SILENT SENTINEL ARE SPECIALISTS IN LONG RANGE OPTICAL SENSORS INCLUDING BOTH COOLED AND UNCOOLED THERMAL CAMERAS

Fixed MODEM - Deployment Guide – Kit, Tripod

SILENT SENTINEL
VISION & MOTION CONTROL

This manual is used as a guide. The photos, graphics, diagrams and illustrations provided in the manual are only used for explanation, which may be different from the specific product. Please refer to the actual product. We try our best to make sure all the contents in this manual are accurate. We do not provide any representations or warranties in this manual.

If you need the latest version of this manual, please contact us. Silent Sentinel recommends that you use this manual under the guidance of professionals.

Version Control

Version	Author	Approver	Date
1.0	Matthew Short	Paul Elsey	11th April 2020

Contents

Introduction

The aim of this document is to details the steps required to physically deploy the Fixed MODUM Capability.

Equipment List

Complete Kit – Tripod

The following equipment makes up the Complete Kit – Tripod;

Part Number: RCF-KIT-FD384H / RCF-KIT-FD640H

Serial	Description	Part Number	Image
1.	MODUM Camera System		
2.	MODUM Ethernet Cable (3m) – Camera to Laptop		
3.	MODUM Power Supply		
4.	MODUM Tripod		
5.	MODUM Tripod Extension Pole		

6.	Thermal Black Body inc PSU		
7.	Thermal Black Body Tripod		
8.	Thermal Black Body Tripod Extension Pole		
9.	Laptop inc PSU		
10.	Laptop USB to Ethernet Converter		
11.	USB Stick		

Physical Setup Guide

Mounting the MODUM Camera

Step	Description	Image
1.	Separate the MODUM Extension Mount into it's two parts	
2.	Fix the show part into the underside of the MODUM Camera.	
3.	Fix the show part Camera Mount point on the Tripod	
4.	Slide both parts of the mount back together. Adjust the MODUM so it is facing forwards and tighten the locking thread.	

Deploying the Blackbody

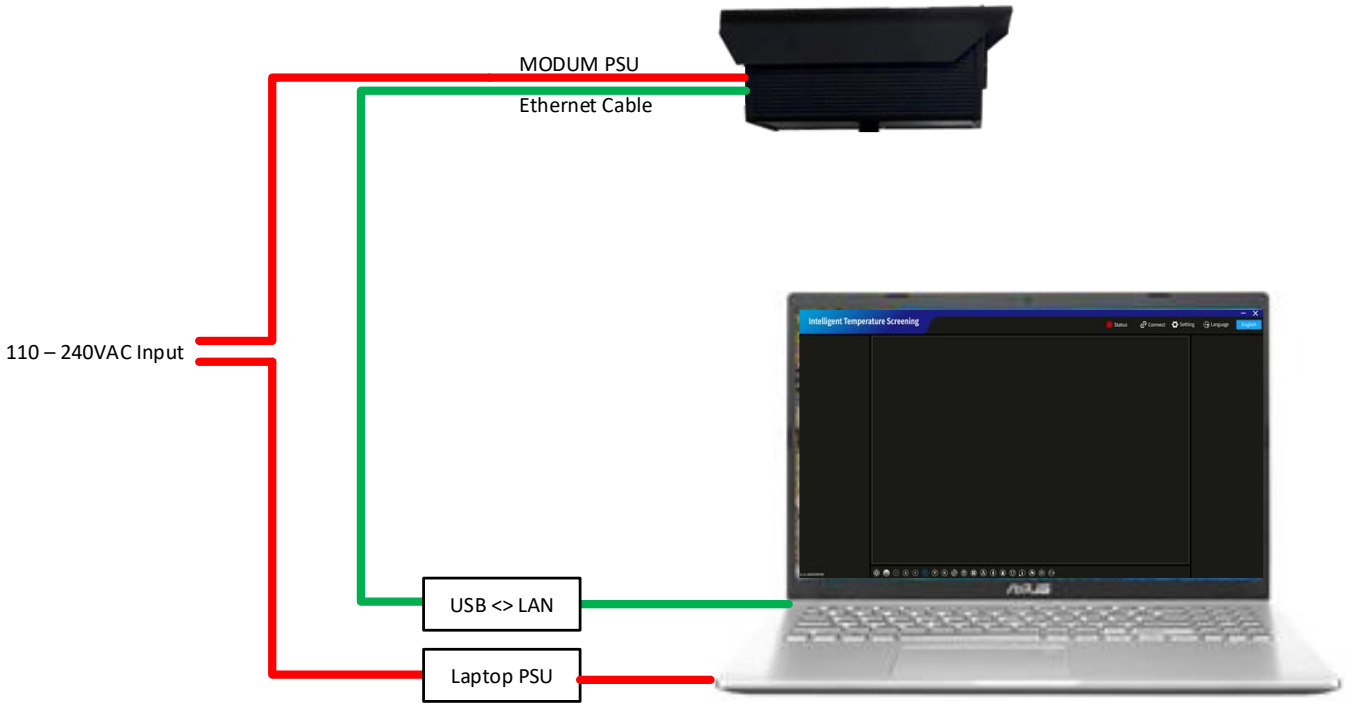
Step	Description	Image
1.	Separate the MODUM Extension Mount into it's two parts	
2.	Fix the show part into the underside of the Black Body.	
3.	Fix the show part to the top of the Tripod	
4.	Slide both parts of the mount back together. Adjust the Black body is facings towards the camera.	

Complete Assembly

Installation Information

Wiring Guide

MODUM Camera System



Thermal Blackbody

Deployment Suggestions

Deployment Notes

General

1. The system should be deployed indoors in a relatively stable ambient temperature.
2. Any quick changes in temperature will impact on the blackbodies ability to regulate its surface temperature. This will then have an impact on the accuracy of the system
3. If the system is to be deployed outdoors then protect from the environment by installing inside a container / tent.
4. Avoid areas that have a number of high temperature objects in the FOV. If any present, use the shield zones to shield them out.
5. Avoid placing directly at the entrance from the outside. Force the person to walk through a channel first before screening. This will allow enough time to reduce the impact on their skin temperature based on the outside conditions.

MODUM Camera

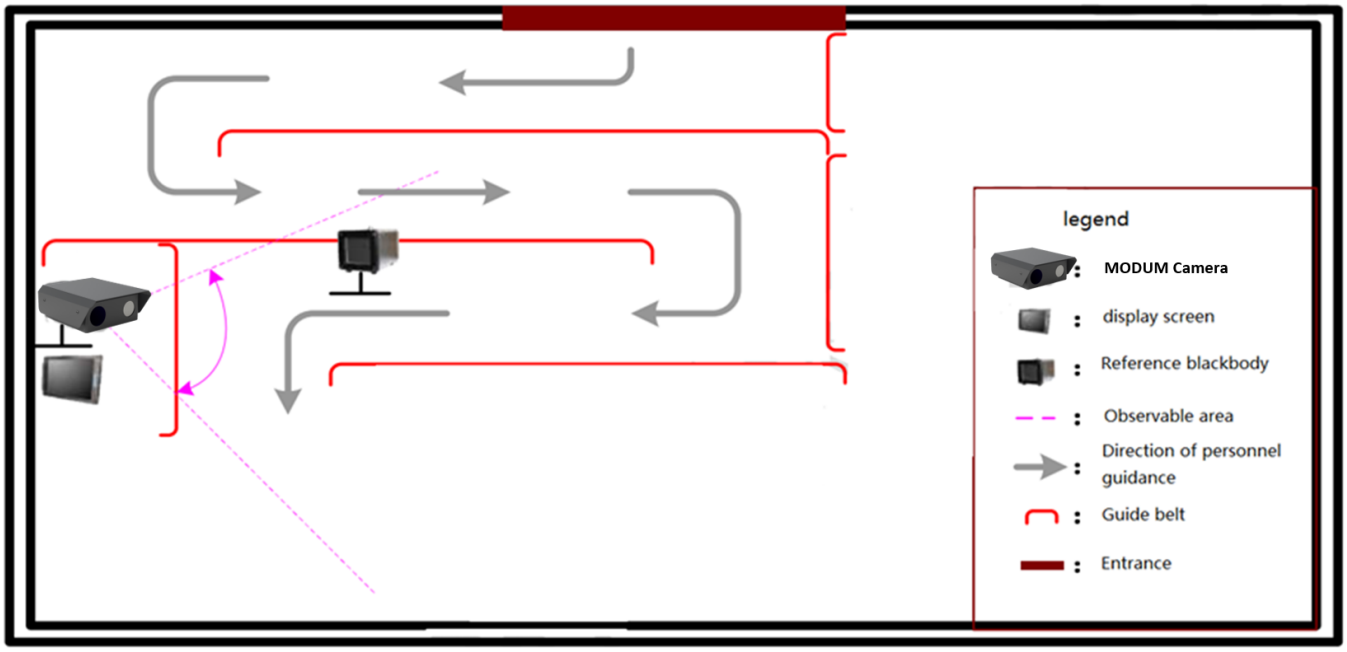
1. The MODUM Camera should be deployed around 2m from the people to be screened.
2. For best performance the MODUM Camera should be roughly head-height of the people to be screened minimising the angle of incidence to their faces as much as possible.

Black Body

1. The Black Body should be deployed towards to top of the Field of View (FOV) of the MODUM camera in an area that will not be obstructed.
2. Deploy as close to the range you want to screen at. I.e., if the people are to be screened at 2.5m deploy the blackbody at that range.
3. Avoid areas with high air flow. This may impact on the black bodies ability to maintain it's temperature.

Typical Deployment Scenario

The below architecture outlines a typical deployment scenario



Notes:

Personnel Movement

The above deployment includes a forced chanell that the individuals have to walk through. This ensures a compliant pose when walking towards the camera. It also provides time for the individuals skin temperature to stabilize versus the internal temperature and reduce the impact brought about by the outside environment.

Camera Placement

The Camera / Guide Belt placement ensures personnel cannot get ‘too close’ to the cameras. Any measurements away from the set range (typically 2m) will become less accurate. If they are measured further away, the read temperature will be lower. If they are measured closer the read temperature will be higher (potentially leading to false alarms).