Explosion-Proof Thermal Bi-Spectrum Network Positioning System

Quick Start Guide

Legal Information

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About this Manual

The Manual includes instructions for using and managing the Product. Pictures, charts, images and all other information hereinafter are for description and explanation only. The information contained in the Manual is subject to change, without notice, due to firmware updates or other reasons. Please find the latest version of this Manual at the Hikvision website (https://www.hikvision.com).

Please use this Manual with the guidance and assistance of professionals trained in supporting the Product.

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Regulatory Information

FCC Information

FCC compliance: This equipment has been tested and found to comply with the limits
for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are
designed to provide reasonable protection against harmful interference when the
equipment is operated in a commercial environment. This equipment generates, uses,
and can radiate radio frequency energy and, if not installed and used in accordance with
the instruction manual, may cause harmful interference to radio communications.
Operation of this equipment in a residential area is likely to cause harmful interference
in which case the user will be required to correct the interference at his own expense.

FCC Conditions

This device complies with part 15 of the FCC Rules. Operation is subject to the following
two conditions:

1. This device may not cause harmful interference.

2. This device must accept any interference received, including interference that may
cause undesired operation

EU Conformity Statement

CE   This product and - if applicable - the supplied accessories too are marked
with "CE" and comply therefore with the applicable harmonized European
standards listed under the EMC Directive 2014/30/EU, the RoHS Directive
2011/65/EU, the ATEX Directive 2014/34/EU.

2012/19/EU (WEEE directive): Products marked with this symbol cannot be
disposed of as unsorted municipal waste in the European Union. For proper
recycling, return this product to your local supplier upon the purchase of
equivalent new equipment, or dispose of it at designated collection points.
For more information see: www.recyclethis.info.

2006/66/EC (battery directive): This product contains a battery that cannot
be disposed of as unsorted municipal waste in the European Union. See the
product documentation for specific battery information. The battery is
marked with this symbol, which may include lettering to indicate cadmium
(Cd), lead (Pb), or mercury (Hg). For proper recycling, return the battery to

your supplier or to a designated collection point. For more information see: www.recyclethis.info.

Intended use of the camera
Ex mark:

DS-2TD□T-□(without fiber)：

CE₂₇₇₆ II 2 G Ex db op is II C T6 Gb

II 2 D Ex tb op is IIIC T80 °C Db

DS-2TD□TF-□(with fiber)：

CE₂₇₇₆ II 2 G Ex db op is op pr II C T6 Gb

II 2 D Ex tb op is op pr IIIC T80 °C Db

Hazardous Area Classification: Zone 1, Zone 2, Zone 21, Zone 22.
IP Degree: IP68 (2m, 2h)
Ex Standards:

IEC 60079-0: 2017	EN IEC 60079-0: 2018
IEC 60079-1: 2014	EN 60079-1: 2014
IEC 60079-28: 2015	EN IEC 60079-0: 2018
IEC 60079-31: 2013	EN 60079-31: 2014

Special Conditions for Safe Use:

1. Ambient Temperature: -40°C to 60°C.
2. The width of flameproof joint is more than the minimum values specified in IEC60079-1 standard. If needed, repair of the flameproof joints must only be made in compliance with the structural specifications provided by the manufacturer. Repairs must not be made on the basis of values specified in table 4 of IEC60079-1:2014.
3. When installation, the free end of the composite cable should be taken into the inside of the end-equipment enclosure that is Ex apparatus, or safety area.
4. For type DS-2TD6566TF-*/** Explosion-proof thermal bi-spectrum network positioning system, When installation, the free end of the composite cable with fiber should be taken into the inside of the end-equipment enclosure that is Ex apparatus, or the electrical Ex components (e.g. fiber optic terminal devices), or safety area.
5. DO NOT OPEN WHEN ENERGIZED.
6. USE FASTENERS WITH YIELD STRESS ≥ 450 MPa.

Industry Canada ICES-003 Compliance

This device meets the CAN ICES-3 (A)/NMB-3(A) standards requirements.

Safety Instruction

These instructions are intended to ensure that user can use the product correctly to avoid danger or property loss.

The precaution measure is divided into **Warnings** and **Cautions**:

Warnings: Neglecting any of the warnings may cause serious injury or death.

Cautions: Neglecting any of the cautions may cause injury or equipment damage.

⚡	⚠
Warnings Follow these safeguards to prevent serious injury or death.	**Cautions** Follow these precautions to prevent potential injury or material damage.

⚡ **Warnings**

● Grounding:

   The both internal and external earthing shall be connected reliably.

   Ground wire cross-sectional area of not less than the phase connector cross-sectional area level, at least 4 mm².

● The device should be used in compliance with local laws and electrical safety regulations. Refer to the appropriate documentation for detailed information.

● The input voltage should conform to IEC60950-1 standard: SELV (Safety Extra Low Voltage) and the Limited Power Source (85 to 265 VAC). Refer to the appropriate documentation for detailed information.

● DO NOT connect multiple devices to one power adapter, to avoid over-heating or fire hazards caused by overload.

● Make sure the plug is properly connected to the power socket.

● If smoke, odor, or noise arises from the device, immediately turn off the power, unplug the power cable, and contact the service center.

● The installer and user are responsible for password and security configuration and its settings.

● Both internal and external grounds should be connected properly. (The cross section area of the grounding wire must be no less than 4 mm², and no less than that of the phase connector).

● For permanently connected equipment the disconnect device shall be incorporated in the equipment, unless the equipment is accompanied by installation instructions stating that an appropriate disconnect device shall be provided as part of the building installation.

⚠ Cautions

- To ensure explosion-proof performance, do not damage explosion-proof surface
- Do not drop the device or subject it to physical shock.
- Wipe the device gently with a clean cloth and a small quantity of ethanol, if necessary.
- Do not aim the lens at the sun or any other bright light.
- When any laser equipment is in use, make sure that the device lens is not exposed to the laser beam, or it may burn out.
- Do not expose the device to high electromagnetic radiation or extremely hot, cold, dusty, or damp environments.
- Place the device in a dry and well-ventilated environment.
- Keep non-waterproof devices away from liquids.
- Keep the device in original or similar packaging while transporting it.
- A few device components (e.g., electrolytic capacitor) require regular replacement. The average lifespan varies, so periodic checking is recommended. Contact your dealer for details.
- Improper use or replacement of the battery may result in explosion hazard. Replace with the same or equivalent type only. Dispose of used batteries in conformance with the instructions provided by the battery manufacturer.
- Never attempt to disassemble the device.

Ex structure instruction

- We have made adequate consideration in flameproof enclosure design of the explosion-proof camera to prevent explosive gases getting into the inner volume, the explosion inside the enclosure cannot cause the explosion of the external explosive gases. We ensure the explosion-proof performance by strengthen enclosure the strength, adjust the length and gap of the joint of associate components and limit the maximum surface temperature.
- The enclosure is able to subject to static pressure test (1.5 times of reference pressure for at least 10s) specified in EN60079-01/IEC60079-1, no leakage or deformation allowed after test.
- The maximum surface temperature will no more than 80ºC in normal operation.
- Tempering glass is adopted in observation port, the tempering glass shall pass the impact and thermal shock test.
- Protection the flameproof surface in maintaining of this product, otherwise the damaged flameproof surface will affect the Explosion-proof performance.
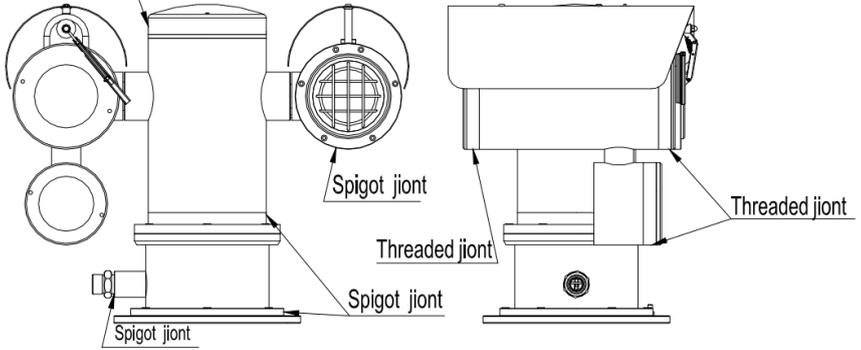
Threaded jiont

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Table of Contents

1 Introduction

1.1 Overview

Explosion-Proof Thermal Bi-spectrum Network Positioning System is a surveillance product capable of video/audio collecting, smart encoding and network transmitting. It adopts an embedded system and a high-performed hardware process platform to achieve good stability and reliability.

You can visit and configure your camera via web browser and client software. Explosion-Proof Thermal Bi-spectrum Network Positioning System adopts a stainless steel enclosure, receiving an IP68 rating for ingress protection.

The camera is designed and manufactured according to EN IEC60079-0:2018, EN60079-1: 2014, EN60079-28: 2015, EN60079-31: 2014, IEC60079-0: 2017, IEC60079-1: 2014, IEC60079-28: 2015, IEC60079-31: 2013.All associate technical document, drawings and samples of the camera are tested and certified by China National Quality Supervision and Test Center for Explosion Protected Electrical Apparatus (CQST), ATEX certification number: CE_{2776} CNEX 19 ATEX 0040X and IECEx certification number is IECEx CNEX 19.0030X.

Application Scenarios: oil industry, mine fields, chemical industry, port, grain processing industry, etc.

1.2 Model Description

DS-2TD□T-□(without fiber)：

CE_{2776} Ⅱ 2 G Ex db op is ⅡC T6 Gb

Ⅱ 2 D Ex tb op is ⅢC T80 ℃ Db

DS-2TD□TF-□(with fiber)：

CE_{2776} Ⅱ 2 G Ex db op is op pr ⅡC T6 Gb

Ⅱ 2 D Ex tb op is op pr ⅢC T80 ℃ Db

Explanation of model naming:

DS-2 | T | D | 6 | 5 | X | X/XT | - | X | X | X | X | X | /X

Software Platform

Explosion-proof camera

IR Light

Optical Max. Resolution (MP):
2: 2 MP; 5:5MP

Optical camera module component type

Lens focal length (mm):
25: 25 mm; 50: 50 mm

Stands for Thermal camera module component performance
T: Accurate temperature measurement

Max. Resolution (MP): 6: 0.3 MP

For specialized application

Shape:
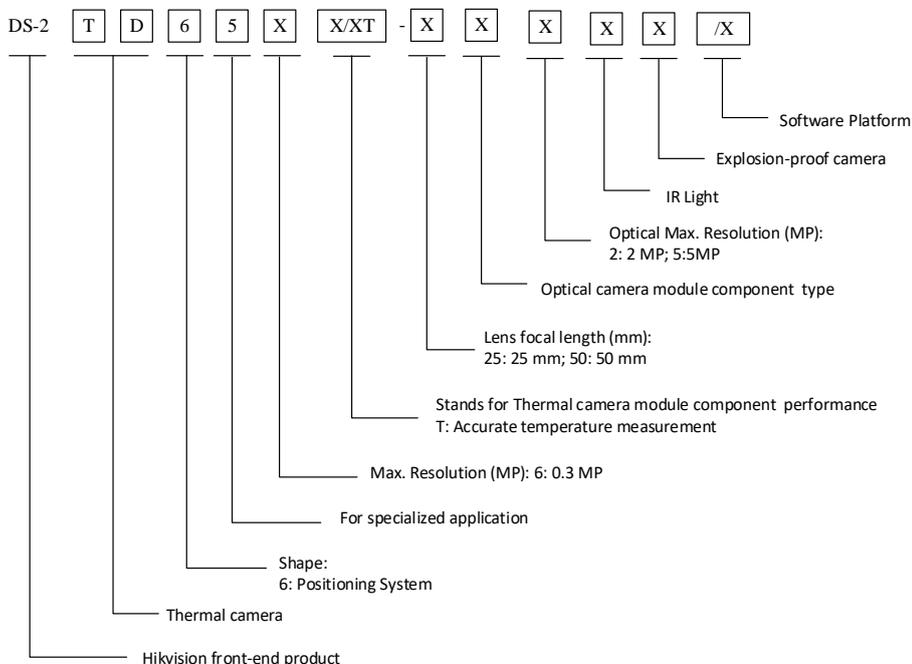6: Positioning System

Thermal camera

Hikvision front-end product

Figure 1-1 Model Explanation

Models:
DS-2TD6566T-25H2LX/V2, DS-2TD6566T-50H2LX/V2,
DS-2TD6566T-25H2LX/V2UHK, DS-2TD6566T-25H2LX/V2CKV,
DS-2TD6566T-25H2LX/V2UVS, DS-2TD6566T-25H2LX/V2KVO,
DS-2TD6566T-25H2LX/V2HUN, DS-2TD6566T-50H2LX/V2UHK,
DS-2TD6566T-50H2LX/V2CKV, DS-2TD6566T-50H2LX/V2UVS,
DS-2TD6566T-50H2LX/V2KVO, DS-2TD6566T-50H2LX/V2HUN (Main cylinder normal
without fiber)
DS-2TD6566T-25H2LX/W, DS-2TD6566T-50H2LX/W,
DS-2TD6566T-25H2LX/WUHK, DS-2TD6566T-25H2LX/WCKV,
DS-2TD6566T-25H2LX/WUVS, DS-2TD6566T-25H2LX/WKVO,
DS-2TD6566T-25H2LX/WHUN, DS-2TD6566T-50H2LX/WUHK,
DS-2TD6566T-50H2LX/WCKV, DS-2TD6566T-50H2LX/WUVS,

DS-2TD6566T-50H2LX/WKVO, DS-2TD6566T-50H2LX/WHUN (Main cylinder heighten without fiber)

DS-2TD6566TF-25H2LX/V2, DS-2TD6566TF-50H2LX/V2,
DS-2TD6566TF-25H2LX/V2UHK, DS-2TD6566TF-25H2LX/V2CKV
DS-2TD6566TF-25H2LX/V2UVS, DS-2TD6566TF-25H2LX/V2KVO
DS-2TD6566TF-25H2LX/V2HUN, DS-2TD6566TF-50H2LX/V2UHK
DS-2TD6566TF-50H2LX/V2CKV, DS-2TD6566TF-50H2LX/V2UVS
DS-2TD6566TF-50H2LX/V2KVO, DS-2TD6566TF-50H2LX/V2HUN (Main cylinder normal with fiber)

DS-2TD6566TF-25H2LX/W, DS-2TD6566TF-50H2LX/W,
DS-2TD6566TF-25H2LX/WUHK, DS-2TD6566TF-25H2LX/WCKV,
DS-2TD6566TF-25H2LX/WUVS, DS-2TD6566TF-25H2LX/WKVO,
DS-2TD6566TF-25H2LX/WHUN, DS-2TD6566TF-50H2LX/WUHK,
DS-2TD6566TF-50H2LX/WCKV, DS-2TD6566TF-50H2LX/WUVS,
DS-2TD6566TF-50H2LX/WKVO, DS-2TD6566TF-50H2LX/WHUN (Main cylinder heighten with fiber)

DS-2TD6536T-9H2LX/V2, DS-2TD6566T-9H2LX/ V2, DS-2TD6536T-15H2LX/ V2,
DS-2TD6566T-15H2LX/ V2, DS-2TD6536T-25H2LX/ V2, DS-2TD6566T-25H2LX/ V2,
DS-2TD6536T-50H2LX/ V2, DS-2TD6566T-50H2LX/ V2, DS-2TD6536T-75H2LX/ V2,
DS-2TD6566T-75H2LX/ V2, DS-2TD6536T-AH2LX/ V2, DS-2TD6566T-AH2LX/ V2,
DS-2TD6536T-BH2LX/ V2, DS-2TD6566T-BH2LX/ V2, DS-2TD6536T-CH2LX/ V2,
DS-2TD6566T-CH2LX/ V2, DS-2TD6536T-DH2LX/ V2, DS-2TD6566T-DH2LX/ V2,
DS-2TD6537T-9H4LX/W, DS-2TD6567T-9H4LX/W, DS-2TD6537T-15H4LX/W,
DS-2TD6567T-15H4LX/W, DS-2TD6537T-25H4LX/W, DS-2TD6567T-25H4LX/W,
DS-2TD6537T-50H4LX/W, DS-2TD6567T-50H4LX/W, DS-2TD6537T-75H4LX/W,
DS-2TD6567T-75H4LX/W, DS-2TD6537T-AH4LX/W, DS-2TD6567T-AH4LX/W,
DS-2TD6537T-BH4LX/W, DS-2TD6567T-BH4LX/W, DS-2TD6537T-CH4LX/W,
DS-2TD6567T-CH4LX/W, DS-2TD6537T-DH4LX/W, DS-2TD6567T-DH4LX/W,
DS-2TD65AD-Q, DS-2TD65AD-W, DS-2TD65AD-E, DS-2TD65AD-R

2 Preparation

Basic Requirement

- All the electronic operation should be strictly compliance with the electrical safety regulations, fire prevention regulations and other related regulations in your local region.
- Check the package contents and make sure that the device in the package is in good condition and all the assembly parts are included.
- Use the system according to the working environment requirement.

Checking Installing Environment

- Be sure that there is enough space to install the positioning system and accessories.
- Make sure that the wall is strong enough to withstand at least 8 times the weight of the system and the mount.

Preparing Cables

- According to the actual network bandwidth, the Cat5 (in 100M) or Cat6 (100M above) is needed.
- When the Positioning System uses standard 24 VAC power supply, the power cable should be American wire gauge 18 or above. The formula of the cross-section S (mm²) and the maximum transmission distance L (m) of the bare wire is L=50*S.
- Choose the video cable according to the transmission length. The video should meet the least demands as: 75Ω resistance; 100% copper core conducting wire; 95% weaving copper shield.

Preparing Tools

Before installation, please prepare the tools needed, such as the expansion screws, electric hammer, electric drill, wrench, screwdriver, electroprobe and network cable.

Original Packaging

When you unpack the positioning system, please keep the original package properly, in case of returning or repairing the positioning system, you can pack the positioning system with the package.

Note: The user should be responsible for any damage caused when transporting with unoriginal package.

3 Appearance Description

3.1 Positioning System Appearance

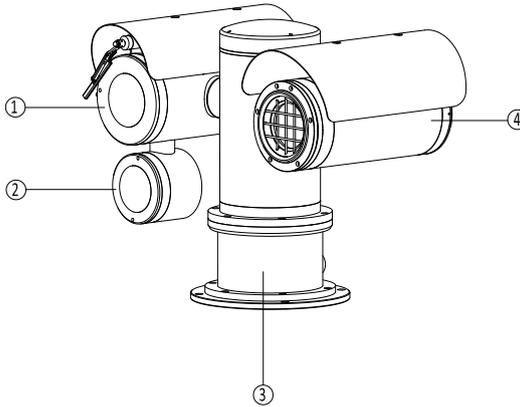Refer to the following figures for thermal positioning system overview.

Figure 3-1 Thermal Positioning System Overview

Table 3-1 Description of Thermal Positioning System

No.	Description
1	Optical
2	IR Light
3	Power Cable
4	Thermal

3.2 Cable Descriptions

The cable interfaces of positioning system are shown in Figure 3-2. The cables of power supply, alarm inputs, alarm outputs, etc. are distinguished by different colors. Please refer to the labels attached on the cables for identification.
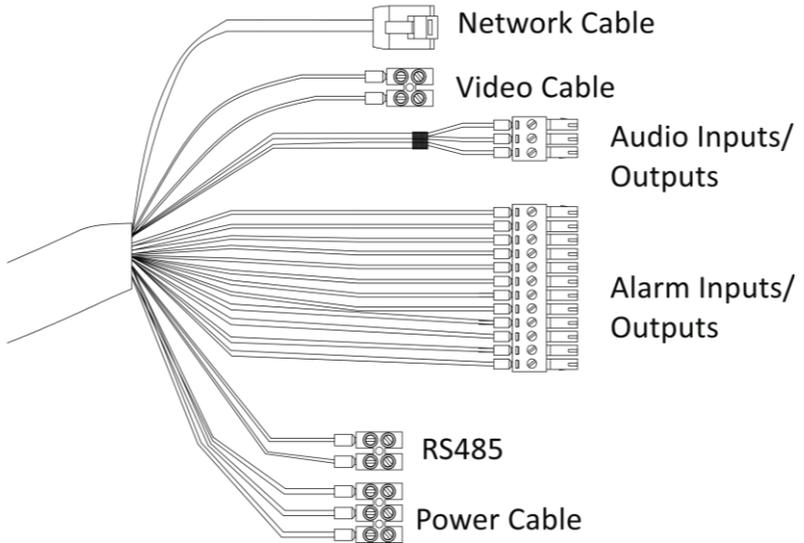
Figure 3-2 Cables of Positioning Systems

3.3 Albium In/Out Connections

NOTE

This section is only for the positioning system with alarm in/out functions.

The positioning system can be connected with alarm inputs (0~5VDC) and alarm outputs. Refer to the following diagrams for alarm output:
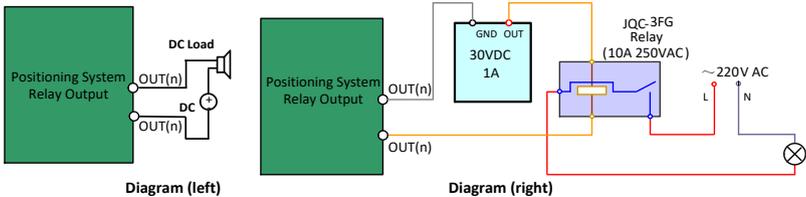

Figure 3-3 Alarm Out Connections

The alarm provides the relay output (no voltage), and the external power supply is required when it connects to the alarm device.

● For DC power supply (left diagram), the input voltage must be no more than 30VDC, 1A.

- For AC power supply, the external relay must be used (right diagram) to prevent damages to the positioning system and avoid risk of electric shock.

4 Installing the Positioning System

4.1 Monitoring Distance Range

Electric lens is adopted for the thermal channel of positioning system. It supports auto-focus function and remote focus function. For different lens focal length, the monitoring range is shown in the table below:

Table 4-1 Monitoring Range (Pixel Interval: 17um)

Lens Focal Length/mm	25	50	75	100
MRAD	0.68	0.34	0.23	0.17
Detection Range (Vehicle)/m	2255	4510	6765	9020
Detection Range (Human)/m	735	1471	2206	2941
Recognition Range (Vehicle)/m	564	1127	1691	2255
Recognition Range (Human)/m	184	368	551	735
Identification Range (Vehicle)/m	282	564	846	1127
Identification Range (Human)/m	92	184	276	368

NOTE

- This table is for reference only, and the actual detection range may vary according to different camera settings, mounting condition, monitor and so on.
- When the weather is fine and the atmospheric visibility is normal, the probability of detecting/recognizing/identifying target is 50%.
- The human width is presumed as 0.5m (human width cannot exceed 0.75m), the human height is presumed as 1.8m, and the vehicle width cannot exceed 2.3m.

4.2 Wiring

Please fully take into consideration the installation environment and position of the positioning system when you plan for the wiring. In order to make sure the stable power supply and signal transmission, please closely follow the rules below:

- Please get familiar with the installation environment before you wiring, including the wiring distance, wiring environment, keeping magnetic-field interference away, etc.
- Please make sure the rated voltage of the cable is higher than that the device requires, thus guarantee the device can work normally when the voltage instability occurs.
- Please avoid the interrupt line connection
- It's recommended to use a single complete cable for the device connection; if not, reinforce and protective measures should be taken for the wiring point between two cables, in case the circuit aging will make the device work abnormally.
- Make sure the video cable and the signal transmission cable are well protected. And pay attention to reinforce and protective measures during wiring.
- Make sure the cables are not too redundant or being stretched too tight.
- Under normal circumstances, the wiring is completed by the professional technicians. However, when the device cannot work normally, you can check the above information to look for reason.

4.3 Bracket Installation

Steps:

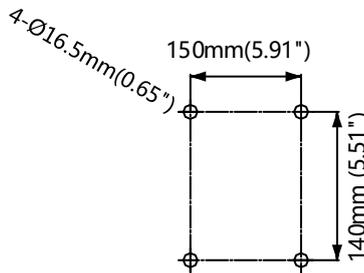2. Drill four φ16.5 holes in the wall according to the screw hole sites of the racket.

Figure 1-2 Dimension of a Wall Mounting Bracket

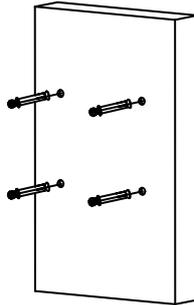3. Insert four M12 expansion screws into the screw holes.

Figure 1-3 Drill Expansion Screws

4. Align the holes on the bracket with the position of expansion screws, Install the bracket plate onto the wall, and tighten the expansion screws.
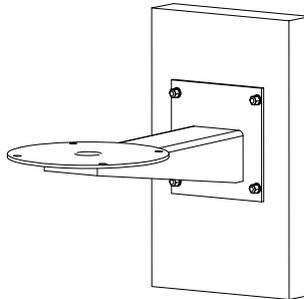

Figure 1-4 Install Bracket Plate

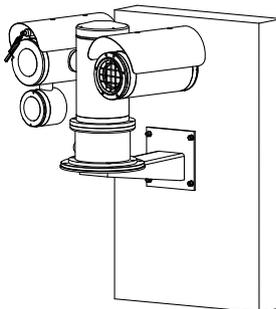5. Align the holes on the camera with the holes of bracket, fix the camera with M10 screws.

Figure 1-5 Install Camera

4.4 Explosion-proof Tube Installaion (without fiber)

Purpose：

You must use the explosion-proof tube and junction box to prevent the explosive gas from entering into the camera through the cable. Or it may cause danger.

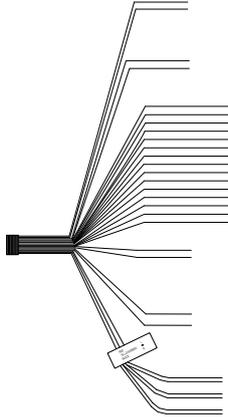***Steps:***

1. Cut all terminals of the cable.

Figure 1-6 Cut all terminals

2. Unscrew one cable gland of the explosion-proof tube, route the cable through the tube.
3. Screw the explosion-proof tube with the thread connector of camera.
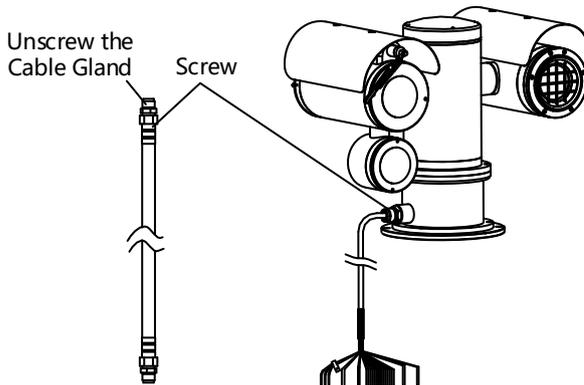

Figure 1-7 Explosion-proof Tube

4.5 Explosion-proof control box(ATEX/IECEx certificates) Installation (without fiber)

Steps:

1. Attach the junction box onto the wall, and mark the four screw sites with pencil.
2. Drill four φ8 screw holes on the wall.
3. Use the Allen wrench to secure the junction box on the wall with four M8 * 80 expansion screws.
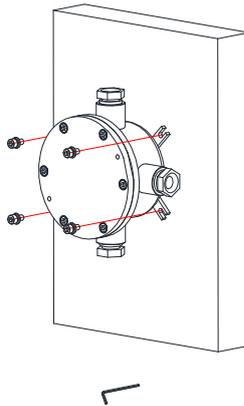4. Place gasket and screw the nuts.

Figure 1-8 Secure the Junction Box

5. Loosen the screws to disassemble the junction box cover and keep the cover aside.

   Note:
   - Do not take out the safety rope.
   - Be careful to protect the cover of junction box from damage.

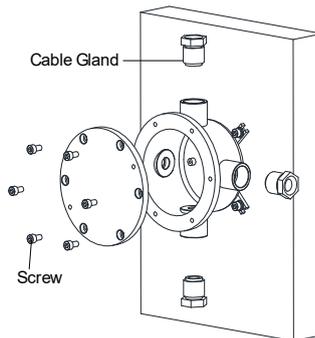6. Loosen the cable glands and keep the glands aside.

Figure 1-9 Disassemble the Junction Box

7. Connect the cables.

   1). Route the camera cables through the top cable gland and insert them into the junction box.

   2). Route the external cables through the bottom cable gland and insert them into the junction box.

   3). Poke through the sealing ring, and use the sealing rings to cover the cables.

   4). Connect the power cables with the connector, and then connect the video cables.

Top Cable Gland

Sealing Ring
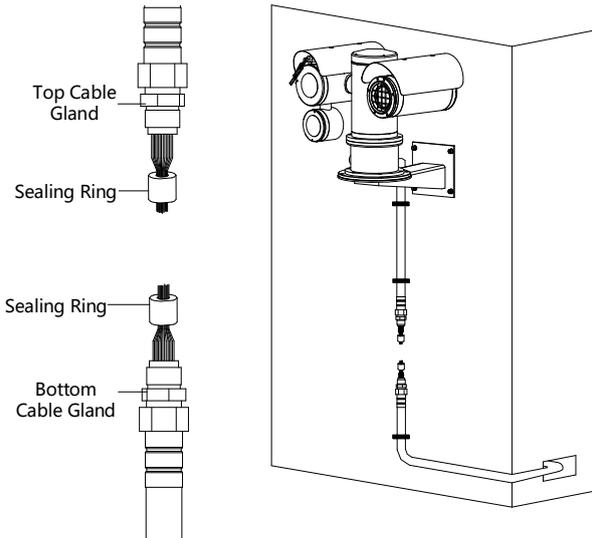
Sealing Ring

Bottom Cable Gland

Figure 1-10 Connect Cables

8. Connect the junction box and explosion-proof tube with cable glands.
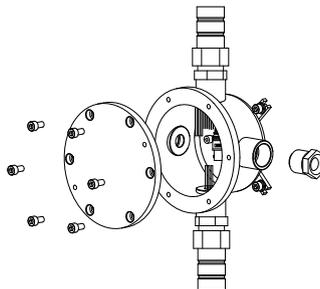
9. Cover the junction box with the screws.

Figure 1-11 Cover the Junction Box

Result:

The Installation is complete, see the figure below.

Figure 1-12 Installation Complete
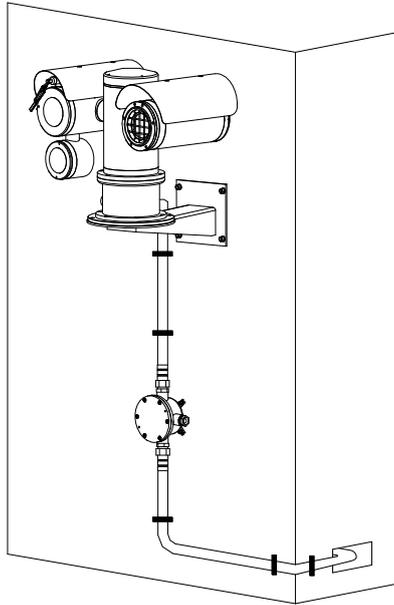
4.6 Explosion-proof control box(ATEX/IECEx certificates) Installation (with fiber)

For type DS-2TD☐TF-☐,Refer to Figure 1-13,must use galvanized steel pipe to protect optical fiber strongly. Figure shown as Explosion-proof control box. If necessary, the free end of the composite cable should be taken into the inside of the end-equipment enclosure that is Ex apparatus, or safety area.
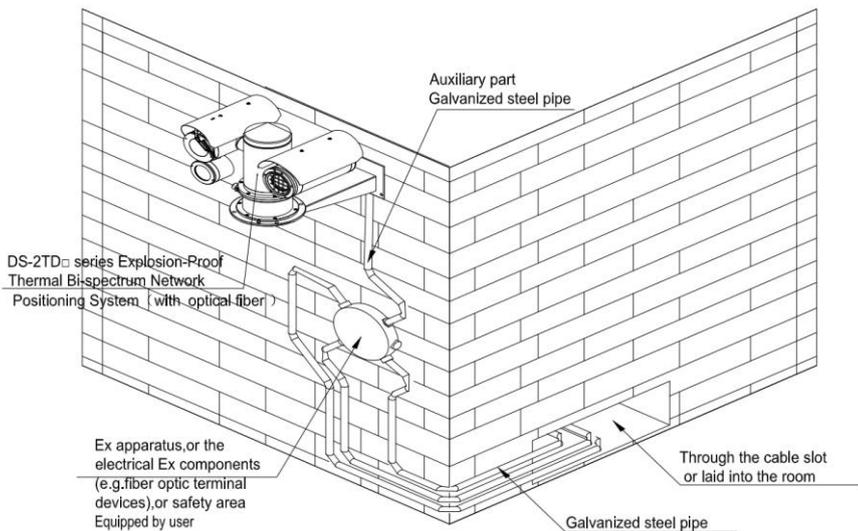
Figure 1-13 Installation Complete With Optical Fiber Model

4.7 Finishing Installing

Connect the corresponding cables and turn the power on; the system will do the self-test automatically. Make sure the live view image and the PTZ control work normally and then finish the installation.

5 Setting the System over the LAN

NOTE

- You shall acknowledge that the use of the product with Internet access might be under network security risks. For avoidance of any network attacks and information leakage, please strengthen your own protection. If the product does not work properly, please contact with your dealer or the nearest service center.
- To ensure the network security of the positioning system, we recommend you to have the system assessed and maintained termly. You can contact us if you need such service.

5.1 Wiring

To view and configure the system via LAN (Local Area Network), you need to connect the network system in the same subnet with your PC. Then, install the SADP or client software to search and change the IP of network system.

The following figure shows the cable connection of network system.
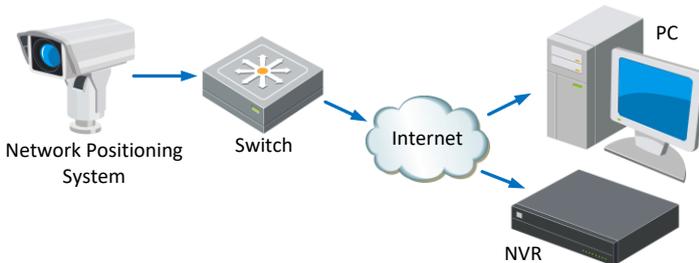
Figure 5-1 Wiring over LAN

5.2 Activating the System

Purpose:

You are required to activate the system first by setting a strong password for it before you can use the system.

Activation via Web Browser, Activation via SADP, and Activation via client software are supported. In the following sections, activation via web browser and SADP will be taken as examples. You may refer to the user manual of the system for the details of activation via client software.

5.2.1 Activation via Web Browser

Steps:

6. Power on the system, and connect the system to the network.

7. Input the IP address into the address bar of the web browser, and click Enter to enter the activation interface.

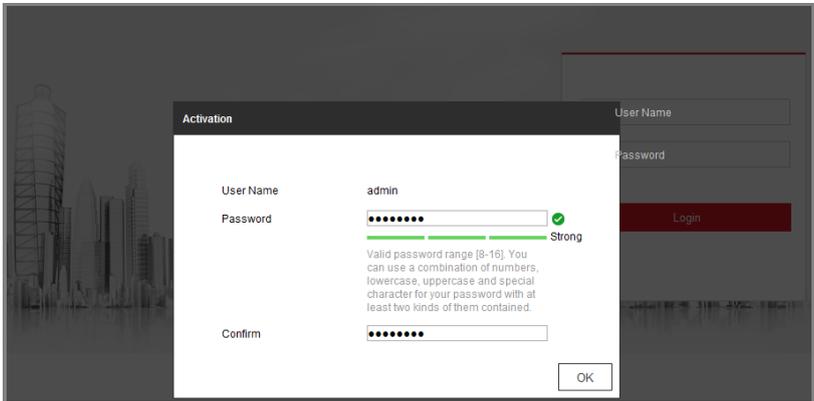NOTE The default IP address of the system is 192.168.1.64.

Figure 5-2 Activation Interface(Web)

8. Create a password and input the password into the password field.

⚠️ **STRONG PASSWORD RECOMMENDED**– *We highly recommend you create a strong password of your own choosing (using a minimum of 8 characters, including upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.*

9. Confirm the password.

10. Click **OK** to activate the system and enter the live view interface.

5.2.2 Activation via SADP Software

SADP software is used for detecting the online device, activating the device, and resetting the password.

Get the SADP software from the supplied disk or the official website, and install the SADP according to the prompts. Follow the steps to activate the system*.*

Steps:

1. Run the SADP software to search the online devices.

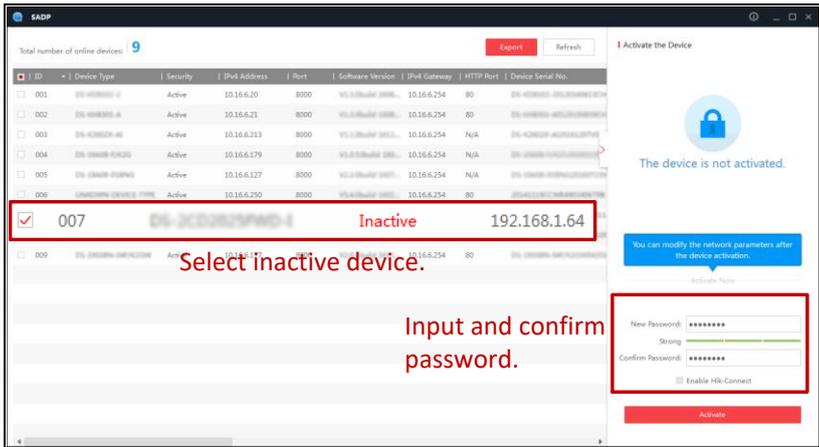2. Check the device status from the device list, and select an inactive device.

Figure 5-3 SADP Interface

3. Create a password and input the password in the password field, and confirm the password.

> ⚠️ **STRONG PASSWORD RECOMMENDED**– *We highly recommend you create a strong password of your own choosing (using a minimum of 8 characters, including upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.*

4. Click **OK** to save the password.

   You can check whether the activation is completed on the popup window. If activation failed, please make sure that the password meets the requirement and then try again.

5.3 Modifying the IP Address

Purpose:

To view and configure the system via LAN (Local Area Network), you need to connect the network system in the same subnet with your PC. Then, install the SADP software or client software to search and change the IP of network system. We will take modifying the IP Address via SADP software as an example to introduce the IP address modification.

Steps:

1. Run the SADP software.

2. Click to select an active device.

NOTE Please refer to section 3.2 to activate the system if it is inactive.

3. Change the device IP address to the same subnet with your computer by either modifying the IP address manually or checking the checkbox of Enable DHCP.

❙ Modify Network Parameters

☐ Enable DHCP
☑ Enable Hik-Connect

Device Serial No.:	XX-XXXXXXXX-XXXXXXXXXXXXXXXX
IP Address:	192.168.1.64
Port:	8000
Subnet Mask:	255.255.255.0
Gateway:	192.168.1.1
IPv6 Address:	::
IPv6 Gateway:	::
IPv6 Prefix Length:	0
HTTP Port:	80

────────── Security Verification ──────────

Admin Password:

Modify

Forgot Password

Figure 5-4 Modify the IP Address

4. Input the password and click **Save** to activate your IP address modification.

6 Operating via Web browser

6.1 Accessing the System

System Requirement:

Operating System: Microsoft Windows XP SP1 and above version / Vista / Win7 / Server 2003 / Server 2008 32bits

CPU: Intel Pentium IV 3.0 GHz or higher

RAM: 1G or higher

Display: 1024×768 resolution or higher

Web Browser: Internet Explorer 7.0 and above version, Apple Safari 5.02 and above version, Mozilla Firefox 5 and above version and Google Chrome8 and above version

Steps:

1. Open the web browser.

2. In the browser address bar, input the IP address of the network positioning system, e.g., 192.168.1.64 and press the Enter key to enter the login interface.

3. Activate the positioning system for the first time using, refer to the section *5.2*

   Activating the System.

4. Input the user name and password and click   Login   .

   The admin user should configure the device accounts and user/operator permissions properly. Delete the unnecessary accounts and user/operator permissions.

   ![NOTE]

   The device IP address gets locked if the admin user performs 7 failed password attempts (5 attempts for the user/operator).

Figure 6-1 Login Interface

5. Install the plug-in before viewing the live video and managing the network positioning system. Please follow the installation prompts to install the plug-in.

NOTE

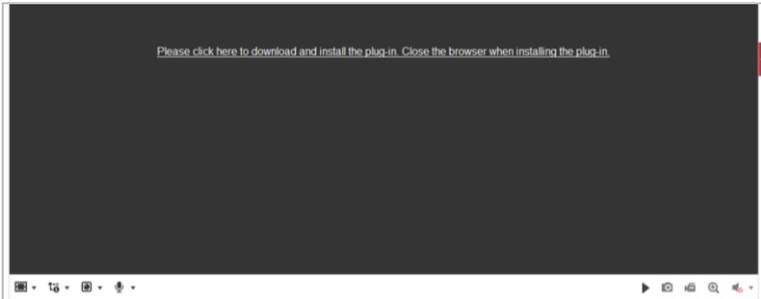You may have to close the web browser to finish the installation of the plug-in.

Figure 6-2 Download Plug-in

6. Reopen the web browser after the installation of the plug-in and repeat the above steps 2-4 to login.

NOTE

For detailed instructions of further configuration, please refer to the user manual of network positioning system.

6.2 Live View Page

The live video page allows you to view live video, capture images, realize PTZ control, set/call presets and configure video parameters.
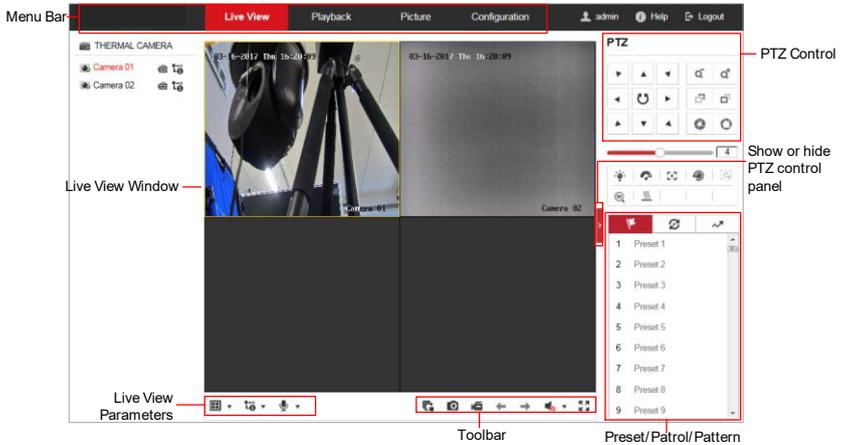
Figure 6-3 Live View Page

Menu Bar:

Click each tab to enter Live View, Playback, Picture, and Configuration page respectively.

Click ⓘ to display the help file of the positioning system.

Click ⤷ to logout the system.

Live View Window:

Display the live video.

Toolbar:

Operations on the live view page, e.g., live view, capture, record, audio on/off, regional exposure, regional focus, etc.

PTZ Control:

Panning, tilting, focusing and zooming actions of the positioning system. The lighter, wiper, one-touch focus and lens initialization control.

Preset/patrol/pattern:

Set and call the preset/patrol/pattern for the positioning system.

Appendix

Frequently Asked Questions (FAQ)

Device Running Error

Question:

- The device fails to start up or reboots repeatedly.
- The device constantly powers off unexpectedly when you pan/tilt the device or call preset.
- The device fails to zoom in/out or pan/tilt.

Answer:

- Examine the power supply of the positioning system and see whether it meets the requirements.
- Select the power supply as close as possible.
- Examine the power cord and see whether it meets the requirements.

Device Upgrading

Question:

Device fails to upgrade.

Answer:

- Examine if the device upgrading fails because of the poor network.
- Examine if the upgrading program matches with the device type.

Others

Question:

The device live view is vague.

Answer:

- Examine if you removed the protective film.
- Examine if the lens is dirty or not.
- Examine if any obstruction is nearby, e.g. spider web.

Question:

Live view fails with good network connection.

Answer:

- Examine if the IE plug-in is well installed. Change the Website Blocker settings if necessary.
- For cross-domain routing, enable the UPnP of device, or set manual mapping to port No. 80, 8000, or 554.
- Examine if the live view channel amount exceeds the upper limit.
- Examine the network bandwidth.

Question:

Focus fails when you test outdoor device in indoor situation.

Answer:

- Restore the device to default settings.
- Adjust the **Min. Focusing Distance** in **Configuration > Image> Display Settings > Focus**

Common Material Emissivity Reference

Material	Emissivity
Human Skin	0.98
PCB	0.91
Cement Concrete	0.95
Ceramics	0.92
Rubber	0.95
Paint	0.93
Wood	0.85
Asphalt	0.96
Brick	0.95
Sand	0.90
Soil	0.92
Cotton	0.98
Cardboard	0.90
White Paper	0.90
Water	0.96

See Far, Go Further