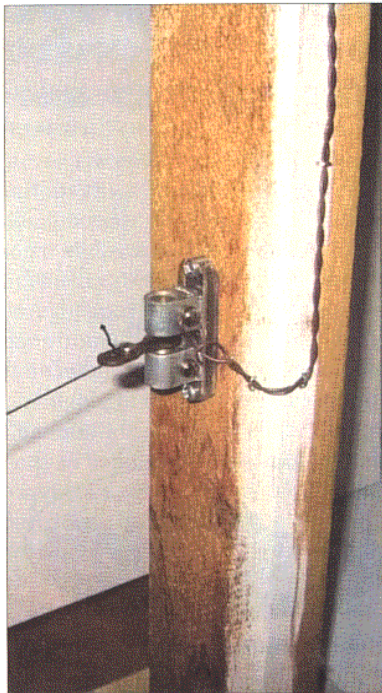


Old Alarm Devices Can Do New Installation Tricks

Security technicians of a couple of decades ago can truly appreciate today's cost-effective and easy-to-install modern alarm hardware. This being *Security-Sales & Integration's* 25th anniversary, I thought it would be an ideal time to not only reflect on some of the older, tried-and-proven system components, but to look at possible applications for these devices in today's modern installations.

Devices such as pull traps, floor mats, door lachings and alarm screens have provided important services in protecting our customer's premises through the years. Additionally, discussing these old technologies helps today's younger technicians understand the history and diversity of the alarm industry.



Floor, or pull, traps are the oldest types of alarm sensors. Here, a nylon trip line is configured to be used as a "dead trap."

A Method to My Madness

Some of you will look at my preceding comments and say, "Why even bother with such old devices?" let me start by interjecting a little bit of my philosophy on selecting and applying alarm system components.

When we propose and install alarm system components, we have to be aware of what I call "The Standardization Factor." What I mean by this is the installing of the same type of alarm sensor in the same manner in many systems. We do have to keep in mind that there is that small possibility that, the more we standardize alarm installation procedures, the more we leave ourselves open to a standardization of these services.

I also realize that, from a service viewpoint, the more standardized products and services are, the easier and more cost-effective servicing the system will be. Therefore, the alarm dealer must always walk that fine line, providing enough diversification in sensor applications so that compromise of an alarm is prevented, but standardized enough to provide for easy installation and service.

Interjecting some older technologies and applications into these systems can help provide this performance diversification. How many of you still occasionally install a concealed alarm contact on an interior high-traffic door for additional trapping?

Floor/Pull Traps Are Handy

Another reason for applying older technology may be for environmental reasons. If I want to protect less accessible areas, such as above store ceilings, attics and crawl spaces, many modern space detection devices, such as PIRs, could be troublesome due to large temperature extremes and insect control.



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BOB'S TIPS

- Diversify your installation with a mixture of technologies.
- Avoid placing or moving heavy objects over floor mats.
- Periodically clean brass clips on pull traps with steel wool.

A possible alternative might be to use the oldest alarm sensor known: the floor trap or pull trap. These devices are still available from manufacturers like Ademco. They can be configured either as a "dead trap," with a nylon trip line (*see photo*) or a "live trap," with a solid, 24-gauge wire for trip wire cut supervision.

Covert-type installations in unoccupied areas are the best applications for pull trap devices. Routine maintenance should include cleaning the brass clips with steel wool to maintain a good electrical contact.

At one time, pull traps were also used to secure removable items. Today, in this case, I would recommend magnetic pull-apart devices from GRI and Sentrol.

Floor Mats May Surprise Crooks

Another supplemental, low-cost interior trap area option is the use of strategically placed floor mats. Placing these under carpet mats, either in high-traffic areas or high-value areas, can add a form of detection that many burglars today might not expect. The floor mats are normally open devices with thin metal ribs that close with the correct pressure.

Floor mats are available in 25-foot rolls, which can be cut to the desired length. Solder wire connections to cut

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mat sections when possible for extra reliability. Hermetically sealed mats are also available and recommended for areas with moisture, such as damp concrete floors and marine decks.

A variety of floor mats are available from United Security Products (www.unitedsecurity.com), including a pet-resistant mat that takes at least 60 pounds of weight to activate. Customers should be made aware to avoid rolling heavy objects over these mats as it could crease and damage the thin metal rib switches.

Properly maintained floor mats can offer a good, low false alarm alternative to electronic motion sensing. They too are not adversely affected by wide temperature swings.

Mats Can Include Switches

An interesting application for floor mats is providing a customer with a security interlock for their retail display cases and cash registers. This would allow cash registers and display cases to only be opened when a merchant is standing directly behind the device, thereby not allowing a thief to reach around and open an unattended cabinet.

Small, button-sized mat switches from Tapeswitch (www.tapeswitch.com) can be covertly placed under carpets for activating door strikes or taking camera shots. I can remember one particular application in which a

customer liked the convenience of arming and disarming their residential alarm system by a foot tap on a convenient, yet covert, spot mat switch on the edge of the rug near their door entrance.

The need may rise to install a floor switch in a standard, normally closed alarm loop. The Ademco 602 and USP 900 converter modules will allow a normally open floor mat to be installed in a normally closed alarm loop. It is also recommended that the floor mats be taped securely to the bare floor to avoid any slipping and to additionally give the mat a firm and protected operating foundation.

Foil Burglars With Lacing

The ancient art of foiling wind on glass and lacing doors is truly something that is done very seldom today. In its day, installing foil on a cold winter window was an art that took patience and practice. Most alarm dealers are glad that new window sensors have replaced this high-maintenance application.

On the other hand, the practice of lacing objects, such as doors and openings, is something that any technician can do with a little practice.

Lacing is basically nothing more than stapling fine solid No. 24-26 wire in a grid pattern. This wire grid may consist of one, or sometimes two, NC alarm circuits, also known as a double loop. The lacing can be applied to the inside surface of a door, interfaced with a door

contact and connected by a short flexible door cord.

The door is then covered by a thin piece of plywood or masonite to protect the thin wiring from any physical damage or tampering. The wood protective cover may also internally be supervised with a tamper contact. Any penetration of this laced door would break the lacing wire and cause an alarm.

Openings such as skylights can also be laced with one or two circuits and EOL resistors for additional security. Slightly spaced, hand-drawn bare No. 24 copy wire is recommended. The installing company only knows the grid wiring configurations.

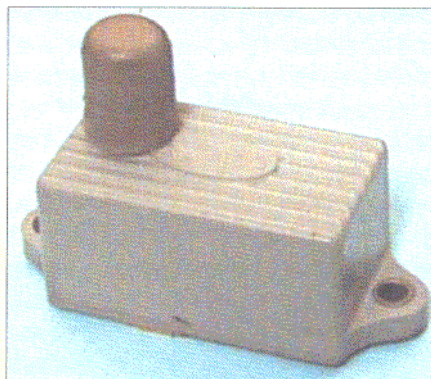
While this is a more labor-intensive installation, lacing does have the advantage of being more resistant to bugs and other environmental conditions than modern electronic sensors. I sometimes hear from installers who say they have systems with alarm lacing that is still working after 20 or 30 years.

At one time, another type of alarm screen — the wood dowel alarm screen — was used to protect large openings such as skylights. These lattices were custom-made from wooden doweling with a fine alarm wire embedded in the doweling. Due to lack of demand, the last manufacturer of these wooden screens stopped making them about three years ago.

You Can Win Great Prizes By Playing the Name the Antique Alarm Device Game!

OK all you old timers, can you tell me what the pictured alarm device is? E-mail me (bob.dolph@securitysales.com) the name of the device, manufacturer, model number and what it was used for.

Those with the correct answers will be placed in a drawing for an Ademco Vista IOP control panel (grand prize) and an Ademco DT-7235 dual-technology motion detector (runner-up). Special thanks to Ademco's David Gottlieb for donating these wonderful prizes.



Can you identify this device?