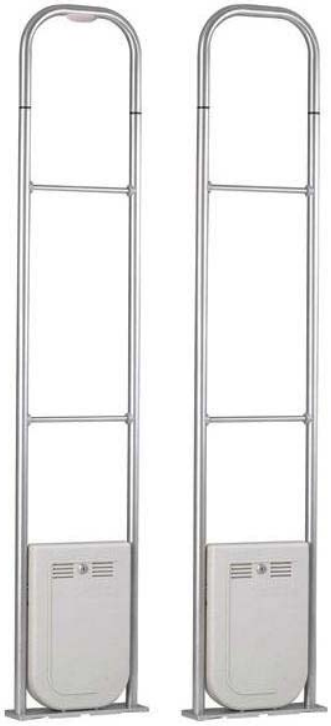

Installation Manual for EG2233/EG3333/EG8406/EG3355/EG3388 RF EAS Systems

- DSP system with proprietary software incorporating RF/ADD.
- EG2233 classic. EG3333 ABS, EG8404 chrome and ABS, EG3355/3388 acrylic
- Automatic analysis of noise and interference ensuring high pick rate and fast response time.
- Digital system with auto-testing mode to ease tuning and installation.
- Environmental friendly with low power usage.

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19-20 Connaught Road Central
Hong Kong

Simplify Installation and Set-up Procedures

(Tx2300 Transmitter and Rx4300 Receiver)

Detection distance

Distance / Labels/tags	Suggested	Maximum
40×40mm labels	1.0m	**1.2m**
Tags（Q≥220）	1.6m	**1.8m**

Transmitter Antenna Tx 2300（Refer to figure 5）

Normally no tuning required.

Technical Data:

Operating voltage……. DC 24V
Operating current……. < 450mA
Fuse…… 250V, 500mA
Sweeping frequencies…..…. 7.6~8.2MHz
Modulation frequency..180Hz, 172Hz, 160Hz or 150Hz (factory setting at 180Hz)

Adjusting Modulation Frequency

The modulation frequency is preset at the factory at 180Hz.
Adjusting the setting at JP5, JP6, JP7 and JP8 will change the modulation frequency.

	Disconnected	Connected
180Hz	**JP5, JP6, JP8**	**JP7**
172Hz	**JP5, JP7, JP8**	**JP6**
160Hz	**JP6, JP7, JP8**	**JP5**
150Hz	**JP5, JP6, JP7**	**JP8**

For systems to operate, the Modulation Frequency of the Tx and Rx must be the same.

Multiple connections

Non-synchronization

If there are two or more groups of antennae which are 10m away from each other, and synchronization is not suitable, it is necessary to change the modulation frequency of one group from another to avoid interference between systems, i.e. one set of transmitters at 180Hz and while another set at 160Hz（or 150Hz or 172Hz）. For example, in figure 1 and 4 if the two sets of systems are over 10m apart, setting two different modulation frequency for the two groups would be sufficient. However, for the set up in figure 2 and 3 , synchronization would be necessary (see section on Synchronization below).

Figure 1

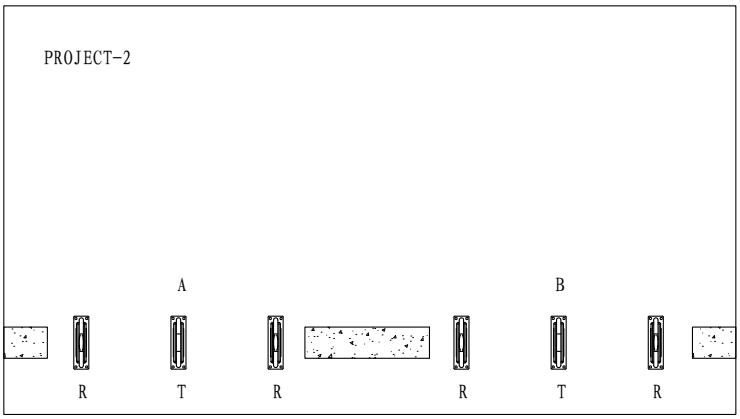


Figure 2

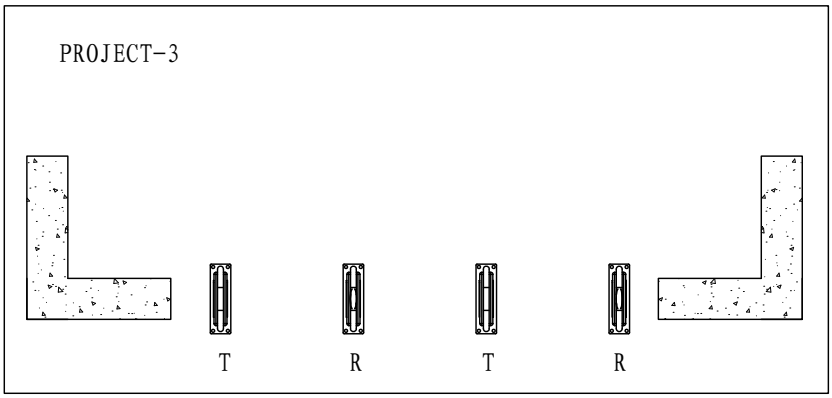


Figure 3

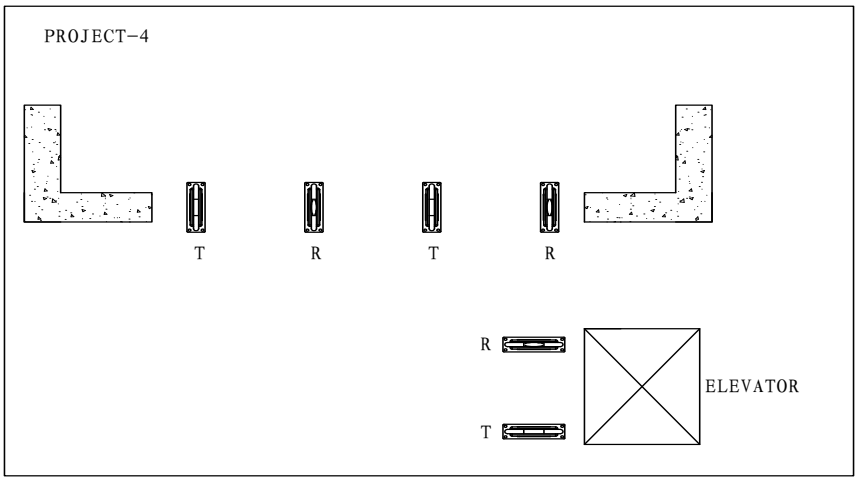
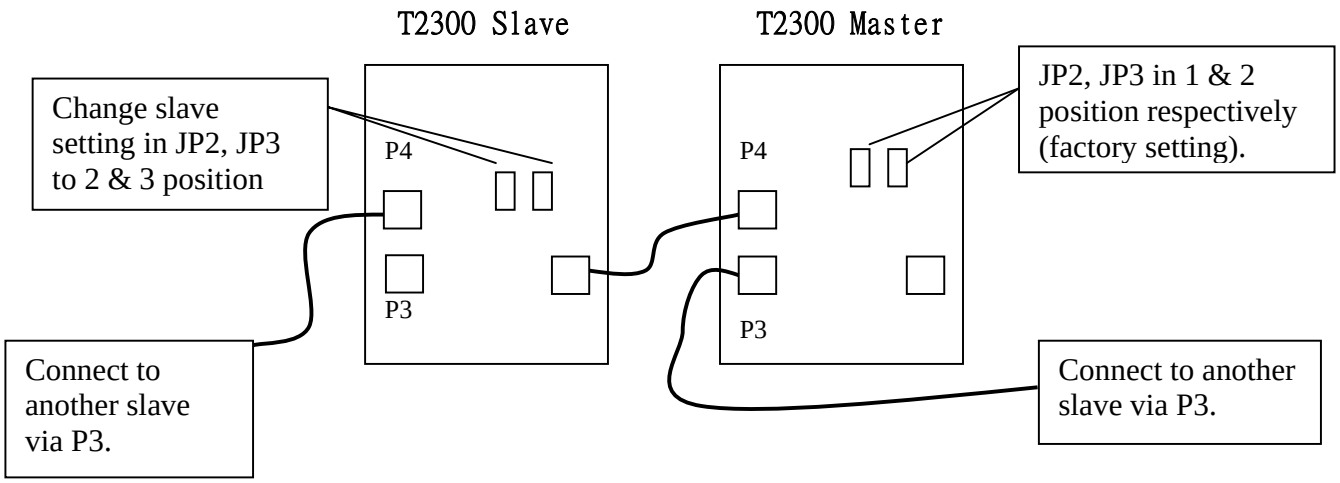


Figure 4

Multiple connections

Synchronization



Sweep freq. tuning

Put EAS detector above transmitter, press "power" to detect:

Fc: read 7.6~8.2MHz (VR15 for tuning);

Fs: should read 180Hz when JP7 is connected;

Δ: should read 1000±50KHz (VR14 for tuning).

Receiver antenna Rx 4300（Refer to figure 6）

Technical Data:

Operating voltage…..……. DC 24V

Operating current, stand-by…… < 300mA

Operating current, operating….. < 400mA

Fuse…… 250V, 500mA

Slide switches setting

RF Labels and Hard Tags Selector	**Labels and Hard tags (factory setting)**	**Hard tags only**		
SW1-1	ON	OFF		
Modulation Frequency	180Hz**(factory setting)**	172Hz	160Hz	150Hz
SW1-2	ON	On	OFF	OFF
SW1-3	ON	OFF	ON	OFF
The modulation frequency in the Receiver Antenna must be the same as that in the Transmitter Antenna.				
Sensitivity Level	***Highest (factory setting)***	***High***	***Medium***	***Low***
SW1-4	ON	OFF	ON	OFF
SW1-5	ON	ON	OFF	OFF
Detecting Moving and Stationery tags	**Detect both moving and stationery tags**	**Detect moving tags only**		

	(factory setting)			
SW1-6	ON	OFF		
Note: once changes are made to either Tx Board or Rx Board, must press "RESET1" button on the Rx Board so that the systems will reboot itself.				

Noise signal tuning

The light DS1, DS2 and DS3 indicate the conditions of the operation:

i. **If they do not lit up, this means perfect condition (no noise).**

ii. If only DS1 lit up, the condition is good.

iii. If both DS1 and DS2 lit up, the condition is fair and the system can still operate effectively.

iv. If all DS1, DS2 and DS3 lit up, there is much interference and will need to identify source of interference in order to find a viable solution.

Timing of Alarm and Warning Light

Adjust VR2 (clockwise to extend, anti-clockwise to reduce) for alarm and light on time varying 1~4 seconds.

JP3	**1&2**	**Alarm and light on/off simultaneously**
JP3	**2&3**	**Light will remain on for 2~3 seconds after alarm**

Figure 5 **~T2300 Transmitter**

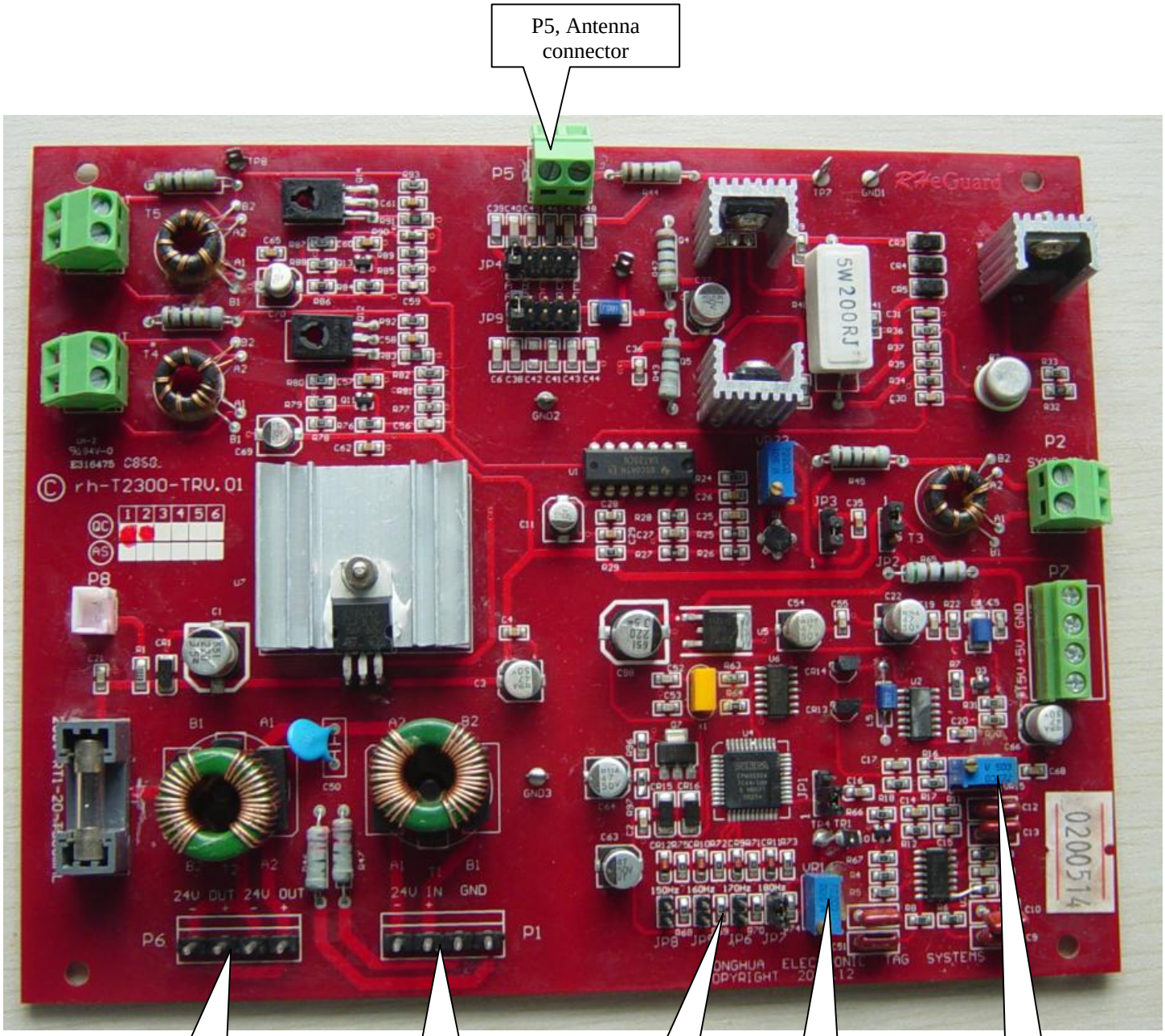
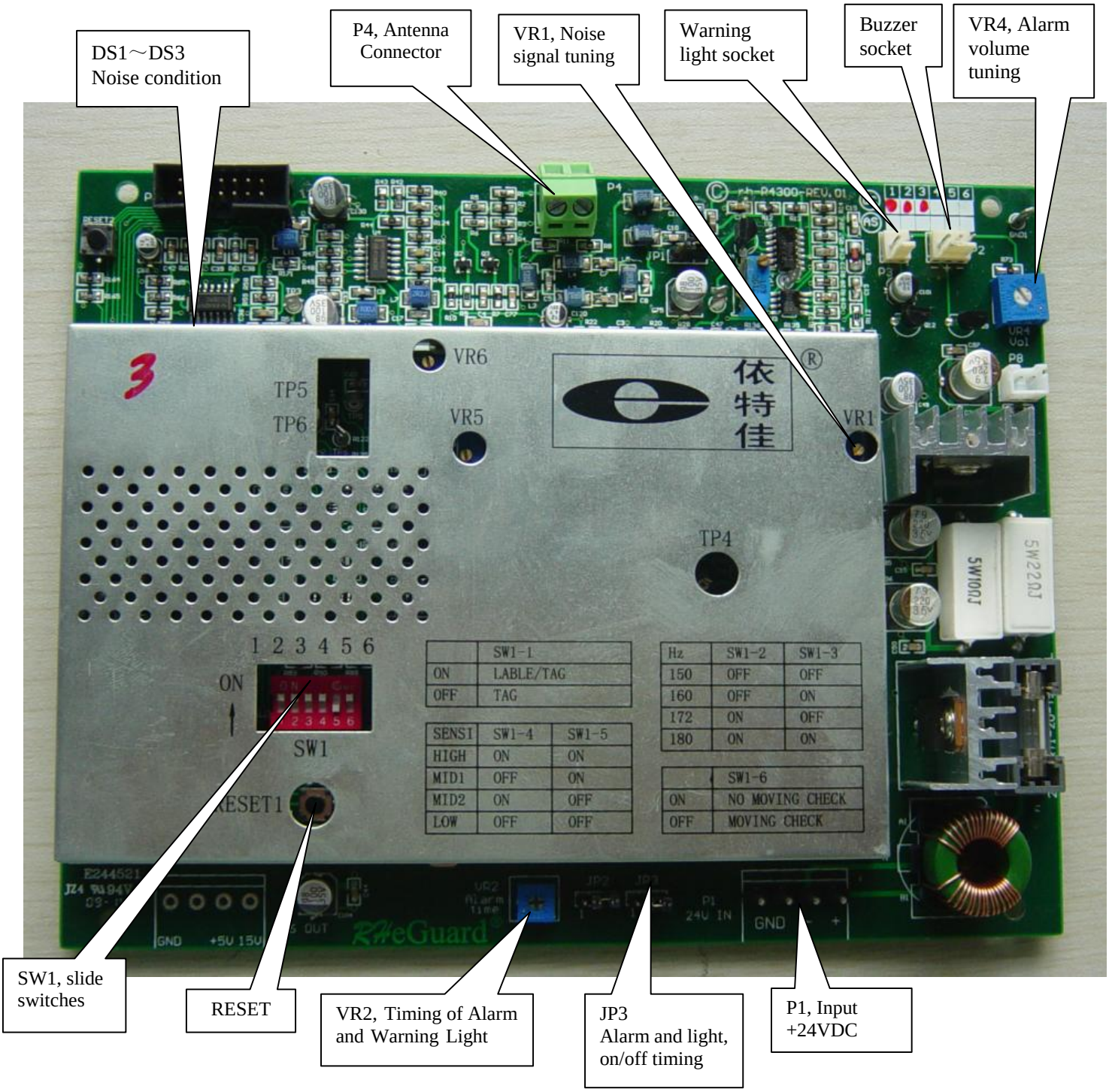


Figure 6 **~R4300 Receiver**



	SW1-1
ON	LABLE/TAG
OFF	TAG

SENSI	SW1-4	SW1-5
HIGH	ON	ON
MID1	OFF	ON
MID2	ON	OFF
LOW	OFF	OFF

Hz	SW1-2	SW1-3
150	OFF	OFF
160	OFF	ON
172	ON	OFF
180	ON	ON

	SW1-6
ON	NO MOVING CHECK
OFF	MOVING CHECK

Trouble shooting – High Interference

If there were high interference, the system will shut itself off to avoid false alarm. To ensure the system will operate well, must try and eliminate obvious cause of interference. Then, follow the below instructions:-

1. **In Tx, adjust VR14 until Sw reads 700 ~ 750.**
2. **In Rx, change jumper in JP1, moving one slot to the right i.e. from position 1/2 to 2/3. This is the case when there is high noise interference and detection distance is more than 1.5m.**
3. **In Rx, change jumper in JP2, moving one slot left i.e. from position 2/3 to ½. This is to eliminate the self-locking function at high noise interference.**
4. **In Rx, adjust VR1 until only DS1 light flashes.**
5. **In Rx, select SW1-4 to ON and SW1-5 to OFF.**
6. **Press RESET.**

If there is large metal objects close-by, may see if grounding it to the Rx antenna base labeled GND at P1 (connecting with wire) will improve interference. If no improvement, remove this grounding.

The above adjustment is only suitable for hard tags use only and not for labels. The parameters for labels are weaker thus with the above adjustments, unless the labels are very made, detection would be poor.

Attention!

The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. In cases where the manual is provided only in a form other than paper, such as on a computer disk or over the Internet, the information required by this section may be included in the manual in that alternative form, provided the user can reasonably be expected to have the capability to access information in that form.