



CardMaster RF Installation Manual

Rev 07.03.12

Related Manuals include:

CardMaster Operators Guide

CardMaster Programming Guide

CardMaster Service Guide

CardMaster Installation Manual

Installation Manual for CardMaster fuel control

www.cardlockvending.com customers call 888-487-5040

CONGRATULATIONS

**YOU HAVE PURCHASED CARDLOCK VENDINGS
CARDMASTER SYSTEM WITH RF
COMMUNICATIONS.**

**THIS INSTALL MANUAL IS TO BE USED IN
CONJUNCTION WITH THE CARDMASTER
INSTALLATION MANUAL .**

**THE RF UNITS HAVE BEEN PROGRAMMED AND
TESTED WITH YOUR CARD READER. THERE
SHOULD BE NO NEED TO ACCESS THE RF UNITS IF
INSTALLATION IS PERFORMED PROPERLY.**

**THE PC RF DEVICE CAN BE MOUNTED OUTSIDE
ON A WALL IF YOU PROVIDE A NEMA 4 WEATHER
PROOF BOX AND AC OUTLET FOR THE POWER
SUPPLY.**

**THE PC RF RECEIVER MAY BE INSTALLED
INDOORS AND COMMUNICATE WITH THE
OUTSIDE UNIT DEPENDING ON CONDITIONS OF
THE BUILDING AND POTENTIAL OBSTACLES
BETWEEN THE RECEIVING DEVICE AND
TRANSMITTING DEVICE. THIS CAPABILITY IS
SITE SPECIFIC AND NO GUARANTEES OF
COMMUNICATION THROUGH OBSTACLES IS
OFFERED BY CARDLOCK VENDING.**

Critical Do's and Don'ts

*Do not proceed without reading the following information on this page. Critical!

*All work should only be done by a qualified electrician, experienced in installing Petroleum Equipment in a Class 1 Div 1 or 2 environment.

*All work needs to be done in conformance with applicable NFPA codes.

*All work needs to be done in conformance with applicable provisions of the National Electric Code.

*All work needs to conform to all applicable local codes, electrical, safety, and fire department.

*Do not substitute telephone wire as communication wire where Belden Shielded Cables are required.

CardMaster 120vac Power must be from a dedicated circuit.

*Do insure clean electrical power.

In case of doubt install “AC” line conditioners with surge suppression

EARTH GROUND– TESTING TO ZERO (0) OHMS REQUIRED

Overview

System Components of the RF CardMaster Console:

**See CardMaster Installation Manual
for full CardMaster Component List.**

- 1. Mounting Bracket**
- 2. Antenna**
- 3. Antenna Cable**
- 4. Antenna Mounting Post**
- 5. RF Receiver**
- 6. RF Transmitter**
- 7. (4) Mounting screws**
- 8. RS232 cable**
- 9. 12 volt power supply cable/w RF power cable**

RF

CARDMASTER

PHYSICAL

INSTALLATION

NEC Hazardous Location Installation Parameters

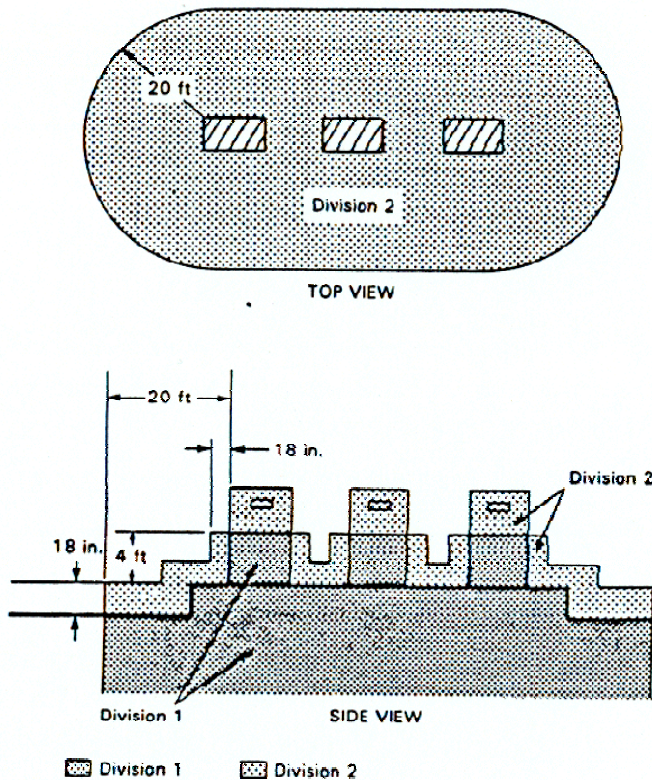


Figure 314-1. Extent of Class I location around gasoline dispensing units (except overhead type).

It is important to note that all conductors of a circuit, including the grounded conductor, that may be present within a dispensing device are required to be provided with a switch or special-type circuit breaker that will simultaneously disconnect all conductors. The intent is that no energized conductors be in the dispenser vicinity during maintenance or alteration. Considering possible accidental reversal of the polarities of conductors at panelboards, the grounded conductor must be able to be switched to the open or off position. Grounded conductors may be present in old-style pump motors, or they may pass through a dispenser as part of a circuit for the island lighting.

Since a fire or large gasoline spill at the dispensing island may make it impossible to operate the switches on the dispensing island that shut off the flow of gasoline, paragraph 4-1.2 of NFPA 30A, *Automotive and Marine Service Station Code*, requires an easily accessible and clearly identified emergency power cutoff to be provided at a location remote from the dispensing device. The term "clearly identified" means that a sign is to be posted indicating where the cutoff switch is located. This emergency power cutoff should be readily accessible and not blocked

Division 1 is the area around the gasoline/diesel dispensers.

Division 2 is the area 0" to 18" above grade and 0" to 18" away from the islands out to a distance of 20'.

This means CardLock Vending's CardMaster can be installed 48" above grade & 18" horizontal gap or space between the CardMaster and the dispensers.

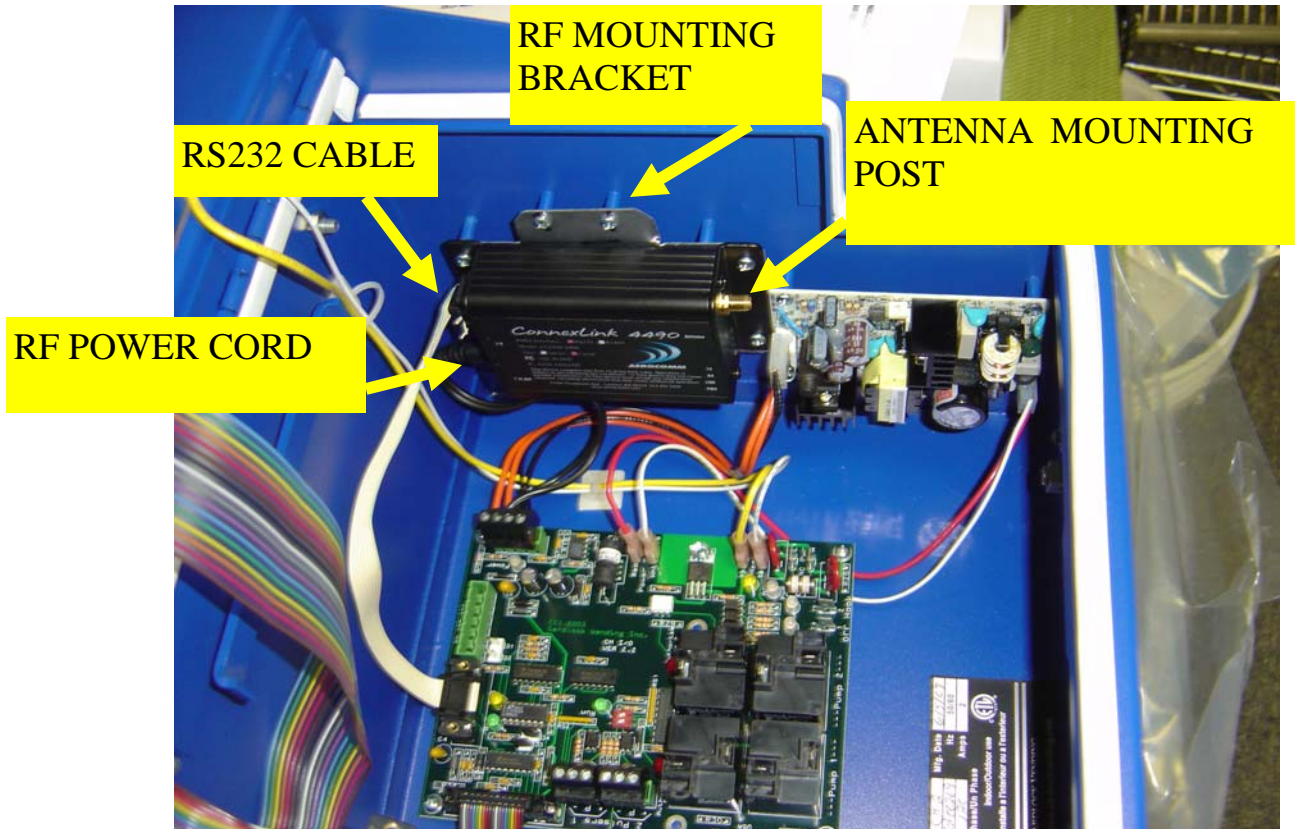
Always follow the local codes and the national electric codes when installing Cardlock Vending equipment. This is true at fueling islands as well as any other locations.

INSTALLATION OF CARDREADER

1. FOLLOW INSTRUCTIONS IN CARDMASTER INSTALLATION MANUAL BEFORE PROCEEDING.
2. FOR FACTORY BUILT UNITS ATTACHING THE ANTENNA CABLE TO THE TRANSMITTER IS ALL THE INSTALLER NEEDS TO DO FOR RF UNITS.
3. FOR RF FIELD KITS DRILL HOLE IN PEDESTAL 3/4 INCH DIAMETER AT APPROPRIATE HEIGHT FOR SIX INCHES OF ANTENNA MOUNTING POLE TO BE ABOVE CARD READER.



4. ATTACH ANTENNA CONDUIT TO PEDESTAL SECURING WITH U BRACKET. ROUTE ANTENNA CABLE INTO CARD MASTER AND SECURE TO ANTENNA POST ON RF UNIT.



5. SECURE RF UNIT TO CARDMASTER BOX USING SUPPLIED MOUNTING BRACKET AND SCREWS. REPLACE THE EXISTING 12V POWER SUPPLY CABLE WITH NEW CABLE PROVIDED. PLUG RF POWER CABLE INTO RF UNIT.
6. UNPLUG EXISTING RS232 CABLE FROM I/O BOARD AND REPLACE WITH NEW CABLE

PROVIDED IN KIT. PLUG OTHER END INTO RF MODULE.

7. FOR FACTORY BUILT UNITS ATTACHING THE ANTENNA CABLE TO THE TRANSMITTER IS ALL THE INSTALLER NEEDS TO DO FOR RF UNITS.

PROCEED WITH CARDMASTER INSTALLATION PROCEDURES AS OUTLINED IN THE CARMASTER INSTALLATION MANUAL