



TSE 3525 Computer Screening Jammer



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COMPUTER SECURITY EQUIPMENT - DATA DEFENDER

GENERAL DESCRIPTION



The compromising electro-magnetic radiation, which is emitted when working with computers, makes it possible for unauthorized reproduction of the monitor picture and the siphoning off of data.



There are various possibilities available to protect against from an unauthorized attack on the compromising electro-magnetic emissions:

1. Tempest Computer

In this case a modified computer emits no compromising radiation, Because so few are manufactured, these devices are very expensive. Also, their compatibility with other systems is often restricted.

2. Shielded Rooms

This form of protection has the advantage that standard PC systems can be used. The disadvantage of this form of protection is its high cost. In addition flexible use of the computer is not possible.

3. Protection Device

A protection device works by superimposing jamming signals and is suitable for any PC that is connected to a monitor via an external line. The computer can be used "bug proofed" in any position.

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PROTECTION DEVICE DEFENDER

In contrast to other versions of protection devices that generate broad band noise that is superimposed on the video signal, the Defender detects only the computer system's pixel frequency information, and sends out a narrow band noise on this frequency. The pixel frequency depends on the computer system being used and is between 20 and 80 MHz and has the highest amplitude in this range.

A microprocessor controlled spectrum analyzer searches for the pixel frequency. The pixel frequency you are interested in is scanned and the voltages of the single frequencies are assessed and saved. Furthermore the frequency of the horizontal synchronization line is obtained and the possible pixel frequencies are calculated.

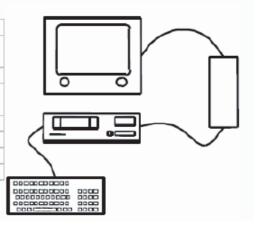
A noise generator is clocked at the output of the protection device at the determined frequency. This type of noise generator is a narrow band and can always be switched automatically to the last found frequency.

USE OF THE PROTECTION DEVICE DEFENDER

The Defender is suitable for any computer that is connected to a monitor via an external line. The connection of the Defender is effected by the installation of the VGA cable from the graphic card to the monitor via the protection device

TECHNICAL DATA

Scanning Frequency:	20 - 80 MHz
Connections:	VGA-Input (SubD 15-pin)
	VGA-Input (SubD 15-pin)
Indicators:	Power LED
	Sync. LED
	Error LED
Power Supply:	5 V DC (via mains power pack)
Power Consumption:	Approx. 700 mA
Dimensions :	110 x 35 x 185 mm
Weight:	500 g



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