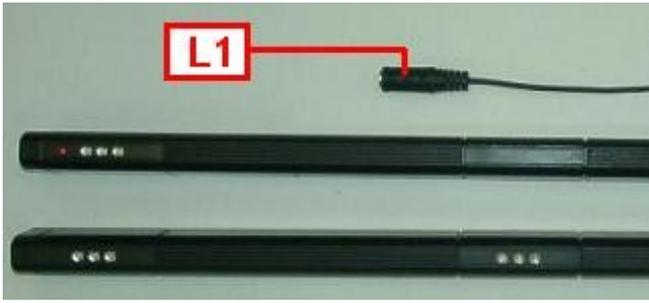
1.6 Double sided tape

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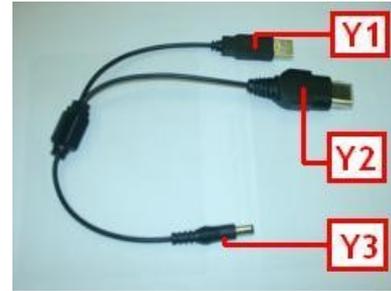
3. TopGun ports List (marked as different symbols below)

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 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 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™, connect (L1) to a AC – DC power transformer. Refer to **(4.3)AC - DC Transformer output requirements**.

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**.

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
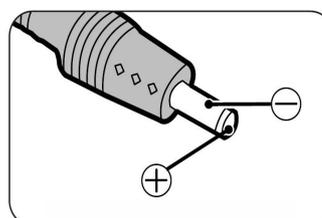
5.Mount the LED stands

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 projectors larger then 80 inches, mount the LED stands inside the screen as shown in figure 3, refer to 5.2.3.

5.2.1 Mount the LED stand B on the left of the screen, and LED stand A on the right of the screen. See figure 1.

5.2.2 Mount the LED stand B below the screen, and LED stand A above the screen. See figure 2.
For this setting, TopGun could be closer to the screen. Please note that the workable distance of TopGun is always
equal to 2-3 times of the distance between the two stands.

5.2.3 Mount the LED stand B on the left and LED stand A on the right, inside the screen. 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 5 sets of infrared LED on the LED stands are not visible, while the red LED will indicate if power is ON.

Note : 1. For 4:3 screens over 60 inches or 16:9 screens over 42 inches, TopGun Blaze stand is needed to replace the

      LED stands. TopGun Blaze Stand official site: http://www.hkems.com/product/xbox/TopGunBlazeStand.htm

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

figure 1

figure 2

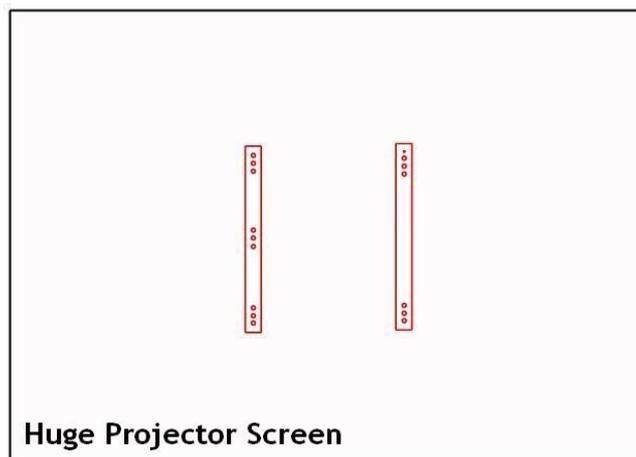

Huge Projector Screen

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 Procedures

6.2.1 Download the Gun2Mouse V3.2 from the link below: http://www.hkems.com/files/EMS%20TopGun%20V3.2.exe

6.2.2 Double click to install the file.

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

6.2.4 The computer will ask you for driver, please let it search for the most suitable driver automatically.

6.2.5 Test the gun if it is workable in PC. See **(6.3)Test**.

6.2.6 Calibrate the gun, see **(7)Hardware Calibration**.

6.2.7 Run the "Gun2Mouse v3.2" program from the start menu, set up the macro as you like, and click "Start". Then you could use the gun to control the mouse pointer and play games.

6.3 Test

6.3.1 Right click "my computer", select "property", select "device manager". Inside the "device manager", you could find the "EMS TopGun V3.2". If there is an interjection mark beside it, please update driver and let it search for the most suitable driver automatically.

6.3.2 Run the Tester.exe, click button test and see if it response.

6.3.3 Run the Tester.exe, click Fire test and see if it response.

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 screen of 14~30 inches, TopGun should be around 1.5M ~ 2M away from the screen.
    For screen of 30~60 inches, TopGun should be around 2M ~ 4M away from the screen.
    For screen of 60~80 inches, TopGun should be around 4M ~ 6M away from the screen.
    For 4:3 screens over 60 inches or 16:9 screens over 42 inches, TopGun Blaze stand is needed to replace the LED stands.
    TopGun Blaze Stand official site: http://www.hkems.com/product/xbox/TopGunBlazeStand.htm

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 5 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".

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. (refer to 7.3.1 and 7.3.2 below) 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, 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 (ABCDEF):
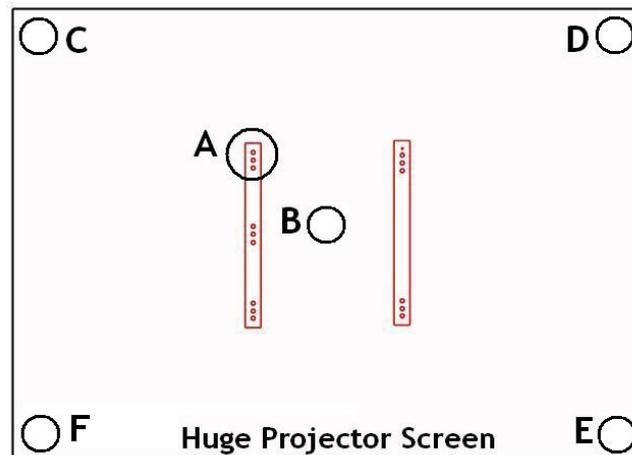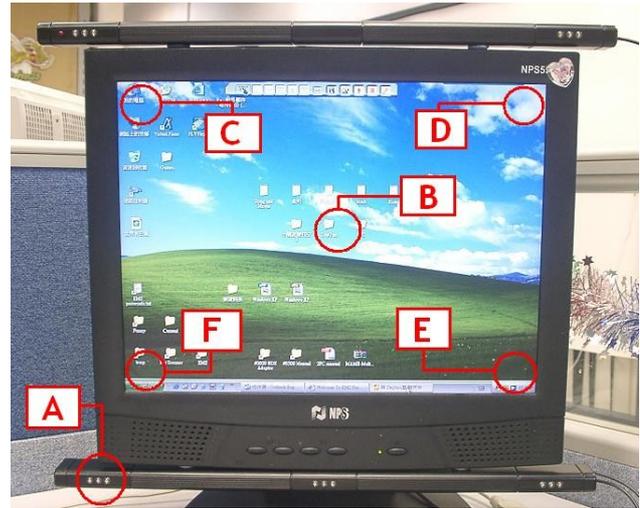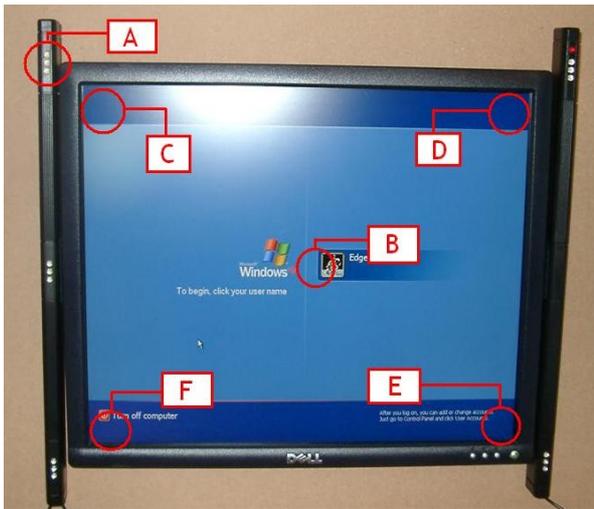
I) Aim at the marked LED (i.e. point A of the above picture), press trigger. (i.e. Button D, refer to TopGun buttons list)
If it success, the pointer will flash and the gun will recoil for once. If it doesn't, repeat until it does.

II) Aim at the center of the screen (i.e. point B of the above picture), press 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 left corner of the screen (i.e. point C of the above picture), press 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 top right corner of your screen (i.e. point D of the above picture), press 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 right corner of your screen (i.e. point E of the above picture), press 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) Aim at the bottom left corner of your screen (i.e. point F of the above picture), press 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.

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

8. Debug function – to find out infrared interruptions
   (for TopGun of BT / BT1 version only)

Any infrared sources near the screen would interrupt the EMS TopGun system. 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 following program (LCDImage). Extract it to any location.
     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.
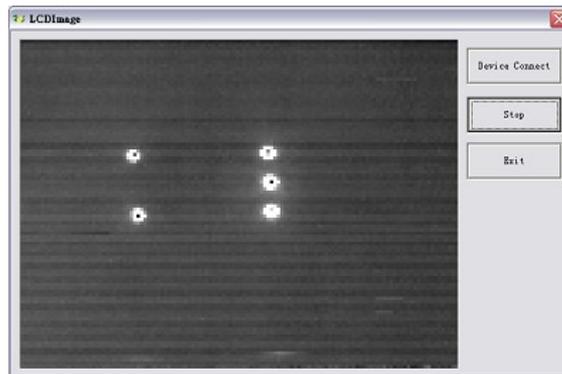

figure 8.7.1   figure 8.7.2.

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

4. User should aim the gun over the whole screen and see if there is any interruption near the screen.

9. Important note

9.1 Any infrared sources (Sun light or yellow light or any heat source) may interrupt the EMS 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 EMS 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.

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