



**58Khz
Floor Guard
With Control Box
Installation Manual**

Version: 2012

Manual Part Number: WG BTLFG IM

(120203A)

WG SECURITY PRODUCTS INC.

3031 Tisch Way, Suite 602, San Jose, CA 95128 (USA)
<http://www.wgspi.com>

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FCC ID: P9I-WGBTLFG

“This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.”

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the Federal Communications Commission (FCC) rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The use of a shielded-type power cord is required in order to meet FCC emission limits and to prevent interference to the nearby radio and television reception. It is essential that only the supplied power cord be used. Use only shielded cables to connect I/O devices to this equipment. You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

Note:

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

RF exposure warning

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter

Technical Support Contact Information	
North America South America	Tel: 949-545-6005 Toll Free: 888-633-5095 Fax: 949-545-6011 Email: service@wgsapi.com
Rest of World	Tel: 4+49 8654 7715-21 Fax: 4+49 8654 7715-21 Email: support-ROW@wgsapi.com

CRITICAL NOTE

As specified by FCC Regulations 15.21, any changes or modifications not expressly approved by the party responsible for compliance of this equipment, will void the user's permission and authority to operate this equipment.

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OVERVIEW

System Overview

Floor-Guard systems consist of one sealed floor antenna, a 58khz control unit and a smart power supply unit (WG SPS-24). The control unit provides all the control functions for the transceiver, including tag detection and alarm notification. The floor antenna is fully sealed and water-proof and can be buried in concrete or cement floor.



Floor Antenna
(with ferrite antennas)
WG-



Floor Guard Control Unit
WG-



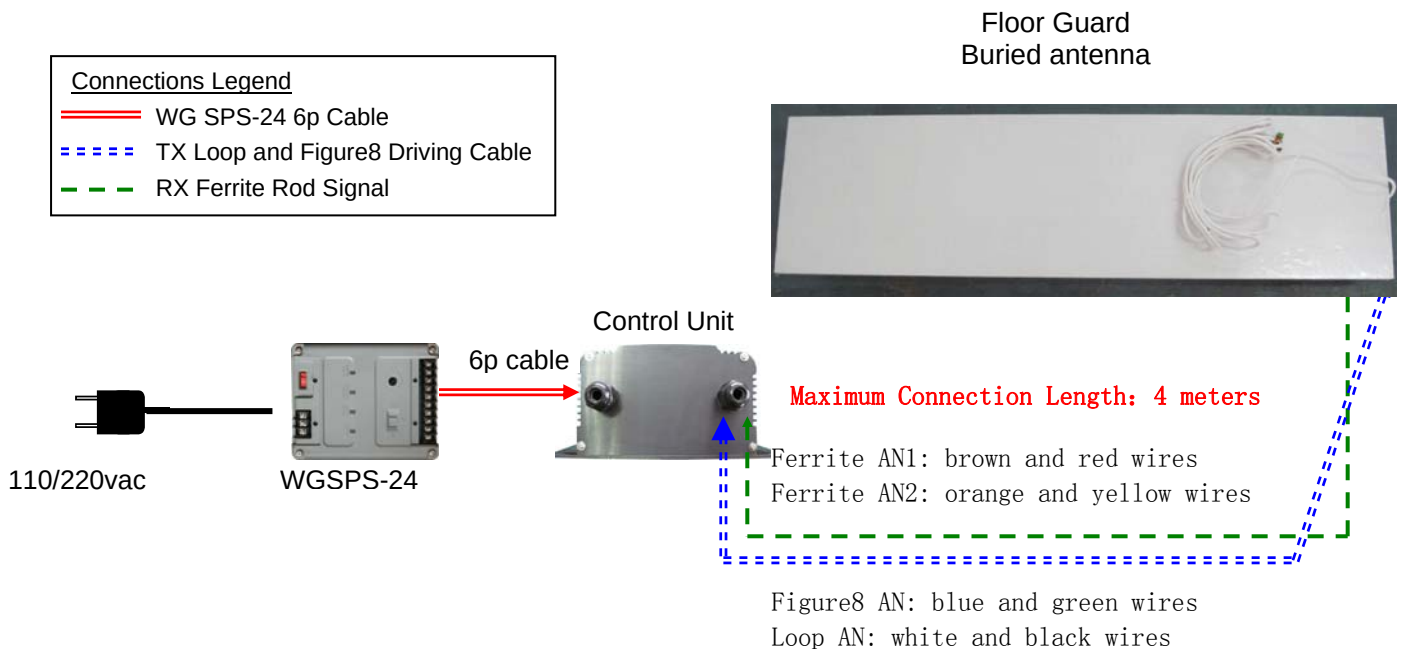
24vac Stepdown Transformer
WG SPS-24

Detection Range (up from floor)

	Europe	USA
Super Pencil Tag	0.9 m	3 ft

System Configuration

The PLCU controls the transceiver through the TX control cable. All detection information is received through the RX cable. The Transformer power box powers the PLCU and transceiver through two separate cables. The following diagram illustrates the connections.



Floor Guard Features & Benefits

- **Ultra Thin Antenna Design**
The ultra thin antenna less than 1 inch thickness can make the floor antenna easily buried into the concrete floor in many multi floors shopping mall environment.
- **Digital Signal Processing**
The Premier Guard applies the latest and most advanced DSP technology for anti-theft solutions, virtually eliminating false alarms while maintaining considerable detection range.
- **Integrated Audible and Visual Notification**
Alarm notification is built into the Premier Guard on both the pedestal and controller.

Specifications

Electrical

Primary Input (Stepdown Transformer)	230/115 $\pm 10\%$ @50/60Hz (Input) 26vac @ 4A (Output)
Pedestal Input	26vac @50/60Hz
Control Unit Input	26vac @50/60Hz
Control Unit Rated Current	1.8A @ 26vac
(The rated current data is given at driving 1500X400mm Floor Guard Antenna)	
Transmitter Output	1.6ms Burst
Operating Frequency	58Khz

Mechanical

Floor Guard Antenna

Length	1500mm (59")
Width	400mm (15.7")
Thickness	25mm (1.0")
Weight	15Kg (33.1lbs)

Floor Guard Control Unit

Length	302mm (11.9")
Width	210mm (8.3")
Height	97mm (3.8")
Weight	2.8Kg (6.2lbs)

WG SPS-24 Smart Power Supply

Height	80mm (3.15")
Width	110mm (4.33")
Thickness	140mm (5.5")
Weight	3 Kg (6.6 lbs)

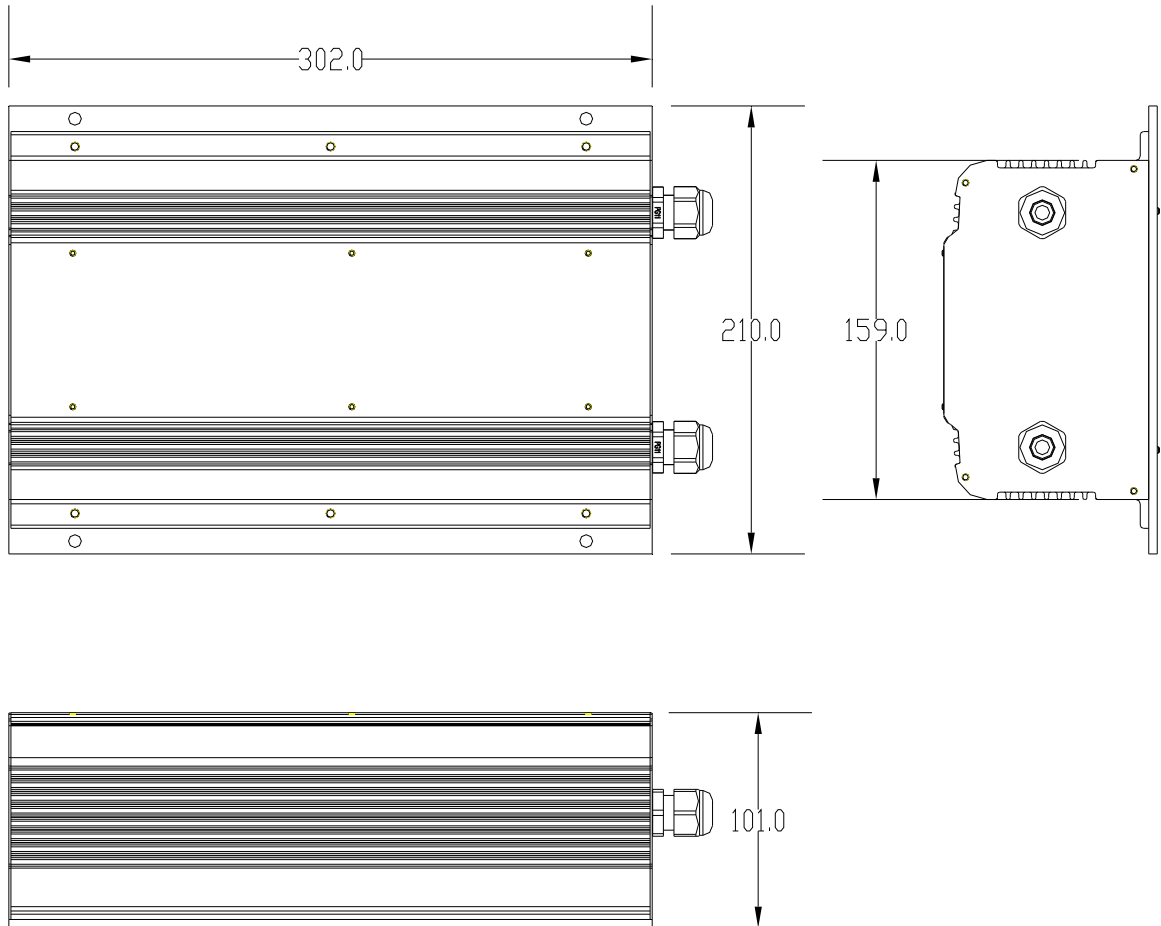
Environmental

Maximum Temperature	Operating	45 °C (113°F)
Relative Humidity		0 to 85% non-condensing

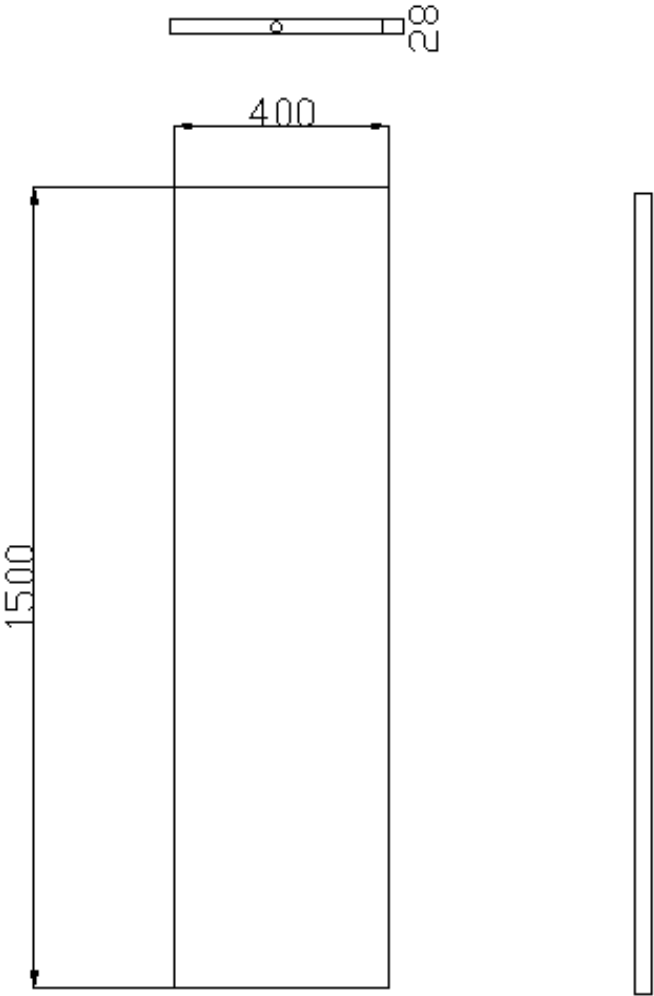
PRE-INSTALLATION INFORMATION

Floor Guard Control Unit Dimensions

(All dimensions are in millimeters)



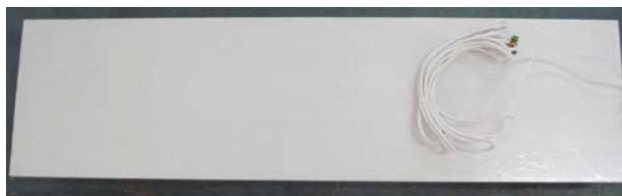
Floor Guard Antenna Dimensions
(All dimensions are in millimeters)



INSTALLATION

Parts List –Floor Guard Overall System

Floor Antenna
WG-



24vac Transformer
WG SPS-24



Control Box
WG

<u>Part Name</u>	<u>Order Number</u>
1. Floor Guard Antenna	WG
2. Floor Guard Control Unit	WG
3. 24vac Smart Power Supply	WG SPS-24
4. Digitool Tuning Software	

Note: Digitool Tuning Software is provided upon separate order

Quick Start for System Connections

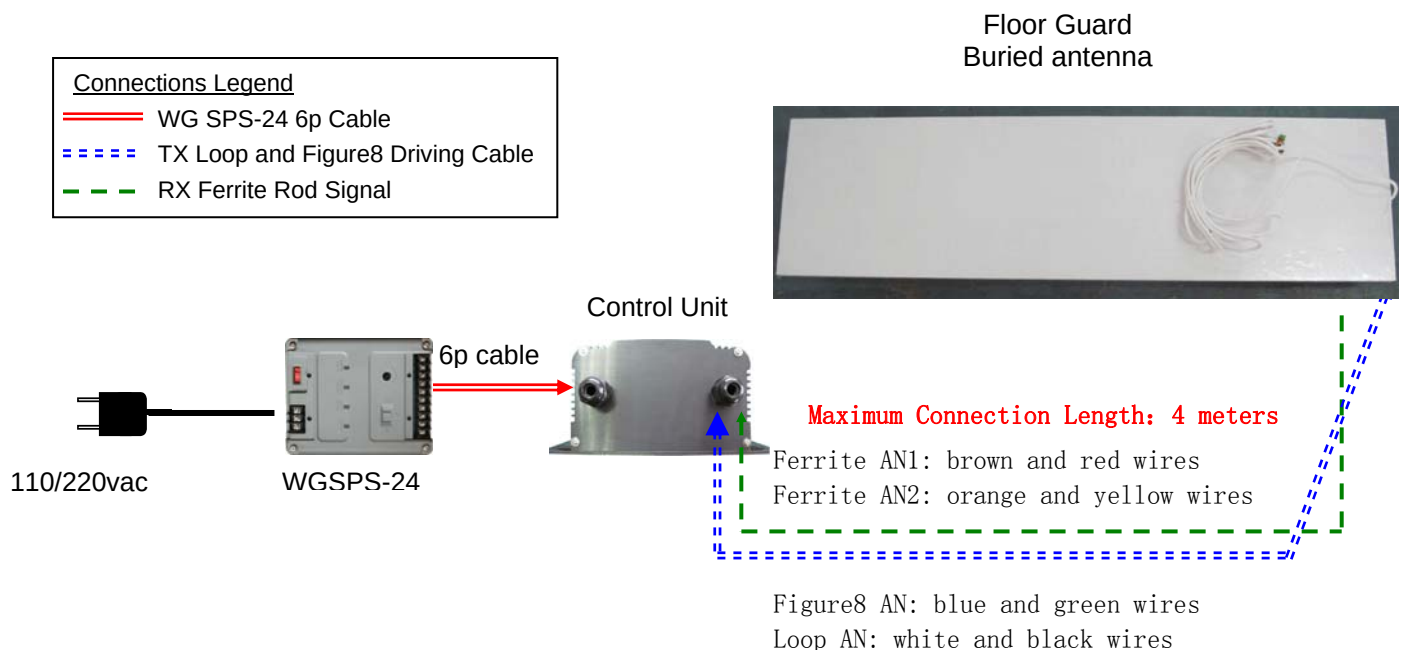
A Floor Guard system consists of a smart power supply (WG SPS-24), a Floor Guard Control Unit and a Floor Antenna.

The smart power supply has a 6-pins 24vac outputs that can only power the Floor Guard Control Unit through 24vac and also communicate with the control unit for some tuning control and remote alarm display features.

The PLCU is powered and controlled by the WG SPS-24 power supply unit. Also the control unit has an 8-conductors cable with two 4pins connectors assembled on one end to connect to the Floor Guard Control Unit transceiver board. One of the connectors is 4-pins connector for TX transmitting signals from the Control Unit to drive a loop antenna coil and a figure8 antenna coil in Floor Guard antenna. The other connector is a 4-pins connector for RX signals from the Control Unit to receive signals from Floor Guard ferrite antennas.

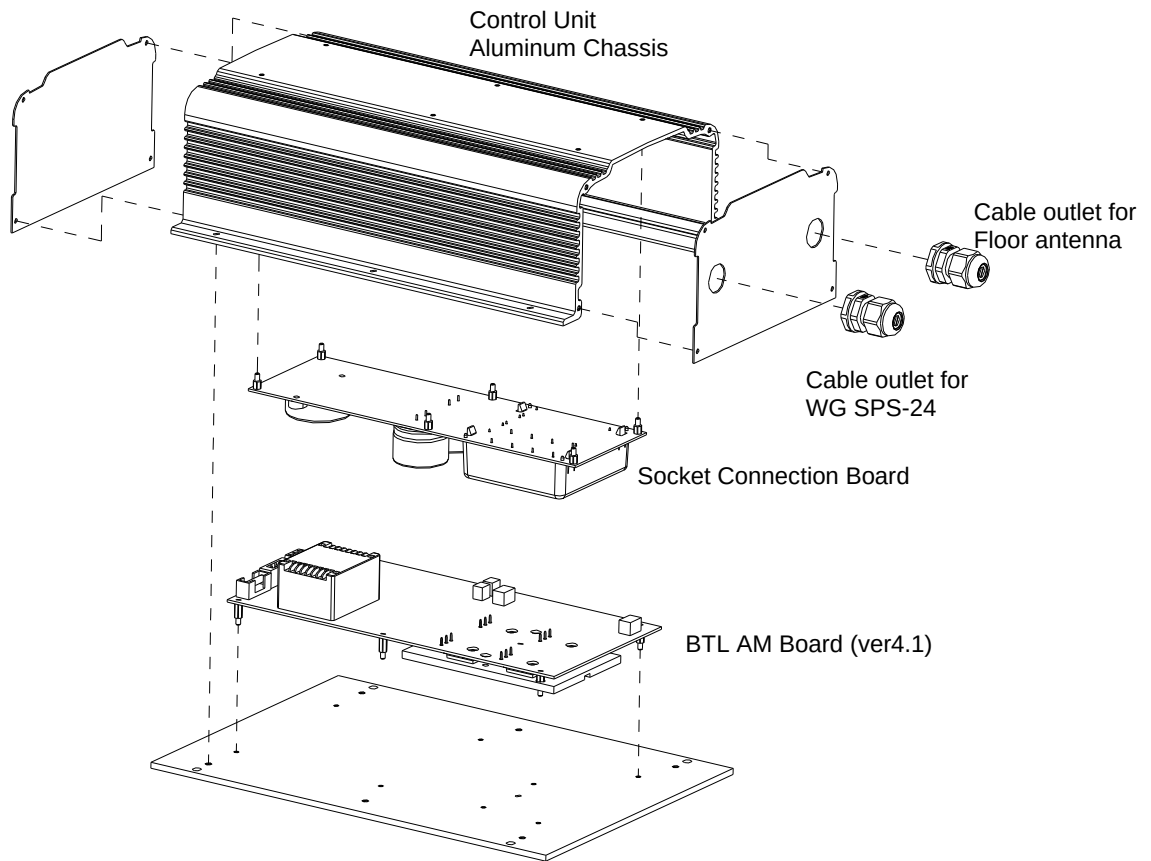
Notice: Both the TX and RX cables has wire orders that follow the pin and wire color mapping and can not be transpose with the order.

Additional installation procedures are shown in greater detail in the following sections.



Interior Cable and Connector Connections

For interior Cable connection, user should open the control unit case, and take the two PC boards –socket connection board and the BTL AM board (ver4.1) out for access to the sockets for connection to FloorGuard antenna and the WG SPS-24 power supplies.

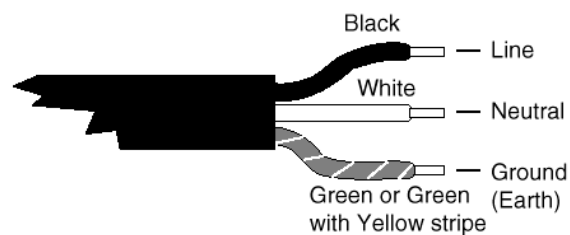


Power Cord Notices

North American Power Supply Cords

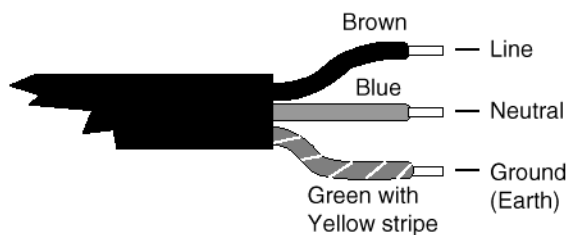
This equipment is supplied with an external power line at one end and a molded receptacle terminal block at the other end. Conductors are color coded white (neutral), black (line) and green or green/yellow (ground).

Operation of this equipment at voltages exceeding 130vac will require power supply cords that comply with NEMA configurations.



International Power Supply Cord

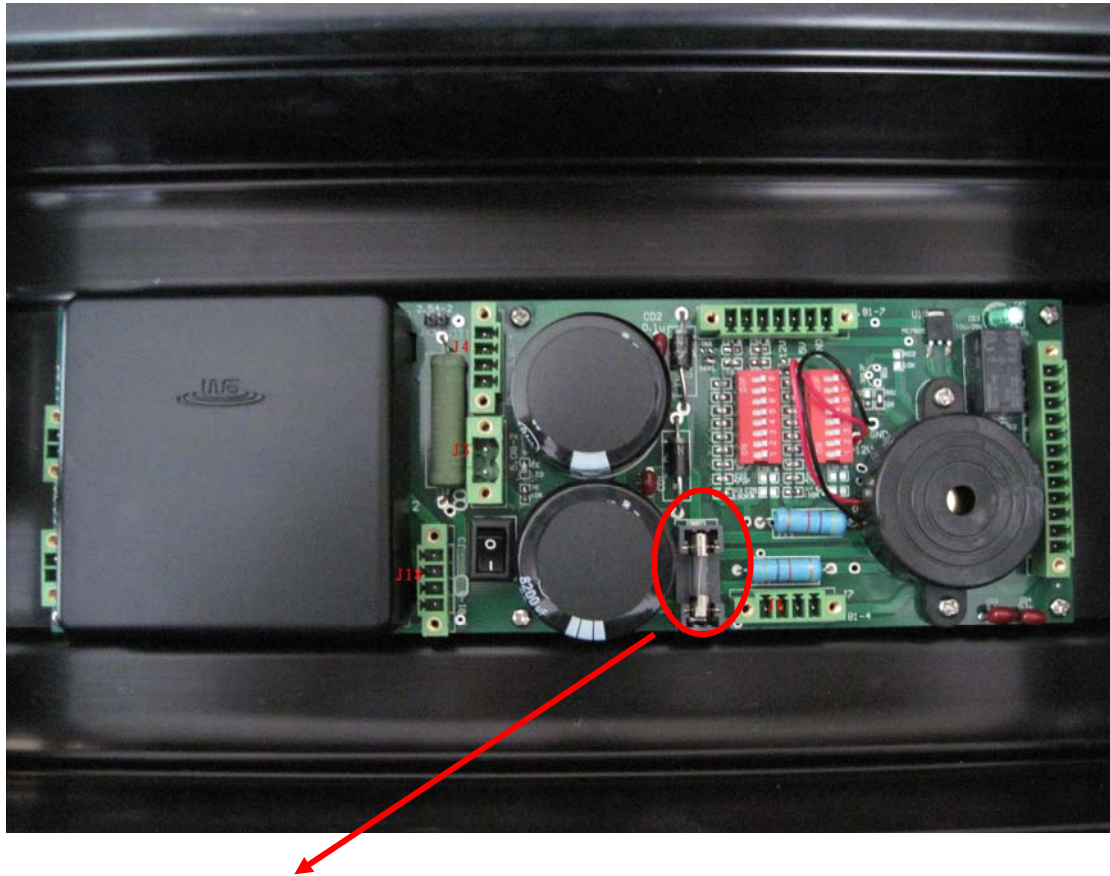
This equipment is supplied with an external power line at one end and a molded receptacle terminal block at the other end. Conductors are CEE color-coded—light blue (neutral), brown (line) and green/yellow (ground). Other IEC 320 C-13 type power supply cords can be used if they comply with the safety regulations of the country in which they are installed.



We recommend that you use a CE approved power cord H05 VV-F or H05 VVH2-F2 (Refer to the electrical code which governs your country for installation of an Anti-Theft Unit to the main power supply)

Fuse Replacement Information

The fuse holder is located on the control box inside Socket PC board.



Fuse Replacement:
Extended Fuse (Time-Delay Fuse)
5mm x 20mm 24vac @ T3.15A/250V

1. Equipment shall be electrically disconnected from the branch-circuit supply when replacing the fuse.
2. Remove the fuse holder with a screwdriver, rotating it in a counterclockwise direction.
3. Replace the fuse in accordance with the specification noted below.

WARNING – TO REDUCE THE RISK OF DAMAGE; REPLACE ONLY WITH THE SAME FUSE TYPE AND RATING.