

# Smart Multi Band Jammer User Manual

## Model: PISCES-X



### 1. Network frequency

| Operator | GSM          |                                     | CDMA         |                            | GSM          |                |
|----------|--------------|-------------------------------------|--------------|----------------------------|--------------|----------------|
|          | Network Band | Frequency(MHz)                      | Network Band | Frequency (MHz)            | Network Band | Frequency(MHz) |
| 2G       | GSM          | 934~954                             | CDMA         | 870~880                    | GSM          | 954~960        |
|          | DCS          | 1805~1835                           |              |                            | DCS          | 1835~1850      |
| 3G       | TD-SCDMA     | 1885~1915<br>2010~2025              | CDMA2000     | 870~880                    | WCDMA        | 2130~2145      |
| 4G       | TD-LTE       | 1880~1920<br>2320~2370<br>2575~2635 | FDD-LTE      | 1855 ~ 1875<br>2110 ~ 2125 | FDD-LTE      | 1835~1855      |

## **2. Jammer Introduction**

The system is based on intelligent shielding management and control technology, and in the increasingly complex wireless signal environment, it realizes the green blocking of mobile phone signals, intelligent management and control, also has black and white list functions.

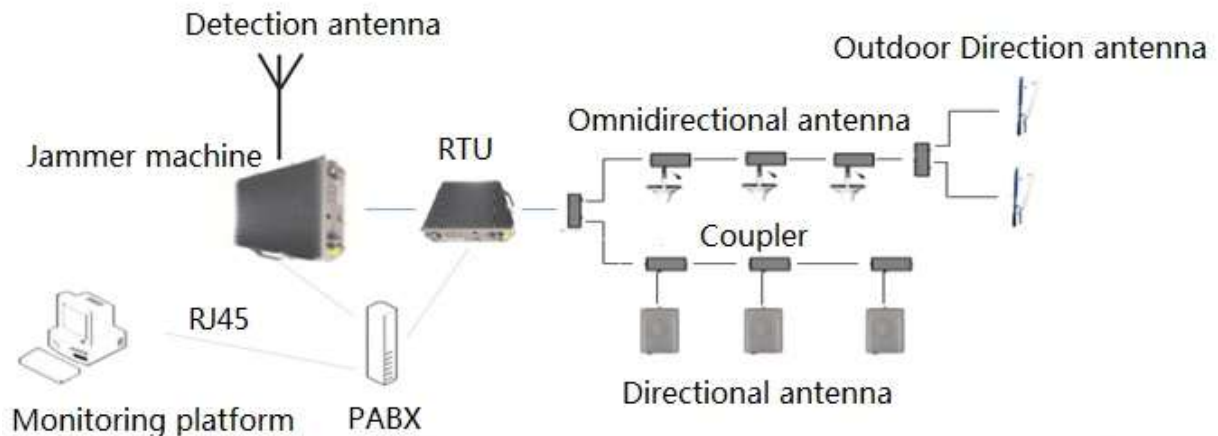
### **2.1 System structure**

The mobile phone signal intelligent shielding management and control system is composed of an intelligent shielding system and a black and white list management and control system. The intelligent shielding system mainly realizes the entire network shielding of mobile 3G&4G, GSM and CDMA network.

The black and white list control system mainly implements the black and white list function of mobile 2G. The white list can realize the call and text messaging functions, and the black list restricts the phone and text messaging functions.

### **2.2 Intelligent shielding system**

It consists of network management platform software, shielding control main equipment and intelligent shielding control remote equipment. RF transmission adopts optical fiber and feeder transmission media. The network management platform adopts TCP/IP protocol and adopts five types of transmission media.



### Application Guide

The network management platform mainly realizes the standardized processing of the collected data, and imports the processed data into the database for storage. Based on the reported information, distinguishing the source of the reported information belongs to a specific network format.

The management platform realizes comprehensive data-based applications, and provides functions such as real-time reporting, historical reporting and query.

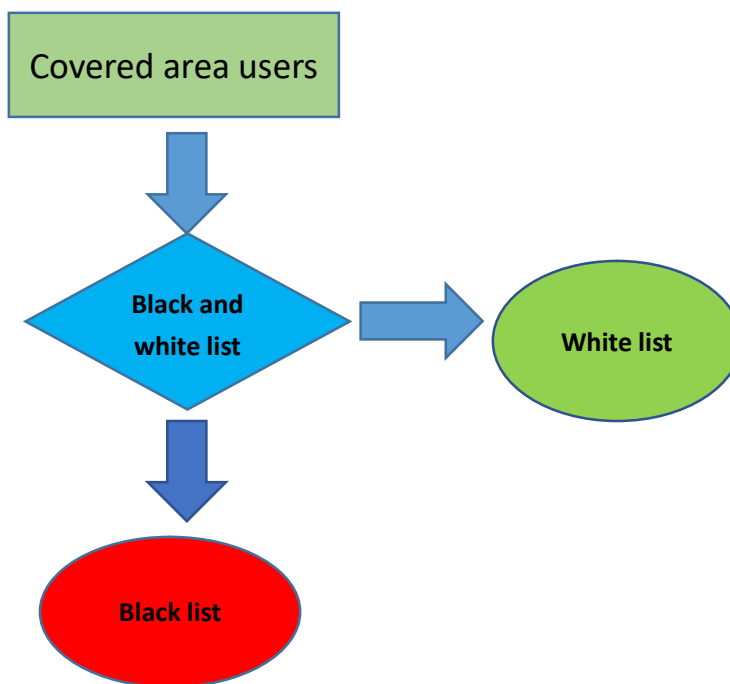
#### The management platform mainly includes the following aspects:

- \* Management of the collection equipment in the foreground
- \* Identity authentication (personnel management)
- \* Authorization management (determine the authority and role of personnel)
- \* Log management (scanning log, alarm log)
- \* Operation parameter management
- \* Time and time synchronization

### 2.3 Black and White List Management System

Mainly realize the standardized processing of the collected data, and import the processed

data into the database to release the white listed users, so that the white list can be used for calls and text messages.



## 2.4 System Parameter

### 2.4.1 Main machine of Smart Jammer

|                              |                                                                                                                                                                                             |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name                         | Smart Control Jammer                                                                                                                                                                        |
| Working frequency            | CDMA: 865-880MHz GSM: 930-960MHz<br>DCS1800+ LTE: 1805-1880MHz TD-F: 1885-1915MHz TD-A: 2010-2025MHz LTE<br>2.1G+WCDMA: 2110-2170MHz TD-LTE 2.3G: 2320-2370MHz TD-LTE 2.6G:<br>2575-2655MHz |
| Max Output<br>(each channel) | $10 \pm 2\text{dBm}$                                                                                                                                                                        |
| Maximum                      | $75 \pm 3\text{dB}$                                                                                                                                                                         |

|                                 |                                          |
|---------------------------------|------------------------------------------|
| gain                            |                                          |
| Gain<br>adjustment<br>range     | $\geq 25\text{dB}$                       |
| Gain<br>adjustment<br>Precision | 1dB-2dB                                  |
| Adaptability                    | Adaptive adjustment of system parameters |

## 2.4.2 RTU of Smart Jammer

| Name                            | RTU of Smart Jammer                                                                                                                                                                        |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Working<br>frequency            | CDMA: 865-880MHz GSM: 930-960MHz DCS1800+LTE:<br>1805-1880MHz TD-F: 1885-1915MHz TD-A: 2010-2025MHz LTE<br>2.1G+WCDMA: 2110-2170MHz TD-LTE 2.3G: 2320-2370MHz TD-LTE 2.6G:<br>2575-2655MHz |
| Max output<br>(each<br>channel) | $37 \pm 2\text{dBm}$                                                                                                                                                                       |
| Max gain                        | $55 \pm 3\text{dB}$                                                                                                                                                                        |
| Gain<br>adjustment<br>range     | $\geq 25\text{dB}$                                                                                                                                                                         |
| Gain                            | 1dB-2dB                                                                                                                                                                                    |

|                         |                                          |
|-------------------------|------------------------------------------|
| adjustment<br>Precision |                                          |
| Adaptability            | Adaptive adjustment of system parameters |
| Power<br>consumption    | $\leq 500\text{W}$                       |
|                         |                                          |

### 2.4.3 Antenna parameter

|                                                 |           |           |           |           |           |             |           |
|-------------------------------------------------|-----------|-----------|-----------|-----------|-----------|-------------|-----------|
|                                                 | Parameter |           |           |           |           |             |           |
| Frequency (MHz)                                 | 880-960   | 1710-1850 | 1885-1915 | 2010-2025 | 2300-2400 | 2400-2483.5 | 2575-2635 |
| Polarization mode                               | V         |           |           |           |           |             |           |
| Gain <sup>a</sup> (dBi)                         | ≥2        | ≥3        | ≥3.5      | ≥4        | ≥4        | ≥4.5        | ≥4.5      |
| Circularity <sup>b</sup> (dB)                   | ±0.5      | ±1        | ±1        | ±1        | ±1        | ±1          | ±1        |
| Vertical half power beam width <sup>c</sup> (°) | 85        | 55        | 55        | 55        | 55        | 55          | 45        |
| Voltage standing wave ratio                     | ≤1.5      |           |           |           |           |             |           |
| Power tolerance (W)                             | ≥50       |           |           |           |           |             |           |
| Intermodulation <sup>d</sup> (dBm)              | ≤-85      | ≤-85      | /         |           |           |             |           |
| Interface                                       | N-Female  |           |           |           |           |             |           |
| working environment                             | -30℃～+45℃ |           |           |           |           |             |           |
| Storage environment                             | -40℃～+55℃ |           |           |           |           |             |           |



## 2.5 Intelligent shielding system software monitoring platform function

### Function 1: Time-sharing control

According to the actual needs of the site, the jammer can be controlled through the software platform.

| <div> <div>打开 合并 刷新</div> <div> <div>站址信息</div> <div>北京市</div> <div>北京市</div> <div>屏蔽器</div> </div> </div>   |           |          |          |    |                     |
|--------------------------------------------------------------------------------------------------------------|-----------|----------|----------|----|---------------------|
| 位置: 系统配置 > 设备参数操作 - 01010001 00                                                                              |           |          |          |    |                     |
| <div> <div>告警状态</div> <div>告警使用</div> <div>设备信息</div> <div>网管参数</div> <div>设置参数</div> <div>实时采样</div> </div> |           |          |          |    |                     |
| <input type="checkbox"/>                                                                                     | 参数名称      | 本地值      | 远程值      | 单位 | 最后更新时间              |
| <input type="checkbox"/>                                                                                     | 开启时间1     | 08:00:00 | 08:00:00 |    | 2018-10-12 13:39:06 |
| <input type="checkbox"/>                                                                                     | 关闭时间1     | 08:45:00 | 08:45:00 |    | 2018-10-12 13:39:06 |
| <input type="checkbox"/>                                                                                     | 开启时间2     | 09:00:00 | 09:00:00 |    | 2018-10-12 13:39:06 |
| <input type="checkbox"/>                                                                                     | 关闭时间2     | 09:45:00 | 09:45:00 |    | 2018-10-12 13:39:06 |
| <input type="checkbox"/>                                                                                     | 开启时间3     | 10:00:00 | 10:00:00 |    | 2018-10-12 13:39:06 |
| <input type="checkbox"/>                                                                                     | 关闭时间3     | 10:45:00 | 10:45:00 |    | 2018-10-12 13:39:06 |
| <input type="checkbox"/>                                                                                     | 开启时间4     | 14:00:00 | 14:00:00 |    | 2018-10-12 13:39:06 |
| <input type="checkbox"/>                                                                                     | 关闭时间4     | 14:45:00 | 14:45:00 |    | 2018-10-12 13:39:06 |
| <input type="checkbox"/>                                                                                     | 开启时间5     | 15:00:00 | 15:00:00 |    | 2018-10-12 13:39:06 |
| <input type="checkbox"/>                                                                                     | 关闭时间5     | 15:45:00 | 15:45:00 |    | 2018-10-12 13:39:06 |
| <input type="checkbox"/>                                                                                     | GSM下行衰减值  | 31       | 31       | dB | 2018-10-12 13:39:06 |
| <input type="checkbox"/>                                                                                     | 1.8G下行衰减值 | 31       | 31       | dB | 2018-10-12 13:39:06 |
| <input type="checkbox"/>                                                                                     | CDMA下行衰减值 | 31       | 31       | dB | 2018-10-12 13:39:06 |

## Time-sharing control

### Function 2: Equipment alarm

Alarm monitoring can be performed on each jammer through the system management platform.

位置: 报警管理 > 当前设备报警

设备名称  报警信息  开始时间  结束时间

| 设备名称 | 站点编号     | 设备编号 | IP            | 位置信息 | 报警内容          | 报警级别 | 报警次数 | 报警时间                    |
|------|----------|------|---------------|------|---------------|------|------|-------------------------|
| 屏蔽器  | 01010001 | 00   | 192.168.7.222 |      | 1.8G下行输入欠功率报警 | 一般报警 | 1    | 2018-10-12 13:38:54.908 |
| 屏蔽器  | 01010001 | 00   | 192.168.7.222 |      | GSM下行输入欠功率报警  | 一般报警 | 1    | 2018-10-12 13:38:54.877 |

共2条记录, 当前显示第 1/1 页

## System alarm

### Function 3: Log function

Through the system management platform, you can view the alarm records of each blocker.

位置: 系统配置 > 设备参数操作 - 01010001 00

| <input type="checkbox"/> | 参数名称          | 本地值 | 远程值 | 最后更新时间              |
|--------------------------|---------------|-----|-----|---------------------|
| <input type="checkbox"/> | GSM下行输入过功率报警  | 正常  | 正常  | 2018-10-12 13:39:05 |
| <input type="checkbox"/> | GSM下行输入欠功率报警  | 报警  | 报警  | 2018-10-12 13:39:05 |
| <input type="checkbox"/> | 1.8G下行输入过功率报警 | 正常  | 正常  | 2018-10-12 13:39:05 |
| <input type="checkbox"/> | 1.8G下行输入欠功率报警 | 报警  | 报警  | 2018-10-12 13:39:05 |
| <input type="checkbox"/> | CDMA下行输入过功率报警 | 正常  | 正常  | 2018-10-12 13:39:05 |
| <input type="checkbox"/> | CDMA下行输入欠功率报警 | 正常  | 正常  | 2018-10-12 13:39:06 |
| <input type="checkbox"/> | 2.1G下行输入过功率报警 | 正常  | 正常  | 2018-10-12 13:39:06 |
| <input type="checkbox"/> | 2.1G下行输入欠功率报警 | 正常  | 正常  | 2018-10-12 13:39:06 |
| <input type="checkbox"/> | TD-A下行输入过功率报警 | 正常  | 正常  | 2018-10-12 13:39:06 |
| <input type="checkbox"/> | TD-A下行输入欠功率报警 | 正常  | 正常  | 2018-10-12 13:39:06 |

## Log management

### Function 4: unified management

A new shield can be added through the system management platform to realize the remote centralized management of the equipment by the system.

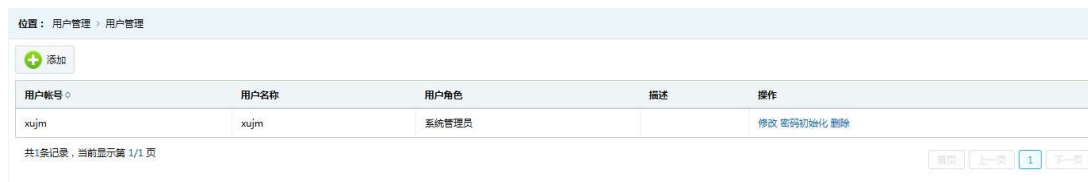




## Remote management

### Function 5: user management

Through the system management platform, the management authority of different personnel can be set



## User Management

## 2.6 Black and white list control equipment platform software

### 1. Equipment Management



## 2. Black and white list management (black and white list);

XXX站点 (手机信号管控)

GSM管控

CDMA管控

站点名称: 站 点ID: 站点类型:

电源状态: CPU状态: 射频输出: 射频状态:

位移状态: 内存状态: 射频驻波: 程序版本:

其他告警: 存储状态: 设备温度: 上报时间:

重启 开射频 关射频 开功放 关功放 查询 设置

工作参数 扫描参数 管控名单 传输参数 告警使用 入网短信

| 序号 | IMSI | 关注名称 | 删除操作 | 更新时间 |
|----|------|------|------|------|
|----|------|------|------|------|

刷新 添加 删除

For more information, please contact Us:

Skype: kevin\_yin04

WhatsApp: +1 (947)622-2364

[sales@thespysolution.com](mailto:sales@thespysolution.com)

[www.thespysolution.com](http://www.thespysolution.com)