

Dynamag, DynaMAX, DynaWave, eDynamo, mDynamo, uDynamo, BulleT, iDynamo 6, tDynamo

SCRA Devices
MTSCRA Demo Guide (macOS)

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Table 0.1 - Revisions

Rev Number	Date	Notes
10	February 8, 2017	Initial release
11	October 20, 2022	Added support for iDynamo 6 and tDynamo.

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Table of Contents

Table of Contents 6

1 Introduction 7

2 How to Connect to the MTSCRA Demo 8

 2.1 Connect via USB Interface 8

 2.2 Connect via BLE Interface..... 10

3 How to Use the MTSCRA Demo 14

4 How to use the MTSCRA OEM Demo via USB Interface 19

1 Introduction

This document provides instructions to use the MTSCRA Demo on macOS. It is part of a larger library of documents designed to assist Dynamag, DynaMAX, DynaWave, eDynamo, mDynamo, uDynamo, BulleT, iDynamo 6, and tDynamo implementers, which includes the following documents available from MagTek:

- ***D998200161 DYNAMAG, DYNAMAX, DYNAWAVE, EDYNAMO, MDYNAMO, UDYNAMO, BULLET, IDYNAMO 6, TDYNAMO PROGRAMMER'S MANUAL (MACOS)***

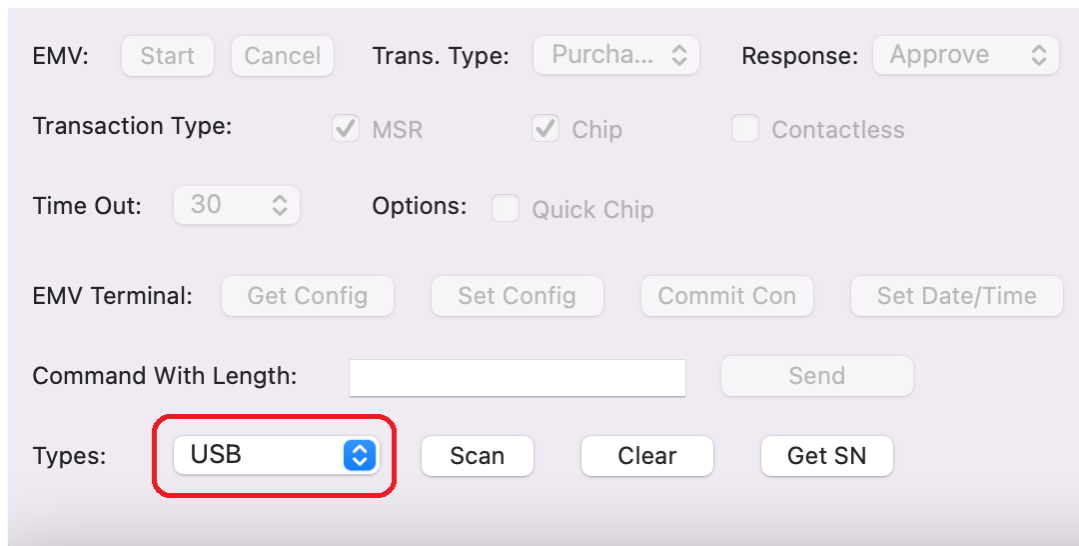
2 - How to Connect to the MTSCRA Demo

2 How to Connect to the MTSCRA Demo

2.1 Connect via USB Interface

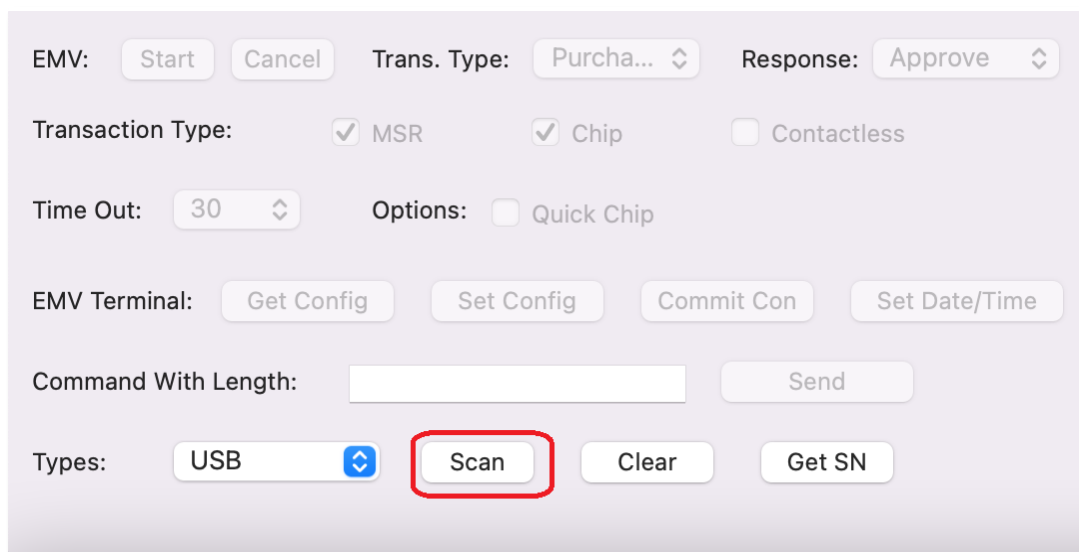
To set up the USB interface on a MAC, follow these steps:

- 1) Connect the device to the USB port of the MAC.
- 2) Launch the MTSCRA Demo and select **USB** as the device type in the **Type** list box.



The screenshot shows the MTSCRA Demo application interface. At the bottom, the 'Types' dropdown menu is open, and 'USB' is selected. The 'Scan' button is also visible next to the dropdown. Other interface elements include 'EMV: Start Cancel', 'Trans. Type: Purcha...', 'Response: Approve', 'Transaction Type: MSR Chip Contactless', 'Time Out: 30', 'Options: Quick Chip', 'EMV Terminal: Get Config Set Config Commit Con Set Date/Time', 'Command With Length: Send', and 'Get SN'.

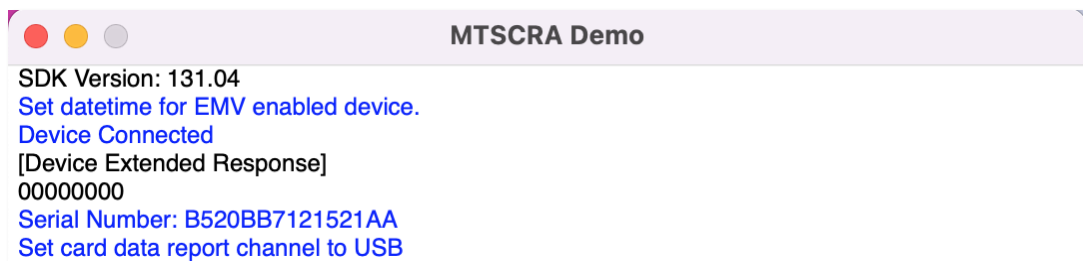
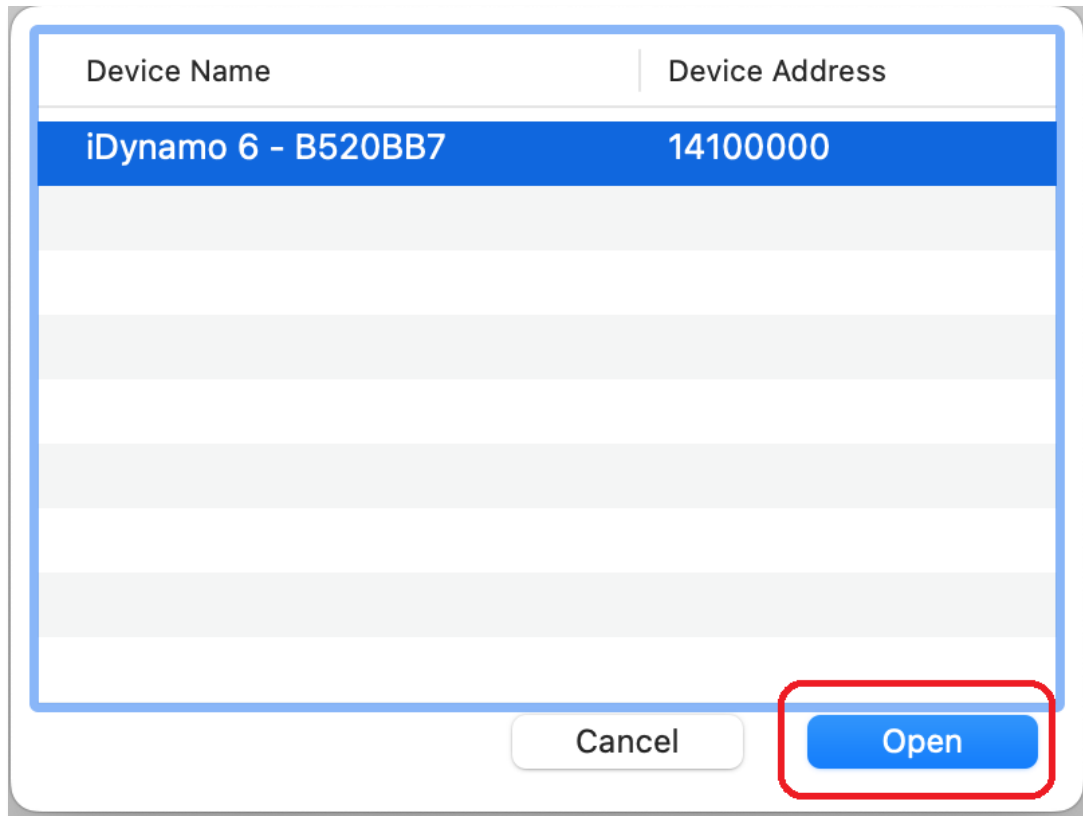
- 3) Press the **Scan** button to scan for connected USB devices.



The screenshot shows the MTSCRA Demo application interface. The 'Scan' button is highlighted with a red box. The 'Types' dropdown menu is still open, showing 'USB' selected. Other interface elements are the same as in the previous screenshot.

2 - How to Connect to the MTSCRA Demo

- 4) Select the Device ID and press the **Open** button to open the device.



2 - How to Connect to the MTSCRA Demo

2.2 Connect via BLE Interface

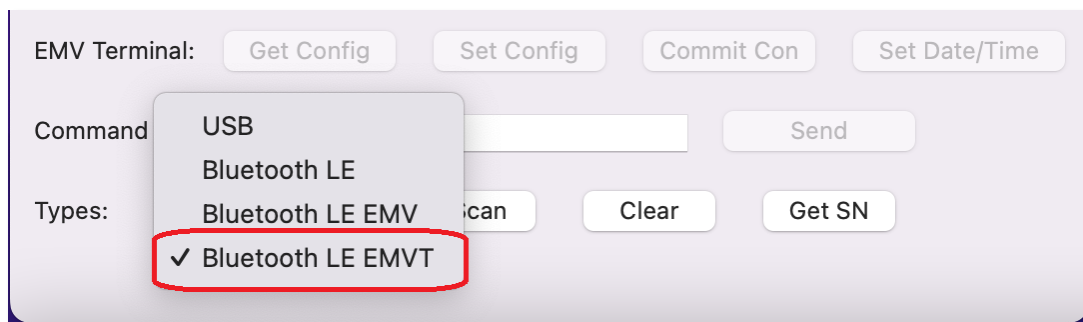
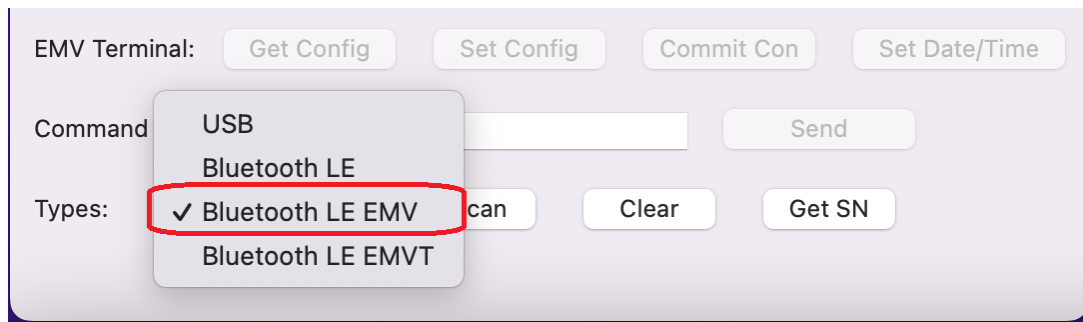
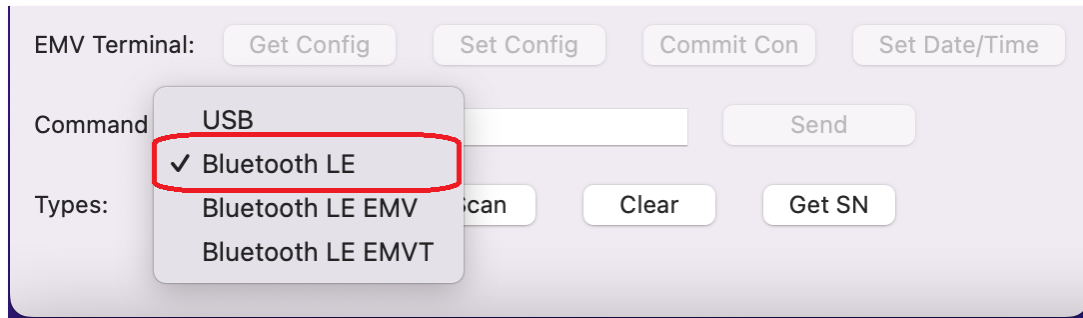
To set up the BLE interface with DynaMAX, eDynamo, and tDynamo on a MAC, follow these steps:

- 1) Launch the MTSCRA Demo.

If using DynaMAX select **Bluetooth LE** as the device type in the **Type** list box.

If using eDynamo select **Bluetooth LE EMV** as the device type in the **Type** list box.

If using tDynamo select **Bluetooth LE EMVT** as the device type in the **Type** list box.

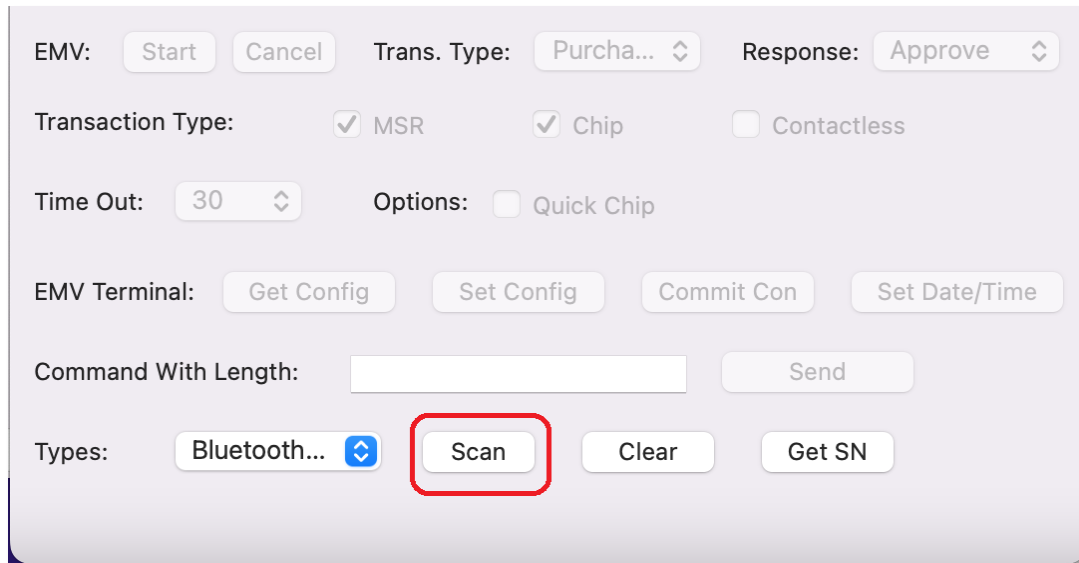


- 2) If you have an eDynamo, press and hold the button on the device for 3 seconds to put it in the pairing mode.

If you have a DynaMAX, slide the button to the on position to turn on the device.

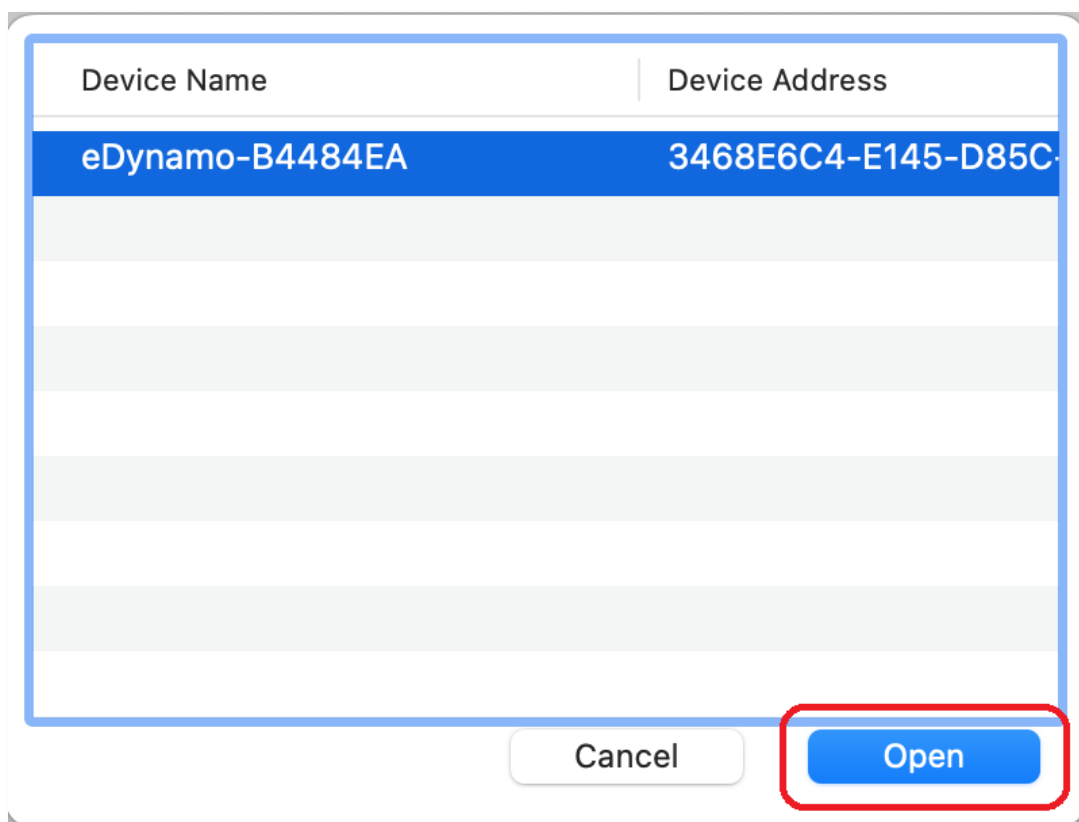
2 - How to Connect to the MTSCRA Demo

- 3) Press the **Scan** button to scan for BLE devices.



The screenshot shows the MTSCRA Demo application interface. At the top, there are buttons for 'Start' and 'Cancel' under the 'EMV:' label, and a dropdown menu for 'Trans. Type:' set to 'Purcha...'. To the right is a dropdown for 'Response:' set to 'Approve'. Below these are checkboxes for 'Transaction Type:' with 'MSR' and 'Chip' selected, and 'Contactless' unselected. There is a 'Time Out:' dropdown set to '30' and an 'Options:' section with 'Quick Chip' unselected. Under 'EMV Terminal:', there are buttons for 'Get Config', 'Set Config', 'Commit Con', and 'Set Date/Time'. A 'Command With Length:' section has a text input field and a 'Send' button. At the bottom, the 'Types:' dropdown is set to 'Bluetooth...'. The 'Scan' button is highlighted with a red rectangle.

- 4) Select the Device and press the **Open** button to open the device.

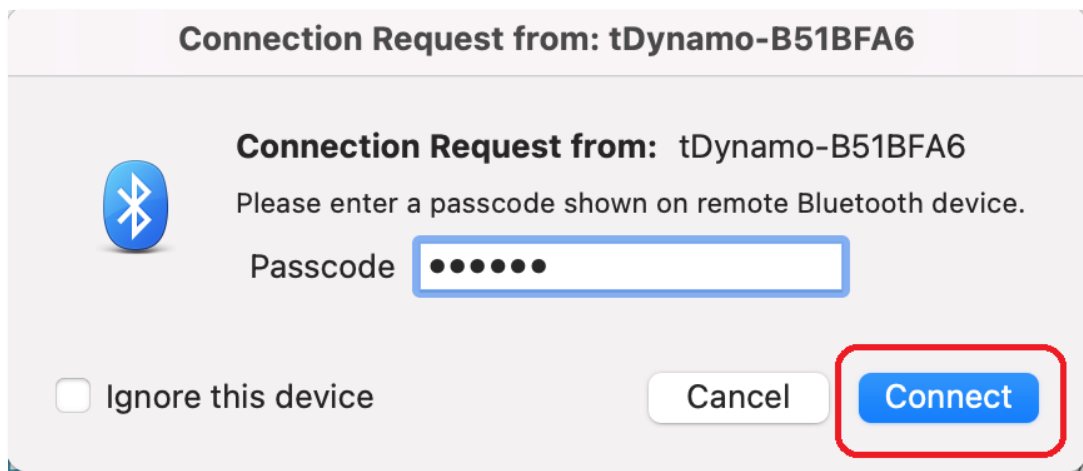
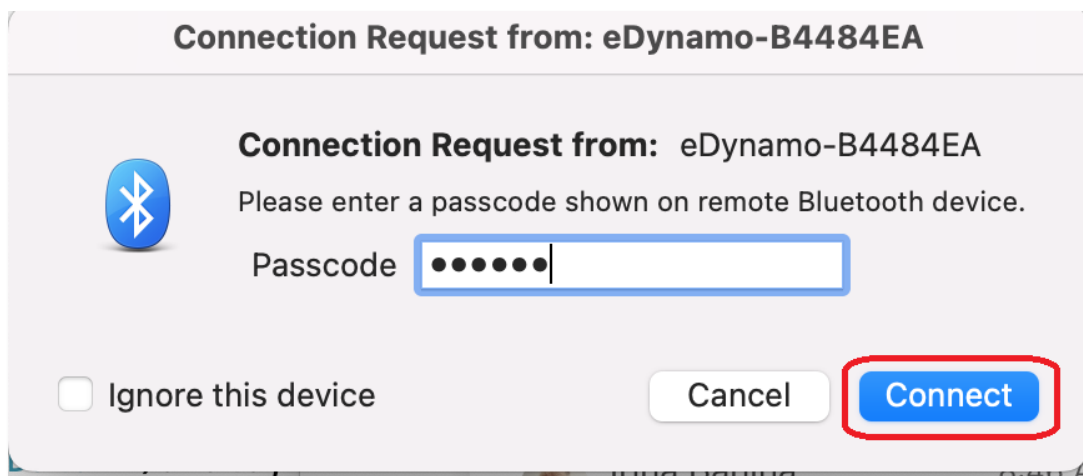
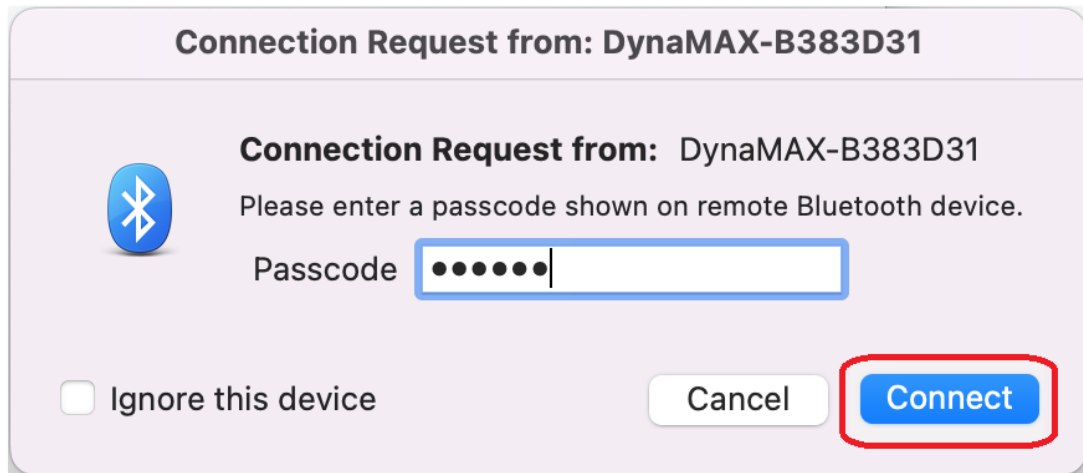


The screenshot shows a list of discovered BLE devices. The first device, 'eDynamo-B4484EA' with address '3468E6C4-E145-D85C...', is highlighted in blue. Below the list are 'Cancel' and 'Open' buttons. The 'Open' button is highlighted with a red rectangle.

Device Name	Device Address
eDynamo-B4484EA	3468E6C4-E145-D85C...

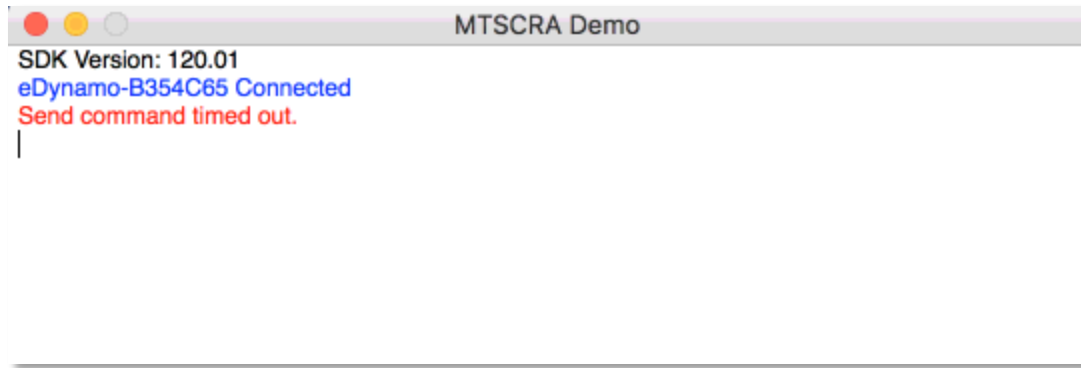
- 5) Enter the pairing code for the device, by default, the pairing code is: 000000 or 999999, then press the **Connect** button. Examples shown below.

2 - How to Connect to the MTSCRA Demo



- 6) Ignore the Send command time out error as this happens only the first connection.

2 - How to Connect to the MTSCRA Demo

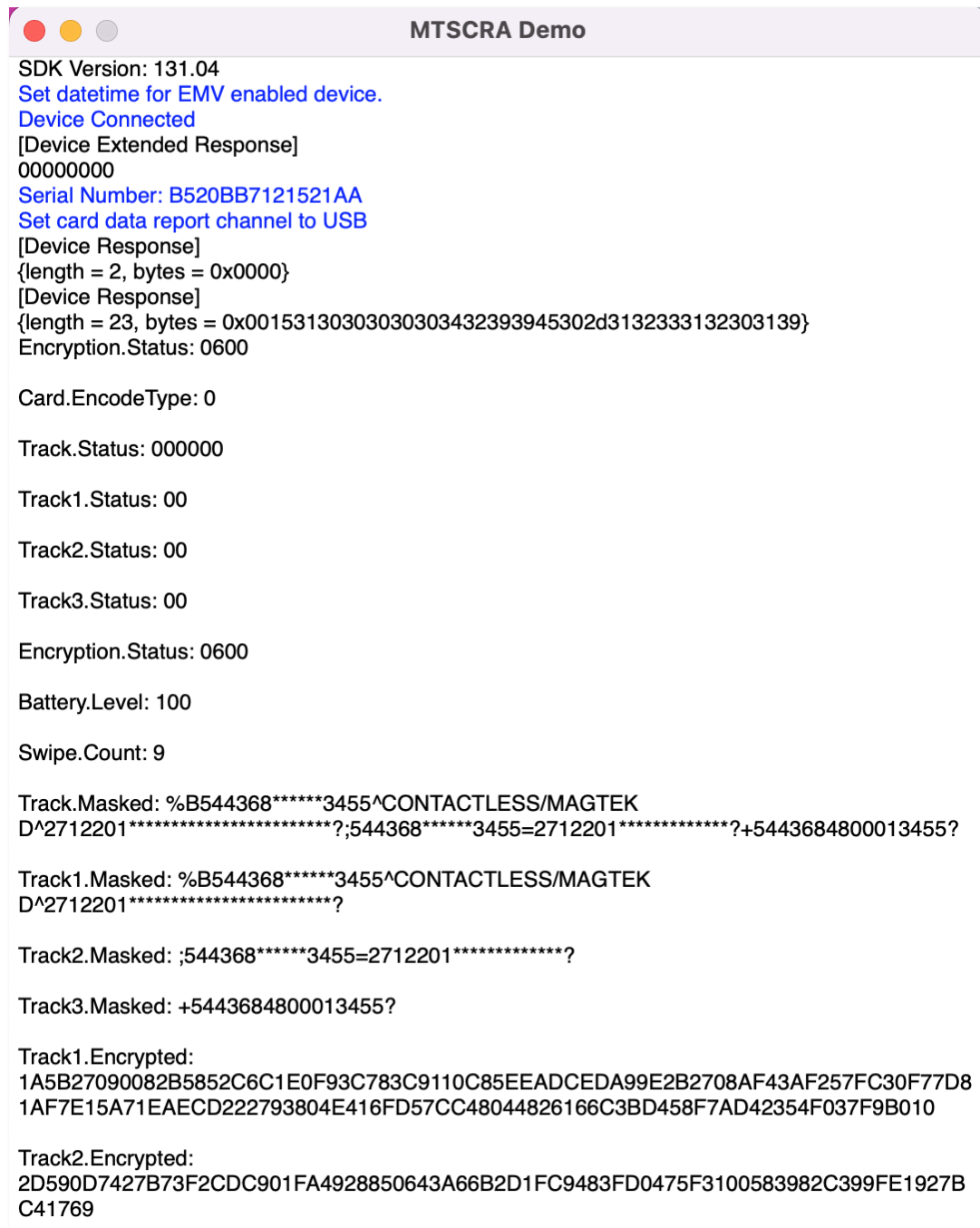


3 - How to Use the MTSCRA Demo

3 How to Use the MTSCRA Demo

The follow instructions is the same for USB or BLE interface.

- 1) Connect to the device.
- 2) Swipe a magnetic stripe card to read the card data.



```
MTSCRA Demo

SDK Version: 131.04
Set datetime for EMV enabled device.
Device Connected
[Device Extended Response]
00000000
Serial Number: B520BB7121521AA
Set card data report channel to USB
[Device Response]
{length = 2, bytes = 0x0000}
[Device Response]
{length = 23, bytes = 0x00153130303030303432393945302d3132333132303139}
Encryption.Status: 0600

Card.EncodeType: 0

Track.Status: 000000

Track1.Status: 00

Track2.Status: 00

Track3.Status: 00

Encryption.Status: 0600

Battery.Level: 100

Swipe.Count: 9

Track.Masked: %B544368*****3455^CONTACTLESS/MAGTEK
D^2712201*****?;544368*****3455=2712201*****?+5443684800013455?

Track1.Masked: %B544368*****3455^CONTACTLESS/MAGTEK
D^2712201*****?

Track2.Masked: ;544368*****3455=2712201*****?

Track3.Masked: +5443684800013455?

Track1.Encrypted:
1A5B27090082B5852C6C1E0F93C783C9110C85EEADCEDA99E2B2708AF43AF257FC30F77D8
1AF7E15A71EAECD222793804E416FD57CC48044826166C3BD458F7AD42354F037F9B010

Track2.Encrypted:
2D590D7427B73F2CDC901FA4928850643A66B2D1FC9483FD0475F3100583982C399FE1927B
C41769
```

3 - How to Use the MTSCRA Demo

- 3) If you want to send a command to the device, enter the command in the command text box and press the **Send** button.

MTSCRA Demo

[Device Response]
<000103>

EMV: Start Cancel Trans. Type: Purcha... Response: Approve

Transaction Type: ☒ MSR ☒ Chip ☐ Contactless

Time Out: 30 Options: ☐ Quick Chip

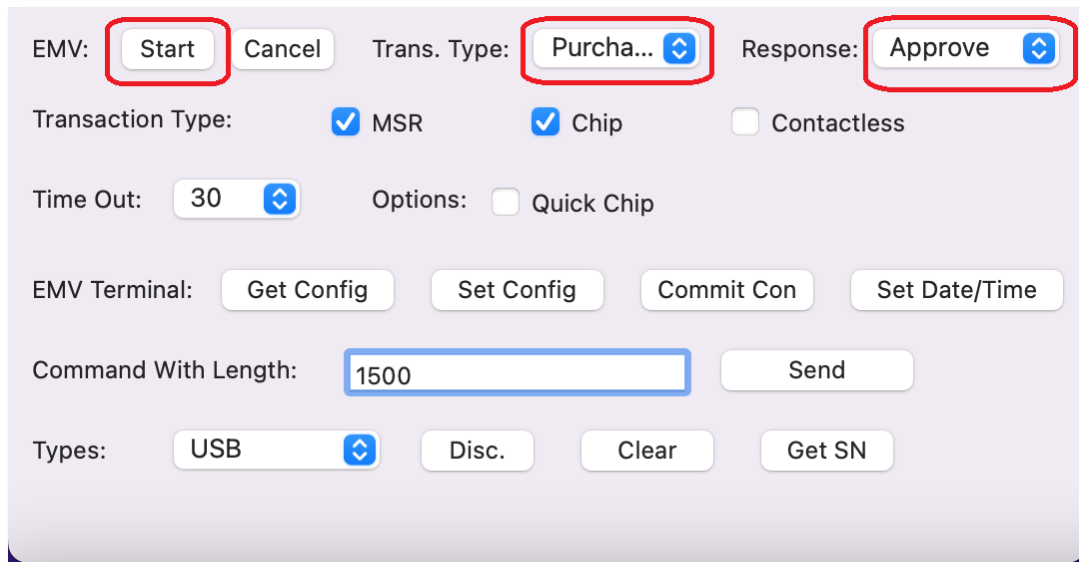
EMV Terminal: Get Config Set Config Commit Con Set Date/Time

Command With Length: 1500 Send

Types: USB Disc. Clear Get SN

- 4) If you have an eDynamo and want to read a chip card, select the desired **Response** and **Transaction Type**, then press the **Start** button to begin an EMV transaction, and then insert the chip card when **Present Card** message appears.

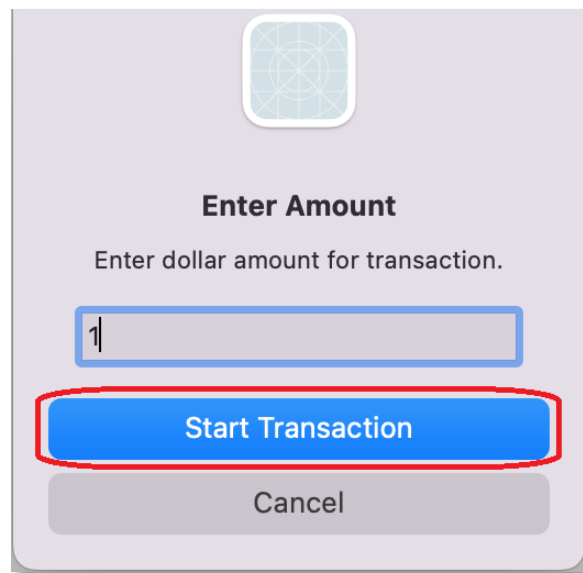
3 - How to Use the MTSCRA Demo



The screenshot shows the MTSCRA Demo interface with the following elements:

- EMV:** A dropdown menu with "Start" selected, highlighted by a red box.
- Cancel:** A button next to the EMV dropdown.
- Trans. Type:** A dropdown menu with "Purcha..." selected, highlighted by a red box.
- Response:** A dropdown menu with "Approve" selected, highlighted by a red box.
- Transaction Type:** Checkboxes for "MSR" (checked), "Chip" (checked), and "Contactless" (unchecked).
- Time Out:** A dropdown menu with "30" selected.
- Options:** A checkbox for "Quick Chip" (unchecked).
- EMV Terminal:** Buttons for "Get Config", "Set Config", "Commit Con", and "Set Date/Time".
- Command With Length:** A text input field containing "1500" and a "Send" button.
- Types:** A dropdown menu with "USB" selected, and buttons for "Disc.", "Clear", and "Get SN".

- 5) Enter an amount if prompted and press the **Start Transaction** button.

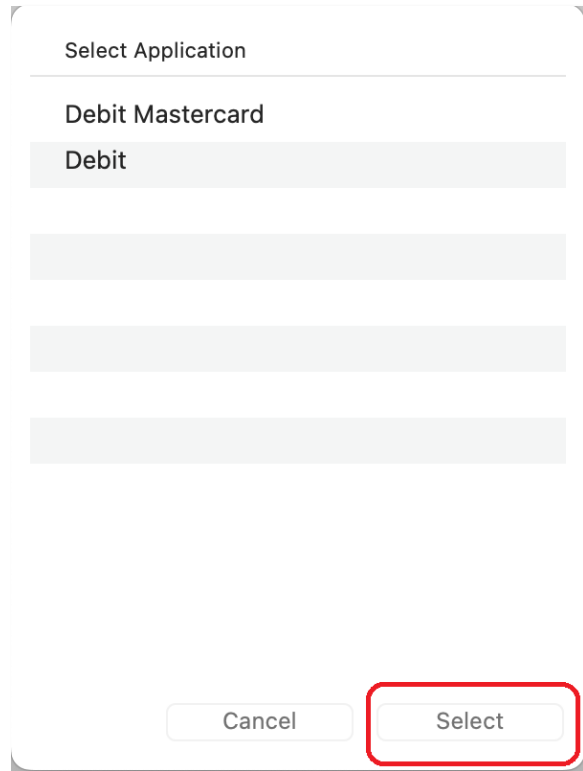


The screenshot shows the "Enter Amount" dialog box with the following elements:

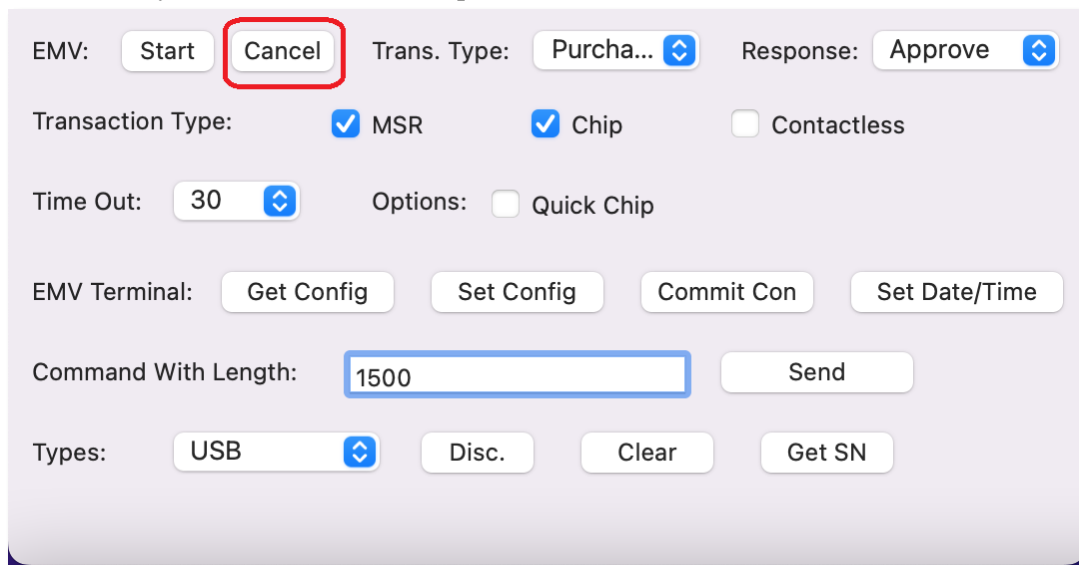
- Enter Amount:** The title of the dialog box.
- Enter dollar amount for transaction.** The instruction text.
- 1:** The amount entered in the text input field.
- Start Transaction:** A blue button highlighted by a red box.
- Cancel:** A gray button below the "Start Transaction" button.

- 6) Select an Application if prompted in the **Select Application** window, then press the **Select** button.

3 - How to Use the MTSCRA Demo



- 7) If you want to cancel the EMV transaction, press the **Cancel** button. Please note that the cancel feature will only work before the card is presented.



- 8) To clear the screen, press the **Clear** button.

3 - How to Use the MTSCRA Demo

EMV: Start Cancel Trans. Type: Purcha... Response: Approve

Transaction Type: ☒ MSR ☒ Chip ☐ Contactless

Time Out: 30 Options: ☐ Quick Chip

EMV Terminal: Get Config Set Config Commit Con Set Date/Time

Command With Length: 1500 Send

Types: USB Disc. **Clear** Get SN

- 9) To close the device, press the **Disc.** button.

MTSCRA Demo

Set datetime for EMV enabled device.
Device Connected
[Device Extended Response]
00000000
Serial Number: B520BB7121521AA
Set card data report channel to USB
[Device Response]
{length = 2, bytes = 0x0000}
Disconnected
Disconnected

EMV: Start Cancel Trans. Type: Purcha... Response: Approve

Transaction Type: ☒ MSR ☒ Chip ☐ Contactless

Time Out: 30 Options: ☐ Quick Chip

EMV Terminal: Get Config Set Config Commit Con Set Date/Time

Command With Length: 1500 Send

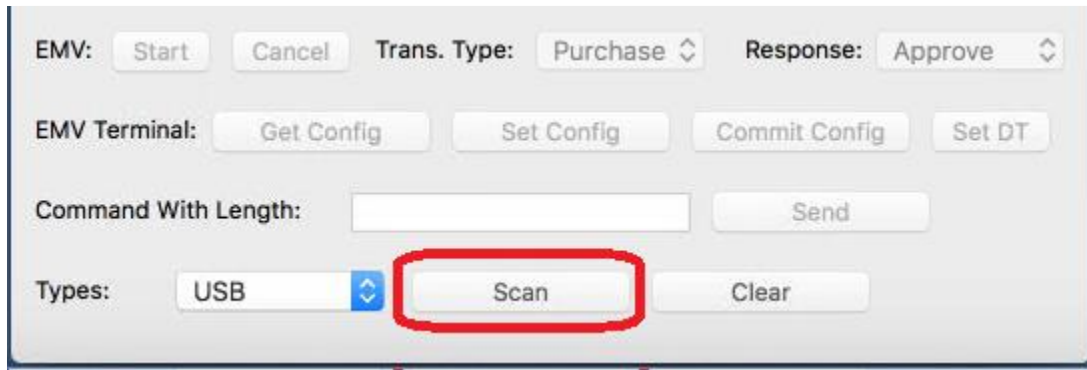
Types: USB **Disc.** Clear Get SN

4 - How to use the MTSCRA OEM Demo via USB Interface

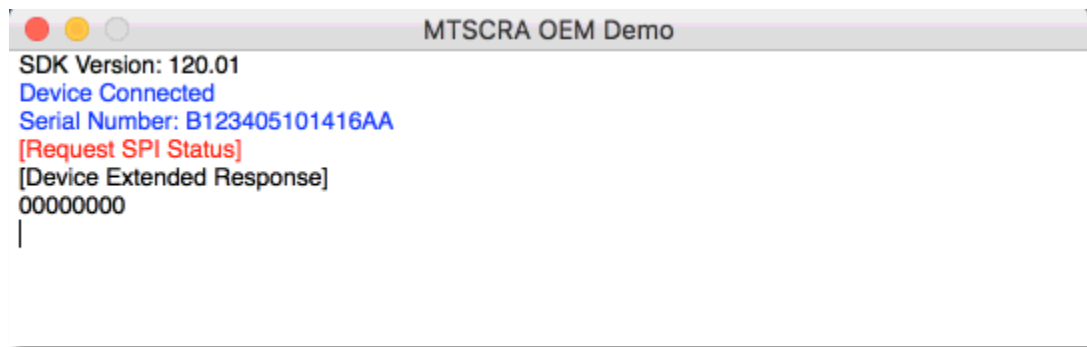
4 How to use the MTSCRA OEM Demo via USB Interface

To set up the USB interface with mDynamo on a MAC, follow these steps:

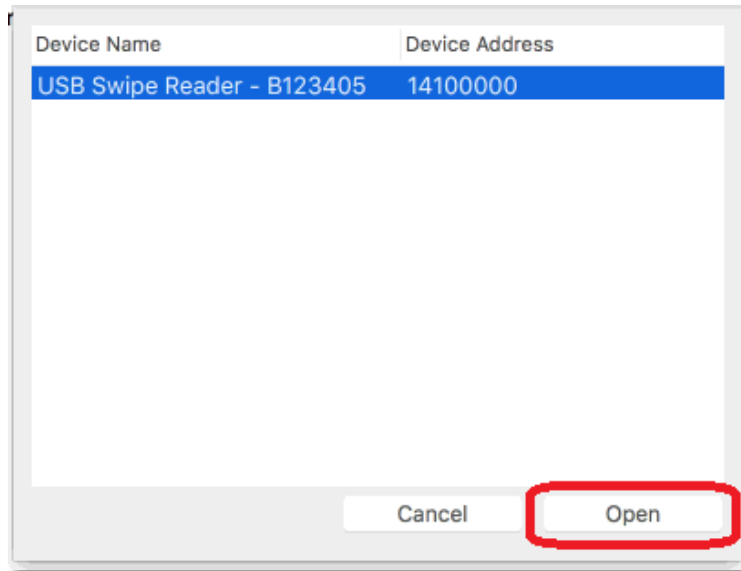
- 1) Connect the mDynamo to the USB port of the MAC.
- 2) Launch the MTSCRA OEM Demo and press the **Scan** button to scan for connected USB devices.



- 3) Select the Device and press the **Open** button to open the device. After the device is opened, the demo will set the time in the device automatically.



4 - How to use the MTSCRA OEM Demo via USB Interface



- 4) Swipe a magnetic stripe card to read the card data.

4 - How to use the MTSCRA OEM Demo via USB Interface

- 5) If you want to send a command to the device, enter the command in the command text box and press the **Send** button.

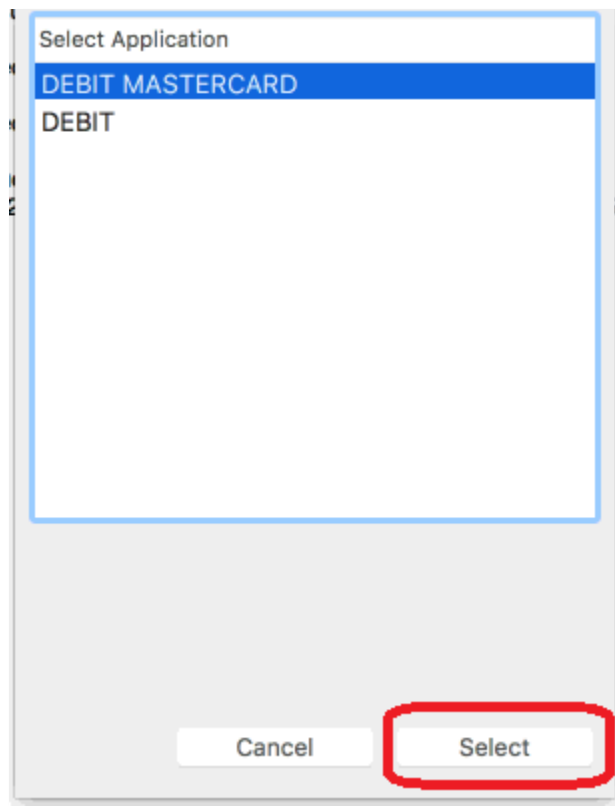
The screenshot shows the MTSCRA Demo application window. At the top, there's a title bar with standard macOS window controls. Below it, a text area displays '[Device Response]' followed by '<000103>' and a cursor. The main interface contains several sections: 'EMV:' with 'Start' and 'Cancel' buttons; 'Trans. Type:' with a dropdown menu set to 'Purchase'; 'Response:' with a dropdown menu set to 'Approve'; 'Card Type:' with 'Chip' selected and 'Contactless' unselected; 'EMV Terminal:' with 'Get Config', 'Set Config', 'Commit Config', and 'Set DT' buttons; 'Command With Length:' with a text box containing '1500' and a 'Send' button (highlighted with a red rectangle); and 'Types:' with a dropdown menu set to 'USB', 'Disc.', and 'Clear' buttons.

- 6) If you want to read a chip card, select the desired response and transaction type, press the **Start** button to begin an EMV transaction, and then insert the chip card when **Present Card** message appears.

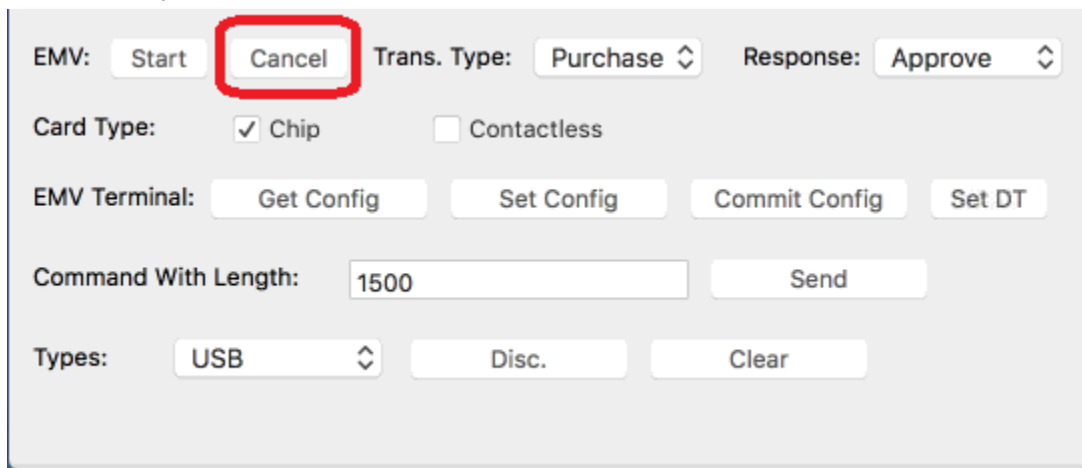
This screenshot shows the same MTSCRA Demo application window, but with different settings. The 'EMV:' section now has the 'Start' button highlighted with a red rectangle. The 'Trans. Type:' dropdown is still set to 'Purchase', and the 'Response:' dropdown is still set to 'Approve'. The 'Card Type:' remains 'Chip'. The 'EMV Terminal:' buttons are the same. The 'Command With Length:' text box still contains '1500', and the 'Send' button is still present. The 'Types:' dropdown is still set to 'USB', with 'Disc.' and 'Clear' buttons also visible.

4 - How to use the MTSCRA OEM Demo via USB Interface

- 7) Select the desired Application in the **Select Application** window, then press the **Select** button

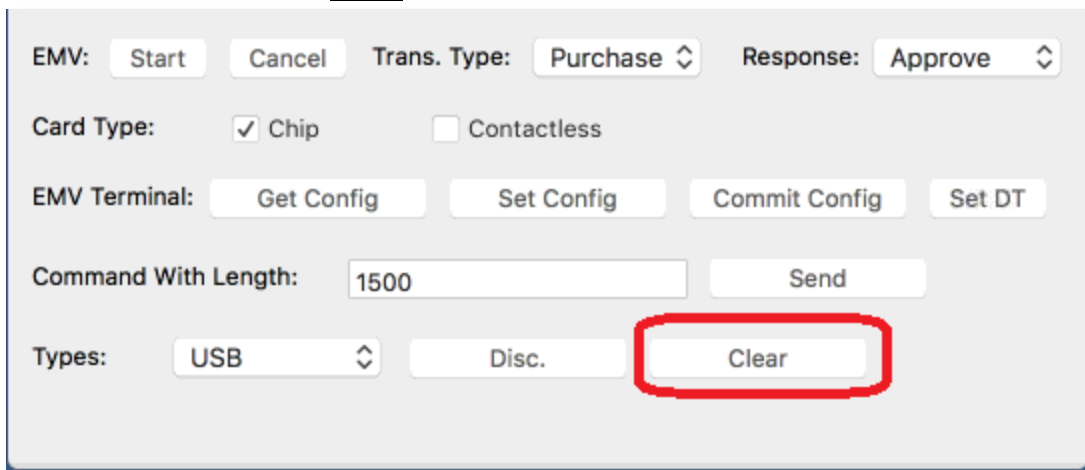


- 8) If you want to cancel the EMV transaction, press the **Cancel** button. Please note that the cancel feature will only work before the card is inserted.



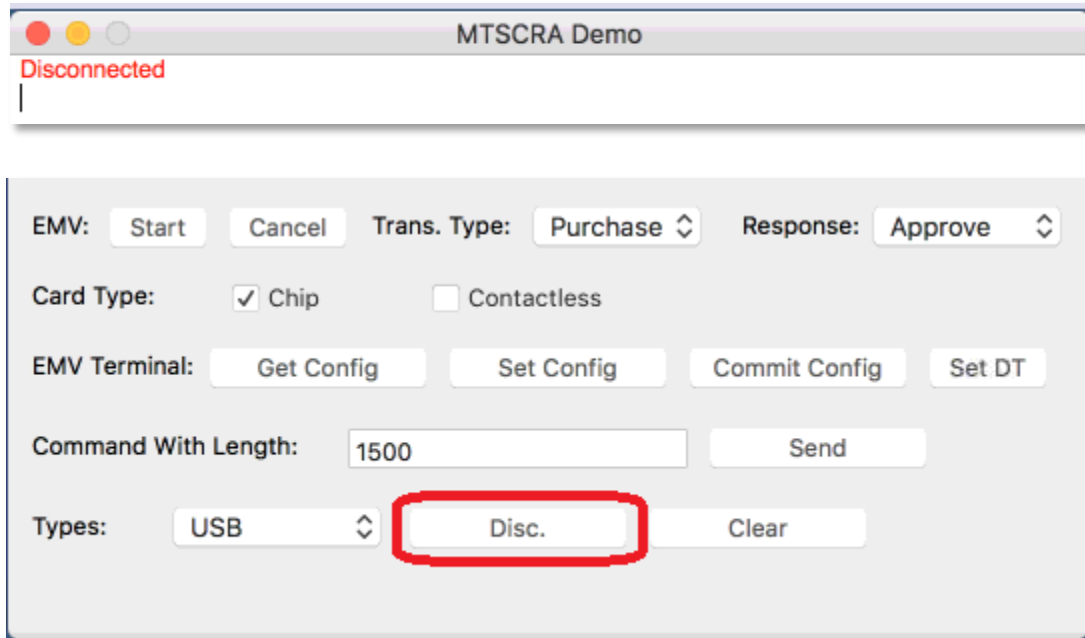
4 - How to use the MTSCRA OEM Demo via USB Interface

- 9) To clear the screen, press the **Clear** button.



The screenshot shows the MTSCRA Demo interface. At the top, there are buttons for 'EMV: Start' and 'Cancel', a dropdown for 'Trans. Type: Purchase', and a dropdown for 'Response: Approve'. Below these are checkboxes for 'Card Type: Chip' (checked) and 'Contactless'. Under 'EMV Terminal:', there are buttons for 'Get Config', 'Set Config', 'Commit Config', and 'Set DT'. A 'Command With Length:' field contains '1500' with a 'Send' button next to it. At the bottom, under 'Types:', there is a dropdown set to 'USB', a 'Disc.' button, and a 'Clear' button. The 'Clear' button is highlighted with a red rectangular box.

- 10) To close the device, press the **Disc.** button.



The screenshot shows the MTSCRA Demo interface. At the top, there are buttons for 'EMV: Start' and 'Cancel', a dropdown for 'Trans. Type: Purchase', and a dropdown for 'Response: Approve'. Below these are checkboxes for 'Card Type: Chip' (checked) and 'Contactless'. Under 'EMV Terminal:', there are buttons for 'Get Config', 'Set Config', 'Commit Config', and 'Set DT'. A 'Command With Length:' field contains '1500' with a 'Send' button next to it. At the bottom, under 'Types:', there is a dropdown set to 'USB', a 'Disc.' button, and a 'Clear' button. The 'Disc.' button is highlighted with a red rectangular box. Above the interface, a window titled 'MTSCRA Demo' shows a red 'Disconnected' status.

