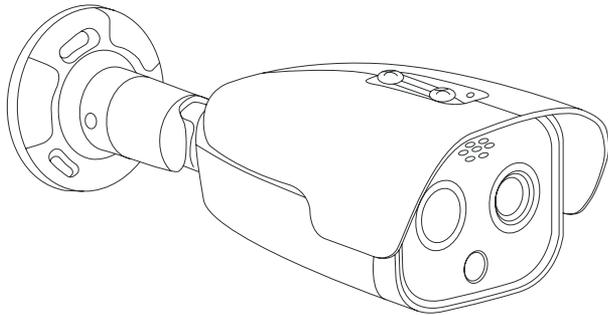Industry

ICI
INFRARED CAMERAS INC

FM 700X P-SERIES
QUICK START GUIDE

ICI cameras fall under US Federal Law and Export Control.

2105 W. Cardinal Dr. Beaumont, TX 77705
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infraredcameras.com
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We Are IR ™

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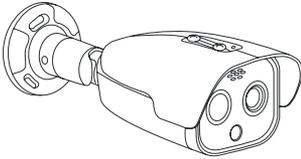(866) 861-0788
www.infraredcameras.com

Revision: 01-2024-001

Package Includes

FM 700X
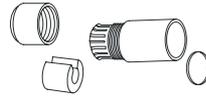
Waterproofing Kit

Anchors x3

Drill Template

Alignment Guides

Screws x3

Hex Wrench

Memory Card

ENSURE ALL SYSTEM EQUIPMENT AND COMPONENT ITEMS ARE PRESENT BEFORE BEGINNING INSTALLATION

Installation

USE THE ALIGNMENT GUIDES TO DRILL HOLES FOR SETTING DEVICE SCREWS.

DO NOT USE TOO LONG SCREWS WHEN INSTALLING THE DEVICE. USING SCREWS THAT ARE TOO LONG MAY DAMAGE THE THERMAL CAMERA.

THE INSTALLATION WALL SHOULD BE ABLE TO BEAR AT LEAST 4 TIMES THE WEIGHT OF THE CAMERA AND INSTALLATION ACCESSORIES.

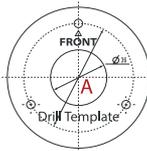THE INSTALLATION WALL SHOULD BE ABLE TO BEAR AT LEAST 4 TIMES THE WEIGHT OF THE CAMERA AND INSTALLATION ACCESSORIES.

IF THE INSTALLATION SITE IS A CONCRETE WALL OR CEILING, FIRST INSTALL EXPANSION SCREWS; THEN, INSTALL THE BRACKET. THE INSTALLATION HOLES OF THE EXPANSION SCREWS NEED TO BE IN LINE WITH THE BRACKET.

IF THE INSTALLATION SITE IS A WOODEN WALL, USE SELF-TAPPING SCREWS TO INSTALL THE BRACKET DIRECTLY.

THE DEVICE HAS FIXED FOCUS; THEREFORE, BEFORE INSTALLING THE DEVICE, PLEASE SELECT AN INSTALLATION POSITION AND LENS FOCAL LENGTH ACCORDING TO THE APPLICATION REQUIREMENTS TO ACHIEVE THE CORRECT FOCUS.

WHEN TRANSPORTING THE CAMERA, DO NOT LIFT, CARRY, OR PULL THE DEVICE BY THE CABLE. LIFTING, CARRYING, OR PULLING THE DEVICE BY THE CABLE MAY AFFECT THE WATERPROOF PERFORMANCE OF THE CAMERA OR CAUSE WIRING PROBLEMS.

A.

Place the alignment guide on the mounting position and drill three Φ5 mounting holes according to the markers on the alignment guide.

The recommended depth is 25mm.

B.

Insert the expansion screws into the drilled holes.

C.

Open a φ 36 hole with "A" as the center of the circle according to the sticker.
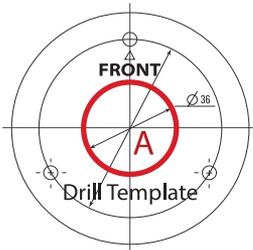
D.

Pass the tail wire of the camera through the A hole, then use screws to fix the camera to the mounting position.
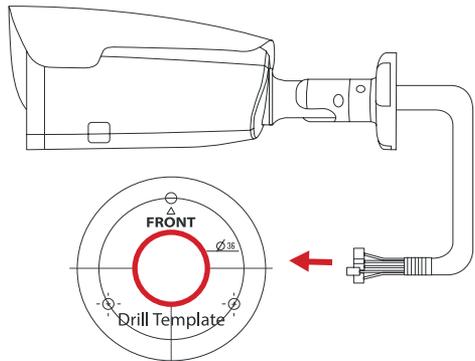
Wall Mounting
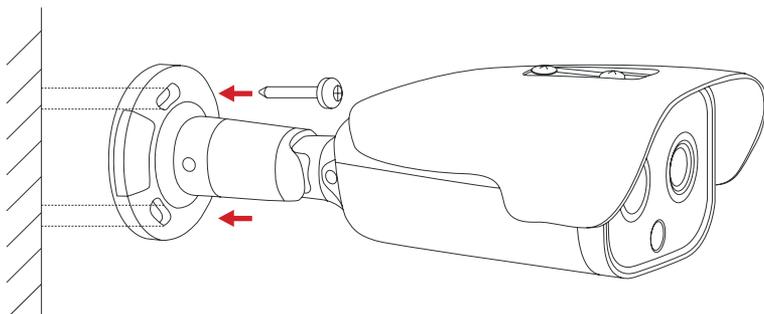
Ceiling Mounting
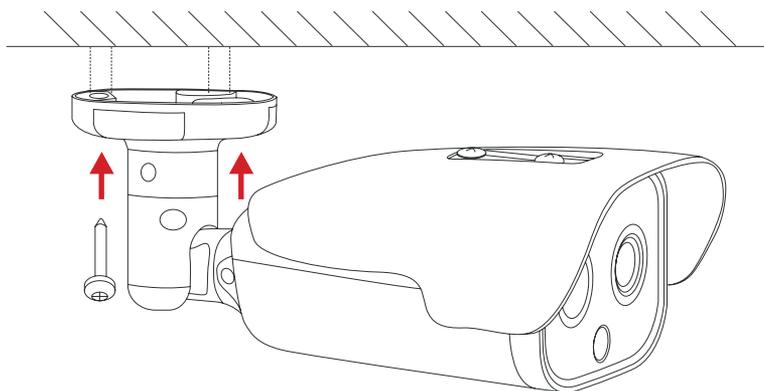
IF THE INSTALLATION SITE IS A CONCRETE WALL OR CEILING, FIRST INSTALL EXPANSION SCREWS; THEN, INSTALL THE BRACKET. THE INSTALLATION HOLES OF THE EXPANSION SCREWS NEED TO BE IN LINE WITH THE BRACKET.
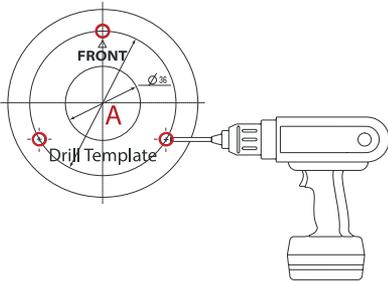
IF THE INSTALLATION SITE IS A WOODEN WALL, USE SELF-TAPPING SCREWS TO INSTALL THE BRACKET DIRECTLY.

WHEN USING THE CAMERA, INSTALL THE WATERPROOFING KIT TO PREVENT WATER FROM ENTERING THE NETWORK CABLE.

E.

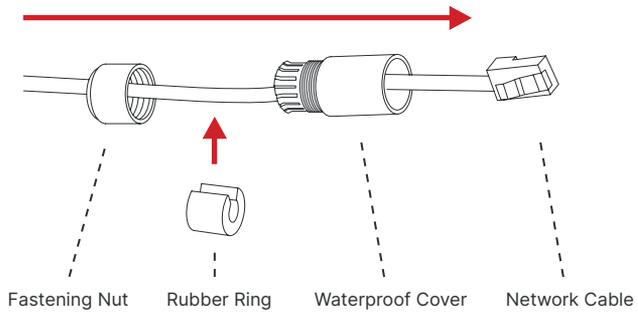Pass the network cable through the fastening nut and the main body of the waterproof cover.

F.

Place the rubber ring on the network cable between the main body of the waterproof cover and the fastening nut.

Fastening Nut   Rubber Ring   Waterproof Cover   Network Cable

G.
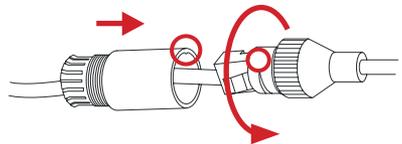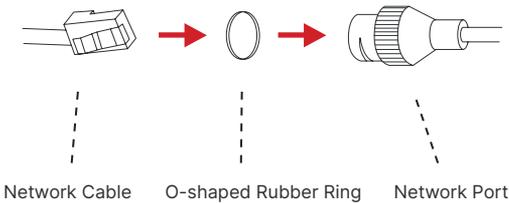
Put the O-shaped rubber ring into the network port, and insert the network cable into the network port.

Network Cable   O-shaped Rubber Ring   Network Port

H.

Align the notch of the network port with the buckle of the main body of the waterproof cover, put the main body of the waterproof cover into the end of the network port, and tighten it clockwise.

I.

Insert the waterproof rubber ring into the main body of the waterproof cover. Turn the fastening nut clockwise and press the waterproof rubber ring tightly.
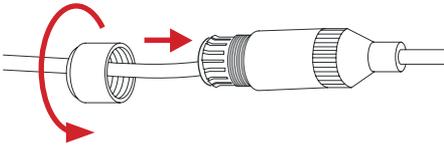
J.

ICI recommends having a service professional connect the device to facility networks and power sources.
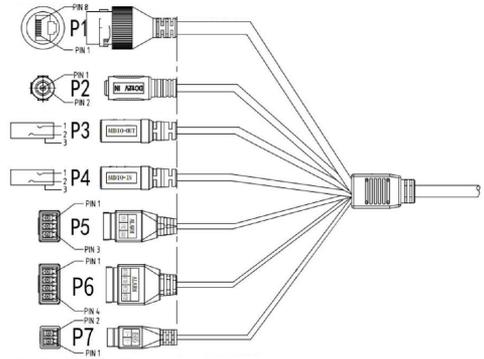
Cable Definitions

- P1 network interface (LAN)

- P2 power interface (DC12V)

- P3 audio output (AUDIO OUT)

- P4 audio input (AUDIO IN)

- P5 alarm input (ALARM IN): PIN 1(ALARM-IN1) and PIN 2(ALARM-IN2) are alarm input, PIN 3 is GND;

- P6 is alarm output (ALARM OUT): pin_1(ALARM-OUT1) and in_2(ALARM-COM1) are channel 1 alarm output; pin_3(ALARM-OUT2) and pin_4 (ALRAM-COM2) is channel 2 alarm output;

- P7 RS-485 interface (RS485)

K.

Use the Hex Wrench to loosen the lock nuts indicated and adjust the angle of the device by turning or rotating the device. Tighten the lock nuts when device is properly aligned.
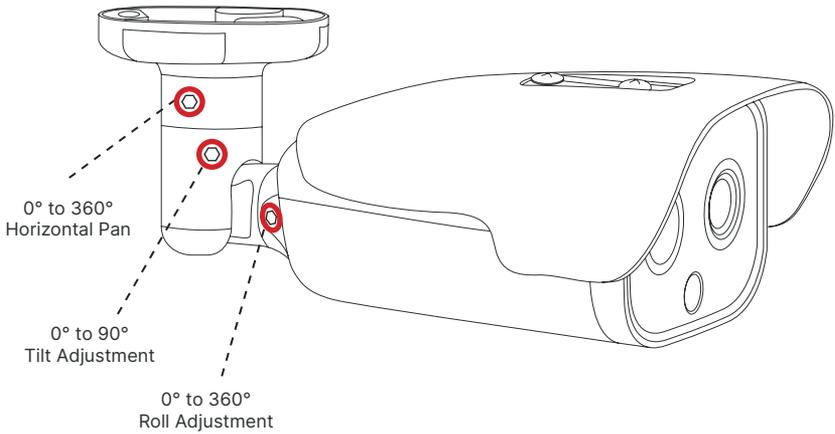

0° to 360°
Horizontal Pan

0° to 90°
Tilt Adjustment

0° to 360°
Roll Adjustment

L.

Power on the device.

M.

Connect to the device through an Internet browser.

THE THERMAL IMAGER NEEDS SUFFICIENT WARM-UP TIME FOR THE MOST ACCURATE TEMPERATURE MEASUREMENTS AND BEST IMAGE QUALITY. THIS TIME CAN OFTEN VARY BY ENVIRONMENTAL CONDITIONS. IT IS BEST TO WAIT A MINIMUM OF 10 MINUTES FOR THE DEVICE TO COMPLETELY WARM-UP.

Alarm Interface

The camera can be connected to alarm switch signal (0~DC 5V) input and switch output (no voltage). An external power supply is required when connecting the alarm. The specific wiring method is shown in the figure below.
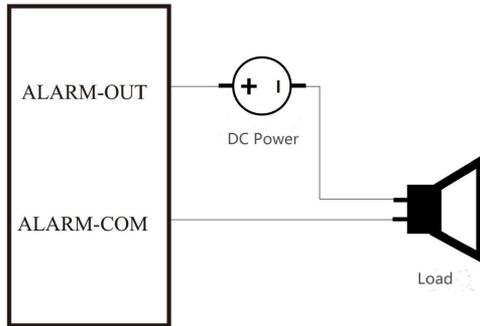
Memory Card

A.

Use a standard screwdriver to detach and remove the memory bay cover.
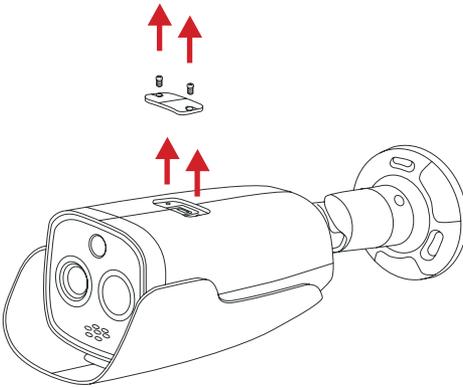
B.

Insert the Micro-SD Card into the top of the device until a clicking sound is heard.

C.

Use a standard screwdriver replace and the memory bay cover and screws.

About ICI / Contact

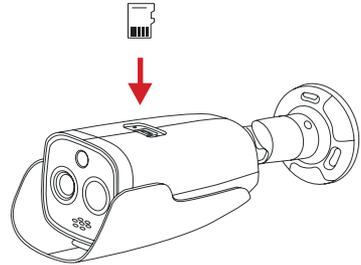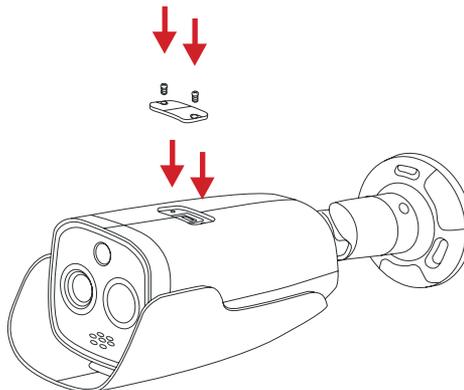Infrared Cameras, Inc.
2105 W. Cardinal Dr.
Beaumont, TX 77705

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General Inquiry: support@infraredcameras.com

Website: www.infraredcameras.com

You may reach a representative by phone or email Mon – Fri 8:00AM - 5:00PM CST.

ICI manufactures complete systems and software. We can provide complete engineering, software, and OEM solutions. Our Fortune 500 clients rely on us for infrared equipment and thermography training (which we offer through the Infrared Training Institute).

In addition to providing custom germanium, silica, and sapphire optics, we also build windows for enclosures, as well as custom pan and tilt units. We can even provide customizable explosion-proof systems.

Our knowledge and experience stems from years of using infrared imaging and temperature measurement instruments to provide solutions to: managers, engineers, scientists, inspectors and operators in space, power companies, medical, pulp and paper, food industry, research and development, and various process industries. You can see our products and services used in industrial, commercial, and government applications worldwide. Originally named Texas Infrared (still DBA), Infrared Cameras, Inc. has been in business since March, 1995.

Thank you for your dedicated and continued support.