

**Remote Controlled Improvised
Explosive Device Jammer
User Guide**

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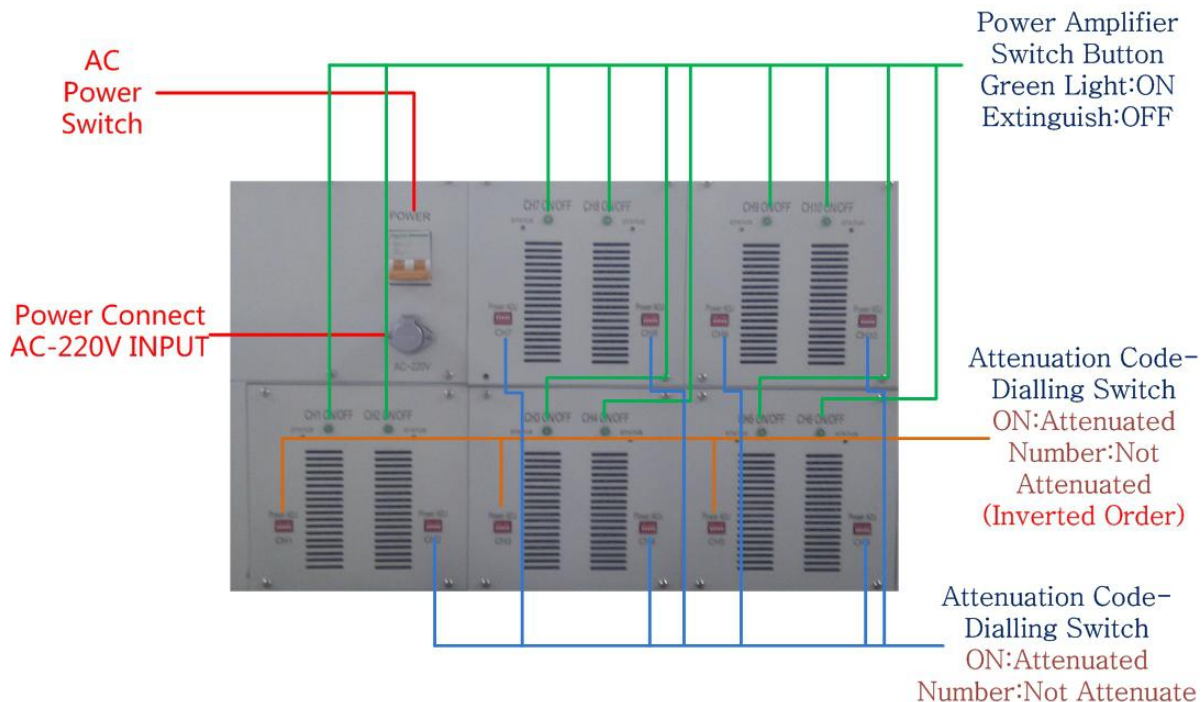


● **Being familiar immediately**

Now let us introduce this mobile signal jammer to you and give you better understanding of the positions of all the buttons, functions of accessories and other hardware.



Control Panel



Front View



RF POWER SWITCH

Press the green light button to activate corresponding power amplifier;



Warning LED

Red Light With VSWR Warning;



Each is 31dB adjustable output power adjustable step is 1dB

Power control principle

CH1~CH6、CH10: NO.2, NO.4, NO.6, NO.7 to No.10 of Dial Code Switch is control power, Dial “ON” is 1,Dial “number” port is 0

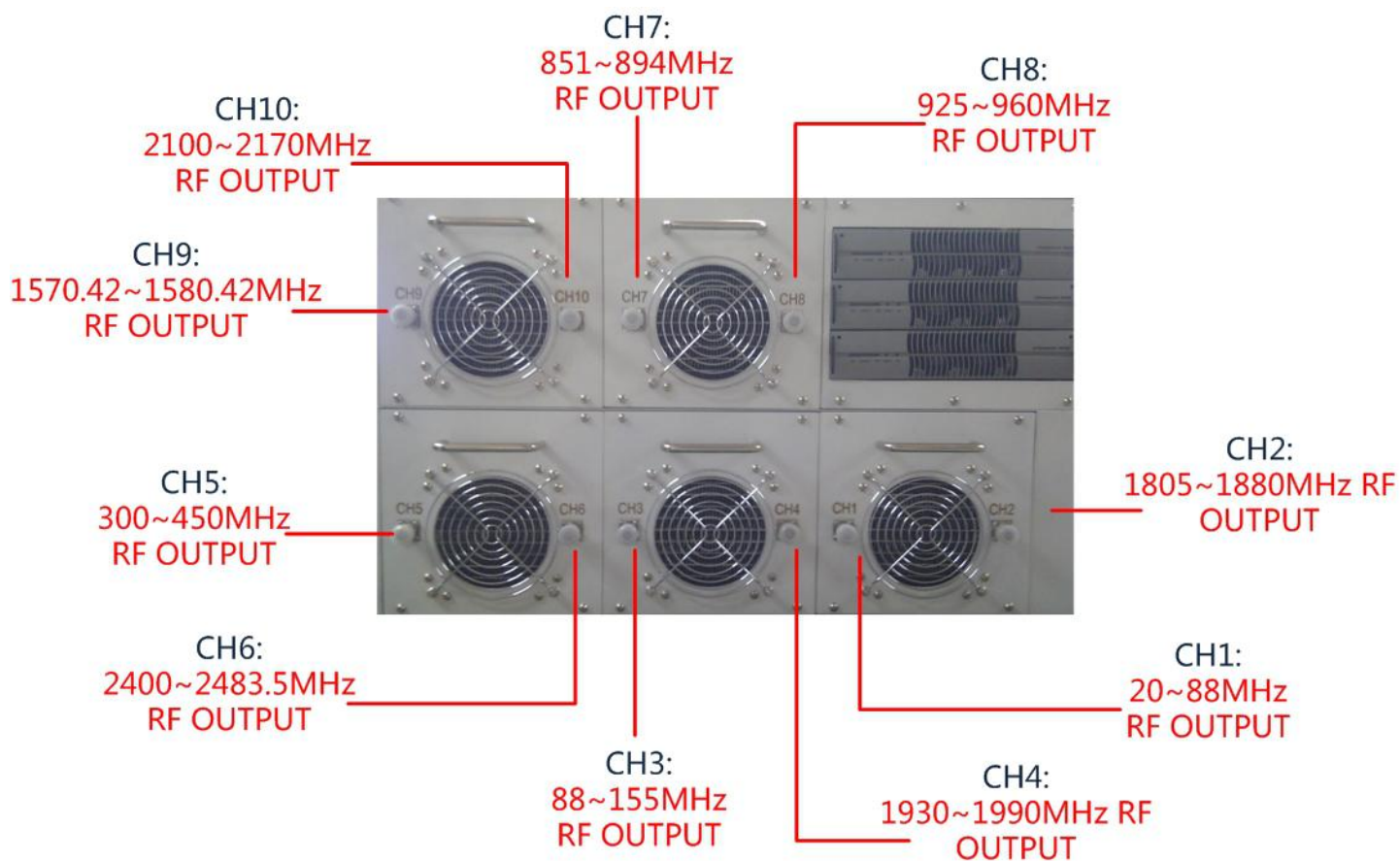
Power Level (dB) \ Number	1	2	3	4	5
0	0	0	0	0	0
1	1	0	0	0	0
2	0	1	0	0	0
3	1	1	0	0	0
4	0	0	1	0	0
5	1	0	1	0	0
6	0	1	1	0	0
7	1	1	1	0	0
8	0	0	0	1	0
9	1	0	0	1	0
10	0	1	0	1	0
11	1	1	0	1	0
12	0	0	1	1	0
13	1	0	1	1	0
14	0	1	1	1	0
15	1	1	1	1	0
16	0	0	0	0	1
17	1	0	0	0	1
18	0	1	0	0	1
19	1	1	0	0	1
20	0	0	1	0	1
21	1	0	1	0	1
22	0	1	1	0	1
23	1	1	1	0	1
24	0	0	0	1	1
25	1	0	0	1	1
26	0	1	0	1	1
27	1	1	0	1	1
28	0	0	1	1	1
29	1	0	1	1	1
30	0	1	1	1	1
31	1	1	1	1	1

CH7、CH8、CH9: NO.1 to No.5 of Dial Code Switch is control power, Dial “ON” is 1,Dial “number” port is 0

NOTE: CH1、CH3、CH5 Is Inverted order Dial Code;

Power Level (dB)	Number				
	1	2	3	4	5
0	0	0	0	0	0
1	0	0	0	0	1
2	0	0	0	1	0
3	0	0	0	1	1
4	0	0	1	0	0
5	0	0	1	0	1
6	0	0	1	1	0
7	0	0	1	1	1
8	0	1	0	0	0
9	0	1	0	0	1
10	0	1	0	1	0
11	0	1	0	1	1
12	0	1	1	0	0
13	0	1	1	0	1
14	0	1	1	1	0
15	0	1	1	1	1
16	1	0	0	0	0
17	1	0	0	0	1
18	1	0	0	1	0
19	1	0	0	1	1
20	1	0	1	0	0
21	1	0	1	0	1
22	1	0	1	1	0
23	1	0	1	1	1
24	1	1	0	0	0
25	1	1	0	0	1
26	1	1	0	1	0
27	1	1	0	1	1
28	1	1	1	0	0
29	1	1	1	0	1
30	1	1	1	1	0
31	1	1	1	1	1

○ **OutPut Panel**



Back View

● Feature

○ Parameter specifications

Channel	Center Frequency	Frequency Range	Band Width	Output Power	Channel Output Power
CH1	54MHz	20-88MHz	68MHz	50dBm	19dBm/30KHz (min)
CH2	1842.5MHz	1805-1880MHz	75MHz	51.3dBm	18dBm/30KHz (min)
CH3	121.5MHz	88-155MHz	67MHz	50dBm	19dBm/30KHz (min)
CH4	1960MHz	1930-1990MHz	60MHz	51.3dBm	19dBm/30KHz (min)
CH5	375MHz	300-450MHz	150MHz	50dBm	20dBm/30KHz (min)
CH6	2441.75MHz	2400-2483.5MHz	83.5MHz	50dBm	18dBm/30KHz (min)
CH7	872.5MHz	851-894MHz	43MHz	51.3dBm	20dBm/30KHz (min)
CH8	942.5MHz	925-960MHz	35MHz	51.3dBm	22dBm/30KHz (min)
CH9	1575.42MHz	1570.42-1580.42MHz	5MHz	50dBm	18dBm/30KHz (min)
CH10	2135MHz	2100-2170MHz	60MHz	51.3dBm	20dBm/30KHz (min)

Power Supply: AC 220V Shielding area: 100-500M @ according to signal density mobile

Power consumption: 3000 W Weight: 64.5 Kg Side (length×wide×high) : 640x400x400 mm

○ Technique characteristics

- ◎ Taking use of super-high frequency with high effective power.
- ◎ Effective output power (channel power) and bigger interfere radius.
- ◎ Only interfere downlink frequency of mobile system, without disturb normally working of Base Stations.
- ◎ Imported elements: Slow start up design of circuit. These elements can maintain the stable operation condition with high integration. A combination of the Israeli and United states of American Technology. Most sensitive Components imported from Germany, Hungary and Japan.

○ Connect

- ◎ Ten N interfaces, Which are using to connect antenna
- CH1: 20~88MHz;
- CH2: 1805~1880MHz;
- CH3: 88~155MHz;

- CH4: 1930~1990MHz;
- CH5: 300~450MHz;
- CH6: 2400~2483.5MHz;
- CH7: 851~894MHz;
- CH8: 925~960MHz;
- CH9: 1570.42~1580.42MHz;
- CH10: 2110~2170MHz;

- ③ One power supply interface:AC220V IN

System fittings

System fittings consist of block package, panel antenna, antenna connector lines (cable and N connectors) etc. 10 modules are responsible respectively for CDMA, GSM, DCS,WiFi,WLAN, which controls adjustment of output power, power switcher, as well as kinds of alarms(over heating and VSWR) . The next step will provide the function of each fitting in brief.

Antenna

The jammer you bought is made up of jammer and antennas. It contains 10 modules(CH1~CH10) .Each module can adjust power, warning standing wave indicator and warning temperature indicator separately.

- ③ Omni antenna

Frequency: 20~88MHz、 88~155MHz、 300~450MHz (total 3pcs).

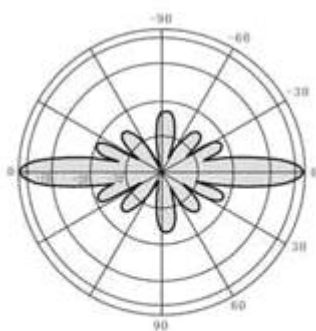
Gain : 3dbi.

Connector type : N type

Photo:



Vertical Ichnography:



Vertical Plane

Frequency Range	20~88MHz	88~155MHz	300~450MHz
Model	TQJ-100-3	TQJ-150-3	TQJ-300/400-3
Input Impedance	50Ω		
VSWR	≤1.8		
Gain	3dBi		
Maximum Power	150W		
Polarization	Vertical Polarization		
PIM	<-107dBm		
Connector Type	7/16 或 N-K		
Lighting Protection	Direct Ground		
Wind Velocity	60(m/s)		
Hold Pole Diameter	φ40(mm)		

◎ **Directional Board antenna**

Frequency : 925~960MHz/1805~1880MHz , 851~894/2110-2170MHz , 1570.42~1580.42/2400~2483.5MHz, 1930~1990MHz (total 7pcs)

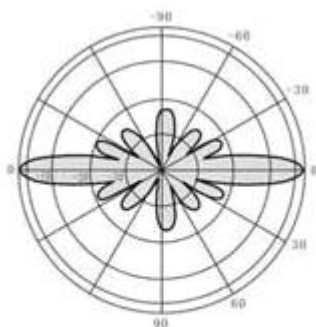
Gain: 12-15dbi

Interface: N type

Photo:



Vertical Ichnography:



Vertical Plane

Frequency Range	851~894 MHz	925~960 MHz	1570.42~1580.42 MHz	1805~1880 MHz	1930~1990 MHz	2110~2170 MHz	2400~2483.5 MHz
Model	ANT-800-2500-12						
Input Impedance	50Ω						
VSWR	≤1.8						
Gain	12dBi						
Maximum Power	150W						
Polarization	Vertical Polarization						
PIM	<-107dBm						
Connector Type	7/16 或 N-K						
Lighting Protection	Direct Ground						
Wind Velocity	60(m/s)						
Hold Pole Diameter	φ40(mm)						

○ **Connector line**



○ **Start Use**

○ **Open the package**

Carefully open the package, keep all package boxes for later shipment.

Check whether any fitting is good or not, if any damage happened, please contact your provider immediately.

○ **Connect system fittings**

Connecting the system fittings, connector lines are used to link the main package equipment with antenna by comparison of the top view. (The antenna must be firstly installed on solid poles)

After connecting the system fittings, a power line is used to electrical outlet at the other end and the other end is put into power socket.(switching on is not allowed before the all antenna have been linked, otherwise the equipment is easy to be damaged.)

WARNING: JAMMER MUST NOT BE CONNECTED TO ELECTRICITY UNLESS ALL ANTENNAS ARE INSTALLED

○ **Switch on your jammer**

○ After all lines (including both connector lines and power line) have been linked.

○ Connect 220V power at the back of main machine

○ Turn on the red switcher "on" position

○ The output power of jammer is maximal in this situation

○ Adjust the small switchers to control output power according to requirement

○ **Switch off your jammer**

○ Turn off the red switcher on "off" position

○ Move away 220V power at the back of main machine

○ Move away panel antenna.

○ The jammer is out of work.

○ **Jamming functions**

○ **According as theoretic**

Wireless communication is effectively completed by ensuring adequacy carrier signal density to a certain noise density during communication. A same frequency distortion signal is used to increase the ratio of carrier signal and noise (Nf) for shutting off the communication between the base station and mobile phone.

The output power of jammer is given, the shield radius in the situation of free space is confirmed according to the receiving signal lever from base station and free space attenuation in pass through. The below is given as a formula of confirming shielding radius and a table of comparison of distance and pass through, based on carrier receiving power from base station, output power of jammer as well as gain of antenna:

$$P_{ch} + G_{at} - L + FAF \geq P_{rx}$$

In the formula:

- Pch** : Minimum of carrier output power of jammer
- Gat** : Gain of antenna
- L** : Attenuation in pass through
- FAF** : Amending Figure of pass through, choosing 6db for 1.8G
- Prx** : Maximum of carrier output power of base station

○ Compare distance with attenuation

$$L_{900} = 32 + 20 \log d + FAF \quad L_{1800} = L_{900} + 6 \quad d \text{ (use meter as unit)}$$

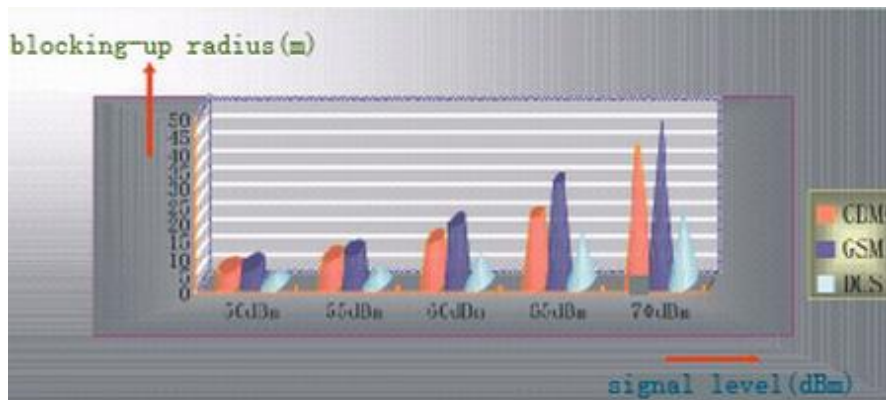
Distance (M)	900MHz Loss (dB)	1800MHz Loss (dB)	Distance (M)	900MHz loss (dB)	1800MHz loss (dB)
1	38	44	4	50	56
2	44	50	5	52	58
3	47	53	6	53	59

Distance (M)	900MHz Loss (dB)	1800MHz Loss (dB) s	Distance (M)	900MHz loss (dB)	1800MHz loss (dB)
7	55	66	40	70	81
8	56	67	45	71	82
9	57	68	50	72	83
10	58	69	60	73	84
15	61	70	70	75	86

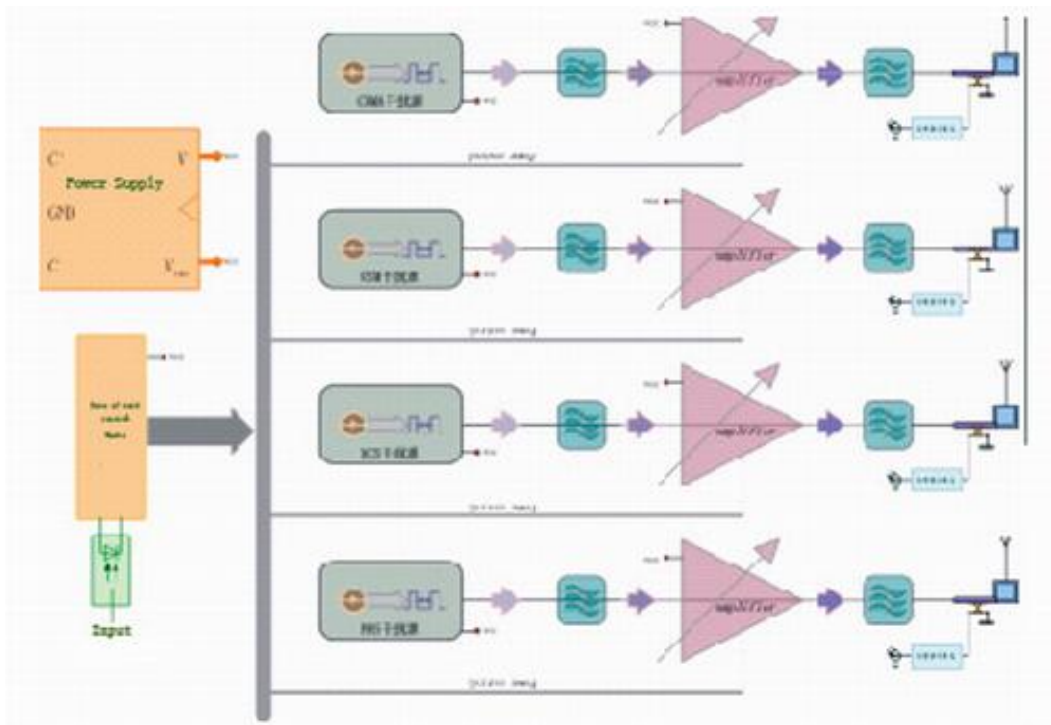
20	64	74	80	76	87
25	66	76	90	77	88
30	67	78	100	78	89
35	69	80	200	84	90

Distance (M)	900MHz Loss (dB)	1800MHz Loss (dB) s	Distance (M)	900MHz loss (dB)	1800MHz loss (dB)
250	86	92	500	92	98
300	87	93	600	93	99
400	90	96	800	96	102
450	91	97	1000	98	104

○ Typically testing records

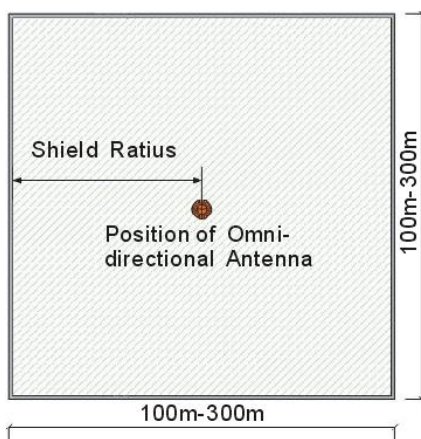


Principle block diagram

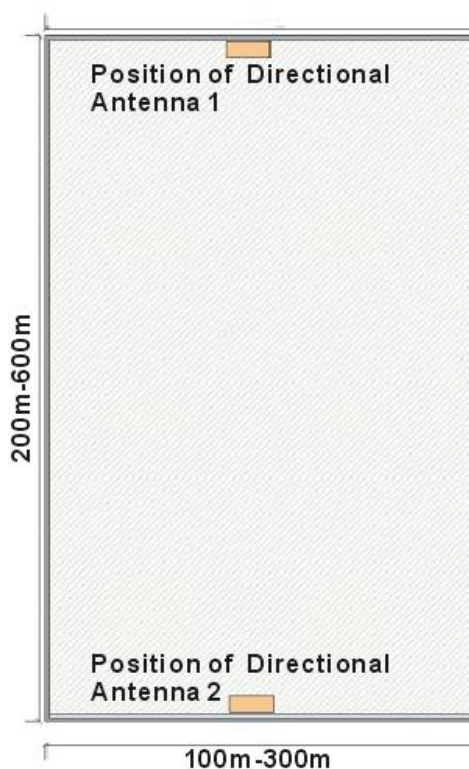


Choosing installation position

1、 Use all omni-directional antenna (in common sense, it is not approve of using) the transmit antenna should be put in the middle of shielding area as below shown.



2、 Use directional antenna, the transmission antenna should be put at the edges of shielding area as below shown.



Notice

- ① Be sure to connect all the antenna before the power supply is switch on. Please do not take off antenna when the machine is working.
- ② Antenna shall be used vertical to the ground, working more efficiently.
- ③ Please don't put the jammer in the water and fire to avoid using in the bad condition of over-wet, over-hot, high voltage and high magnetism.
- ④ If the jammer can not be charged or other unconventionality (the indicator light doesn't light up), please contact with the distributor in local place. Any refit and incorrect repair is not allowed.
- ⑤ Any ruin and disrepair caused by incorrect operation and disassembly will be excluded from the repair with free of charge.

Question and answer

① Does jammer interfere the other electronic equipment to work in normal condition?

No. Because the electromagnetic signal sent by jammer are totally used in the band width and this is regulated by government and just have interception effect to cell phone communication.

② Is jammer harmful to the human body and cell phone?

Please do not need to worry about it. The intensity of electromagnetic signal sent by jammer is in compliance with the national standard of environmental electromagnetic wave health. The signal sent by jammer is relatively small and unharmed to human body according to the testing result. Meanwhile, this device just damage the receiving condition to the cell phone and makes the normal connection between cell phone and base station impossible. Therefore, no damage will occur on cell phone itself.

③ Is there any difference of distance between using jammer indoor and outdoor?

Yes. Generally speaking, outdoor signal is bigger than the indoor signal. Thereby, the shielding effect is worse outdoor. Strictly speaking, whether using indoor or outdoor, the effective distance of interference is related to the surrounding around, for example the distance between different base stations, positions of installation etc.

④ Is the jammer has the same effect to GSM cell phone and CDMA cell phone?

The capacity of anti-interference of CDMA is much better than GSM cell phone. So the interference effect for GSM cell phone is better than CDMA cell phone.

⑤ The shell of jammer will become hot after working for some times. Does the long working time will damage the machine itself?

It is very normal. When designing, we are thought of makin use of the conductivity of metal shell to help the heat sinking during our designing of the Jammer. This way, the machine can be kept in good working condition for long time.