

# Engage Combo (Gen 2) Installation Guide

THE COMPLETE INSTALLATION &  
OPERATIONS REFERENCE GUIDE



# Welcome to Your New Device

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## **THE ENGAGE COMBO**

Congratulations on your purchase of Cantaloupe's new Engage Combo Device. This installation guide has been created to help you get up and running. Please be sure to read this manual thoroughly and refer to the pre-installation information content in the Before You Get Started section for additional resources and information.

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# Before You Get Started

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## SECTION 01

TOOLS REQUIRED FOR INSTALLATION

INSTALLATION KIT CONTENTS

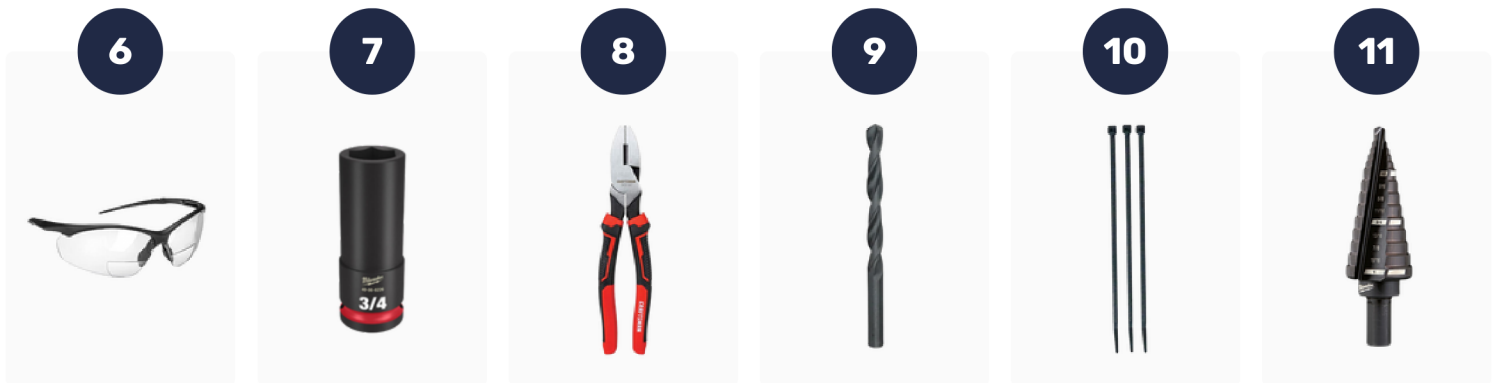
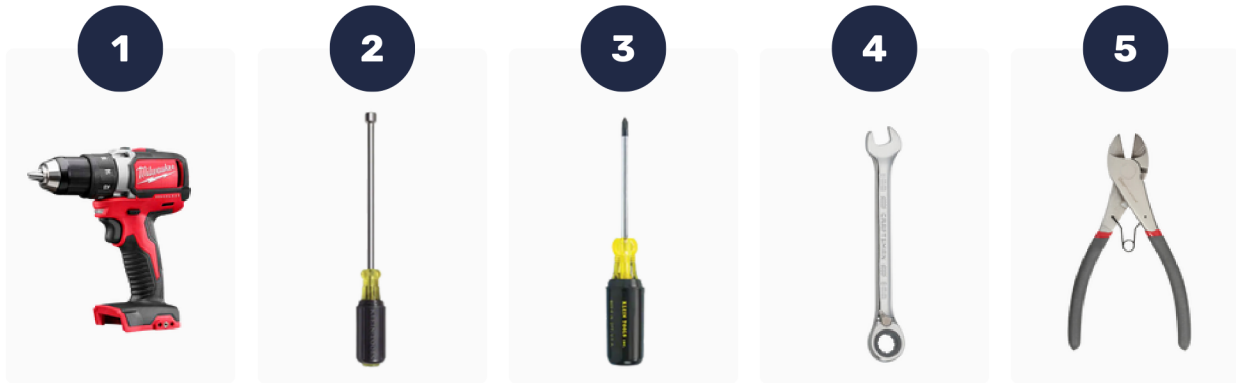
PRE-INSTALLATION STATEMENT PROCEDURES

### **PLEASE NOTE:**

The Engage Combo device may need to download and process software updates when it is first installed and powered on. Please allow the system to fully complete all updates before attempting any test swipes. Please do NOT power down the unit while the updates are processing as this may result in unexpected behavior.



### TOOLS REQUIRED FOR INSTALLATION



1. Power Drill (corded or battery operated)
2. 11/32" Nut Driver
3. Phillips Head Screwdriver
4. 8mm Metric Wrench
5. Wire Cutters
6. Safety Glasses

7. 3/4" Deep Wall Socket
8. Pliers
9. 5/32" Drill Bit
10. Zip Ties
11. Step Bit\* (1/2", 3/4", and 1" drill bits)

\*Alternatively, you can use the individual drill bit sizes in place of the step bit.

### INSTALLATION KIT CONTENTS

1



2



3



4



5



6



1. Engage Combo Device
2. Bill Acceptor Guides
3. Antenna

5. MDB Cable
6. DEX AB Cable (To Machine)
7. Decals

**IMPORTANT:** In some cases, you may need to order a regressor depending on where you choose to mount the device and if there are clearance issues, contact Cantaloupe's Customer Care at 1-800-341-7677 for more information.

### INSTALLATION INFORMATION



Thank you for purchasing the Engage Combo. Before you start, please read the instructions thoroughly and then take a few moments to plan your installation. Pick a mounting spot that will allow for ease of access and will not interfere with any moving parts in your vending equipment. You must have a signed ePort Connect Services Contract and bank account assigned to this device for it to be able to accept credit card transactions.

Please call Cantaloupe's Customer Care at 1-888-561-4748, if you need activation documents or have any technical issues with your device.

You must have a signed ePort Connect Services Contract and bank account assigned to this device for it to be able to accept credit card transactions. Please call Cantaloupe's Customer Care at 1.888.561.4748 if you need activation documents.

For instructional videos and installation tips for your vending device, please visit us at <https://www.cantaloupe.com/help-center/r/touchscreen-installation-guides> or scan the QR code above with your smart phone or tablet for quick, direct access to the installation videos for your specific vending equipment below.



## REQUIRED ACCESSORIES

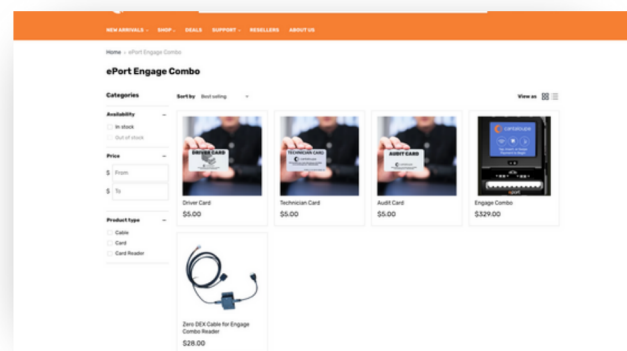
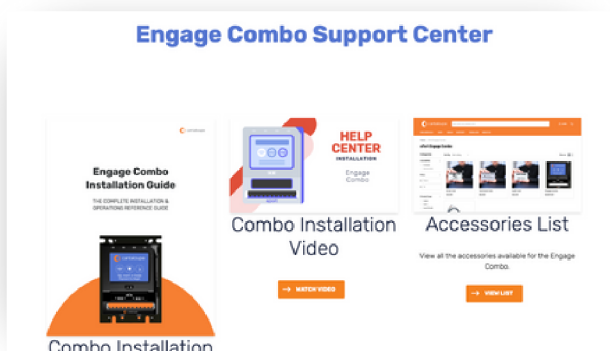


While most machine makes and models can function normally without any additional accessories, some machines (particularly older models) may require a firmware update or additional accessories to function.

Before going to install an Engage Combo on your machines, please take a moment to visit our Engage Combo Accessories FAQ page. Here you will find information on the types of accessories available, and a compatibility chart of machines that require additional accessories.

Please [visit](#) or scan the QR code on this page with your phone or tablet to access the Engage Combo Accessories FAQ.

If you still have questions about the Engage Combo or it's accessories, please view the following pages on our website for more information:



# Installation of the Engage Combo

*New Install Instructions - skip to section 2b if replacing a prior generation Engage Combo.*

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## **SECTION 2a**

INSTALLING THE ENGAGE DEVICE SYSTEM  
CONNECTION TO THE DEVICE

## INSTALLING THE ENGAGE COMBO DEVICE

1. It is time to set up the antenna. It should be mounted on top of the vending equipment, so be sure not to drill into anything that is already on top of the machine or that which could cause clearance issues.
2. Once you have the surface on top selected, drill a 1/2" hole on top leading into the vending equipment.
3. Feed the antenna wiring through the 1/2" hole and fasten the nut tightly to the shaft of the antenna to hold it firmly in place (see figure 2.3).  
Note: The nut that comes with the installation kit has a slot on it to make it easy to slide into place before firmly securing it to the antenna.
4. Locate 4 11/32" nuts that secure the bill validator to the vending machine. Remove these nuts and remove bill validator from machine.
5. With Bill Validator facing you remove the four screws that secure the mask to the validator.
6. Take the Engage Combo Unit and install the Antenna connection first followed by MDB and then DEX.
7. Once all connections are secure, place two wires to the left and two wires to the right.
8. Take the bill validator and place over the Engage Unit. Make sure that no wires are pinched between the Combo and the Bill Validator.
9. Rotate Combo and Validator in your hand and reinstall the 4 screws removed earlier.
10. Reinstall Bill Validator and secure the four nuts removed earlier.



figure 2.3



figure 2.4

## SYSTEM CONNECTION TO THE DEVICE

1. Now that the Engage device is secured to the vending equipment, it is time to connect the MDB and DEX cables.
2. Connect the DEX cable to the DEX port on the vending equipment. There are several areas inside of the vending equipment that house a DEX port, making it versatile where you can connect your DEX cable. There are optional DEX Y cables that can also be used for installation if necessary (see figure 2.5).  
Note: If you choose to use a DEX port that is located on the door frame, you'll need to take it apart and let the cable hang, otherwise it will hit the back of your vending equipment which could damage the cable over time.
3. Connect MDB cable to the connection point directly from the main board. All other MDB connections should follow the Engage (plugged in 'first in line' to the board).
4. If the Engage is plugged in behind any other equipment, it could cause reporting or communication errors.
5. Now that the cable is connected, power the vending equipment back on and check the front of the equipment to make sure the power is connected correctly and is booting up.  
Note: It may take several minutes for the machine to fully reboot, gather it's IP Address, and load additional files to operate.



figure 2.5

# Installation of the Engage Combo

*Replacing a 1st generation Engage Combo*

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## **SECTION 2b**

INSTALLING THE ENGAGE DEVICE SYSTEM  
CONNECTION TO THE DEVICE



## INSTALLING THE ENGAGE COMBO DEVICE

**Please note:** *These steps can be skipped if done previously when installing 1st generation device.*

**Do NOT use any existing cables from the 1st generation device. Use the new cables provided in the box with your new device.**

1. It is time to set up the antenna. It should be mounted on top of the vending equipment, so be sure not to drill into anything that is already on top of the machine or that which could cause clearance issues.
2. Once you have the surface on top selected, drill a 1/2" hole on top leading into the vending equipment.
3. Feed the antenna wiring through the 1/2" hole and fasten the nut tightly to the shaft of the antenna to hold it firmly in place (see figure 2.3).  
Note: The nut that comes with the installation kit has a slot on it to make it easy to slide into place before firmly securing it to the antenna.
4. Locate 4 11/32" nuts that secure the bill validator to the vending machine. Remove these nuts and remove bill validator from machine.
5. With Bill Validator facing you remove the four screws that secure the mask to the validator.
6. Take the Engage Combo Unit and install the Antenna connection first followed by MDB and then DEX.
7. Once all connections are secure, place two wires to the left and two wires to the right.
8. Take the bill validator and place over the Engage Unit. Make sure that no wires are pinched between the Combo and the Bill Validator.
9. Rotate Combo and Validator in your hand and reinstall the 4 screws removed earlier.
10. Reinstall Bill Validator and secure the four nuts removed earlier.

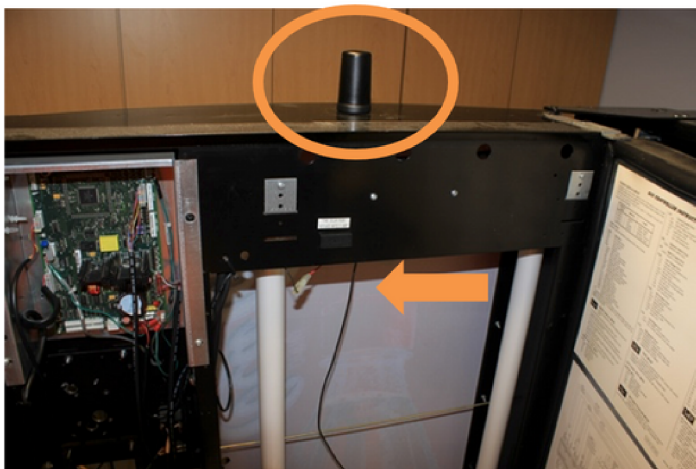


figure 2.3



figure 2.4

## SYSTEM CONNECTION TO THE DEVICE

**Please note: Do NOT use any existing cables from the 1st generation device. Use the new cables provided in the box with your new device.**

1. Now that the Engage device is secured to the vending equipment, it is time to connect the MDB and DEX cables.
2. Connect the DEX cable to the DEX port on the vending equipment. There are several areas inside of the vending equipment that house a DEX port, making it versatile where you can connect your DEX cable. There are optional DEX Y cables that can also be used for installation if necessary (see figure 2.5).  
Note: If you choose to use a DEX port that is located on the door frame, you'll need to take it apart and let the cable hang, otherwise it will hit the back of your vending equipment which could damage the cable over time.
3. Connect MDB cable to the connection point directly from the main board. All other MDB connections should follow the Engage (plugged in 'first in line' to the board).
4. If the Engage is plugged in behind any other equipment, it could cause reporting or communication errors.
5. Now that the cable is connected, power the vending equipment back on and check the front of the equipment to make sure the power is connected correctly and is booting up.  
Note: It may take several minutes for the machine to fully reboot, gather its IP Address, and load additional files to operate.



figure 2.5

# Expected Start-Up Behaviors

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## **SECTION 03**

CHIP PAYMENT ACCEPTANCE SEQUENCE TAP  
PAYMENT ACCEPTANCE SEQUENCE SWIPE  
PAYMENT ACCEPTANCE SEQUENCE  
CONNECTION TO THE DEVICE

## START UP SEQUENCE - NO ISSUES

The start-up sequence typically can take up to 20 minutes to power on and become ready to make a sale. This time can differ depending on how long the vending machine takes to communicate with the card reader and the cellular signal reception.

- The screen will display this sequence on power up:
- System Initializing – a progress bar with percent complete will be shown
- Blank white screen
- White screen, 'Loading .....', 'Please wait .....
- Blank white screen
- Blue gradient background with Cantaloupe logo 'Cantaloupe' near the top of the screen with "chip, tap, and swipe" logos displayed.
- 4 simulated LEDs will blink at the top of the screen
- Under the 'Cantaloupe' logo and wording, 'Not ready' may be shown until the device is ready to accept transactions. During the Start-up Sequence the words 'Not Ready' will appear on the screen as the device connects to our system. This is also when the Device Serial Number will be appearing on the screen.
- Screen will switch from 'Not ready' to 'Ready'
- Bottom of screen will display 'Tap, insert, or swipe payment to begin'

**The very first time the device is powered up in the field, it is recommended to perform a test swipe using a pass card.**

- If this test swipe succeeds, the device is ready for use.
- Sometimes, this will result in an error such as 'Couldn't reach network', and the device will return to the 'Not ready' / 'Waiting for network' state for about a minute.
- Once the device returns to the 'Ready' state, reattempt the test swipe. If there are no problems with the device's cellular provisioning, this second attempt will succeed.  
Note: If the second swipe does not approve, power cycle the machine, allow the device to complete the start-up sequence, then perform a third test swipe.

#### PLEASE NOTE:

The Engage device needs to download and process software updates when it is first installed and powered on. Please allow the system to fully complete all updates before attempting any test swipes. Please do NOT power down the unit while the updates are processing as this may result in unexpected behavior.

## CHIP PAYMENT ACCEPTANCE SEQUENCE

The device will beep and show the below messages during the transaction process. The screen will display text. Upper and lower areas of text will be indicated using a forward slash (/) as a separator (see figure 3.1).

- 'Please wait' / 'Processing ... Do not remove card'
  - » Once a card is inserted, a 'beep' will indicate that the card has been recognized
  - » Card information is being read
- 'Please wait' / 'Authorizing ... Remove card'
  - » Card information is being sent for authorization
  - » Card has not been detected, remove the card and try again
- 'Please wait' / 'Authorizing...'
  - » Card authorization is still in progress, do not remove the card
- 'Approved' / 'Waiting for vending machine'
  - » Card authorization has been received and credit is being applied to the vending machine
- 'Approved'/'Select item'
  - » Vending machine has confirmed receipt of credit and you may now select your item



figure 3.1

## TAP PAYMENT ACCEPTANCE SEQUENCE

The device will beep and show the below messages during the transaction process. The LEDs on the top of the screen will display information about the card reading process. The screen will display text. Upper and lower areas of text will be indicated using a forward slash (/) as a separator (see figure 3.1 on page 15).

- 'Please wait' / 'Processing... Do not remove card'
  - » Card information is being read, do not remove the card
  - » LEDs on the top of the screen will light up from left to right
  - » The device will beep once the card information has been read
- 'Please wait' / 'Authorizing... Remove card'
  - » LEDs will return to 'off'
  - » Card information is being sent for authorization
- 'Please wait' / 'Authorizing...'
  - » Authorization is still in progress
- 'Approved' / 'Waiting on vending machine'
  - » Card authorization has been received and credit is being applied to the vending machine
- 'Approved' / 'Select item'. A 'cancel' button is displayed on the touch screen of the card reader.
  - » Vending machine has confirmed receipt of credit, you can select 'cancel' if you wish to cancel the current authorization for an item selection



## SWIPE PAYMENT ACCEPTANCE SEQUENCE

The device will beep and show the below messages during the transaction process. The screen will display text. Upper and lower areas of text will be indicated using a forward slash (/) as a separator (see figure 3.1 on page 15).

- ‘Please wait’ / ‘Authorizing...’  
» Authorization is in progress. Card data has already been read.
- ‘Approved’ / ‘Waiting for vending machine’  
» Card authorization has been received and credit is being applied to the vending machine
- ‘Approved’ / ‘Select item’. A ‘cancel’ button is displayed on the touch screen of the card reader.  
» Vending machine has confirmed receipt of credit

### SINGLE VENDING/MULTI-VENDING SEQUENCES

Single Vending	Multi-Vending
<ul style="list-style-type: none"><li>• ‘Approved’ / ‘Select item’</li><li>• ‘Please wait’ / ‘Vending item...’</li><li>• Displayed once vending machine has reported a selection has been made</li><li>• ‘Thank you’ / ‘1 item vended (\$x.xx)’</li><li>• Displayed once the vending machine has reported vend success to the card reader</li><li>• The last message will be ‘Thank you’ / ‘1 item vended (\$x.xx)’. this will be the total of how much was spent including two-tier.</li></ul>	<p>Once the device is ready the multi-vend mode acts like a series of single vend sequences that adds the total spent by the customer at the end of each sale including any two-tier pricing.</p> <ul style="list-style-type: none"><li>• ‘Approved’ / ‘Select item’</li><li>• ‘Please wait’ / ‘Vending item...’</li><li>• Displayed once vending machine has reported a selection has been made</li><li>• ‘Thank you’ / ‘N items vended (\$x.xx)’</li><li>• Displayed once the vending machine has reported vend success to the card reader</li><li>• ‘Thank you’ / ‘Select another item’</li><li>• Displayed once the vending machine has been recredited with the remaining balance from the initial authorization.</li></ul> <p>The cycle will repeat until no more credit is available or the max number of items allowed in a single sale has been reached. The last message will be ‘Thank you’ / ‘x items vended (\$x.xx)’. this will be the total number of items vended to the customer and the total of how much was spent including two-tier fee.</p>

## Engage Combo Technical Screen Guide

Instructions on how to access and utilize the technical screen feature on your device.

### 1. Accessing the technical screen.

To access the tech screen, press the Cantaloupe symbol in the upper left part of the screen four times in a row.

### 2. Navigating the service screen.

The service screen will show the serial number of the device, the fill DEX button, and signal information.

**RSSI shows the current signal strength. RSRP and RSRQ indicate signal strength and quality over time.**

**An RSSI reading of 35, and above are considered good.**

**RSRP has a typical range of -44 (good) to -140 (bad).**

**RSRQ has a typical range of -3 (good) to -19.5 (bad).**

It'll also indicate whether the cellular connection is connected.

Press "More" to view the IMEI and SIM card numbers. Additionally, view which carrier you're connected through, and the date and time of your last DEX transmission and transaction.

### 3. Navigating the device screen.

The device screen will allow you to do a DEX audit which creates a DEX file without a fill marker. Additionally, you can check for device updates, upload a log, save information to a USB, adjust brightness, or reboot the device.

### 4. Test transaction.

Before leaving the device, do a test swipe or tap to make sure it is ready for a transaction.

**Visit [cantaloupe.com/help-center](https://cantaloupe.com/help-center) for more assistance or scan the QR code to view our technical screen instructional video.**







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