

JAMMER

Dual Force (Vehicle)

The inspection vehicle is equipped with radio frequency jammer, Improved explosive device protection, phone, radio, and remote-control toy.



Introducing the Dual Force (Vehicle) jammer - the ultimate solution for secure communication on the move. Designed for use in a variety of security applications, this powerful device can be easily installed on a SUV vehicle, and effectively blocks VHF, UHF, CB, Car alarm, key fob, CDMA, GNSS, GSM, EDGE, UMTS, WCDMA, LTE, 5G NR (NA, NSA, CA), Bluetooth, and Wi-Fi signals on 2G, 3G, 4G, and 5G mobile networks. Additionally, it is designed to effectively disrupt mobile phone signals, which can be used as a trigger for ignition in certain situations. With the ability to target a wide range of frequencies and communication standards, it can quickly interfere with transmission in the 100 to 520 MHz and 500 to 5000 MHz range.

FEATURE

Powered by a 12VDC battery or a 100-220VAC 50Hz external power supply, the jammer has an average power consumption of 480W and a maximum power consumption of 800W. It can operate for up to 2 hours on battery power and has a range of 200-300 meters for omni-directional antenna (LOS) and 500 meters for directional antenna (LOS).

The jammer is equipped with directional 4 sets (Gain 6.7dbi, Impedance 50Ω , VSWR < 2.5) and omni-directional 6 sets (Gain Measure, Impedance 50Ω , VSWR < 3.5) antennas, which can be controlled by an antenna control platform and a switch for on/off operation for switching antennas. It can operate in temperatures between -20°C to $+60^{\circ}\text{C}$, and has a special cooling fan that ensures noiseless operation. It also has voltage protection and automatically detects when VSWR ratio is lower than 4 to 1.





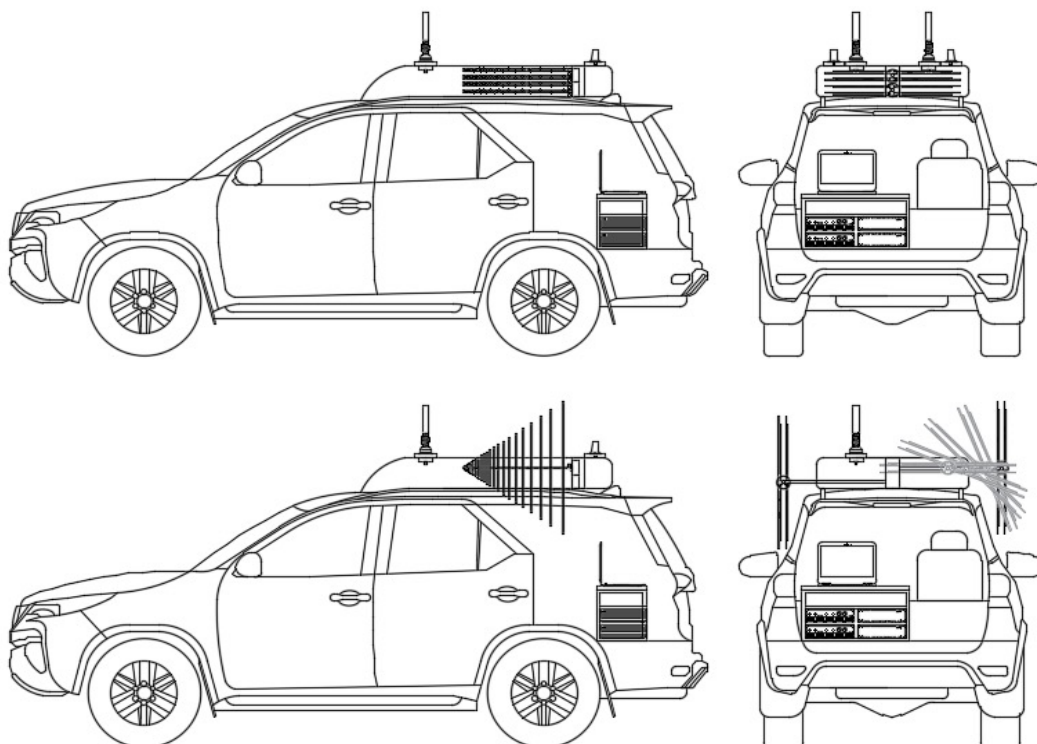
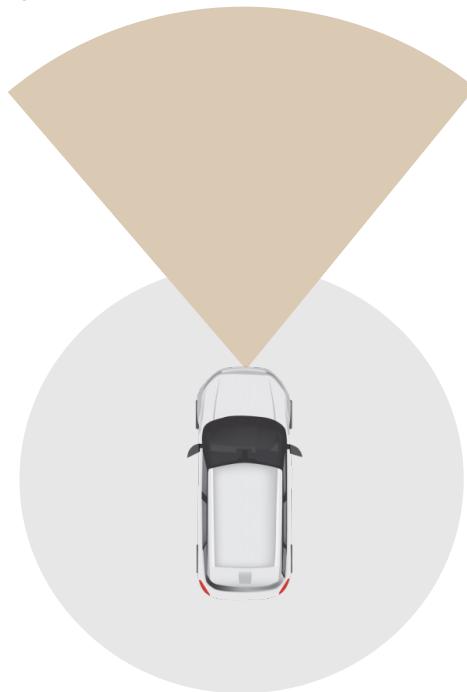
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The inspection vehicle is equipped with radio frequency jammer, Improvised Explosive Device (IED) protection, phone, radio, and remote-control toy.

With a total height of 2.5 meters with antennas, the Dual Force (Vehicle) jammer offers 3 variants and 6 output options, all of which are software controlled and have a maximum output power of 100W per output. Measuring 340 x 321 x 190 mm and weighing less than 42 kg (including the battery), it is compact and easy to install.

Constructed with Aluminum 6085 MIL-DTL-5541F Type II Class 3 standard and certified to MIL-STD-461F test levels RE102, RS103, CS114, CS115, CS116, MIL-STD-1275-E, and MIL-STD 810G, the Dual Force (Vehicle) jammer is built to withstand the toughest conditions.

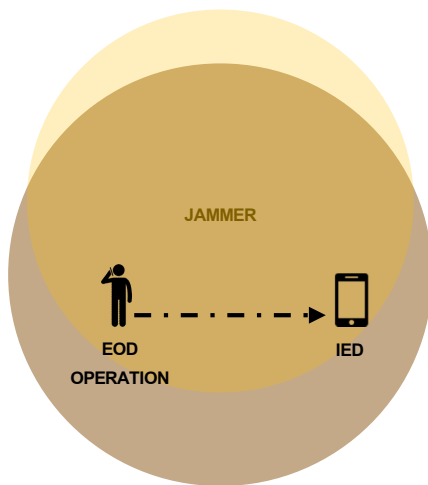


Remark :

It is critical for operators to employ a Dual Force Jammer (Vehicle) at all times during the mission. The signal wave will be substantially reduced if passing persons, buildings or other obstacles. However, operators can prevent this type of problem by building taller towers. or work in an AOI (Area of Interest) larger than the operational area. Using several Dual Force (Vehicle) jammer devices together may dramatically boost power and area control capacity.

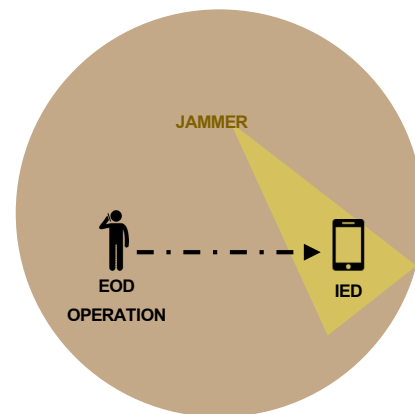


SCENARIO



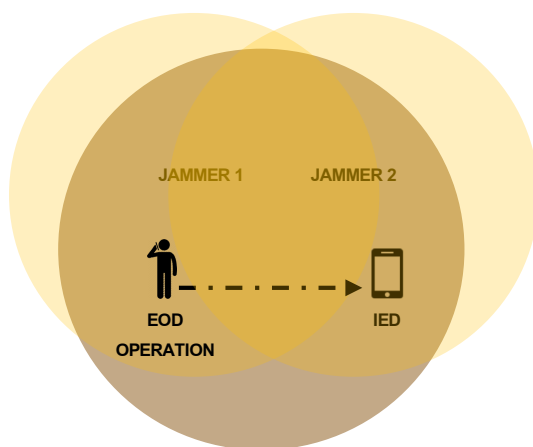
OMNI-DIRECTIONAL ONE SYSTEM BOX

Using one jammer equipped with an omni-directional jammer antenna to cover all potentially harmful signals, (In the case of using 1 signal jammer to cover all signal waves may reduce the distance of the signal transmission)



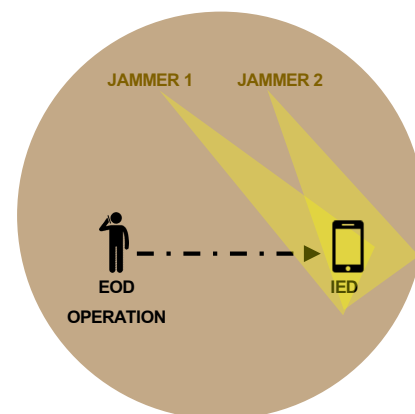
DIRECTIONAL ONE SYSTEM BOX

Using one jammer equipped with a directional jammer antenna This enables the usage of interference transmitters to be extended for higher precision and distance. In this manner, the user may fully exploit the jammer's transmitting strength in a particular direction.



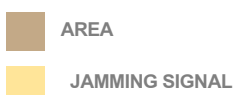
OMNI-DIRECTIONAL TWO SYSTEM BOX

Using two jammers equipped with omni-directional jammer antennas in the working area at the same time boosts the target's capacity to cover potentially dangerous operational risks by creating a unique signal that interferes with both Dual Force transmitters. By operating in tandem this usage pattern can considerably improve user security.



DIRECTIONAL TWO SYSTEM BOX

Using two jammers equipped with directional jammers simultaneously in the operating area It increases the user's ability to cover areas from signal that could compromise operations by emitting a unique pattern that interferes with both Dual Force transmitters. Working together at full efficiency, this usage pattern can significantly increase the security of users.. This is the best form of use if the user knows the location of the IED.





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PRODUCT DETAIL

Specification overview



Equipment Form

SUV Vehicle (2.5 total high with antennas)



Size

340 x 321 x 380 mm.



Weight

<42 kg (battery included)



Operation Time

2 hours using battery



Communication Technology

Walkie VHF, UHF, CB, Car alarm, key fob, CDMA, GNSS, GSM, EDGE, UMTS, WCDMA, LTE, 5G NR (NA,NSA,CA), Bluetooth, Wi-Fi



Operation UI

Software Control on tablet



Antennas

200 meters omni-directional antenna (Mobile Phone)
300 meters omni-directional antenna (Walkie Talkie)



Frequency

Walkie Talkie 100 - 520 MHz
Mobile Phone 500 - 5000 MHz



SPECIFICATION DETAIL

Duel Force Vehicle model

Jammer Module

Topic	Description
Equipment Form	SUV Vehicle (2.5 total high with antennas)
Communication Technology	Walkie VHF, UHF, CB, Car alarm, key fob, CDMA, GNSS, GSM, EDGE, UMTS, WCDMA, LTE, 5G NR (NA,NSA,CA), Bluetooth, Wi-Fi
Output Power	2 Variant, 4 Output, Software Controlled, High Speed 100W (Max) per output
Size	340 x 321 x 380 mm. <84 kg (battery included)
Power Consume	12VDC battery, 100-220VAC 50Hz for battery charging and external power supply (average 480W, maximum 800W)
Operation Time	2 hours using battery (continuous use with external power supply)
Operation Distance	200 – 300meter omni-directional antenna (LOS) 500meter omni-directional antenna (LOS)
Operation UI	Controlled with Meteor Suit software via touch screen tablet. Command power on/off, control signal emissions for each module, display operating status such as current, temperature, signal frequency and power, battery level, various abnormalities such as antenna connection alarm, over-voltage in system, overheating, module problem, battery dead, etc.
Antenna	Omni-Directional 6 sets (Gain Measure, Impedance 50Ω , VSWR <3.5) with antenna control platform and a switch for on/off operation for switching antennas
Environment	Operation $-20\text{ }^{\circ}\text{C}$ to $+60\text{ }^{\circ}\text{C}$, RH 98% non condensing Storage $-40\text{ }^{\circ}\text{C}$ to $+85\text{ }^{\circ}\text{C}$, RH 98% non condensing
Cooling System	Special cooling fan noiseless while working
Voltage Protection	Continuously
VSWR detection	Automatically detects when VSWR ratio is lower than 4 to 1.
Material	Aluminum 6085 MIL-DTL-5541F Type II Class 3 standard
Certificate	MIL-STD-461F test levels RE102, RS103, CS114, CS115, CS116. MIL-STD-1275-E, MIL-STD 810G



SPECIFICATION DETAIL

Duel Force Vehicle model

Adjustable Frequency Channels

Channel #	Frequency (MHz)	Purpose	Power (W)
1	137-155 MHz	VHF-1 Walkie Talkie	100
2	155-185 MHz	VHF-2 Walkie Talkie	100
3	227-298 MHz	VHF-3 Walkie Talkie CB	100
4	300-433 MHz	Alarm, Car Alarm, Key fob	100
5	300-450 MHz	UHF-1 Walkie Talkie	100
6	450-494 MHz	UHF-2 Walkie Talkie	100
7	703-960 MHz	Mobile Phone 4G, 5G	100
8	1710-2025 MHz	Mobile Phone GPS, 2G, 3G, 4G, 5G	100
9	2110-2170 MHz	Mobile Phone 3G, 4G, 5G	100
10	2300-2500 MHz	Mobile Phone 4G, 5G, Wi-Fi, Bluetooth	100
11	2500-2690 MHz	Mobile Phone 4G, 5G	100
12	3400-3700 MHz	Mobile Phone 5G	50
13	5150-5350 MHz	Wi-Fi	50

Note:

- CH1-11 transmission power 100W
- CH12-13 transmission power 50W
- 2G including GSM/GPRS/EDGECDMA
- 3G including UMTS/HSUPA/HSDPA/HSPA+/WiMax
- 4G including LTE/LTE-A/LTE-A Pro
- 5G including 5G NR (NA,NSA) / 5G-A
- GPS including GNSS, Galileo, BeiDou



SPECIFICATION DETAIL

Dual Force Vehicle model

Example - Isuzu MU-X 3.0 ELEGANCE AT 2WD 2022

Topic	Description
Model	Isuzu MU-X 3.0 ELEGANCE AT 2WD 2022
Sizing L x W x H	4850 x 1870 x 1875 mm
Engine	4-cylinder in-line 16 valves VGS Turbo and Intercooler
Cylinder capacity	2.999 cc.
Drive System	2 wheel drive, 6 speed automatic transmission
Maximum Power	140 kW (190 hp) / 3600 rpm
Maximum Torque	450 Newton-meters / 1600-2600 rpm
Fuel Supply System	Common rail
Fuel Capacity	80 Liter
Fuel Type	Diesel
Suspension	Front suspension Double wishbone Rear suspension Independent multi-link suspension
Audio Console	9-inch touch screen, Android Auto and Apple CarPlay Support, Bluetooth/USB support, Speaker 8 positions
Driving and Safety Controls	7 airbags, ABS with EBD and BAS, stability control, hill-start assist, hill-descent control, ISO fix child-seat anchors, blind-spot monitoring and front and rear park distance control (with rear-view camera).
Air Conditioner	Air Conditioning – Dual, Air Cond. - Climate Control, Air Cond. - Climate Control 2 Zone, Air Conditioning - Pollen Filter
Electric Connector	2 x 12VDC, 1 x 220VAC, 2 x USB, Wireless Charger
Standard Equipment	Smart Device Integration - Android Auto, Smart Device Integration - Apple CarPlay Audio - Aux Input USB Socket, Bluetooth System, GPS (Satellite Navigation), Multi-function Control Screen – Color, 8 Speaker Stereo, Speed Zone Reminder - Road Sign Recognition