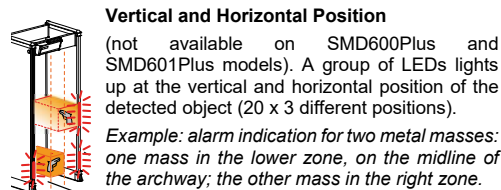


SIGNALS

	1	2	9
READY		--	--
Transit with NO ALARM		--	--
Transit with ALARM			
Large metal mass		 pulsed	 blinking
Random Alarm			--

(*) The number of stars is proportional to the size of the metal mass (or to the signal strength, in case of no transit).

Other Alarm indications

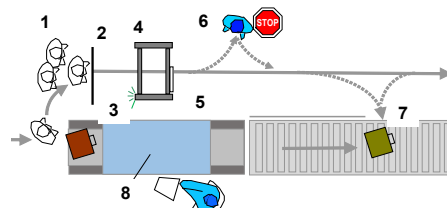


Metal Type Indication on the display:
Ferr: ferrous metal; **NoFe**: non-ferrous metal.

Signals may be different according to the model and setting

OPERATION

Generic application: people screening with personal effects inspection

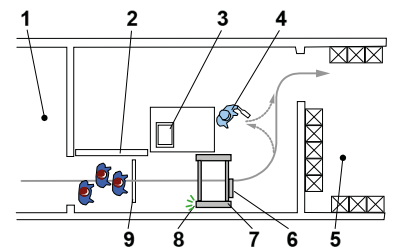


- Line of people waiting to be inspected
- Waiting line
- Entry pacing lights
- Metal Detector archway
- Metal Detector control unit
- Screener
- Luggage recovery area
- X-ray unit

- As part of the normal screening process, people are required to perform a complete passage through the archway.
- Instruct the people to deposit their hand-luggage, bags, coats, cellular phones, cameras, calculators and spectacle cases on the X-ray conveyor belt or in special containers, maintaining a distance of at least one meter from the Walk-Through Metal Detector archway.
- Allow only one person at a time to walk through the unit. During a transit, the red entry pacing light indicates to people standing in front of the archway they must wait until it becomes free again.

- If the alarm of the Metal Detector is not activated, no further search is required.
- On the contrary, an alarm state upon a person's transit, which is the result of metal objects carried by that person that are above the alarm threshold, requires further action in order to clear the cause(s) of the alarm.
- This secondary screening, which may also make use of other different devices such as Shoe Analyzers, Hand Held Metal Detectors or other WTMD, shall be performed according to local Security Authority procedures taking into account that:
 - The indication given through light bars that illuminate where the presence of an object is detected is solely meant to help screeners establish the cause of an alarm and not as determiner of the number of objects in transit. For example, the removal of an object pinpointed by a light at waist level cannot exclude the presence of another object placed nearby.
 - In fact, the presence of multiple objects above the threshold limit which are carried by any person can only be excluded through a final transit to be performed through the WTMD without alarm condition or through appropriate secondary search procedures.
 - If preconfigured, the terminal part of the luminous bars lights up in ORANGE instead of RED, to help screeners better identify alarms originated from the shoes.

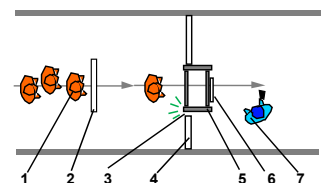
Personnel screening in an industrial/general purpose application (Loss Prevention)



- Monitored area (working area)
- Barrier
- Object-holding tray
- Screener
- Exit area (locker room)
- Walk-through Metal Detector control unit
- Walk-through Metal Detector
- Entry pacing lights
- Waiting line

- In this case, the X-ray unit is usually replaced with an **Object-holding tray**. All the above mentioned notes are applicable, except for actions related to personal effects.
- Instruct the people to deposit their personal effects on an **object-holding tray**, maintaining a distance of at least one meter from the walk-through metal detector archway.
- IMPORTANT!** In order to detect very small metal objects people passing through the archway must wear clothes with no metal parts.

Screening of prisoners with no personal effects



- Line of inmates waiting to be inspected
- Waiting line
- Entry pacing lights
- Barrier
- Walk-through Metal Detector
- Walk-through Metal Detector control unit
- Screener provided with a hand-held metal detector

All the above mentioned notes are applicable, except for actions related to large metal personal effects.

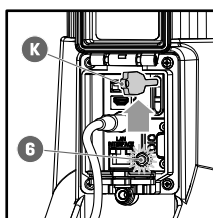
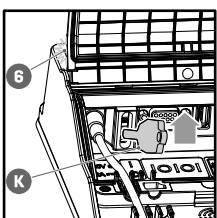
DESCRIPTION

CU	Control Unit
1	Control unit display, divided into two parts, a green section and a red section
2	Control unit sounder
3	Keypad
4	Chip card reader
5	Lock of front panel

AA Archway antenna

Options: Ph: photocells for transit counting
APSM: lower connection module
CBB/E, CBB/P: crossbar long life battery back-up

6	Power indicators
8	Entry pacing lights (GREEN: transit allowed; RED: busy, transit not allowed)
9	LED bar with zone alarm indication (exit side): in case of alarm, a group of LEDs lights up to pinpoint the position of the detected object(s).
10	ON/OFF switch, Use ON/OFF key K. I: ON; O: OFF
11	low battery indicator (if battery is installed, panel models only)
12	Battery level luminous indicator (column version, only with Crossbar Battery Backup option)
PSA	Power supply AC/DC adapter



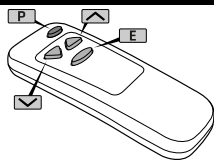


Sources of interference

- The Walk-Through Metal Detector creates a magnetic field, which extends inside and around the archway. Because of this, the unit is sensitive not only to metal masses carried by people in transit, but also to masses of metal which may be located in close proximity and are subject to movements. During operation, make sure that:
 - Large movable metal objects such as baggage carts or wheelchairs are kept one meter (three feet) away from the archway.
 - Other large metal structure such as control barriers that are meant to be stable during operation, do not provoke alarm signals.
 - Do not allow waiting people to come closer than one meter (three feet) from the entrance of the unit.
- Ensure that only one person enters the unit at a time.
- Do not allow the Walk-Through Metal Detector to be used as an unattended public walk-through access.
- Instruct the people to walk through the center of the archway so that they do not bump into the structure. Prevent any impact with the archway, in order to avoid possible false alarms.
- Do not move the Walk-Through Metal Detector unit.

Keypad /IR Remote Control

IRC-1 Remote Control is an accessory, which acts as the control unit keypad. Power supply: two AAA 1.5V cells.



Status reading

- Device status (these indications remain active when power cycling the device):
 - current security level (IS)
 - transit counts: transits (CI) and outward transits (CO)
 - ENA status
- Test of audio and visual alarm signals.

Programming

- P** Enter/exit the programming mode.
- ↑** Increase a value or scroll up a list.
- ↓** Decrease a value or scroll down a list.
- E** Confirm a selection or execute a command.

Alarm Volume / Alarm Tone adjustment

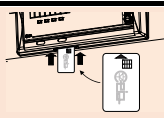
- Press the PROG key to enter the programming phase.
- Six dashes will appear on the display (password prompt).
- Enter the password (up to 6 letters or numbers). Insert each character of the password by pressing the arrow keys to select it and then pressing the ENTER key to confirm. Note: each confirmed character is replaced by a star (*). NOTE: if no password has been defined, simply press the ENTER key and go to the next step
- The programming phase starts: the last used command will appear.
- Press the arrow keys to select the AV (Alarm Volume) or AT (Alarm Tone) function, if a different one is displayed.
- Press the ENTER key to change the AV setting: the acoustic alarm is activated.
- Press the arrow keys to change the current value.
- Press the ENTER key to confirm the new value.
- Press the PROG key to exit from the programming phase.

Chip card

Each chip card executes a single command or selection.

Command: insert the chip card until it is recognized (a message appears on the display), then remove it.

Selection: insert the chip card and remove it at the proper selection.



WARNING: when the chip card is inserted the unit is not operating: do not use the chip card during the screening procedures!

Keep closed the slot when not in use.



Battery Operation [OPTION]

Built-in batteries switch in automatically in the event of a mains failure. The batteries recharge automatically when the AC/DC adapter is connected to the mains. Battery sets with different autonomy are available:

- APSM:** battery pack built into lower connection module
- CBB/P and CBB/E:** high capacity battery pack installed onto the crossbar.

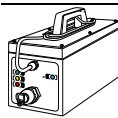
Battery level indication

- The message "B" and a 7-level vertical bar-graph appear on the right side of the display:



- APSM sounder SPK (panel models only) is activated when battery is completely discharged.
- Fast recharge version of CBB provides the operator with a visible indication of the battery level (elliptic models: light BCL the bottom side of the crossbar; panel models light LINE):

Light status	Discharge Level	Recharge Level
Steady ON	>80%	>95%
Fast blinking	40% to 80%	40% to 95%
Slow blinking	< 40%	< 40%



External battery pack (MBSU-2 / TSU)
This accessory allows long lasting independent operation when mains power is not available. Re-charging takes place automatically when mains voltage is present (~ 5h with detector off).

Operating time

APSM	CBB/P	CBB/E	MBSU/2	TSU
Up to 40'	Up to 13h	Up to 7h	Up to 21h	Up to 37h

The actual operating time depends on the WTMD model and its configuration.

Suggested Maintenance Schedule

Operation	Period
Verification of the visual indicators.	- Daily (mandatory)
Operator-level functionality test.	- At shift changes
Tool: OFV kit or Test piece specified by the Security Standard in use.	- In case of doubt of proper operation
General cleaning.	4 months
Tool: a slightly moist, non-abrasive cloth.	
Visual check that all components of the metal detector are undamaged.	4 months

Self-diagnosis messages

RX E RR	FAULT: discontinue equipment use and contact a technician. (x:1,2,...)
STATE RX	
GATE TX	
WAIT	Temporary adjustment phase: wait for normal functioning indication.
MAIN SER	Emergency battery operation: reconnect to the mains power supply as soon as possible.
B	(Display OFF): Power supply absent: reconnect to the mains power supply
PASS WITOL	Transit of a person through the gate along a prohibited direction: verify the reason of the transit.
	Dirty photocells: clean the photocells with a non-abrasive cloth
PHOT ERR	Prolonged photocell activation: free the photocell beam.
	Fault in the photocells: contact a technician.
PASS INVA	Contact the supervisor.
DATA ERRO	Replace the chip card. Do not extract the card until the message "REMOVE" appears on the display.
WRON VERS	
CARD INVA	Use a compatible chip card.
CARD INRE	
LOAD ING	Metal detector busy during data transfer from a chip card: wait.

USE AND SAFETY INFORMATION

General warnings

- CEIA cannot be held responsible for any damage resulting from procedures which are not expressly indicated in this manual or from any lack of attention, either partial or total, of the procedures described therein.
- Read this manual carefully before installing, operating or carrying out maintenance on the device. Keep the manual in a safe place for future reference, and in perfect condition.
- Follow the instructions contained in this manual for all operations relating to use of the device
- All personnel operating with or performing operations on the device must have an adequate preparation and shall know the procedures described in this manual.
- Any modification to the configuration setup by CEIA is forbidden and voids all warranties and certifications.
- This manual must accompany the device described therein in the case of change of ownership, and until the device is broken up.

Correct use

A Walk-Through Metal Detector is a unit that reacts to the metal masses present on a person's body. As part of the normal screening process, people are required to walk through the detector archway. A correct analysis requires a complete passage through the archway.

Forbidden use

Any use different from that described in this manual is forbidden. If the equipment is used in manner not specified within this manual, the protection provided by the equipment may be impaired.

Operating limits

Power supply: 100...277V~ ±10%, 47...63Hz; 40VA (indicative value, depending on the installed options).

Operating Temperature: indoor use: 23°F to 149°F [-5°C to +65°C] outdoor use: -4°F to 149°F [-20°C to +65°C] (on demand: -34°F to 158°F [-37°C to +70°C]).

Storage temperature: -34°F to 158°F [-37°C to +70°C] • Relative Humidity: 0 to 95%, non-condensing. • Altitude: up to 1000 ft [300m] (on demand: up to 20,000 ft [6000m]).

Use warnings

- The final user is responsible for selecting the appropriate security level/sensitivity for their application. After this selection has been made, and programming has been adjusted accordingly, it is also the final user's responsibility to verify calibration using the test object(s) appropriate to the level of security selected. Additionally, this test should be carried out periodically to insure no changes have occurred in the equipment. Reference Standards on this argument include documents ASTM C 1270 and ASTM C 1309.
 - The final user is responsible for determining and implementing the appropriate inspection procedures and for the training of personnel involved in carrying them out.
 - The information contained in this manual is provided only as a technical reference for use and maintenance, and does not contain operational procedures. For further information on standard procedures to be followed for inspection of people using a metal detector, please consult the guidelines entitled "The Appropriate and Effective Use of Security Technologies in U.S. Schools" by the National Institute of Justice or other relevant directives.
 - Handle the device with care and without excessive force during use.
 - Use exclusively the Power supply adapter provided with the equipment. Do not use any other kind of power-supply adapter.
 - In case of damage to the Power Supply Unit, input and output cables included, the unit should be returned to a CEIA qualified Technical Assistance Centre or directly to CEIA Headquarters for proper repair or replacement. Do not open, tamper with or attempt to repair the power supply unit or any other part of the device.
 - If the device is stored for a long period in temperatures outside the operating range, wait for the temperature of the detector to come back within that range before switching on.
 - Whenever there is any suggestion that the level of protection has been reduced, the device should be taken out of service and secured against any possibility of unintentional use, and authorised service technicians should be called. The level of protection is considered to have been reduced when:
 - the device shows visible signs of deterioration;
 - the device does not operate correctly;
 - the device has been stored for a long period in sub-optimal conditions;
 - the device has suffered mechanical or electrical stress (shocks, bumps, etc.);
 - the device has suffered severe stress during transport;
 - the inside of the device has come into contact with liquids
 - Always remove the plug by hand when disconnecting the power supply cable, never by pulling on the cable.
 - This device contains electrical and electronic components, and may therefore be susceptible to fire. Do not install in explosive atmosphere or in contact with inflammable material. Do not use water or foam in the case of fire when the device is powered up.
 - Do not use in an explosive atmosphere. Avoid contact with inflammable or explosive material!
 - Models with protection covers: make sure that a switch or other device which allows the power to be cut off can be easily operated, as the main switch of the device is not directly accessible.
 - Mobile application: in case the gate is not anchored to the floor, the user shall take all appropriate precautions to prevent tilting of the gate due to bumps or mechanical exertion.
- Medical Safety Information**
- CEIA Metal Detectors comply with regulatory requirements for human exposure to electromagnetic fields. CEIA submits its devices to testing by bodies qualified to check compliance with the emission limits of the main standards currently in force (documentation available on request).
 - General information on use: the electromagnetic field emitted by CEIA devices is extremely weak, with amplitude comparable with that of the earth. However, CEIA cannot exclude the possibility that there may be medical devices which impose special restrictions on use. Any recommendation or directive issued by medical personnel or medical equipment manufacturers relating to electromagnetic fields must therefore be implemented. If for any reason a person about to pass through the detector shows fear or refuses to undergo the inspection, it is recommended that the inspection be carried out using an alternative method.
 - For further information on standard procedures to be followed for inspection of people with implanted medical devices using a metal detector, please consult the ASTM F2401 standard "Standard Practice for Security Checkpoint Metal Detector Screening of Persons with Medical Devices" or other relevant directives.
 - CEIA is not responsible for direct or indirect harm to people or things due to incorrect use of the Metal Detector.

Symbols



The device is marked with this symbol whenever the operator or the maintenance personnel, in order to avoid possible damage, have to refer to the manual.



The device is marked with this symbol in those areas where a high temperature may be present. Ensure these parts are not accessible. Avoid placing these parts in unventilated areas or in places that are close to sources of heat.



The device is marked with this symbol in those areas where a dangerous amount of voltage is present. Only specialised maintenance personnel should make adjustments in these areas.

Customer Satisfaction Report

C.E.I.A. objective is the maximum quality of products and services offered to the customer. Any comments and suggestions useful for achieving this objective will be highly appreciated and can be sent to UK by compiling and returning the form available at:

<http://www.ceia.net/security/satisfaction>

Warranty

The warranty on all CEIA products, extended to the period agreed with the Sales Department, is applicable to goods supplied from our factory, and for every constituent part thereof, with the exception of the batteries. Any form of tampering with the device, and in particular opening its container, is strictly forbidden and will invalidate the warranty.

CEIA reserves the right to make changes, at any moment and without notice, to the models (including programming), their accessories and optionals, to the prices and conditions of sale.

For further information: www.ceia.net