

## INSTALLATION INSTRUCTIONS

These instructions are for saw-cut loop installation in an existing concrete or asphalt drive-thru traffic lane, for use with HME's Drive-Thru Audio or Timer Systems. Refer to the illustrations on the back of this page. Note the differences in loop location for audio systems and timer systems. **Failure to follow these instructions in saw-cut vehicle detector loop installation may cause your HME Drive-Thru Audio System or Timer System warranty to be voided.**

### TOOLS/MATERIALS REQUIRED

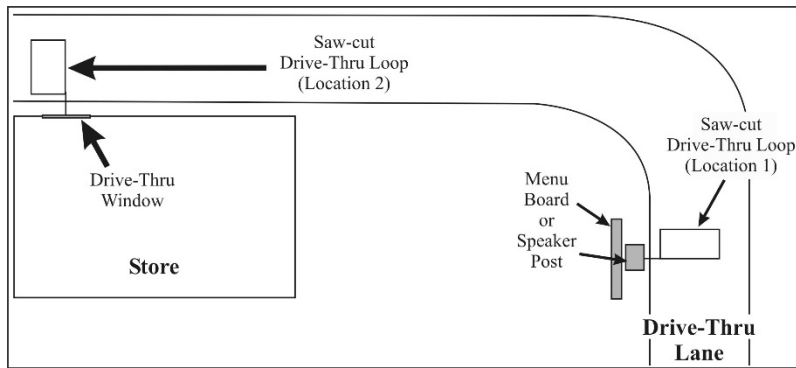
- Drill with 3/4 inch (19 mm) drill bit (optional)
  - Type #18 AWG XLPE cable, 200 feet (70 meters)
  - Concrete and mortar-repair sealant (Quikrete Hydraulic Water-Stop Cement or equivalent)
  - S/G foam tubing, 6 feet (1.82 meter)
  - Concrete-cutting saw
  - Marking chalk
- CAUTION: Hard setting epoxies should never be used.**

### PROCEDURE

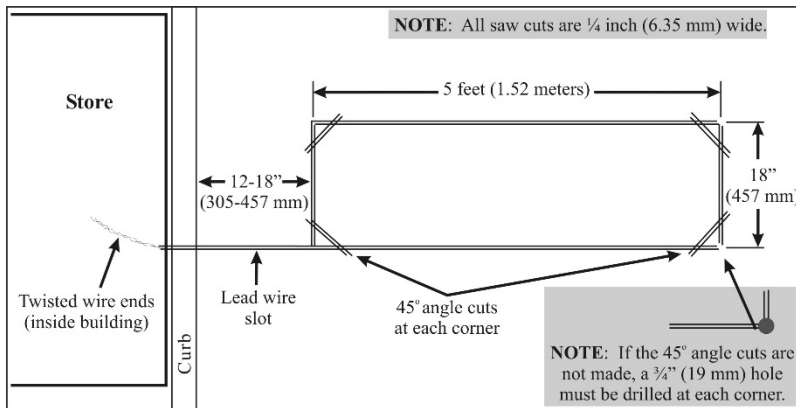
Carefully examine the illustrations on the back of this page before proceeding.

- Lay out and mark with chalk, the exact size and location of the slot before cutting it. The rectangular slot should begin 12 – 18 inches (305 – 457 mm) out from the curb, with its forward edge even with the midpoint of the menu board, speaker post (Location 1) or drive-thru window (Location 2). Its dimensions should be 5 feet (1.52 meters) across the drive-thru lane, and 18 inches (457 mm) wide. **CAUTION: If the loop is being installed in an existing cut, or over an existing loop that is being deactivated, cut through the old loop in 5 or 6 places so it will not interfere with the new loop. Also, if there is a control joint in the concrete, the loop should not span it.**
- **BE AWARE:** A 3 feet (.91 meter) perimeter, free from rebar, wire screen, reinforcing bars, electrical cables or other metal objects should be provided around and under the loop area. Any metal within this perimeter disturbs the loop's magnetic field, thus reducing the field in which detection takes place.
- Cut the slot 1/4 inch (6.25 mm) wide, and 1 1/2 – 2 1/4 inches (38 – 52 mm) deep, along the chalk lines to form a basic rectangular loop. Make an additional 45° angle cut at each of the four corners of the rectangle, to prevent sharp, 90° angles of the concrete from damaging the loop-wire insulation. (If 45° angles are not cut, a 3/4 inch [19 mm] hole must be drilled at each corner.) Also cut a lead-wire slot, 1/4 inch (6.25 mm) wide and 1 inch (25 mm) deep, from one corner of the rectangular loop cut to a point nearest the conduit through which the cable is routed into the store.
- Clean the slot thoroughly with compressed air, and allow the slot and the area around it to dry completely. Be sure no moisture or sand gets back into the slot while the loop is being installed.
- Allowing sufficient lead wire to be routed from the speaker post or menu board into the store, to the audio system base station or timer control unit, lay the first turn of wire in the slot in a clockwise direction, routing it through the 45° angle cuts at each corner. **CAUTION: A continuous piece of unspliced wire must be used. Avoid damaging the insulation on the wire. Nicks or abrasions can permit moisture to enter the loop, making it inoperable.**
- Gently press the wire down to the bottom of the slot, all the way around the loop, with a blunt wooden stick. Do not use a metal instrument or tool. Lay six turns of wire in the slot. After the last turn, lay 3 inch (76 mm) lengths of foam tubing, evenly spaced, on top of the wire to hold it in place in the slot.
- Fill the slot completely with sealant, covering the wire completely so it is not visible.
- Cut the remaining wire to equal the length of the lead wire, twist the two wire ends together to form a twisted pair, with five turns per foot. This twisted pair should go into the lead-wire cut.
- Before applying the sealant, test the loop for insulation resistance and DC continuity resistance. If the DC resistance is greater than 3 ohms, or the insulation resistance to ground is less than 100 megohms, the wire is damaged and the entire loop must be replaced.
- Apply the sealant.

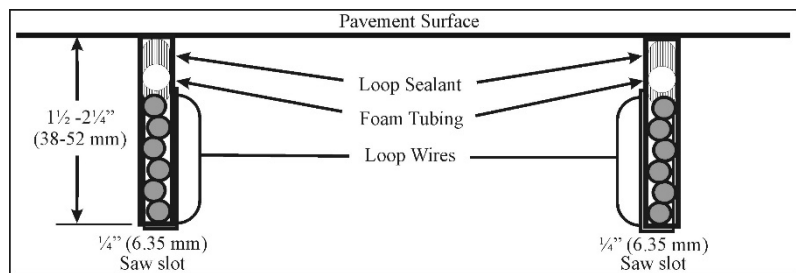
- Solder and insulate all connections to lead wires.



**Figure 1. Saw-cut loop locations**



**Figure 2. Saw-cut loop parameters**



**Figure 3. Saw-cut loop side view**

## Waste Electrical and Electronic Equipment (WEEE)

The European Union (EU) WEEE Directive (2012/19/EU) places an obligation on producers (manufacturers, distributors and/or retailers) to take-back electronic products at the end of their useful life. The WEEE Directive covers most HME products being sold into the EU as of August 13, 2005. Manufacturers, distributors and retailers are obliged to finance the costs of recovery from municipal collection points, reuse, and recycling of specified percentages per the WEEE requirements.

## Instructions for Disposal of WEEE by Users in the European Union

The symbol shown below is on the product or on its packaging which indicates that this product was put on the market after August 13, 2005 and must not be disposed of with other waste. Instead, it is the user's responsibility to dispose of the user's waste equipment by handing it over to a designated collection point for the recycling of WEEE. The separate collection and recycling of waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local authority, your household waste disposal service or the seller from whom you purchased the product.

