



BS - Catch Cellular Bug Catcher March 2010



GENERAL DESCRIPTION

The **BS-CATCH - Cellular Bug Catcher** is a powerful tool that helps the TSCM (Technical Surveillance Counter Measure) team to detect within a period of less than 10 minutes the existence of GSM bugging devices.

The CDB is a portable, easy to operate IMSI/IMEI catcher which is specially designed for the TSCM operation.

The **BS-CATCH** is used mainly to detect and identity any concealed bug detection devices that use an internal GSM transmitter. The system identifies the GSM based bugging device from their IMSI or IMEI number, detects its location and is also capable to block its operation.

The Principle of the **BS-CATCH** lies on a simulation of a GSM Base Station inspired by stations of a real network. It allows acquisition of all GSM Mobile Stations in the range of the **BS-CATCH** BTS. The user can define whether to locate the bugging device or to block it. The operator can modify the covered area by changing the transmitted power up to 0.2 watts. The coverage area is up to 50 meters inside an office building and within an individual floor.

The **BS-CATCH** operates in the 900 MHz and 1800 MHz bands. It employs a unique technology whereby it captures the mobile handset from a long distance, but with very low power.

The **BS-CATCH** is a compact, lightweight and easily transportable device. An internal rechargeable battery allows 2 hours of continuous operation. An external power input is available to connect 90-230 VAC and 12 VDC.

OPERATION

The system performs the following functions:

- 1. BTS scan
- 2. IMSI/IMEI extraction
- 3. Silent activation
- 4. Blocking/jamming

BTS scan:

To improve the performance of the equipments processing time, a complex cloning algorithm enables the unit to select the best BTS to be cloned. The **BS-CATCH** captures the information that is broadcast on the GSM network: MCC, MNC, LAC, Cell Identification, ARFCN, POWER level, BA neighbored cell list and more.

The Cell list information is presented to the operator but is mainly used to automatically select (or can be modified manually) the cloned BTS channel.



Next, the **BS-CATCH** emulates a BTS that forces the mobile bugging devices to introduce themselves. The system captures the IMSI/IMEI presence verification and some other useful information about the bugging unit.

Along with the IMSI information, the system also presents the reception level which indicates the distance of the element from the **BS-CATCH** unit.

Silent activation:

The **BS-CATCH** can also be used to detect the location of the device by silently activating a target and determining it location by working together with a GSM Direction Finder or GSM Homing device.

Blocking Jamming:

After the unit identifies the bugging device, the operator of the **BS-CATCH** can jam/block the hidden devices from operating. The operation of the bugging device will be disabled until its power is reset.

Specifications:

	Spec
No of Channels	1
Freq bands	Dual band - GSM 900Mhz
	and DCS 1800Mhz
Housing	Pelican case model
Control	Notebook 10
communication	USB connection
Power	220 VAC and 12 VDC
Batteries	2 hours operation
Power	200 mw
Antennas	External Omni directional
	Optional external directional
	antennas also available
Operational distance	50 meter radius
Operational temperature	0°C - 40°C
Scanning BTS	
information	•
IMSI /IMEI display	V
Locate target – silent	
activation	•
Block target phone	V
Maintain operators	
LOGIN password	,