# OutDoor Mini PTZ Camera Auto Tracking Usage Instructions



Zhejiang Uniview Technologies Co., Ltd.

### **One: Introduction**

#### Application

#### **Application Scenario**

Use this function to track a human in restricted or sensitive area that is normally inaccessible.

#### **Functional principle**

When the camera detects one or more human objects, it tracks the object in closest distance and makes the person in the center of the image. The camera rotates with the object's movement.

If **Continuously Track** is configured, the camera keeps tracking the object until it disappears, and then returns to the original position. If **Max. Tracking Time** is configured, the camera tracks the object from when the object is selected to when the tracking time is up, and then returns to the original position.

### **Two: Survey guidelines**

#### Installation

Mount height: 3m-5m is recommended if the camera is used in restricted zones, industrial parks, or walking streets; and 4m-5m is recommended for use on roads. Monitoring distance: for F40 type cameras, 2m-17m is recommended, and the camera works best in the range of 6m-10m. For X4 type cameras, 2m-25m is recommended, and the camera works best in the range of 6m-10m.

Installation environment: Restricted areas such as banks, warehouses, school or residential area borders, power station nearby regions, no-parking areas, danger zones like riverside and reservoir, and indoor scenes like warehouse shelf areas.

#### Recommended scenes

1. Border area/ wall



2. No parking area



#### 3. Restricted area



#### Scenes not recommended

1. Scenes with multiple objects



2. Camera's view of object is severely blocked



3. Scenes with too much shadow and light changes



Top view angle:  $15^\circ$  -30  $^\circ$  . 20  $^\circ$  is recommended.

Reliable installation: keep device bracket perpendicular to the wall, and mount the device securely to avoid impact on tracking performance caused by camera shake.

Device protection: after installation, the power cable and network cable connectors must be properly waterproofed.



Camera Installation Illustration

#### **Precautions**

Lighting: use the function in scenes with enough lighting. Camera tracking performance during the daytime is better than at night.

Recommended: scenes with adequate and even lighting, and the camera has a clear view of the object.



Not recommended: Camera's view of object is blocked, and lighting is uneven.



**Object moving speed**: the camera may lose track of the object if the object moves faster than 17s per circle (360 degree). 6m-10m monitoring distance is recommended to ensure that the object's angular speed is not too high.

**Slanted view**: a slanted view may lead to unsatisfactory tracking performance. Adjust camera view properly by adjusting camera position or by PTZ movements.

Unobstructed view: the camera may stop tracking the object when the object is blocked by power cables and tree branches. Install the camera in the center of surveillance area with an unobstructed view.

**Lens direction**: if camera tilts down to the vertical (lens facing the ground directly) when tracking the object, the camera may not be able to keep tracking. The recommended top view angle is  $15^{\circ} - 30^{\circ}$  (best at  $20^{\circ}$ ).

Multiple objects: if multiple objects appear in the surveillance area, the camera selects and tracks the object closest to the center of the surveillance area.

Minimum pixel: the minimum object size is 60\*100. The method to determine an object size:

1. Open the camera's Web interface, take a snapshot on the Live View page.



2. Cut out the human body from the snapshot by using a screenshot tool, then right click and view its size.

Property	Value				
Origin					
Origin					
Date taken					
Image	All Common	-			
Dimensions	36 x 111				
Width	36 pixels				
Height	111 pixels				
Bit depth	32	H			
File		- 11			
Name	human body.PNG				
Item type	PNG image				
Folder path	C:\Users\user\Desktop				
Date created	2020/7/3 17:13				
Date modified	2020/7/3 17:13				
Size	7.02 KB				
Attributes	N				
Offline availability	/				
Offline status					
Channel					



See the attached file for the formula to calculate the object size in pixel. Auto Tracking is unavailable when image rotation is enabled.

### **Three: Configuration Description**

#### On the camera's Web interface

Click **Setup** > **Intelligent** > **Smart**, and click the settings button of **Auto Tracking**. Select the checkbox of **Enable Auto Tracking**, complete the settings and click **Save**. The function is enabled when the settings are saved successfully.

2020-11-19

unv	📮 Live View 📰 Playback 😰 Photo 🌞 Setup
Common	Smart
Network	Auto Tracking
Video & Audio	Auto Tracking
PTZ	
Image	Human Body Detection
Intelligent	Human Body Detection 💠
► Smart	
Events	
Storage	
Security	
System	
	w 📰 Playback 🖾 Photo 🗢 Setup
Common	ito Tracking
Network	Smart > Enable Auto Tracking

	Smart > Enable Auto Tracki	ng		
video & Audio	Enable Auto Tracking			
PTZ	Rule Settings	Plan		
image		A REPORT OF A REPORT	Parameters	
Intelligent			Continuously Track	
+ Smart		-7-1-9-	Max Tracking Time(s) 30	
Events				
torage	CO COLLED			
ecurity	- NUTE	THE PARTY		
ystem	The country and		and a second	
		[None]	* ≠ # iii   C	
	Save			

**Max. Tracking Time**: the time (in seconds) that the camera tracks the object. The camera tracks the object for the set time duration and then returns to the original position.

**Continuously Track**: when enabled, the camera tracks the object until it disappears from the surveillance area, and then returns to the original position.

**Plan**: set the time period for your settings to take effect.

PTZ panel: control PTZ movements.

#### On the managing NVR's Web interface

1. Click **Setup** > **Camera** > **Camera**, add the camera to the NVR via Uniview protocol.

นทิง		💻 Live	View [	II Playback	🌣 Setup	🎝 Smart	a the second		N. TOFO	
Client	*	Came	ra	Fisheye	2	Advanced				
System	~									
Camera		Auto	Switch to H.26	5 On Off	Note: Effective when fi	rst connected				
Camera Encoding		Auto S Refre	Switch to U-Co esh Mo	ode Advanced Moo	le Note: Effec	tive when first conne Search Search S	ected			
USD			No.	Camera ID	Address	Port	Remote Camera ID	Protocol	Status	Vendor
image			1	D1	192.168.1.50	80	्र <sup>्</sup> 1	Uniview		
Schedule			2	D2	192.168.1.14	80	1	Uniview		
Motion			3	D3	209.2.2.57	80	1	Uniview		
Video Loss			4	D4	209.2.4.136	80	1	Uniview		
Tampering Privacy Mask								10		

#### 2. Click Setup > VCA > Auto Tracking.

บทิง	🖷 Live View 💷 Playback 🌞 Setup 🎿 Smart
Client 🛛 🕹	Auto Tracking
System 🛛	
Camera 🖌 🗸	Select Camera D5(IP Camera 05)
VCA	Auto Tracking On Off
Face Detection	Tracking Mode Panoramic
Intrusion Detection	Tracking Timeout(s) 30
Cross Line Detection	Zoom Auto
Audio Detection	
People Counting	Control PTZ Arming Schedule Trigger Actions
Defocus Detection	81/06/7820 11:78:50
Scene Change Detection	
Auto Tracking	
Object Left Behind	
Object Removed	STOP N Q Q
Hard Disk	
Alarm 🛛 🕹	
Alert	DT7 Greed
Network 🛛 🕹	Piz speed - +
Platform 🛛 🕹	
User 🛛 🕹	
Maintenance 🛛 🕹	Save
Backup 🛛 🕹	

Auto Tracking: enable or disable the function.

Tracking Mode: only supports Panoramic mode.

Tracking Timeout: same as Max. Tracking Time on the camera's Web interface.