

GateSentry™

Vehicle Access Control System Model VACS2000

Installation Instructions

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®

HM ELECTRONICS, INC.

DRAFT

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ENGINEERING WORKING DOCUMENT NOT FOR RELEASED FOR PRODUCTION

SECTION 1. SYSTEM DESCRIPTION

1.1 GENERAL

The GateSentry™ Vehicle Access Control System provides vehicle identification, validation and authorization for entry or exit of a secure area. It allows the area to be controlled automatically, without operator or user intervention.

GateSentry™ utilizes an underground antenna, which receives a Radio Frequency Identification (RFID) code from a transponder attached to the underside of a vehicle. The antenna is connected to a Reader, which relays the RFID to a personal computer (PC), where it is compared to a list of codes in a database of individuals authorized access to the secure area. If authorization is confirmed, the Reader activates a gate or other barrier to open or close.

If AC power is not already available where each Reader will be located, a licensed electrician will need to install power cables. A minimum of 5 amps power must be provided. **Be certain the power is off before you handle the power cable.** Installation of the GateSentry™ system consists of wall mounting Readers at each of one to four access points and installing a loop antenna in the road near each Reader. The roadbed may have to be sawcut to lay antenna wire. Conduit will need to be run and cables pulled and connected between each Reader and the PC, the loop antenna, the barrier opener and the AC power source. All wiring must be done in accordance with the National Electrical Code (NEC). Small transponders must be mounted on access-authorized vehicles. After the equipment has been installed, the GateSmart™ PC software must be configured, and user personnel must be trained to use the software and to properly install transponders on vehicles.

The time required for installation of the GateSentry™ system will vary according to how many Readers and loop antennas need to be installed, and how many entries/exits of the secure area will be controlled by GateSentry™.

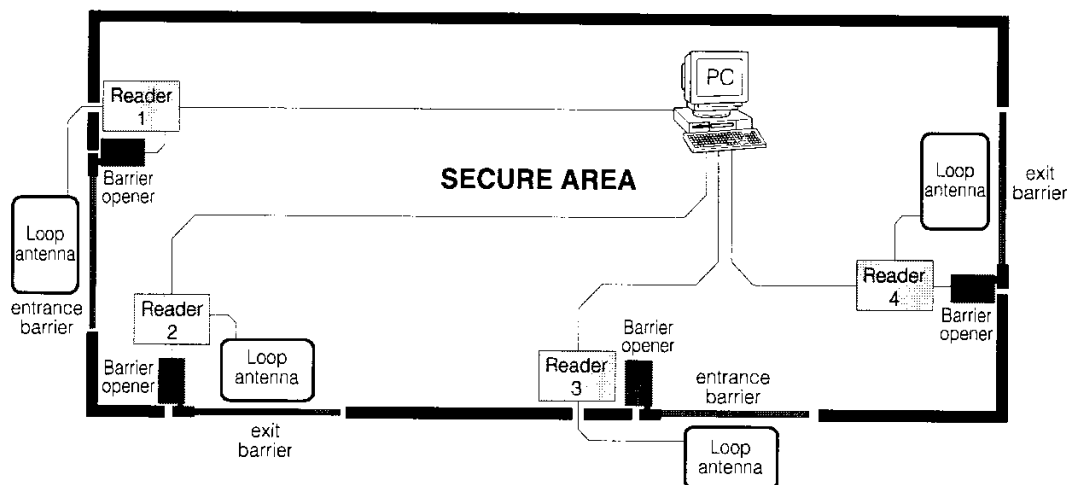


Figure 1. Typical layout of secure area with GateSentry™ controlling access to four entries/exits

1.2 UNPACKING THE SYSTEM

Check the packing list for each item as it is unpacked, to verify receipt of all components and equipment listed.

1.3 EQUIPMENT IDENTIFICATION

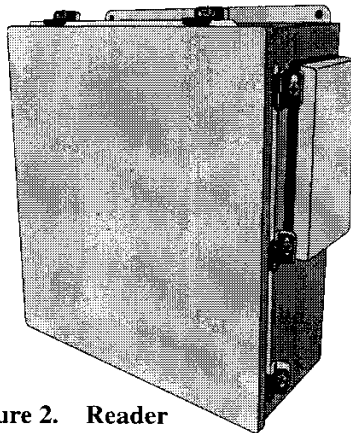


Figure 2. Reader

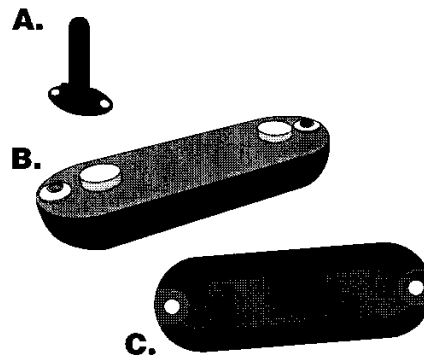


Figure 3.

- A. = MiniTag transponder
- B. = Magnet Mount Tag transponder
- C. = Heavy Duty Tag transponder

1.4 OPTIONAL EQUIPMENT

Equipment	Model Number
Video surveillance system	VisionTech 2000
Intercom, multi-channel	IC800

1.5 FCC NOTICE

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the installation manual, may cause harmful interference to radio communication. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

SECTION 2. EQUIPMENT INSTALLATION

2.1 TOOLS REQUIRED

- Phillips (cross-point) screwdriver, size #2
 - standard (slotted) screwdriver, 1/8 inch (4 mm)
 - power drill and drill bit set
 - fish tape, 100 feet (30 meter)
 - cable: type #10 AWG stranded THHN
 - type #14 AWG stranded XLPE
 - crack filler/sealant
 - wire cutter / stripper
 - soldering iron
 - rosin-core solder
 - electrical tape
 - concrete cutting saw
 - marking chalk
- (Dow-Corning or Loctite brand detector-loop sealant are recommended.
The sealant must be compatible with the insulation on the loop antenna wire.)

2.2 INSTALL READER

CAUTION: *Maximum ambient operating temperature for the Reader is 122°F (50°C). Never restrict the airflow through the air vents on the sides of the Reader.*

The Reader **MUST** be positioned where it will allow the **length of lead wire** from the loop to the connections inside the Reader cabinet to be as specified in the table in section 2.4.1. The length of antenna lead wire depends on the loop size. Use the enclosed mounting template to mount the Reader on the wall as follows.

- Hold the template against the mounting surface at the desired location.

NOTE: The template is only for the top two holes on the Reader cabinet. It should be used to mark the wall where you want the top of the cabinet to be positioned.

- Mark the mounting surface through the two screw hole locations shown on the template.
- Set the template aside and drill a hole at each marked spot.

NOTE: The size of the holes to be drilled depends on the size of bolts to be inserted in them. A special drill bit may be required, depending on the type of mounting surface. A concrete anchor bolt should be used for concrete or stucco surfaces. A mollybolt should be used for hollow walls. The bolt must accommodate a 1/4 inch (maximum) diameter screw.

- Insert the anchor bolts or toggle bolts in the holes.
- Hold the Reader against the wall with the conduit connectors at the bottom, as shown in Figure 4, and the holes in the flanges at the top of the cabinet over the two anchors/mollybolts.
- Place the screws through the holes in the flanges and into the anchors/bolts, and screw them all the way in to fasten the Reader securely in place.
- Mark the mounting surface through the two screw holes on the flange at the bottom of the Reader cabinet.

- Remove the screws from the flange at the top of the Reader cabinet, and set the Reader aside.
- Drill a hole at each of the two marked spots, the same size as the first two holes.
- Insert the anchor bolts or toggle bolts in the two holes.
- Hold the Reader against the wall again, with the conduit connectors at the bottom and the holes in the flanges at the top and bottom of the cabinet over the four anchors/mollybolts.
- Place the screws through the holes in the flanges and into the anchors/bolts, and screw them all the way in to fasten the Reader securely in place.

2.3 CONNECT CONDUIT

Separate conduits must be laid for cables to be routed from each Reader to its AC power source, its loop antenna, its entrance/exit barrier opener and the PC. See Figure 1 for an example of conduit routing.

For the loop antenna cable, a $\frac{3}{4}$ inch (19 mm) PVC conduit should be used. For all other cables, $\frac{1}{2}$ inch (12.7 mm) PVC conduit should be used.

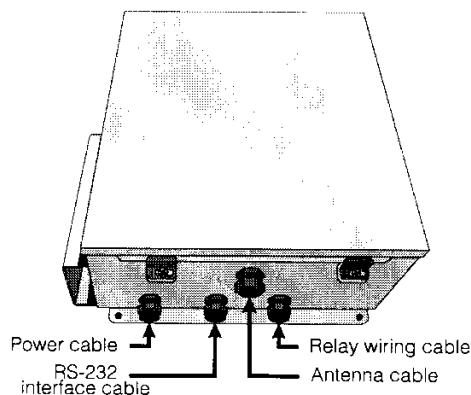


Figure 4. Conduit connectors on Reader

Route the conduit to reach the connectors on the Reader. Connect each conduit to the appropriate connector, as shown in Figure 4.

2.4 INSTALL LOOP ANTENNA

If a loop antenna was not installed in the roadbed prior to this installation, it will be necessary to saw cut the roadbed and insert a wire loop antenna at this time. Proceed as follows.

2.4.1 Antenna Requirements

- The length of antenna wire and lead wire, and the dimensions of the rectangular loop and lead wire slots **MUST** be as shown in the table below.

Loop Antenna Specifications				
Specifications below are for Belden wire # 9438				
Loop Size	Number of Turns	Dimensions of Rectangular Slot	Length of Lead Wire	Overall Length of Wire Required
4 foot (1.22 meter)	3	48 x 13 inches (1.22 x .33 meters)	14 feet (4.27 meters)	136 feet (41.45 meters)
6 foot (1.83 meter)	2	69 x 10 inches (1.75 x .25 meters)	15 feet (4.57 meters)	173 feet (52.73 meters)
8 foot (2.44 meter)	2	96 x 18 inches (2.44 x .46 meters)	16 feet (4.88 meters)	244 feet (74.37 meters)

- The distance between the Reader and the loop depends on the length of lead wire specified in the table above.

NOTE 1: In some cases, metal reinforcement (rebar) may have been laid in the concrete roadbed. This can be determined with a metal detector. If there is metal reinforcement in the roadbed, it will have to be removed prior to installation of the loop antenna, or system performance will be adversely affected.

NOTE 2: If there is an inactive vehicle detector loop less than 5 feet (1.5 meters) from the intended location of the new loop, the old loop must either be removed or cut into short lengths.

- The antenna loop must be located in the roadbed where the vehicle transponder will pass over it.
- The antenna loop must be at least 5 feet (1.5 meters) from any other active vehicle detector loop, and 12 feet (3.66 meters) from the gate.
- If there are two antenna loops for adjacent entry and exit lanes, the two loops must have at least 6 feet (1.82 meters) diagonal distance between them.
- Antenna wire **MUST** be in the range of 14 to 10AWG, 19 to 104 strand, with no splices. Belden #9438 wire is recommended.
- Wire insulation must be capable of withstanding a minimum potential of 600 volts RMS continuously, over the expected temperature extremes.
- Direct burial wire must be used; cross-linked polyethylene (XLPE) is recommended. Refer to International Municipal Signal Association, Inc. (IMSA) specifications 51-1, 51-3 and 51-5. See Appendix.
- Wire must be buried less than 2 inches (5.08 cm) below the roadbed surface.
- Sealant used to close the saw cut must be compatible with the wire insulation.

2.4.2 Saw Cut Procedure

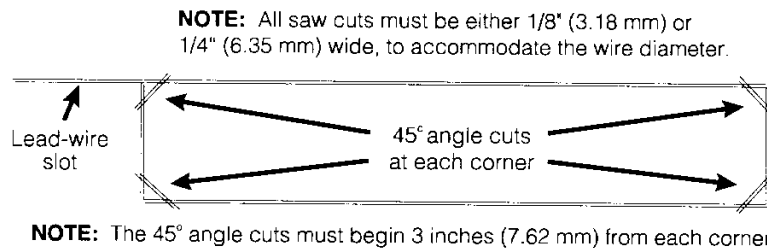


Figure 5. Saw cut layout

- Lay out and mark with chalk, the exact size and location of the slot before cutting it.
- Cut the slot 1/4 inch (6.35 mm) wide and 1 1/2 to 2 inches (38.1 x 50.8 mm) deep along the chalk lines.
- Cut an additional 45° cut at each of the four corners of the rectangle, as shown in Figure 5, to prevent sharp, 90° angles of the concrete from damaging the loop-wire insulation.
- Cut a lead-wire slot, 1/4 inch (6.35 mm) wide and 1 inch (25.4 mm) deep, from the corner of the rectangular loop cut to the end of the antenna-wire conduit.
- Clean the slot thoroughly with compressed air, and allow the slot and the area around it to dry completely. Be certain no moisture or sand gets back into the slot while the antenna wire is being installed.

2.4.3 Antenna Installation Procedure

Lay two or three turns of antenna loop wire in the saw cut as described below. Refer to the table in section 2.4.1 for exact wire length required, and Figures 5 and 6.

- Allow enough lead wire to be routed through the conduit to the Reader, with approximately 2 feet (61 cm) of slack.
- 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 wire must be used, with no splices. Avoid damaging the insulation on the wire. Nicks or abrasions can permit moisture to enter the loop, making it inoperable.

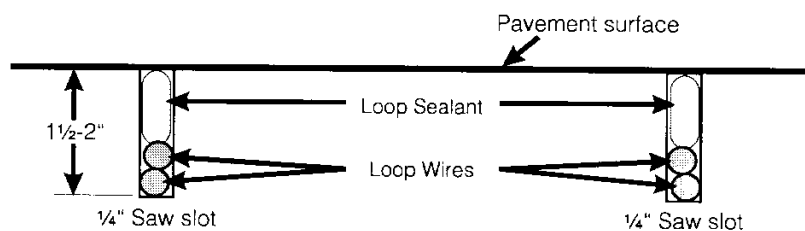


Figure 6. Side view of saw cut with loop wires and sealant

- Gently press the wire down to the bottom of the slot, all the way around the rectangular loop, with a blunt wooden stick (not a metal instrument or tool).
- Lay one more turn of wire in the slot, in accordance with the table in section 2.4.1, and press it down into the slot as described above.
- Cut the remaining wire to equal the length of the lead wire.
- Twist the lead wire and the remaining loop wire together tightly, a minimum of one turn every 2.5 inches (63.5 mm).
- Using a high-voltage megohmmeter, check for any leakage resistance to earth ground. It should be greater than 200 megohms. Follow the meter manufacturers instructions for test procedures and cautions.

2.4.4 Antenna Cable Pulling and Connections

1. Pull Cable

The loop antenna wires and lead wire length are critical. They must conform to the dimensions shown in the table in section 2.4.1. Pull the lead wires through the underground conduit from the loop antenna to the Reader as follows. Repeat the procedure for each Reader installed. Refer to Figure 4.

- Run fish tape through the antenna conduit opening inside the Reader to the loop antenna.
- Go to the end of the conduit near the loop antenna. Fasten the two ends of twisted antenna lead wires to the end of the fish tape.
- Return to the Reader and pull the fish tape and antenna wires through the conduit. Disconnect the wires from the fish tape and pull them approximately 8 inches (20 cm) through the conduit, into the Reader.

2. Connect Cable

In order to connect the loop antenna wires to the Reader, the connector cover (shown in Figure 11) must be removed from the left side of the Reader controller by removing the two screws and lifting the cover from the unit.

CAUTION: *Care must be taken when handling the Reader controller. High voltage across the antenna terminals could be harmful to your health. If the antenna insulation is damaged, the antenna should not be connected to the Reader controller.*

- Crimp and solder insulated, #6 stud spade lugs to the antenna lead wires.
- Insulate the barrel portion of each spade lug with a double layer of heat-shrink tubing. Allow the heat-shrink tubing to overlap the wire insulation.
- Connect the two wires to the Antenna connector as shown in Figure 10.
- Replace the connector cover and secure it in place with the two screws previously removed.

2.5 CONNECT AC POWER

2.5.1 AC Power Cable Pulling

The AC power cable must be installed by a licensed electrical contractor. It must be routed through the conduit from the AC power source to the Reader, and approximately 1 foot (31 cm) of slack cable must be left inside the Reader cabinet, enough to make the necessary connections. The procedure must be repeated for each Reader installed. Refer to Figure 4.

2.5.2 AC Power Cable Connection

Be certain the power is off before attempting to connect the AC power cable.

There is no power on/off switch on the Reader. A power disconnect device should have been installed at the power source when the power cables were pulled. If it has not, a licensed electrical contractor will have to install one. Until that is done, the main power source must be turned off to turn off power to the Reader. This can be done at the main power switch or circuit breaker.

- Connect the power cable wires in the Reader according to color codes, as shown in Figure 11.

CAUTION: *Connect the Reader ONLY to a properly rated power supply circuit. The wall-mounted Reader cabinet must be reliably earth grounded (14 AWG maximum). There must be no splices in the earth ground wire, and it must be connected independent of any other ground wires. Removing other ground wires must not disturb the earth ground.*

2.6 TEST THE READER AND ANTENNA

Before sealing the loop wire in the saw-cut slot, the Reader and antenna must be tested. Turn the power on and be certain the **Antenna Tuning / OK** light on the Reader controller is lit. If either of the red, out-of-range lights (**L↑** or **L↓**) is lit, even occasionally, the length of the lead wire must be adjusted as follows.

- The **L↑** light indicates the lead wires are too long (high inductance). If the **L↑** light is lit, trim 1 inch (25.4 mm) at a time off the ends of the two antenna lead wires, reconnecting the wires to the Antenna terminals after each cut, until the **L↑** light is off and the **OK** light is lit.
- The **L↓** light indicates the lead wires are too short (low inductance). If the **L↓** light is lit, **you MUST start over** with a longer piece of antenna wire. Return to section 2.4.3 and follow the instructions again.

2.7 SEAL THE LOOP

When the Reader and antenna have been successfully tested according to section 2.6, fill the saw-cut loop antenna slot with sealant, covering the wire completely so it is not visible.

2.8 PULL AND CONNECT PC CABLE

2.8.1 PC Cable Pulling

Pull the cable through the underground conduit between the Reader and the PC. Repeat the procedure for each Reader installed. Refer to Figure 4.

Locate the enclosed, 50 foot (15.24 meter) RS-232 computer cable, with a DB9 connector at one end and no connector at the other end. Because there is a connector at the PC end of the cable, the cable must be pulled through the end of the conduit closest to the PC.

- Run fish tape from the PC conduit opening inside the Reader, through the conduit to the end near the PC.
- Go to the end of the conduit near the PC. Allow enough slack cable for the connector end of the RS-232 cable to reach the PC, and fasten the cable to something to prevent the slack from being pulled into the conduit.
- Fasten the other end of the RS-232 cable to the end of the fish tape.
- Return to the Reader and pull the fish tape and approximately 1 foot (31 cm) of the RS-232 cable through the conduit, enough to make the necessary connections in the Reader. Disconnect the cable from the fish tape.

2.8.2 PC Cable Connections

- Connect the RS-232 DB9 connector to the appropriate, available serial (COM) port on the PC.
- In the Reader, make the RS-232 interface cable connections shown in Figure 11 for the Serial cable wiring 6-pin terminal block.

2.9 PULL AND CONNECT BARRIER OPENER CABLE

2.9.1 Barrier Opener Cable Pulling

The barrier opener cable should be 24 gauge or larger, stranded.

- Run fish tape from the conduit opening inside the Reader, through the conduit to the end near the barrier opener.
- Go to the end of the conduit near the barrier opener. Fasten one end of the cable to something close to the barrier opener, with a sufficient amount of slack to reach the opener. Fasten the other end of the barrier opener cable to the end of the fish tape.
- Return to the end of the conduit near the Reader, and pull the fish tape and barrier opener cable through the conduit. Disconnect the cable from the fish tape and pull it approximately 2 feet (61 cm) through the conduit, into the Reader.

2.9.2 Barrier Opener Cable Connections

- Crimp and solder insulated, #6 stud spade lugs to the barrier opener cable wires.
- Connect the barrier opener wires inside the Reader, as shown in Figure 11.
- Connect the wires at the other end of the cable to the corresponding connections of the barrier opener.

2.10 INSTALL TRANPONDERS

Transponders must be placed on all vehicles authorized access to the secure area. Three types of transponders are available for mounting on various types of surface. **A magnetic transponder should be used whenever possible.** Placement of transponders depends of the type of vehicle. They must be mounted where they will pass over the buried loop antenna, as low to the ground as possible.

Figure 7 shows transponder mounting locations on various types of vehicles.

On all vehicles, the transponder must be mounted:

- on a flat, horizontal surface.
- on the underside of a vehicle, as near as possible to the ground.
- where there is no metal between it and the ground.

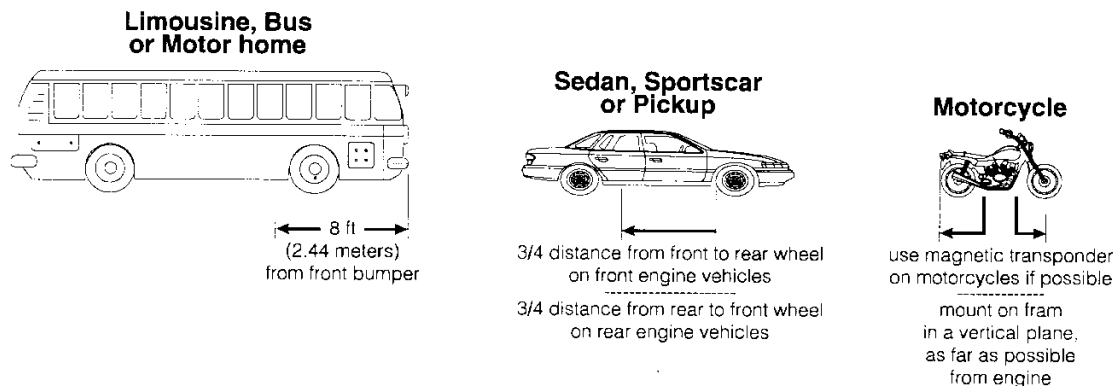


Figure 7. Transponder mounting locations

2.10.1 Magnet Mount Tag Transponder

Mount the Magnet Mount Tag transponder on a flat, preferably vertical, steel surface, where there are no other steel surfaces between the transponder and the road surface. If no flat, steel surface is available in the mounting location specified in Figure 7, use a dual-mount transponder.

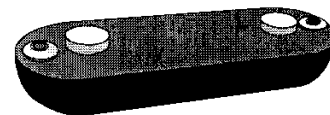


Figure 8.

Magnetic transponder

- Before mounting the Magnet Mount Tag transponder on a vehicle, clean any dirt or residue from the mounting surface where the magnets will contact the metal.
- Place the transponder on the steel mounting surface.

2.10.2 Heavy Duty Tag Transponder

The Heavy Duty Tag transponder can be mounted on a flat surface with screws, bolts or rivets as follows.

- Use the gasket enclosed with the transponder as a template. Hold the gasket against the mounting surface where the transponder will be mounted, and mark the surface with a pencil or other marker through the holes in the gasket.
- Drill a $\frac{3}{16}$ inch (5 mm) hole at each of the marked spots.
- Mount the gasket and transponder with screws, bolts or rivets (not included) over the drilled holes as shown in Figure 9.

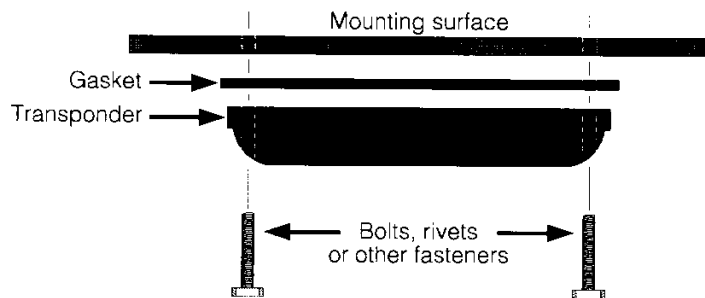


Figure 9. Heavy Duty Tag transponder

2.10.3 MiniTag Transponder

The MiniTag transponder can be mounted with its self-adhesive backing, or with screws, bolts or plastic rivets. It must be mounted 15 inches (381 mm) or less from the ground, on a flat, horizontal surface. If that is not possible, use the magnetic transponder. Before mounting the MiniTag transponder on a vehicle, clean any grease, oil or other residue from the mounting surface.

1. Self-Adhesive Mounting

- Peel the paper backing off the adhesive base of the transponder.
- Press the adhesive base of the transponder firmly against the mounting surface in the position shown in Figure 10.



Figure 10.
MiniTag transponder

2. Screw Mounting

- If you are going to mount the transponder with screws, bolts or the enclosed plastic rivets, use the transponder as a template and mark the mounting surface through the two screw holes in the base of the transponder.
- Remove the transponder from the mounting surface and drill a $\frac{3}{16}$ inch (5 mm) hole at each of the marked spots.
- Mount the transponder with screws, bolts or the enclosed plastic rivets over the drilled holes.

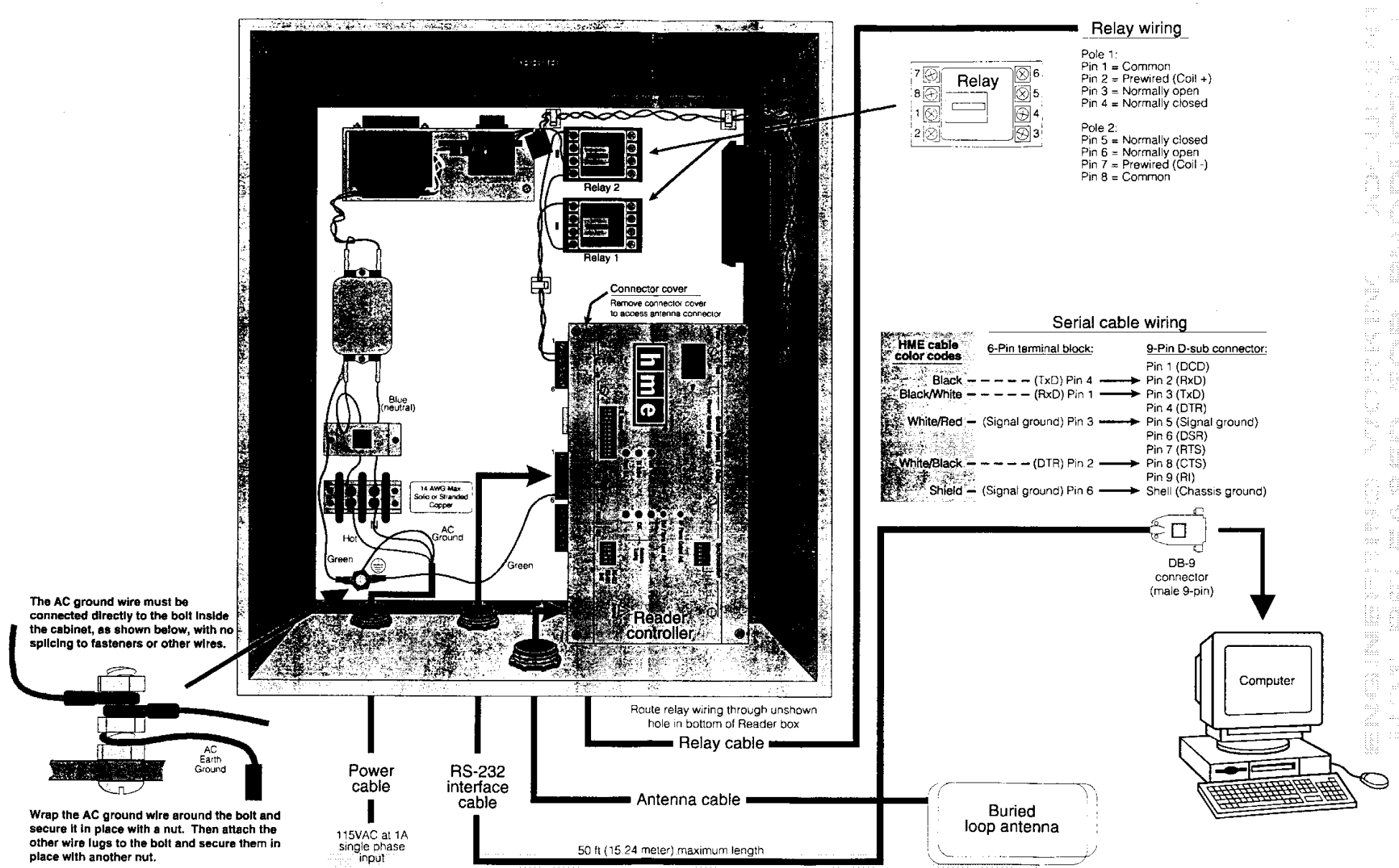


Figure 11.

THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION AND IS NOT TO BE RELEASED FOR

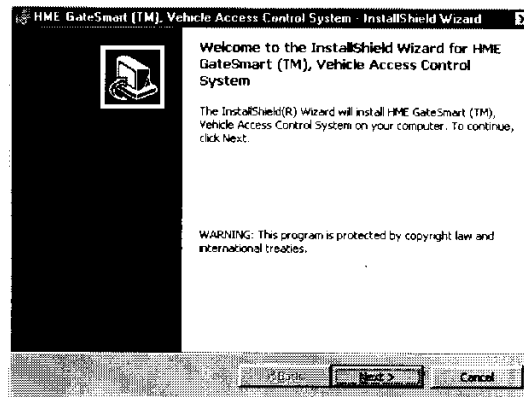
SECTION 3. SOFTWARE INSTALLATION

3.1 INSTALL SOFTWARE

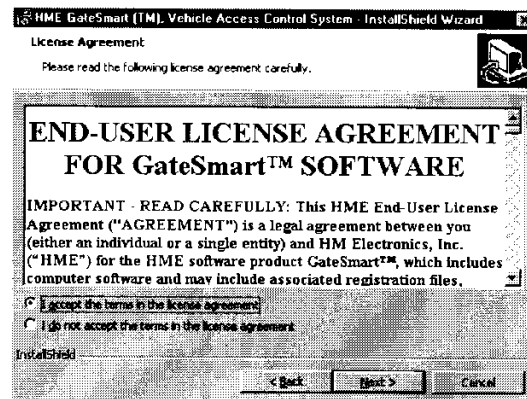
The software used with the GateSentry™ system is called GateSmart™.

GateSmart™ software must be installed in a Pentium class PC, with a Windows 95 or 98 operating system. The program files occupy less than 1 megabyte of hard drive space.

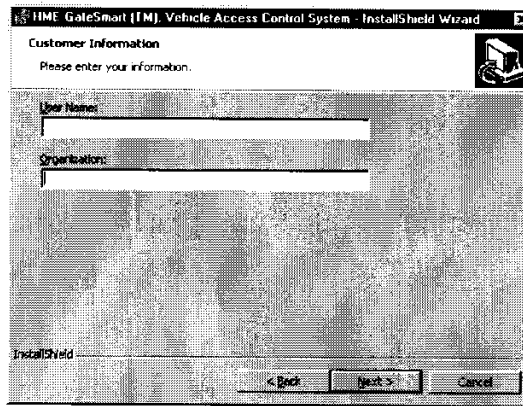
To install GateSmart™, insert the enclosed CD in the CD-ROM drive of the PC. Follow the instructions that appear on the screen, and enter any required information as follows. When the installation is complete, you will see the HME logo.



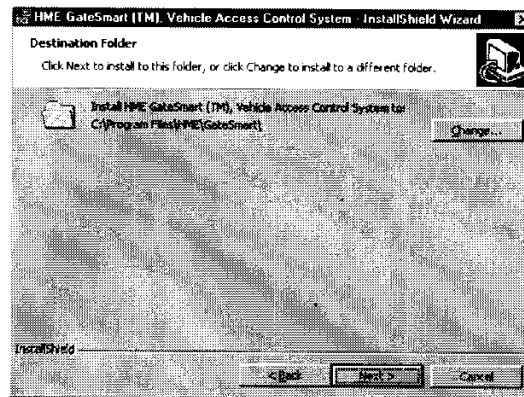
Read the screen and select **Next>** to continue, or **Cancel** to stop the installation.



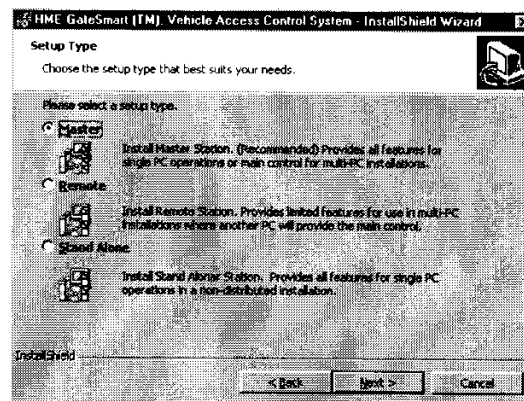
Read the entire license agreement. If you accept the terms of the agreement, select the circle to the left of **I accept the terms in the license agreement**. Then select **Next>** to continue, **Cancel** to stop the installation or **<Back** to return to the previous screen.



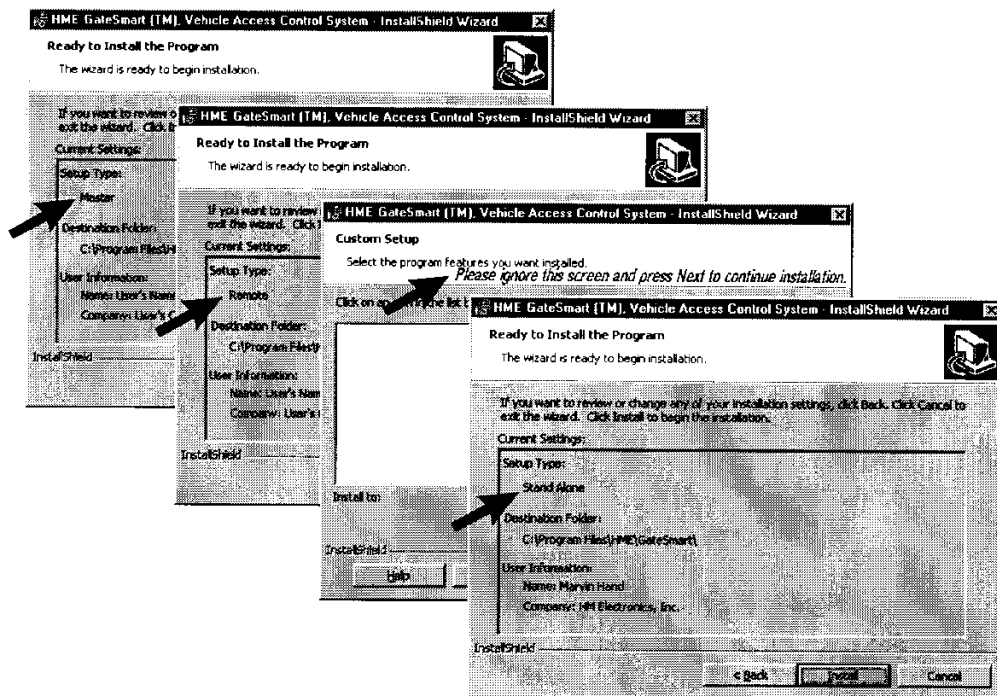
Enter the user's name and organization, then select **Next>** to continue, **Cancel** to stop the installation or **<Back** to return to the previous screen.



To accept the destination folder shown on this screen for GateSmart™ files, select **Next>** to continue, or **Change** to choose a different destination folder. Select **Cancel** to stop the installation or **<Back** to return to the previous screen.



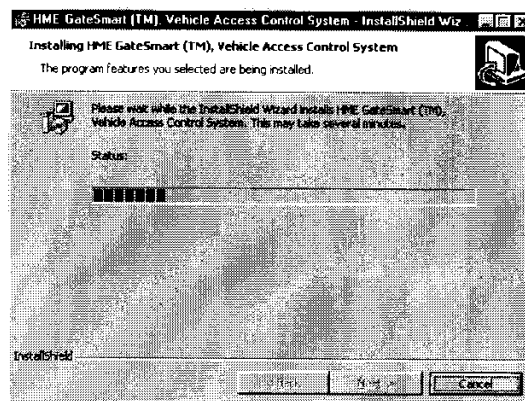
Select **Master**, **Remote** or **Stand Alone** to select the preferred setup type, then select **Next>** to continue, **Cancel** to stop the installation or **<Back** to return to the previous screen.



If you selected Master setup, the first screen at left, above will appear. Select **Install** to proceed with the installation, **Cancel** to stop the installation or **<Back** to return to the previous screen.

If you selected Remote setup, the second screen from the left, above will appear. Select **Install** to proceed with the installation, **Cancel** to stop the installation or **<Back** to return to the previous screen.

If you selected Stand Alone setup, the second screen from the right, above will appear. Ignore this screen and select **Next** to continue. The screen at the far right, above will appear. Select **Install** to proceed with the installation, **Cancel** to stop the installation or **<Back** to return to the Setup Type screen.

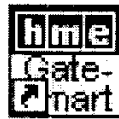


If you selected Install, the screen above will appear while the installation is in progress. The installation status will be shown above the status bar. Select **Cancel** to stop the installation at any time.



The installation has been completed. Select **Finish** to exit the installation program.

If you installed the GateSmart™ software from a CD, you may now remove it from your CD ROM drive.



The two HME icons shown above should now appear on your screen.

3.2 UNINSTALL SOFTWARE

If you would like to uninstall the GateSmart™ software at any time, follow the instructions below.



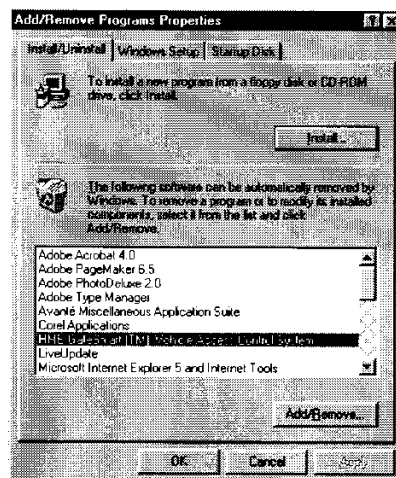
Double click on the **My Computer** icon on the PC desktop screen.



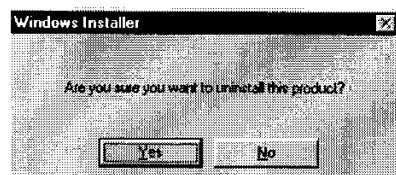
Double click on the **Control Panel** icon on the My Computer screen.



Double click on the **Add/Remove Programs** icon on the Control Panel screen.



Highlight **HME GateSmart (TM), Vehicle Access Control System** on the Add/Remove Programs Properties screen, then select **Add/Remove**.



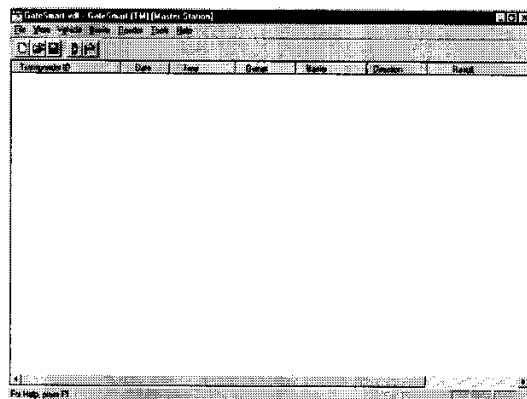
Select **Yes** to finish removing the GateSmart™ software from your computer.

SECTION 4. MASTER STATION INSTALLER SETUP

4.1 GateSmart™ SETUP

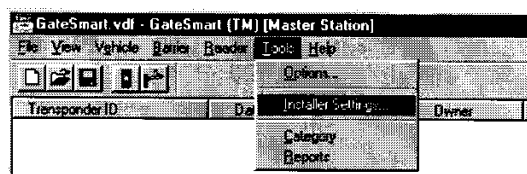


Double click on the HME GateSmart™ icon on the PC desktop to open the software program. The following screen will appear.

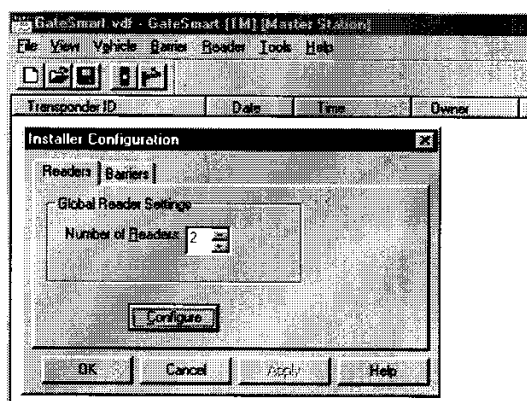


Configure the GateSmart™ software on the customer's PC as follows.

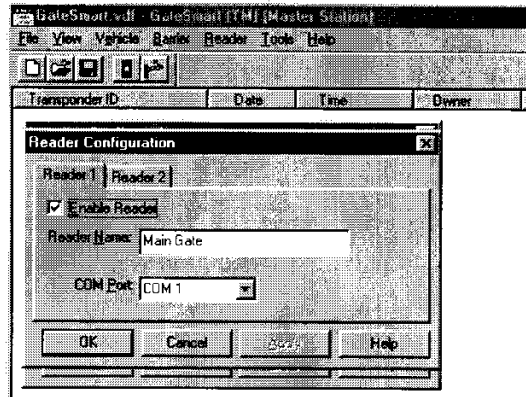
4.1.1 Installer Settings



Select **Tools** on the menu bar, and **Installer Settings** on the dropdown menu.



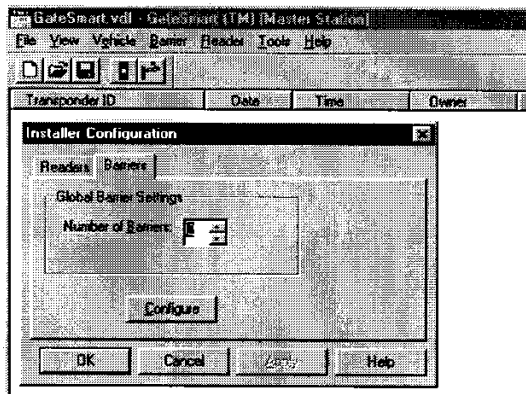
Click on the up ▲ or down ▼ arrows to indicate the number of Readers installed, then select **Apply** to accept and save the number of Readers, and select **Configure** to continue.



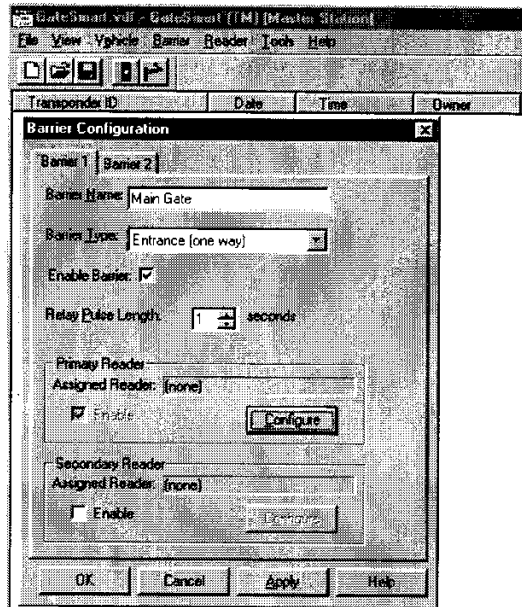
Select the box to the left of **Enable Reader**, and enter the name you would like to call the Reader (such as "Front Gate") in the box next to **Reader Name**, then click on the down ▼ arrow on the side of the box next to **COM Port** and select which of your PC ports you would like to assign to this Reader. Select **Apply** to accept and save the configuration for this Reader.

Select the next Reader (if any). Again select the box to the left of **Enable Reader**, and enter the name and COM port for this Reader as you did for the previous Reader. Select **Apply** to accept and save this configuration and go on to the next Reader.

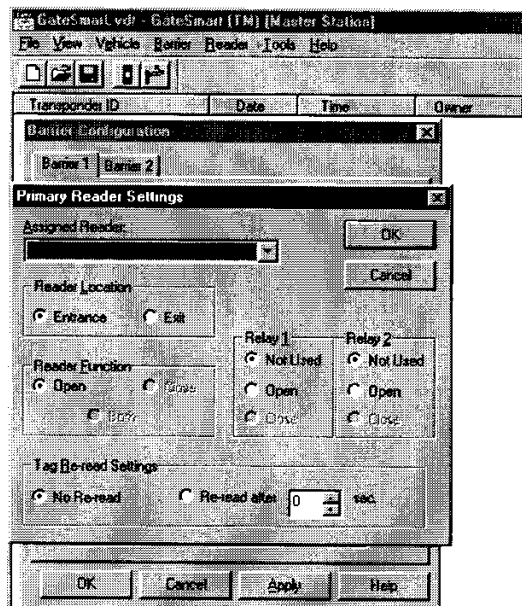
Continue in the same manner until all Readers are configured, then select **OK** to accept all the Reader configurations and exit.



Select **Barriers**, then click on the up ▲ or down ▼ arrows to indicate the number of entry/exit barriers to the secure area. Select **Apply** to accept and save the number of barriers, and select **Configure** to continue.



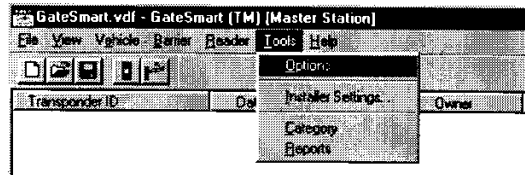
Enter the name you would like to assign this barrier, then click on the down ▼ arrow on the side of the **Barrier Type** box and select which type barrier this is. If you want this barrier to be activated, be certain there is a check mark in the **Enable Barrier** box. Click on the up ▲ or down ▼ arrows on the side of the **Relay Pulse Length** box to select the number of seconds pulse length for opening or closing this barrier. Select **Configure** to assign a Reader for this barrier.



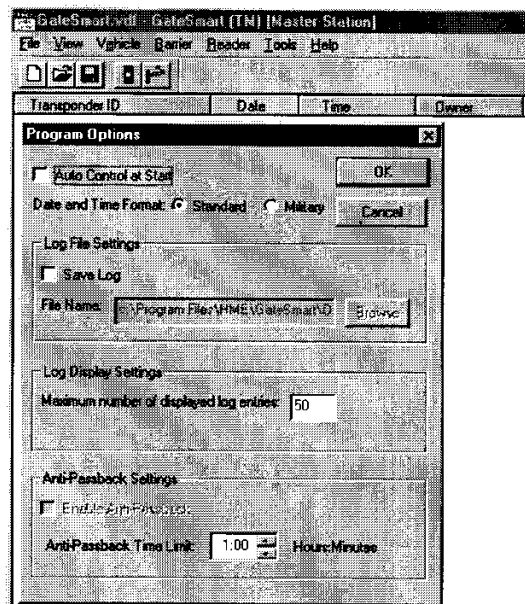
Click on the ▼ arrow on the side of the **Assigned Reader** box to select the Reader you would like to assign this barrier. Then select the desired Reader location and function, relay use and tag re-read settings. Select **OK** to accept these settings, or **Cancel** to return to the previous screen.

Select the next barrier (if any), and repeat the settings as you made them for the first barrier. Continue in the same manner until all barriers are configured, then select **OK** on the **Barrier Configuration** screen to accept all the barrier configurations and exit. You will return to the **Installer Configuration** screen. If you are satisfied with the Reader and barrier settings you have made, select OK to accept all the settings and exit the Installer Settings mode.

4.1.2 Options



Select **Tools** on the menu bar, then select **Options** on the dropdown menu.

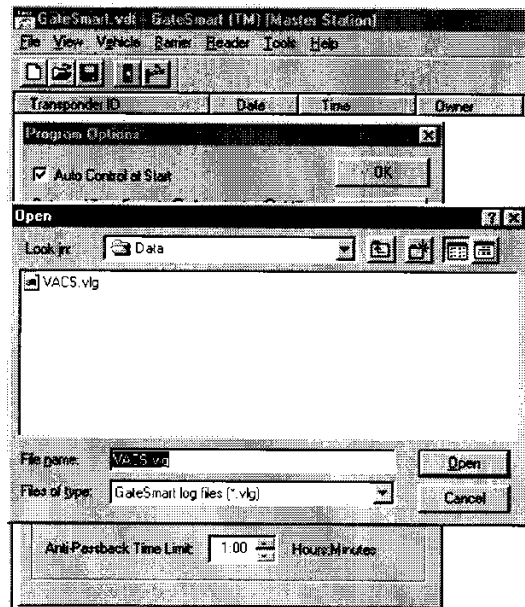


To allow automatic control to begin at startup, select the box to the left of **Auto Control at Start**.

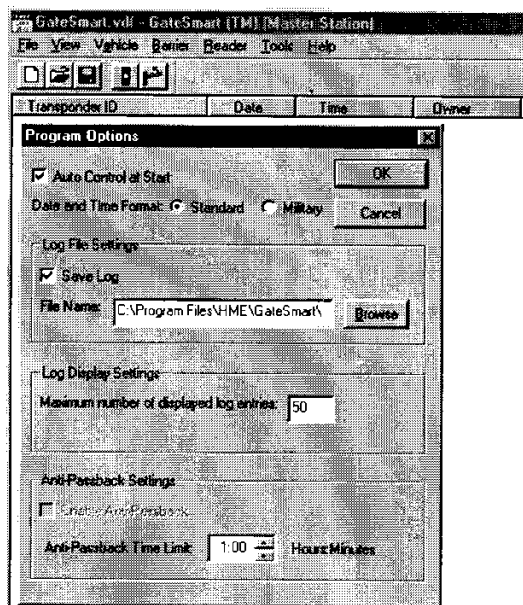
Set the **Date and Time Format** by selecting **Standard** format (month/day/year) or **Military** format (day/month/year).

If you want to save the **Log File Settings** that you have set up, select the box to the left of **Save Log** and designate the file path and name in the box to the right of **File Name**.

The **Browse** button can be used to find a location where you would like the log file to be located.



When you have entered the desired file name and have browsed to the desired file location, select the **Open** button to open the file.



Again in the **Program Options** screen, enter the maximum number of log entries you would like to have displayed in the **Log Display Settings** box.

NOTE: The **Anti-Passback Time Limit** feature is only available for Stand-Alone installations. If you are configuring a Stand-Alone setup, you can select the **Enable Anti-Passback** box to enable that feature, and set the amount of time you would like to require before a transponder can pass through an entry/exit point the next time by selecting the hours or minutes in the **Anti-Passback Time Limit** box and clicking on the up ▲ or down ▼ arrows on the side of the box to select the number of hours/minutes. Select **OK** to save your settings and exit.



Enter the user's name and organization, then select **Next>** to continue, **Cancel** to stop the installation or **<Back** to return to the previous screen.

4.2 GateSmart™ TRANSFER SETUP

The GateSmart™ Transfer setup is only required with the Master Station setup. It is the software that transfers data between PCs at master and remote access areas. If you are doing a Remote Station or Stand-Alone Station setup, skip this section.

4.2.1 Install Dial-Up Server



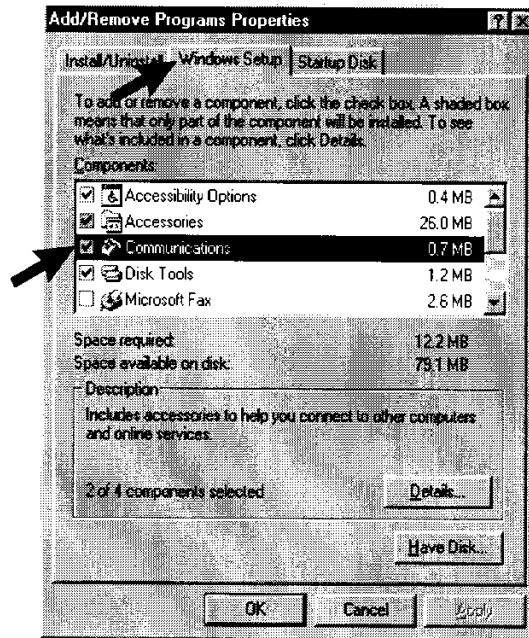
Double click on the **My Computer** icon on the PC desktop screen.



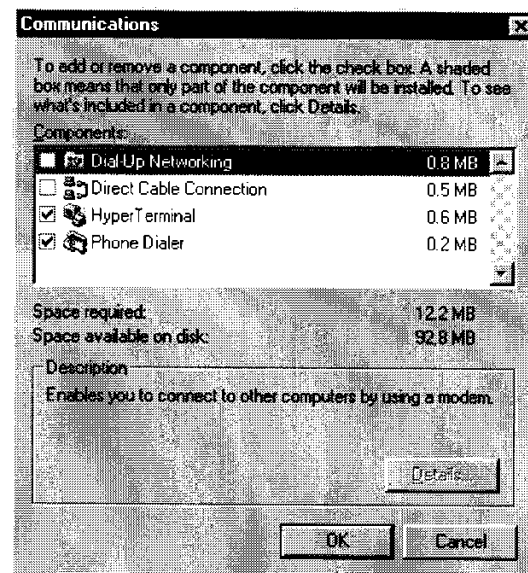
Double click on the **Control Panel** icon on the My Computer screen.



Double click on the **Add/Remove Programs** icon on the Control Panel screen.



Select the **Windows Setup** menu and double click on **Communications**.



Select the box to the left of **Dial-Up Networking**.

Dial-Up Networking will provide modem connections between the master computer and remote computers using GateSmart™ software.

Select **OK** to add this component, or **Cancel** to return to the previous screen.

At the **Add/Remove Programs Properties** screen, select **OK** again to accept installation of Dial-Up Networking.

4.2.2 Configure Network Properties



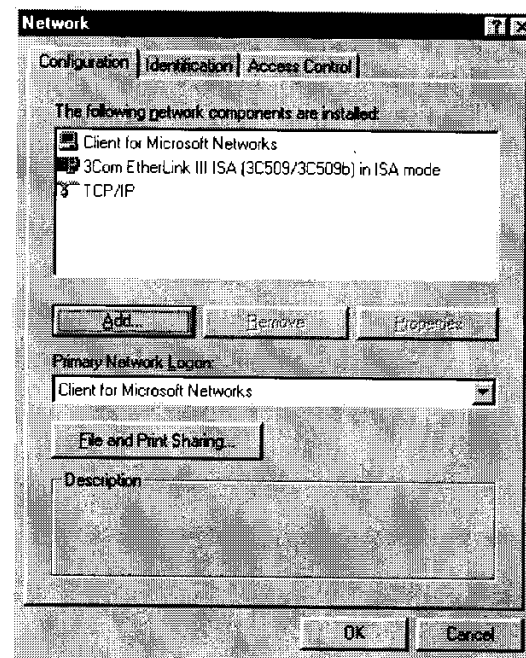
Double click on the **My Computer** icon on the PC desktop screen.



Double click on the **Control Panel** icon on the My Computer screen.



Double click on the **Network** icon on the Control Panel screen.



In the **Configuration** menu, the following items should be listed in the box under "**The following network components are installed.**"

Client for Microsoft Network
Dial-Up Adapter
TCP/IP

If all of these items are listed, select **OK**. If any of these items are not listed, select **Add**.