



# Greenlite Cashless

## *In-Field Hardware Installation Instructions*

**Your Greenlite Cashless field install package** includes, for each vending machine:

- One box containing a Greenlite Device, Antenna, and cables for MDB, DEX, and door switch
- One box containing a **Card Reader** with cable
- Certain machine makes and models require additional **accessories** (cables, connectors, etc.) for the installation. If you have not already ordered the parts for your specific machine contact Vendnet at **1-800-833-4411**

Some details of the installation procedures will also vary for different makes and models of vending machines. This booklet provides **basic** installation instructions that apply for several common makes and models; for further details regarding the unique requirements of certain models, two resources are available:

- Contact Vendnet at 1-800-833-4411 and request technical assistance on the model in question.
- [www.greenlitevending.com/support/](http://www.greenlitevending.com/support/) provides **videos** demonstrating the basic installation, plus several additional videos addressing the special requirements for installation.

[www.greenlitevending.com/support/](http://www.greenlitevending.com/support/)



**NOTE! If your are purchasing your machine from the factory with Greenlite already installed refer to the quick start guide included with your machine.**

**Please take advantage of these videos before installing any devices. They will answer many questions you may have:**

- First, watch the video entitled **“Greenlite Standard Installation Video.”** This describes installation of the Greenlite Device. The basic procedures described here apply to *all* vending machines
- Next, watch the video covering installation of the **Antenna.**
- The following video, **“Greenlite Card Reader Installation Video,”** demonstrates installation of the Card Reader
- It is strongly suggested that you install a Door Switch to track each time the machine is visited, so watch **“Greenlite Door Cable & Door Switch Video.”** Contact Vendnet at 1-800-833-4411 to obtain a door switch for your make and model vending machine

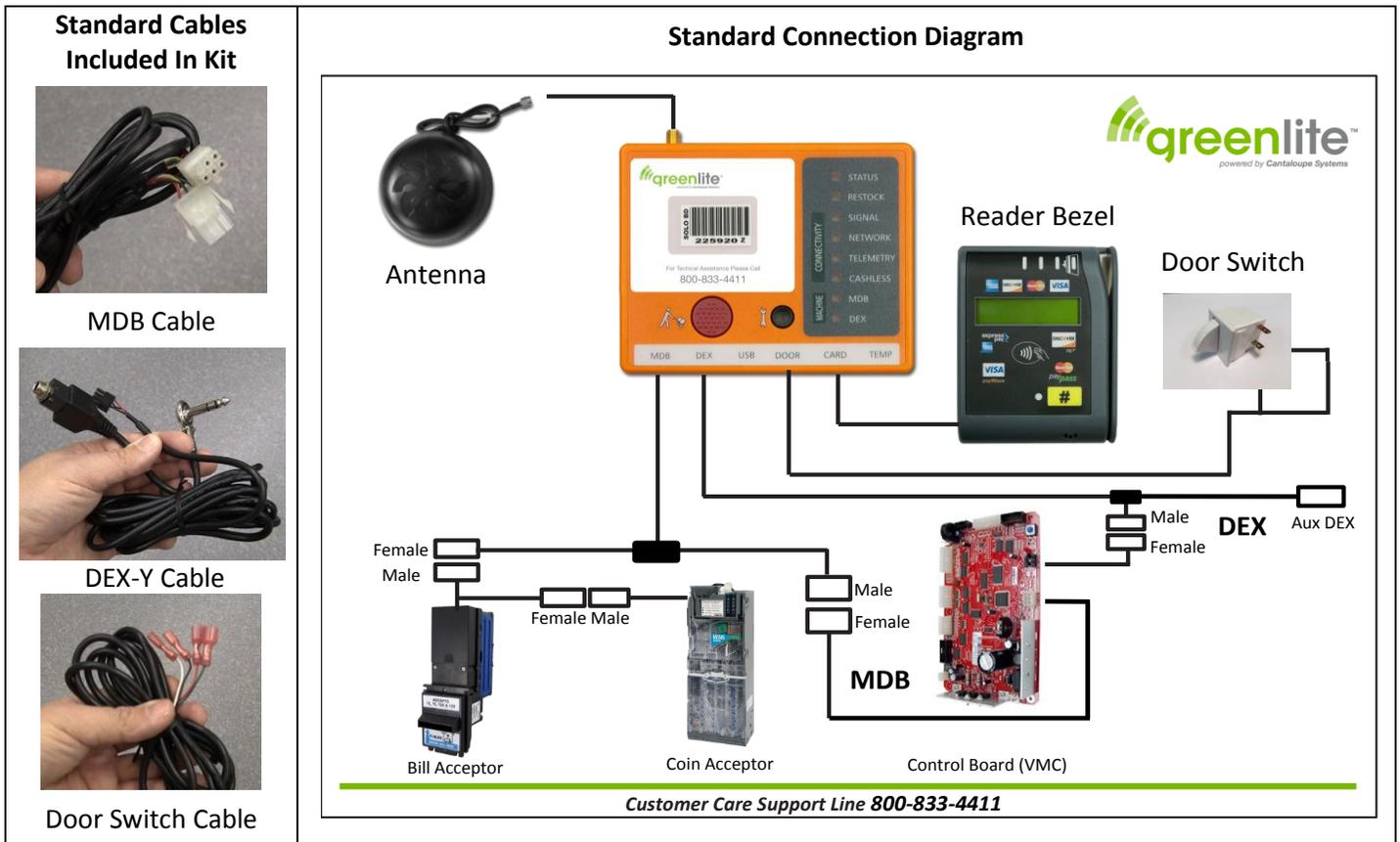


Figure 1: Illustrated Wiring Diagram

Figure 1 is a wiring diagram showing how the Greenlite Device is connected to the antenna, the machine's multi-drop bus (MDB), its DEX data port, and to your new card reader. The optional connections to the door switch and temp sensor is also shown.

If you are retrofitting a machine in the field with Greenlite, here is a list of the **tools** you will need (plus a number of additional recommended items):

### Required Tools

- Drill
- 3/4" Drill Bit (Step Bit Preferable)
- 11/64" Drill Bit (Step Bit Preferable)
- 1/2" Nut Driver
- 11/32" Nut Driver
- 5/16" Nut Driver
- Needle Nose Pliers
- Ratchet Screwdriver w/ Phillips & flathead
- Stubby Screwdriver w/ Phillips & flathead

### Recommended Tools & Materials

- Industrial Velcro
- Electrical Tape
- 4" and 7" Cable Ties
- Cable Tie Mounts
- Knife
- 26" Stepladder or Stool
- Channel-Lock Pliers
- Flashlight
- Alternative is 1/2" Drill bit

(When selecting drill bits, keep in mind that some holes may need to be drilled through the outer walls of your vending machines, i.e., sheet metal. Carbide-tipped bits are recommended.

**NOTE: Be sure to remove any and all shavings or tailing inside machine.)**

## Install Greenlite Telemetry Device and Antenna

First, make sure your machine is in good working order and that the coin and bill acceptors and any other items are functioning correctly. Then turn the vending machine's power OFF, either by throwing the on/off switch, unplugging the machine, or removing the main fuse.

**Note:** For older equipment, prior to beginning the installation, check with Vendnet at **1-800-833-4411** to determine if you may need a vending machine controller EPROM update or other accessories for your model.

**Most mountings are straight forward however please refer to our "Greenlite Installation Location List,"** shows the **recommended positions** for installing the Greenlite Telemetry Device, antenna, cables, and accessories for each of several common makes and models.

- As shown in the "Greenlite Telemetry Device Installation Video," find a spot to **place the Greenlite Device** where it will be easily visible and accessible, and also in reasonable proximity to the various necessary connections. Peel off the adhesive backing of the Velcro pad on the back of the Greenlite Device, and press it firmly in place. (See video).
- Install the **Antenna**; this is normally mounted on top of the machine.
  - Make sure that there are no obstructions inside the machine below where the  $\frac{3}{4}$ " hole will be drilled. Some customers find using a (tapered) **Step Drill Bit** easier than using a standard  $\frac{3}{4}$ " drill bit. If using regular drill bits. Start the hole with an  $\frac{11}{64}$ " bit first and then move up to the  $\frac{3}{4}$ " bit. If using a Step Drill Bit, use a  $\frac{1}{4}$ " to  $1\text{-}\frac{3}{8}$ " bit. Use of the Step Drill Bit is preferred as it makes a quicker, cleaner hole and will deposit less metal shavings inside the machine to clean up later.
  - Remove the nut and washer from the antenna and insert the antenna cable on the edge of the hole.
  - On the inside of the machine, insert the antenna cable through the washer and nut and screw the nut onto the bottom of the antenna.
  - **Note:** Some machines have a thicker top because of extra insulation or bracing. In this case a **bolt extender** will be required. Consult Vendnet at **1-800-833-4411** to confirm if a bolt extender is needed for your model.
- Use the **MDB cable** provided in the kit to connect the Greenlite Telemetry Device's MDB port directly to the machine's MDB motherboard. (Other components connected to MDB should come *after* the Greenlite Telemetry Device in the daisy-chain sequence.) This connection provides power to the device as well as data connections between multiple components. (Consult the Greenlite Telemetry Device Installation Video and the chart above to confirm connections for the MDB)
- Use the **DEX cable** provided in your kit to connect the Greenlite Telemetry Device's DEX port to the machine's DEX port (a female phono-jack-type connector). This jack may be mounted to the vending machine control board cover, be in line with the harness or may

not be included in your model. If no DEX cable is present in your machine, contact Vendnet at **1-800-833-4411** to obtain a DEX cable for your model.

- *Note:* If the machine is to be serviced using a handheld computer requiring DEX access, the “DEX Y cable” (splitter) is provided and will let you connect DEX to the Greenlite Telemetry Device while providing a second connection for the handheld.
- If desired, use the **door cable** (provided) to connect the Greenlite Telemetry Device’s DOOR port to the door switch. Consult with Vendnet to see which of your machines require the installation of a new Door Switch (in addition to the switch button already in the machine) and/or a new Striker Plate.
  - See the “**Greenlite Door Cable & Door Switch Video**” for complete details. You will learn which machines require the new switches and/or striker plates and which can use the machine’s existing door button, and you will be shown how to connect the appropriate switch to the Seed Device.

Connecting the door button to the Greenlite Telemetry Device will **record the time** whenever the door is opened and closed.

- The optional **temperature cable** can be used to connect the Greenlite Telemetry Device’s TEMP port to the machine’s temperature sensor.
  - For any refrigerated machine, connecting the Greenlite Telemetry Device to the temperature sensor will provide an alert whenever the temperature exceeds a specified range.

## Install Card Reader

**While power is still off**, attach the card reader to the front of the machine.

A video entitled “**Greenlite Card Reader Installation Video**” is available at [www.greenlitevending.com/support](http://www.greenlitevending.com/support).

Many makes/models provide a *secondary cutout* near the existing coin slot and/or bill acceptor. Remove the blank faceplate to reveal holes for the standard set of mounting screws and for the cable, and attach the card reader there.

If no such cutout is available, determine where the card reader should be placed and use the enclosed template to drill the necessary holes.

- In some cases, you might decide to *remove the current bill acceptor* and replace it with a *combination bill-acceptor/card-reader*.
- Once your card reader is in place, use the provided **card-reader cable** to connect it to the Greenlite Device’s CARD port.

## Configure the Vending Machine

The final step is to **configure the vending machine for cashless operations**. Procedures vary for each manufacturer and model.

Refer to your vending machine’s manual for the procedure or visit [www.greenlitevending.com/support](http://www.greenlitevending.com/support) for your model.

## Test Your Installation

Once you have installed the Greenlite Telemetry Device, card reader, antenna, and cables, it's time to run a test:

- Turn the vending machine's power back ON.
- Allow a few minutes for the Greenlite Device to connect to the network and initialize. During this process, the device's LED indicator lights for STATUS, MDB and CASHLESS should appear *blinking green*. This may take from a few minutes up to 12 minutes.
- When the LEDs stop blinking and glow *solid green*, you're ready to test.
  - **Important:** If the **DEX** light is NOT GREEN, then power-cycle the machine; this should result in a solid green DEX LED.
- Test by swiping a credit card and verifying that a credit is made; then press the <Cancel> button.
- For a complete explanation all the Greenlite Telemetry Device *status lights*, as well as any *error messages* that may appear on the Card Reader, please refer to the ***Troubleshooting Guide***.

Once testing is done and any problems have been fixed, **record the Device ID on the Installation Worksheet**, along with along with the appropriate **customer and machine information**.