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# HIGH POWER CONVOY VEHICLE IED JAMMING SYSTEM IAV5

1 system of Vehicular IED Jammer	YES
Jamming capacity 20 – 6,000 MHz separated into different modules	YES
Must have mobile antenna for each module	YES
Switch on/off to operate for each band	YES
Operating temperature -10 to +50 degree Celsius	YES
Relative humidity 5-95%	YES
Cooling system : Fan or heat sink	YES
<ul> <li>High VSWR protection (Power Amplifier protection from antenna mismatch or no antenna)</li> </ul>	YES
Overload protection, AC/DC surge protection	YES
Casing shock mount rack (optional)	YES
Power supply 220 VAC 50 Hz and 24 VDC	YES
• Battery for operation not less than 5 hours	Because the total power of the device is too large, it is difficult to reach 5 hours even with an external battery. It is recommended a generators locally to use with the equipment
Minimum operating capability:	The power of each channel is designed to be up to 100 watts, and the distance still depends on the field strength environment of the use site.
When installed in vehicle with directional antenna and vehicle is not moving:	
Front range 150 meters, Back range 150 meters, Side range 30 meters	YES
When installed in vehicle with directional antenna and vehicle is moving at speed	
80-90 km/hour: Front range 75 meters, Back range 75 meters, Side range 30 meters	YES
Display monitor minimum capability:	YES
o Display which band is operable and which band is malfunction	YES
o Battery status	YES
o Battery low alarm	YES
1 set of remote control for range of 10 meters: for on/off and adjust power output for each band	



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#### Introduction

Protecting military and VIP convoys from the threat of Remote Control Improvised Explosive Devices (RCIEDs) -road-side bombs and anti UAV have become challenge and task in many parts of the world.

The IAV5, High Power Convoy Jamming System, implementing the most effective and reliable RF jamming technology and equipped with a fully-integrated broadband jamming system.

The IAV5, JAM can cover, continuously and simultaneously, all the RF communication Frequencies 20MHz ~ 6000MHz which are most commonly used by terrorists to detonate road-side bombs (RCIEDs) and fly the drones.

Adopting the latest jamming technologies, IAV5 features ultra-high RF transmission power of 1100 watt in total, making a bigger shielding range around the vehicle.

System management, including activation and control and operation is carried out through a wired remote control unit installed covertly inside the driver's console unit.

Once the system is activated, it transmits unique noise signal which creates "Firewall" between the transmitter (terrorist) and its receiver (explosive device). Effective eighteen-month warranty and technical support is indispensable to make sure our excellent quality and reputation.



#### **Advantages Of IAV5**

- Designed with ultra-broadband frequency bands, 20MHz-6000MHz.
- 12 modules plug and play design, facilitate for future power upgrading, change and maintenance. Any ruin on the modules never interfere the normal operating for other modules.
- American Mil-spec standard case, shockproof and drop-resistance, available for the vehicle running in a worse field environment.
- Built-in intelligent and efficient cooling fans and radiators ensure that the host of the interference system can work stably for a long time and extend its service life.
- Continuously and simultaneously interference to the common used RF signals.
- The main chassis adopts aviation aluminum alloy shock-proof design, with a majestic appearance and stable structure. It can be dragged like a suitcase for easy transfer.
- · Continuously and simultaneously interference to the common used RF signals.
- The driver has a remote control that can directly control the on/off of each module of the equipment and whether it is working normally or malfunctioning. It can also display the battery status and low battery alarm.



#### **Main Application**

Protect military and VIP team from the road-side remote improvised explosive device (RCIED) attack detonated by the terrorists. Moreover, it can prevent terrorists using GPS location to track the vehicles efficiently.

Used for EOD. Before EOD, wireless telecommunication signals surrounding the bomb must be blocked effectively to prevent the terrorists detonating the bomb through the wireless remote control devices and avoid the huge casualties.

It can be applied that commonly used telecommunication frequency will be blocked when the Police arrest the criminals in order to prevent the criminals gang or Police insider leaking the confidence through the wireless equipment to lead the arrest failure.

It also makes the criminals not be able to remotely control the bomb in the key entrance of the building so that Police can quickly access to the building and round up the criminals to avoid the casualties.

Protecting the boarder and army patrol from the attack of road- side bomb RCIED detonated by the terrorists.

It can be used to prevent terrorists remotely controlling the bomb bursting points in military protection zone, government buildings and some other important places. It can also make the criminals hidden in the military protection zone not communicate with the outside gang to leak the confidence.

In the event of the partial ground war, this wireless jamming system can prevent the enemy laying the bomb detonated by the wireless remote control in advance. In order to protect the land surface chariot attacking troops, Tank and soldiers' lives.

It can be also fixed in some occasion for a temporary protection to respond to some emergencies.

Channel	Frequency Bands MHz	Application	Output Power (Watt)
1	20-108	Wireless ,FM Radio	100W
2	135-174	Wilkie-talkie(VHF)	100W
3	300-400	Remote Control, Drone	100W
4	400-470	Wilkie-talkie(UHF),Car alarm	100W
5	851-894	CDMA	100W
6	925-960	GSM	100W
7	1570-1580	GPSL1	100W
8	1805-1920	DCS,PCS	100W
9	2110-2170	WCDMA	100W
10	2400-2485	WIFI,Drone,Bluetooth	100W
11	5725-5850	WIFI, Drone	100W
		Total Power	1100W

## **TECHNICAL PARAMETERS**

Items	Specifications
Interception Channel	Total 11 bands
Output Power	Total 1100W
Regulatory Distance	50-500m, depends on the signal strength in given area.
System Protection	VSWR, Over-voltage, Over-current.
Power supply	AC220V / 110V or Car power supply
Ingress Protection	IP56
Heat Dissipation Method	Systematic Smart Cooling System
Weight	Approx. 70-80kg per case.
Size	978X719X467mm (Not include antenna)
Environmental	-30°C to + 55°C operation
Remote Control	Full System Operation Control
Number of Antenna Type	Directional Antenna
Vehicle Platform	Off-road four-wheel drive car
Power Supply Source	Additional AC Generator (5000w) or
	Additional DC Alternator (+28V DC/400A)
Total Power Consumption	Max:5500VA, (+28V DC)
Battery Back Up Capacity	200AH/ +28V DC
Operating Humidity	Up to 95%

### **Equipment details**





A 360° shield formed by multiple directional antennas and farther away protects vehicles from threats from IED and drones



#### **Wired Remote Control Panel**

IAV5 has a wired remote control function. And this remote control panel could be performed in the driver's console unit, so it will be very convenient for the driver to remote control the jammer to turn on/off each module separately while driving. With two units of remote control panel to management of 24 modules, the driver can turn off a specific frequency band to make sure the internal communication in emergency.



#### **Configuration List**

- 1 x IAV5 Host device
- 4 x Special directional antenna
- 1 x Display Screen
- 1 x Remote Controller
- 1 x Feeder Line Set
- 1 x User Manual

Installation on end user side



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