

MDS4002

MULTI DETECTION SYSTEM



The MDS4002 is the latest in the MDS series of counter-surveillance systems. This is a system for the serious security professional. It offers an approachable, menu-driven toolkit and a range of probes to track down even the most sophisticated surveillance devices.

It can detect the low power transmitters designed to evade less sensitive detection systems. It can also alert the operator to the latest generation of burst transmitters.

An understanding of the RF near-field will be the main focus of the sweep operation and to that end the design uses controlled filtering, amplification and other techniques.

The system is automatically reconfigured as each probe is connected. The operator can, therefore, without having to key in any parameters relating to the chosen probe, concentrate on the search operation itself.

For the long term protection of 'safe rooms' the procedure is straightforward: following any routine sweep operation the MDS4002 can be set up on a permanent or semi-permanent basis to guard the RF space and log intrusions.

RF PROBE



The RF probe is designed to detect room, telephone and tracking transmitters.

SPECIFICATIONS:

POWER:

supplied by main unit

CONTROLS:

sensitivity knob

FREQUENCY RESPONSE:

10MHz – 6GHz

OUTPUT:

BNC, 50ohm socket
(1.5metre lead connection to main unit)

ANTENNA:

6-segment whip, type active

SIZE:

120 x 60 x 30mm

CAMERA/MAINS CARRIER PROBE



Devices using the mains ring as a transmission medium can be detected when using the camera/mains carrier probe. Hidden cameras are also detected.

SPECIFICATIONS:

POWER:

supplied by main unit

INDICATORS:

camera selection
mains carrier selection

FREQUENCY RANGE:

10kHz – 700kHz

OUTPUT:

5-pin socket

ANTENNA:

permanently attached VLF loop

SIZE:

120 x 60 x 30mm

CONTROLS:

camera detection selection switch
mains carrier detection selection switch
tuning knob

MICROPHONE PROBE



Hardwired microphone systems are difficult to detect. They are not transmitting devices and therefore, there is no RF leakage. Also, the distance between the microphone and the processing unit may be several miles. This is a favoured method of long-term eavesdropping. The microphone probe detects both active and non-active microphones.

SPECIFICATIONS:

POWER:

supplied by main unit

CONTROLS:

normal/reverse microphone polarity selection
switch line on/off selection switch

OUTPUT:

5-pin socket

INDICATORS:

normal microphone polarity selection
reverse microphone polarity selection
line on selection
line off selection

SIZE:

120 x 60 x 30mm

TELEPHONE ANALYSER PROBE



Specifically for checking telephone lines is the telephone analyzer probe. A direct connection is made between the telephone line and the MDS4002 so that transmitters, current carrier devices and modifications to the line or the telephone can be found.

SPECIFICATIONS:

POWER:

supplied by main unit

CONTROLS:

RF /telephone line audio selection switch

INDICATORS:

RF selection
audio selection

INPUT:

FCC telephone socket

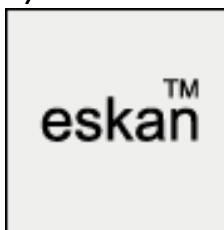
OUTPUT:

5-pin / BNC sockets

SIZE:

120 x 60 x 30mm

LASER/INFRA-RED PROBE



The IR probe is designed to detect laser transmitters and devices operating in infrared frequencies.

SPECIFICATIONS:

POWER:	supplied by main unit
FIELD OF VIEW:	50 degrees
IR WAVELENGTH BANDPASSED:	725 - 1150nm
HALF-POWER ANGULAR RESPONSE:	48 degrees
SPECTRAL RESPONSE:	940nm (infra-red)
OUTPUT:	5-pin socket
SIZE:	90 x 50 x 30mm

REMOTE MONITORING UNIT



In order to log activity between sweep operations the remote monitoring unit can be discretely positioned on a desk or in a drawer somewhere to alert the operator to eavesdropping devices introduced into the protected space.

SPECIFICATIONS:

POWER:	supplied by main unit	INDICATORS:	silent LED
			audio LED
CONTROLS:			vibration LED
silent switch			reset LED
audio switch			
vibration switch		SIZE:	120 x 60 x 30mm
reset switch			

MAIN UNIT SPECIFICATIONS:

DETECTION CAPABILITY:

all types of transmitters including AM, WFM, NFM, sub-carrier, carrier only, single side band, double side band and suppressed carrier. Also scrambled, burst, frequency hopping and other spread spectrum types

FREQUENCY RANGE:

10kHz - 6GHz

RF RECEIVER TYPE:

single conversation super heterodyne, harmonics local oscillator

DYNAMIC RANGE:

typically greater than 80dB

DEMODULATORS:

AM, WFM, NFM and SC

ATTENUATORS:

0, -30dB at active whip

SENSITIVITY:

-60dBm

TUNING METHODS:

manual tuning
automatic, to strongest signal

TONE FREQUENCY:

1 - 1.5kHz

CONTROLS:

on/off switch
LCD control switches:
menu switch
next switch
select switch
manual tuning knob
volume control knob

INDICATORS:

power on
LCD display
manual tuning
probe connection

INPUTS:

RF:
BNC, 50ohm

PROBES:

5-pin
AC: 3-pin mains socket
DC: 2.1mm 12VDC socket

OUTPUT:

3.5mm stereo headphone socket
internal speaker (audio): 8ohm, 300mW
internal speaker (tone): 8ohm, 400mW

AC POWER SUPPLY:

110V, or 220 to 240VAC, internal selection

DC POWER SUPPLY:

12VDC external
12VDC internal rechargeable battery

INTERNAL BATTERY:

constant current charging
7 hours operating time typically

ACCESSORIES:

carrying case
mains lead
headphones
test transmitter
telephone connecting lead (1m)
BNC to BNC lead (1.2m)

MAIN UNIT SIZE:

250 x 240 x 65mm

FULL SYSTEM WEIGHT:

8kg