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Drone detection and control system

Model: C4I-UAVRF-5

Technical Parameter:

I.Detection Part:

1. The equipment can have the functions of locating the drone and the pilot for DJI's latest O4 video transmission.
2. It has the function of receiving analog video transmission of FPV drones.
3. Frequency band support: Supports the 25MHz - 6GHz frequency band.
4. Key frequency band monitoring: 433MHz, 900MHz, 2.4GHz, 5.2GHz, 5.8GHz.
5. Reconnaissance distance: ≥5 kilometers.
6. Direction - finding accuracy: ≤10° (while following); ≤3° (while hovering).
7. Reconnaissance sensitivity: ≥ - 115dBm (25kHz).
8. Reconnaissance airspace: Capable of 360 - degree all - airspace reconnaissance.
9. Adaptable communication modulation methods: FM, 2FSK, 4FSK, GFSK, MSK, BPSK, QPSK, 16QAM, 64QAM, OFDM, DSSS, FHSS.
10. Power supply: AC100-240V.
11. Reconnaissance modes: panoramic scanning and channel scanning.
12. Working capacity: Capable of continuous operation 24 hours a day.
13. Passive detection: Only passively receives without emitting any electromagnetic signals. Can detect the drone model and its electronic fingerprint.

14. Accurate orientation: Can accurately determine the intrusion direction of the drone and indicate the target.

15. Precise identification: Can precisely identify different drones of the same brand and model.

16. Unattended operation: When the unattended mode is activated, it can automatically detect and alarm 24 hours a day.

17. Black and white list: Can mark the black and white list with one click. Drones on the white list will not trigger an alarm.

18. Full model library: Supports the full series of DJI drones, mainstream market brands, and DIY drones, covering more than 98% of the models on the market.

II. Jamming Part：

1. With 8 channels：

Channel	Power	Function
410MHZ-470MHZ	50W	UAV remote control frequency band
830MHZ-940MHZ	50W	UAV remote control frequency band
1180MHZ-1280MHZ	50W	UAV video transmission and positioning frequency band
1420MHZ-1460MHZ	50W	UAV image transmission frequency band
1555MHZ-1655MHZ	50W	UAV positioning and navigation frequency band
2400MHZ-2485MHZ	100W	UAV remote control and image transmission
5150MHZ-5350MHZ	50W	UAV image transmission frequency band
5725MHZ-5850MHZ	100W	UAV image transmission frequency band

2. Jamming function: It can emit jamming signals to make the drone return or land in place (the drone supports return or forced landing function).

3. The time required from starting jamming to the drone being successfully jammed is ≤3 seconds.

4. Jamming distance: In an environment without obvious rain, snow, or fog (without obvious obstructions and without obvious electromagnetic interference), the device's jamming distance to the drone is not less than 1.5 kilometers.

5. Jamming angle: Horizontal 360°, pitch: -45° to 45°.

6. Precise strike: After networking with radio detection equipment and other devices, it can accurately strike the designated drone among multiple (no less than 2) drones of the same model, same working frequency band, and same direction without affecting the normal

controlled flight of other non-designated drones (requires cooperation with radio detection equipment), and can precisely strike non-white list drones set by radio detection equipment.

7. Networking function: It can be networked with other equipment such as radio detection equipment through wired or wireless means.
8. Protection level: IP65.
9. Operating temperature: -40℃ to +55℃.

III. Software operating system

1. Basic information settings

(1) Spectrum detection setting: Set the connection IP and port of the detection equipment.
(2) Server operation setting: Set the connection IP and port of the strike equipment.
(3) Automatic interference parameters: Set the interference duration and strike interval.
(4) Map online status setting: Set online maps and offline maps.
(5) Whitelist list: Display the drones set as whitelist.
(6) Location setting: Provide two modes, automatic and custom, to set the center point coordinates of the detection equipment.
(7) Custom setting frequency band: Users can set the frequency bands to be opened in expulsion and forced landing according to needs.

2. Spectrum detection

(1) Strike log: Record the log information of each interference of the system.
(2) Spectrum detection information: Record all the drone information detected. You can add the drone to the whitelist and export the drone information to Excel for local viewing.
(3) Drone historical trajectory: You can view the historical trajectory of the drone's flight.

3. System management

(1) Platform connection setting: Used to set the IP and port of the drone control platform, so that this system can be remotely viewed in the drone control platform.
(2) Software version number: Display the version numbers of the software and hardware systems.

4. Connection status

(1) Spectrum connection status: The connection status between the system and the detection equipment. Green indicates a successful connection, and red indicates no connection.

(2) Equipment connection status: The connection status between the system and the strike equipment. Green indicates a successful connection, and red indicates no connection.

5. Real-time trajectory: It can display the current real-time flight path of the drone on the map.
6. Sound alarm: After detecting a drone, an alarm sound can be emitted to indicate that the area is under threat.
7. Detection circle: A blue circle detection area with a radius of 5 kilometers is displayed on the map.
8. Defense circle: A red circle defense area with a radius of 2 kilometers is displayed on the map.
9. Power amplifier status: Display the frequency band information currently in operation.
10. Working mode: There are two modes, automatic and manual. Automatic mode can realize 24-hour unattended function in conjunction with expulsion and forced landing.
11. Strike control: The default frequency bands for expulsion are 400M, 900M, 1.4G, 2.4G, 5.2G, and 5.8G. The default frequency bands for forced landing are 400M, 900M, 1.2G, 1.4G, 1.5G, 2.4G, 5.2G, and 5.8G. Users can also set the frequency band according to the custom module to achieve customized expulsion and forced landing.
12. Drone list: For DJI drones, it can display information such as drone model, drone ID, frequency, azimuth, drone distance, discovery time, drone location, drone altitude, pilot location, pilot distance, etc. According to the navigation QR code, path planning for the pilot location can be achieved by scanning with WeChat. For DJI drones that support precise strikes, precise strikes can be implemented. For non-DJI drones, it can display information such as drone model, drone ID, frequency, azimuth, discovery time, and approximate drone location.
13. Networking function: The system can be connected to the Internet, and the strike control capability of this site can be viewed and controlled in the drone control platform. The drone control platform supports PC and mobile terminals.

Portable Drone Jammer and Detector Station

Model: C4I-UDS-IV

Product Description

The portable detection and control integrated box are equipped with a comprehensive drone management and control system. Through in-depth analysis and data mining of drone signals. The serial number, model, and location (longitude, latitude, and azimuth angle) of the drone within the monitoring range can be determined. Remote control position (latitude, longitude, azimuth) and other multi-dimensional information for monitoring. It also has the function of interfering with the frequency band used by drones, which can drive away drones or make forced landings, completely cutting off the connection between drones and remote controllers or ground stations to ensure the safety of low-altitude airspace in the area.
This equipment is suitable for different applications, such as low-altitude security in major event security, guard tasks, security patrols, special anti-terrorism, political core areas, border defenses, military restricted areas, military management areas, power and petrochemical parks and other scenarios.

Functions

- Drone monitoring: To obtain the serial number, model, location (latitude, longitude, azimuth), altitude, pilot position (latitude, longitude, azimuth) and other information of the drone within the monitoring range;
- Unique identification (code): It can identify the unique serial number of the drone and confirm the unique identity information of the drone;
- Drone positioning: It can locate the location information of the drone and display the drone's position (latitude and longitude), orientation information, and distance

information (the distance of the drone relative to the location of the device) in real time;

- Pilot positioning: It can locate the pilot's position information and display the pilot's (remote control) position (latitude and longitude), orientation information, and distance information (the distance of the pilot relative to the location of the device) in real time;
- Multi-target trajectory tracking: It can position and track drone swarms and display multiple drone flight trajectories at the same time;
- Safety list: It can distinguish cooperative and non-cooperative drones, the device will not alarm when cooperative drones are detected, and can markup cooperative drones as trusted;
- Intrusion alarm: When the device detects a drone intrusion, it will issue an sound and light alarm;
- Trajectory playback: Supports drone flight trajectory playback, assisting security personnel in analyzing historical drone flight data;
- Detection records: The detection record list can retain historical records, including multi-dimensional information, such as drone serial numbers, models and frequencies, etc.;
- Multi-unit network: The equipment can be connected to the back-end management and control platform through the Internet, and the multi-unit network can cover a large area;
- Working mode: Using omnidirectional radio frequency interference antenna Two working modes: expel and forced landing; the control distance is 2km;

Key Features

- Full range of detection drone models: The system can identify brands of drones such as DJI, Daotong, Dahua, and Haoxiang, as well as most of the models on the market such as FPV drones and WiFi drones;
- Long detection: an open scenario, the detection distance of some models can reach more than 5km;
- Passive detection: the device does not emit any electromagnetic signals, it is electromagnetic environmental friendly;
- Integrated software and hardware: Equipped with drone control platform, it can work independently without configure to the other equipment;

- Mobile and portable: Trolley box-type portable design, small in size, portability;
- Touch interaction: Touch screen, the operation is simple, convenient and fast;
- Dual power supply: The device can be powered by a built-in battery or an external power supply;
- Easy deploy: The device antenna is placed on the top cover of the box, and can be turned on and off by one click;

Technical Parameters

Detection frequency bands	900M, 1.2G, 2.4G, 5.2G, 5.8G;
Detection distance	1-3km (depending on the environment)
Number of detections	≥5 sorties can be detected and tracked at the same time;
Azimuth error	≤1.5° (RMS)
Positioning accuracy	≤10m
Detection success rate	≥95%
Deployment time	≤90s
Recognition response time	≤5s
Backend control mode	wired
Strike frequency bands	900M, 1.5G, 2.4G, 5.2G, 5.8G
Control distance	≤ 2km
Power consumption of the whole machine	840W
Power supply	External 220V mains power; Built in 29.4V/33Ah lithium battery
Working hours	Test standby time of 24 hours, force landing working time of 70 minutes (continuous work)
Charging time	7 hours
Screen size	10.1 inches
Screen resolution	1080P (1920 * 1200)
Equipment size	65 * 50 * 32cm
Equipment weight	36.6kg
Working temperature	- 20℃~65℃
Protection level	IP65

Portable UAV Detection & Jamming system

Model: C4I-GTUS-IIP

Description

The system is equipped with a 2.8-inch bright IPS LCD screen, which has the function of detecting the orientation and model of the drone, and has the function of interfering with the frequency band used by the drone, which can drive the drone away or force the drone to land, and completely cut off the contact between the drone and the remote control or the ground station to ensure the safety of the low-altitude airspace in the region. Compared with common portable control equipment, this device adds device positioning and networking functions, and can link the back-end command system to facilitate the background command personnel to make transfers according to the distribution of equipment.

Technical Specification

Position Function Parameter	
Module type	High-precision L1, 15 dual-frequency GNSS receiving module
Position system	Beidou, GPS
PPS search accuracy	±15ns
Maximum speed	515m/s
Speed accuracy	0.1m/s
Dynamic heading Angle accuracy	0.3
Networking function parameters	
Communication method	UART
Communication frequency band	490MHz

Transmission power	1w
Transmission distance	2km
Encryption method	AES dynamic encryption
Detection technical parameters	
Detection frequency	Dual frequency 2400~2485MHz, 5150~5950MHz
Detection antenna gain	2dBi
Detection power consumption	≤5W
Detection mode	Omnidirectional detection, directional detection
Detection distance	1-2km
Number of detections	Multiple targets
Detection and identification	Commonly used UAV types
Warning mode	Sound, vibration
Jamming technical parameters	
Operating frequency	900 ~ 930MHz, 1550 ~ 1620MHz, 2400 ~ 2500MHz, 5715 ~ 5850MHz
Output power	140W
Signal style	DSSS(spread spectrum) /FHSS (frequency hopping)
Battery capacity	2 pieces of 7000mah lithium batteries
Endurance	≥30 minutes (continuous launch); ≥120 minutes (30s launch and 90s stop)
Product weight	About 4.6kg
Product size	Host: 690*300*80mm
Working mode	Expel/Forced land mode; Each module can be individually controlled on and off
Screen configuration	2.8-inch high-lighted IPS screen
scope magnification	Maximum 4 times
Jamming distance	Flight height 100m: control distance ≥1700m, flight height 200m: control distance ≥2000m

Portable UAV Jammer

Model: C4I-GTUS-III

Description

The system is equipped with a 2.8-inch bright IPS LCD screen, which has the function of interfering with the frequency band used by the drone, which can Expel or forced land the drones, and completely cut off the contact between the drone and the remote control or the ground station to ensure the safety of the low-altitude airspace in the region. Compared with common portable control equipment, this device adds device positioning and networking functions, and can link the back-end command system to facilitate the background command personnel to make transfers according to the distribution of equipment.

Technical Specification

Position Function Parameter	
Module type	High-precision L1, 15 dual-frequency GNSS receiving module
Position system	Beidou, GPS
PPS search accuracy	±15ns
Maximum speed	515m/s
Speed accuracy	0.1m/s
Dynamic heading Angle accuracy	0.3
Networking function parameters	
Communication method	UART
Communication frequency band	490MHz
Transmission power	5w
Transmission distance	2km

Encryption method	AES dynamic encryption
Jammer technical parameters	
Operating frequency	900 ~ 930MHz, 1550 ~ 1620MHz, 2400 ~ 2500MHz, 5715 ~ 5850MHz
Output power	140W
Signal style	DSSS /FHSS
Battery capacity	2 pieces of 7000mah lithium batteries
Endurance	≥30 minutes (continuous launch); ≥120 minutes (30s launch and 90s stop)
Product weight	About 4.8kg
Product size	Host: 690*300*80mm
Working mode	Expel/Forced land mode; Each module can be individually controlled on and off
Screen configuration	2.8-inch high-lighted IPS screen
scope magnification	Maximum 4 times
Jamming distance	Flight height 100m: control distance ≥1700m, flight height 200m: control distance ≥2000m

Fixed UAV Jammer

Model: C4I-UDS-3

1. Description

The C4I-UDS-3 system delivers our tried and tested drone jamming capability in a hardened IP67 case for permanent installation onto a building. Like all omni-directional jammers the HWUDS-3 could cause some interference to other devices, we have addressed this issue by attempting to use as low power as possible to defeat the drone.

2. Features

- ▶ Multi-band emission, defeating most civilian UAVs
- ▶ Defense Radius: ≧1500M
- ▶ Angle of Defense: 360°
- ▶ Water-proof Design: IP67
- ▶ All-weathers working
- ▶ Defense automatically once POWER ON

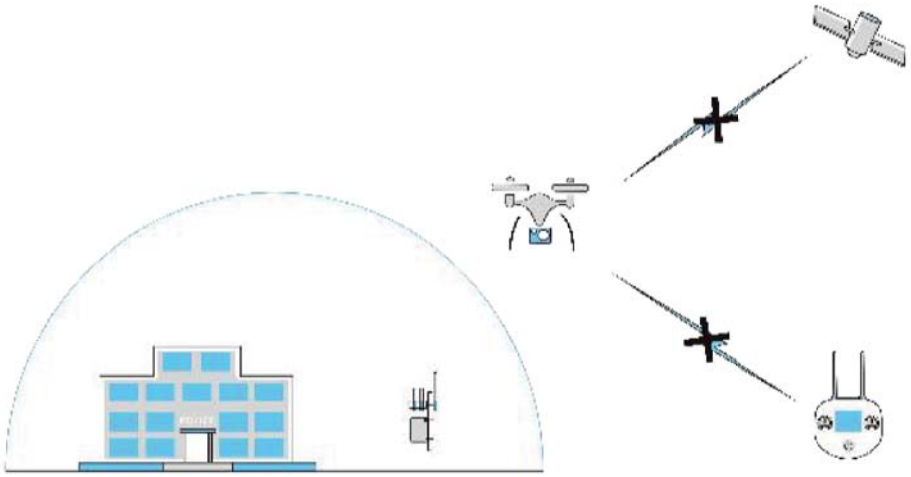
3. Technical Specification

Operating Mode		Remote Control	
		Manual	
Operating environment		-40℃ ~ +55℃	
Protection Level		IP67	
Tripod	Material	Carbon Fibre	
	Dimension	21CM ~ 175CM	
	Weight	2.3KG	
(6 pieces) Antenna	Material	FRP (Fiber Reinforced Plastics)	
	Dimension	Diameter 40mm; Length 65cm	
	Weight	2.4KG	
Main Unit	Material	ADC12 Aluminum-Alloy Die Castings	
	Dimension	L56*W40*H26cm	
	Weight	14.5KG	
Continuous working time		All time	
Built-in adapter		29.5V & 2A	
Power Supply		AC100-240V/50-60Hz	
Defense Radius		≧1500M	
Angle of Defence		360°	
Transmitting Power		Band5: 25W	Band6: 25W
		Band3: 25W	Band4: 25W
		Band1: 25W	Band2: 25W
Working frequency range		BAND5: 2400 - 2500Mhz	BAND6: 5715 - 5850Mhz
		BAND4: 1555 - 1620Mhz / GPS/GLONASS/BEIDOU	
		BAND3: 1100 - 1300Mhz / GPS/GLONASS/BEIDOU	
		BAND1: 420 - 460Mhz	BAND2: 868 - 930Mhz
Jamming Mode		Forcing the UAV landing	
		Expel the UAV	
Number of Jamming Band		6	

4. Function Demonstration

Defense Radius: ≧1500M

Installed at perimeter or top of building to realize an omnidirectional defense shield



Mobile Phone Signal Jammer

Model: C4I-CPSB-III(5G)

Description

The mobile phone signal shielded from the low to high end frequency during the working process. The scanning form garbled -weight interference in the mobile phone receiving message signal.

Mobile phone signal jammer can be used for indoor places where needs signal shielding, such as: test rooms, classroom, conference room, government VIP rooms, etc.

Technical Specification

Types of shielded signals	2G, 3G, 4G, 5G, Wi-Fi, Bluetooth, etc
frequency band	3400-3500MHZ
	2010-2025MHz
	5150-5350MHz
	859-894MHz
	2515-2600MHz
	1805-1920MHz
	2600-2675MHz
	758-803MHz
	894-960MHz
	3500-3600MHz
	2110-2170MHz

	1805-1920MHz
	5750-5850MHz
	2300-2500MHz
Input voltage	AC 170-250V
Shielding range	Radius 5-10 m (field strength -85dBm)
Shielding direction	omnidirectional 360°
Device power	maximum 275W
Transmit power	single channel average 10W
Output channels	14 channels
Host size	434*204*98mm
Host weight	5.3kg
Antenna size	Φ18*300mm
Antenna weight	0.1*14=1.4kg
Adapter size	260*76*40mm
Adapter weight	1.56kg
Packing size	60*34*20cm
Packing weight	12kg

Application Scene

Exam Room

Conference Room

Portable Wide-Band Wireless Frequency Jammer

Model: C4I-BJ-IV（5G）

Introduction

The device is suitable for use in special environment (small space, no power supply, vehicle-mounted interferometer can not enter the place). It is a comprehensive application of analog radio technology, including electronic countermeasures, analog signal processing, power amplification, special antenna design and many other advanced technologies, which can adapt to the need of on-site disposal of wireless remote control device explosives. It is a new equipment in the field of electronic countermeasures, and its performance indicators can meet the actual needs of the public security and armed police departments for riot control, anti-terrorism, explosive disposal, escort, criminal investigation and technical investigation. It adopts the latest jamming signal technology, and the transmitting power and jamming distance are more suitable for the actual work.

The system has strong function, wide range of jamming and blocking wireless explosive device, simple operation, flexibility and convenient installation and erection. It can be used for the disposal of wireless remote control explosive devices in the explosive disposal site, can be used for the security needs of confidential meetings, can be used for the scene stability of mass incidents and other special places that need interference shielding.

Features

1) Small size, light weight, easy to handle, suitable for individual operation.
2) Moderate transmitting power, small radiation to the site staff.
3) Directional transmission in important frequency band, especially suitable for fixed-point explosive disposal in a small range.
4) One-key operation, intelligent control, simple operation, convenient for staff to
5) The indicator light on the panel indicates the electric quantity and working status of the equipment.
6) The device can be operated in the distance by wire control and the device status can be displayed on the screen.
7) The interference signal adopts the method of broadband sweep frequency and time-domain strengthening of key frequency points to increase coverage under the condition of the same power.
8) High-precision semiconductor components are used for core components to ensure the advancement and reliability of products.
9) Dual power supply system is adopted. It can use 220V mains power supply or internal battery pack power supply.

Technical parameters

No	Frequency range	Transmitted power	Antenna	Interference Target
1	27-72 MHz	15W	A:Wide-band monopole omnidirectional antenna	Toy remote control
2	136-174MHz	25W	B:Wide-band monopole omnidirectional antenna	VHF industrial and civil remote control
3	315-470MHz	15W	C:Wide-band monopole omnidirectional antenna	UHF industrial and civil remote control
4	758-803MHz	35W	Built-in array directional antenna	
5	870-880MHZ	35W		850MHz Intercom,CDMA800MHz
6	930-960MHz	35W		DCS1800/CDMA1900MHz/4G-TLE
7	1805-1880MHz	50W		3G-W-CDMA,CDMA2000,4G-LTE
8	1880-1920MHz	50W		
9	2110-2170MHz	35W		4G
10	2300-2400MHz	35W		WIFI
11	2515-2675MHz	35W		5G
12	3400-3600MHz	50W		5G
13	4800-4960MHz	35w		
14	5150-5850MHz	25W		WIFI

Note: It depends on the frequency of mobile phone in each country. The actual frequency band is customized according to the frequency band provided by the customer.

1. Operation mode: switch the machine on and off with one key, and display the working status through operation display panel or remote control;
2. Transmission power: 475W;
3. Power consumption: MAX1300W;
4. Power adaptability: AC220V/DC24-26V;
5. Operation time: built-in DC24V42AH power battery pack, can support the equipment to work continuously for 50 minutes;
6. Built-in charger: 29.5V&8A charging time is about 6 hours;
7. Main device (including antenna) weight 44kg;
8. Host size: 63*50*30cm;
9. Reliability and maintainability requirements: MTBF≥1000 hours, MTTR≤1 hour;
10. Interference style: frequency block interference, sweep interference;
11. Working mode: sweep frequency, dressing spectrum and direct sequence spread spectrum combination;
12. Working mode: low frequency, full frequency, mobile phone three modes;
13. Protection function: RF output no-load and short circuit protection; Internal power system with under voltage, over voltage, overload, short circuit and other protection, sound alarm function;
14. Interference distance: 20-80m (distance and base station distance, and whether there is a mobile phone amplifier)

Surveillance Ball

Model: XT01Q01

Description

The Surveillance ball is a system specially designed for wireless real-time intelligence. The sensor is round in shape like a ball. It is rugged enough to survive a hit or knock and can be thrown to distant area where might be dangerous. Then it transmits real-time video and audio to monitor simultaneously. Operator is able to observe what is going on in hidden place without being at dangerous place. Thus, when you have to take measures in a building, basement, cave, tunnel or lane, risk is reduced. This system is applicable to policeman, military policeman and special operation force to take anti-terrorism action or maintain surveillance whether in city, countryside or outdoors.

This device is fitted with some NIR-LEDs, so the operator can search and monitor objects in dark environment.

Specifications

Scanning Mode	360° Rotating Automatically; Rotating Speed ≧4circles/m
	360° Rotating by Manual
Camera	≧1/3", Color video
Angle of Field	≧52°
Audio/Microphone Sensitivity	≦-3dB, ≧8meters
Signal to Noise Ratio	≧60dB
Light Source	NIR-LEDS
Light Source Distance	≧7m
Light Intensity	Auto-Calibration
Audio/Video Output	Wireless
Data Transmission	Wireless
Diameter of Ball	85-90mm
Weight of Ball	580-650gram
Display Resolution	≧1024*768, Color
Language	English
Display	≧10 inches TFT LCD
Contrast Ratio	1:200
Audio Output	3.5mm earphone jack
Battery	≧3550mAh, Lithium Battery
Continuous Working Time	≧8hours
Size of Display	227 × 177 × 44mm (without antenna)
Weight of Display	≦1600gram (without antenna)
Remote Distance	30m

Thrown Detective Robot

Model: C4I-TDR-2

Introduction

Thrown Detective Robot is a small detective robot with light weight, low walking noise, strong and durable. It also takes into account the design requirements of low power consumption, high performance and portability. The two-wheeled detective robot platform has the advantages of simple structure, convenient control, flexible mobility and strong cross-country ability. The built-in high-definition image sensor, pickup and auxiliary light can effectively collect environmental information, realize remote visual combat command and day and night reconnaissance operations, with high reliability. The robot control terminal is ergonomically designed, compact and convenient, with complete functions, which can effectively improve the working efficiency of the command personnel.

Features

- Simple operation, small size, light weight, easy to carry
- Low noise, easy to hide
- With anti-drop design, can be directly thrown to the target area operation
- Real-time transmission and storage of voice, data and images
- Built - in HD camera and sound collector, can remote visual combat command
- Equipped with infrared lighting, can be day and night reconnaissance operation
- The control terminal interface is simple and intuitive
- With video recording, photography functions
- Built-in SD card, support video, image online playback and export function

Application Scenarios

It is suitable for public security, armed police and other departments, and can be used for anti-terrorism, anti-hijacking, covert detection, low-space detection, patrol, tunnel patrol and other operational tasks in the urban day and night environment.

Technical Specification

Robot	Weight	0.6kg (battery included)
	Dimension	Length: 200mm Height: 115mm (Wheel's diameter)
	Antenna length	433MHZ: 200mm 2.4GHZ: 96mm
	Moving speed	0.6m/s
	Maximum climbing angle	25°
	Maximum Throwing distance	Vertical: 9m Horizontal: 30m
	Remote control distance	Indoor: 50m Outdoor: 180m (Visual Distance)
	Working time	110minutes
	Standby time	150minutes
	Frame Rate	30fps
	Protecting Rate	IP66
	IR illumination distance	7.8m
	FOV	120°
	Audio	One-way, listening only (433M, 2.4G)
Control Terminal	Dimension	230×126mm (without antenna)
	Weight	0.55kg (with battery)
	Display Screen	5inch (Resolution: 1024x600) Touch screen can be customized if buying 10 sets at a time.
	Transmission image	Color
	Working time	180minutes
	Memory Capacity	32G
	Protecting Rate	IP66

Packing Pictures

PORTABLE INTELLIGENT RECONNAISSANCE ROBOT

Description:

Portable intelligent reconnaissance robot is rugged, small and lightweight, perfect to carry on as a back-pack. The robot survives dropping on ground and can be quickly deployed in narrow spaces, moving quietly and fast, equipped with cameras and pickups to collect real-time audio and video data of on-site environment, even in darkness.
Individuals can remotely manipulate the robot to certain places or dangerous areas while maintaining a safe distance, monitoring the place or target objects in real time, so as to make decisions and actions quickly.

The robot weighs 3.2 kg, and survives dropping from a height of 5 meters to concrete. It supports rapid replacement function modules, equipping with 3D LiDAR mapping module to build 3D point cloud model, 2D LiDAR to create layout of environment for autonomous navigation and obstacle avoidance, robotic arm to handle hazardous materials.

Light and Rugged

Weighing 3.2 kg, the robot is easy to carry and throw.

Throwable

The robot is safe to drop from the height of 5 meters onto the concrete, and self-rights when flipped over.

Numerous Accessories

Optional accessories available for multi tasks.

Wireless Ad Hoc Network

The Ad Hoc Network as a mature technology is deployed quickly and allows several robots to join the network to cover a massive area by simply powering on, creating good communication quality while moving at high speeds.

Controlled from the Multi-robot Controller

Installed with a high-precision operator and gripper, 4 color cameras. Optional modules including 2D LiDAR, thermal camera, CBRN/HazMat detector, etc.

APPLICATION

Surveillance / Reconnaissance
Remote Inspection
Hazardous Material Detection
Emergency Rescue

Anti-Terror Mute Electric Drill

Product Introduction

Mute electric drills are used to detect criminal activity in the next room. police officers can drill holes in walls with mute electric drill without being found by criminals, then watch what's going on inside, to detect the movements of people in the next room.
The complete system comes in a portable case for quick installation and easy operation. In a counter-terrorism operation, knowing what's going on inside the room is crucial.

Technical Parameters

1. The whole machine integrated design, no installation, according to the principle of human mechanics design. Handheld propulsion design concept, easy to achieve drilling.
2. The machine consists of a power supply, a host, and a drill. The installation time is less than 30 seconds.
3. Minimum no-load noise :≤25db, maximum power no-load noise ≤30db.
4. Working noise :≤50db.
5. Host weight ≤2KG, control box weight ≤1.3KG, box weight ≤ 9KG.
6. The overall size of the host is ≤170mm*130mm*165mm.
7. Portable case size: ≤560*350*180.
8. Lighting function: surround LED lamp endless brightening function.
9. Speed: Maximum speed ≥300 RPM.
10. Drilling diameter: ≥10mm.
11. Drilling depth: ≥420mm.
12. Drilling efficiency: 24 brick walls ≤2 minutes, 37 brick walls ≤5 minutes.

13. Working time: continuous working time is not less than 6 hours.
14. The whole set of equipment is equipped with a wall detector, which can effectively avoid metal wires and other media before drilling.
15. Drill configuration: equipped with ceramic drill, reinforced concrete drill, wood drill, metal drill, multi-function drill and other special material drill.
16. Can achieve, forward, reverse stepless speed regulation and other functions.

Note: The yellow item is the relative advantage of similar products.

Standard Accessories

S/N	Name	Specification	Quantity
1	Power controller		1piece
2	Host		1piece
3	Connecting line	1.5M	1piece
4	Wall detector	UT387D	1piece
5	Nut wrench	ER20	1piece
6	Open-end wrench	27mm	1piece
7	Chuck	5-6mm	1piece
	Chuck	8-9mm	1piece
8	Multi-function drill	10*450mm	1piece
9	Belt	1.5M	1piece
10	Charger	25.2V	1piece
11	Ceramic drill	8mm	5piece
	Wood drill	6mm	5piece
	Metal drill	6mm	5piece
	Reinforced concrete drill	6mm	5piece

Under Door Camera

Model: C4I-UDC-III

Product Description

It can be used under a narrow slit of only a quarter of an inch. Users can get all the information in the room from the door. The blade of the camera is only 5mm, which is suitable for all types of door seams. It is a portable system integrating sound and video, which is convenient for users to control themselves. It can slide and bend left and right, observe the whole room from the ground up, observe the side position from the left and right angles, clearly pick up the sound and monitor the indoor sound.

The whole system is also equipped with infrared lighting source and camera, which can be used at night and day. It is also equipped with a high-sensitivity microphone for sound acquisition and monitoring, which can transmit video / audio to the display and other devices. The indoor image is played back to the TFT screen of the system.

Product Features

- The 5mm thick blade night vision probe can slide in any door gap greater than 5mm.
- Equipped with infrared auxiliary lighting source, it can still establish a clear image even in low light and dark environment.
- The unique 3-way corner angle of view design can be no less than 120 degree upward, no less than 90 degree to the left and no less than 90 degree to the right, and can clearly observe the whole room, people and obstacles inside the door.
- High resolution and wide-angle imaging system are combined with a small microphone, which can monitor and intercept video and sound in real time.
- The hand-held telescopic rod can be telescopic within the range of 64-150cm, and can be observed from a long distance to avoid danger.

Technical Parameter

Insert blade thickness	5mm
Blade Size	L 200 x W 60mm
Telescopic Pole Length	64 ~ 150cm
Image Sensor	1 / 10 ″ infrared HD CCD camera, which can also be observed in all black environment
Sensitivity	0.03lux
FOV	50 degree
Observation Distance	30mm～∞
Light Resource	IR light resource
Blade Angle	no less than 120 degree upward, no less than 90 degree to the left and no less than 90 degree to the right
Main Control Tube	Flexible joystick
Display	5 inch color LCD
Video Output	Composite video terminal
Sound Output	Mono headphone output
Storage	16G SD card
Power Supply	DC 5V / AC Mains
Battery	Two Li battery pack
Working Time	More than 4 hours

Long Range Acoustic Disperser

Model: C4I-1000

Description

Long range acoustic disperser is used to warn and disperse specific population by directional launch of super sound wave. It has a high degree of directional and strong sound output.

It can clearly send important information, instructions and warnings to 2km away. It can be applied for search, rescue, anti-terrorism, anti-riot, and so on.

Technical Parameter

Weight	32Kg
Size (mm)	W 980× H 960mm× T 235mm
Power consumption	0.24kw (general), 0.48kw (peak)
Input power supply	AC 176v-264v /50Hz or DC 12-24v
Maximum sound pressure level	151 dB instantaneous volume @1 meter
Maximum sound pressure level in low mode	120 dB @1 meter
Sound beam Angle	+/-15°@ 2kHz
Battery Working Time	4-8 hours
Battery Charging Time	4 hours (fast charge), 12 hours (slow charge)

Portable Long Range Acoustic Device

Model：C4I-PAD-1

Product Introduction:

Portable Long Range Acoustic Device is a sound directional transmission device that can achieve long-distance shouting, warning, and deterrence functions. It can transmit exceptionally clear sound effects at extremely long distances, even through certain buildings, and has the characteristics of high directionality, high sound intensity, and high clarity. Ensuring the effectiveness and accuracy of long-distance sound propagation.

Product Features:

Human law enforcement, actively dispersing and warning gathered crowds in a non-contact and non injury manner to avoid escalating conflicts.
Built in low-frequency cutoff, effective ultra-high sound intensity, can effectively disperse targets within 0-60 meters, and the maximum warning distance can reach 300 meters.

Convenient and easy to use, small in size, lightweight, and single person portable operation.
Persuasion warning, integrated shouting function, mobile AUX/Bluetooth function warning audio playback function.

Technical Parameters:

Size	360mm * 200mm * 270mm
Weight	8.5kg
Display screen	2.3-inch LCD display screen
Noise volume adjustment function	supports adjusting noise volume
Sound level	Under maximum volume conditions, the sound level of the noise at a distance of 1m from the front of the device is 131.2db (A); Under maximum volume conditions, the noise level at a distance of 5m in front of the device is 117.2db (A);
External USB playback function	supports connecting USB storage cards and playing MP3 audio files inside
Switching playback function	When playing with an external USB, the device supports switching between previous and next songs
Equipped with a wireless microphone	it can achieve wireless shouting function and support adjusting the shouting volume
Recording and playback function	In shouting mode, it has recording and playback functions
Bluetooth playback function	supports Bluetooth connection to mobile phones and other devices for playback
Battery	Built in rechargeable lithium-ion battery with a nominal voltage of 46V
The display screen supports	displaying the remaining battery level
Leakage current	0.2mA

C4i communication

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