



MILO Range v4
Advanced System Setup Guide

24/7 Technical Support
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Setup System Hardware

If your system is setup and taken down each time you use it, please follow the steps listed below to setup the system hardware and prepare the system for use.

Training Room Preparation

1. Turn off all non-fluorescent lights.
2. Cover all windows to prevent sunlight from affecting the hit detection system.

Screen Setup

3. Assemble the projection screen and place it against a wall. (Figure 1)



Figure 1

Projector Setup

4. Place the projector on the floor approximately 18' from the projection screen with the lens pointed at the screen. Do not place the projector on a table or any other surface.
5. Connect power to the projector (Figure 2). Make sure the cable does not interfere with the area where the trainees will walk or stand during training.



Figure 2

6. Connect the projector cable to the VGA input (Figure 3) and run the cable to the location where the computer will sit. Make sure the cable does not run where the trainees will walk or stand during training.



Figure 3

Camera Box Setup

7. Place the camera box on top of the projector with cameras pointing toward the projection screen. (Figure 4)



Figure 4

8. Attach the lenses and the colored IR filters. Note the labels indicating which camera is for Hit Detect and which is for Flashlight. The red filter goes on the Hit Detect camera lens. The blue filter goes on the Flashlight camera lens. (Figure 5a, 5b & 5c)



Figure 5a



Figure 5b



Figure 5c

NOTE: There are really three parts to a complete lens assembly, the camera lens plus the filter and the filter ring. See Figure 6 for a detailed illustration.



Figure 6

9. Connect the network cable to the camera box "System" port (Figure 7). Now, run the cable to the location where the computer will sit. Make sure the cable does not interfere with the area where the trainees will walk or stand during training.



Figure 7

10. Connect power to the camera box (Figure 8). Make sure the cable does not interfere with the area where the trainees will walk or stand during training.



Figure 8

Trainer Station Setup

11. Setup the laptop computer on a desk or table, out of the trainee's way.
(Figure 9)



Figure 9

12. Connect the laptop power supply to a power strip or wall outlet then to the laptop. (Figure 10)



Figure 10

13. Set the mouse on the desk and connect it to the laptop using a USB port on the laptop.

14. Connect the VGA cable from the projector (from step 6) to the laptop's monitor output. (Figure 11)



Figure 11

15. Connect the network cable from the camera box (from step 9) to the network port on the laptop. (Figure 12)



Figure 12

Sound System Setup

16. Set the two speakers on the desk or on the floor, facing the area where the trainee will be during training.

17. Insert the red plug on the right speaker cable into the R jack and insert the white plug on the left speaker cable into the L jack. (Figure 13)



Figure 13

18. Plug the appropriate end of the USB cable into the “To Computer” jack on the Acoustimass module (sub-woofer), and plug the other end into a USB jack on your computer. (Figures 14a, 14b)



Figure 14a

Figure 14b

19. Plug the control pod cable into the “Control Pod” jack. (Figure 15a, 15b)



Figure 15a



Figure 15b

20. Plug one end of the power cord into the “AC Input” jack and plug the other end into a power strip or wall outlet. (Figure 16)



Figure 16

Trainee Action Capture (TAC) Setup

21. Mount the TAC camera to the included clamp system, and secure the clamp to the frame of the projection screen. (Figure 17)

22. Loosen the ball joint on the clamp, aim the TAC camera at the area where the trainee will be during training then tighten the ball joint to secure the camera's position.



Figure 17

23. Connect the power supply to the TAC camera and to an AC power outlet. (Figure 18a)

24. Connect the supplied network cable to the network port on the TAC camera. (Figure 18b)



Figure 18a



Figure 18b

25. Run the network cable to the Hit Detect & Flashlight camera box, avoiding the area where the trainee will be during training.

26. Connect the network cable from the TAC Camera (from step 24) to the “AUX” port on the Hit Detect & Flashlight camera box. (Figure 19)



Figure 19

27. Connect the Samson microphone to an available USB port on the computer. (Figure 20a, 20b)

28. Place the microphone away from the system speakers, preferably near where the trainee will be during training, but avoid running the cable where the trainee will walk.



Figure 20a



Figure 20b

Power Up

29. Turn on the projector by pressing the on/standby button on the projector remote while aiming it at the front or rear of the projector. Wait 30 – 60 seconds while the projector warms up.

30. Press the power button on the laptop system. After about 1 minute, Windows will finish loading and you will see an IES logo on the desktop and projected screen.

Open MILO Range

31. Double-Click on the MILO Range Icon from the Windows desktop (Figure 21)



Figure 21

System Calibration

Now that you have setup the system hardware, you need to perform the MILO Hit Detection & Calibration process. It is strongly recommended to perform system calibration every time you power on the system for use. This will ensure accurate hit detection and shot recognition.