# Watt Point ™

# By Control Module Inc., EVSE LLC State of the Art EVSE with Cable Management

# **EVSE** Payment Module

Model 3725-104



# Control Module Industries Founded in 1969

EVSE LLC

User Manual and Installation Guide Models 3725-104 EVSE Payment Module Patents Pending 3725-UG-002 Rev B January 2016

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# **Important Notes**

# Safety and Compliance

This document provides instructions to install and use the Watt Point<sup>™</sup> Payment Module 3725-104 which manages payment, access and data communication within a network of Watt Point Charging Stations (EVSEs). Before installation of the Watt Point Payment Module by licensed professionals, you should review this manual carefully and consult with a licensed contractor, licensed electrician and trained installation expert to ensure compliance with local building practices, climate conditions, safety standards, and state and local codes. As part of a total EVSE network, the Watt Point Payment Module and Charging Station should be inspected by a qualified installer prior to the initial use. Under no circumstances will compliance with the information in this manual relieve the user of responsibility to comply with all applicable codes or safety standards. This document describes the most commonly-used installation and mounting scenarios. If situations arise in which it is not possible to perform an installation following the procedures provided in this document, contact Control Module Inc, EVSE LLC, is not responsible for any damages that may occur resulting from custom installations that are not described in this document.

# Warranty Information and Disclaimer

Your use of, or modification to, the Watt Point Payment Module in a manner in which the Watt Point Payment Module is not intended to be used or modified will void the limited warranty. Other than any such limited warranty, the Control Module Inc, EVSE LLC, products are provided "AS IS," and Control Module Inc, EVSE LLC, and its distributors expressly disclaim all implied warranties, including any warranty of design, merchantability, fitness for particular purposes and non-infringement, to the maximum extent permitted by law.

### Limitation of Liability

In no event shall Control Module Inc, EVSE LLC, or its authorized distributors be liable for any indirect, incidental, special, punitive, or consequential damages, including without limitation, lost profits, lost data, loss of use, cost of cover, or loss or damage to the watt point charging station or Payment Module, arising out of or relating to the use or inability to use this manual, even if Control Module Inc, EVSE LLC, or its authorized distributors have been advised of the possibility of such damages.

### FCC Compliance Statement

Note: 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 instructions, may cause harmful interference to radio communications. 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.

### Important

Changes or modifications to this product not authorized by Control Module Inc, EVSE LLC, could affect the EMC compliance and revoke your authority to operate this product.

# No Accuracy Guarantee

Reasonable effort was made to ensure that the specifications and other information contained in this manual are accurate and complete at the time of publication. The specifications and other information in this manual, however, are subject to change at any time and without prior notice.

### **Copyright and Trademarks**

Copyright 2016 Control Module Inc., EVSE LLC. All rights reserved. This material is protected by the copyright laws of the United States and other countries. It may not be modified, reproduced or distributed without the prior, express written consent of Control Module Inc., EVSE LLC.

Watt Point is a U.S. registered trademark and service mark of Control Module Inc., EVSE LLC. All other products or services mentioned have the trademarks, service marks, registered trademarks or registered service marks of their respective owners. Control Module Inc., EVSE LLC, has filed several patent applications.

# Instructions Pertaining To Risk Of Fire Or Electrical Shock

The following is a summary of safety concerns relevant to the installation and use of the Model 3725-104 Payment Module. Failure to follow these safety instructions may lead to serious injury, death and/or damage to the equipment.



**WARNING:** is used to provide a warning of hazardous voltage and possibility of electric shock.



**CAUTION:** is used to provide awareness of important safety information in these instructions.

# Important Safety Instructions

**WARNING:** Only qualified personnel should perform the installation. This installation must be performed in accordance with all local electrical/building codes and ordinances. Follow lockout/tagout procedures.

Improper connection of the equipment grounding conductor may result in a risk of electric shock. Reference National Electrical Code, ANSI/NFPA 70 for proper sizing of the ground conductor.

**CAUTION:** To satisfy FCC RF exposure requirements for mobile transmitting devices, a separation distance of 20 cm or more should be maintained between the antenna(s) of this device and persons during device operation. To ensure compliance, operations at closer than this distance is not recommended. The antenna(s) used for this transmitter must not be co-located in conjunction with any other antenna or transmitter.

Additional considerations which will contribute to safe operation of this unit include the following:

- DO: Read all instructions before using this product.
  - The device should be supervised when used around children.
  - In case of a problem, contact your installer or CMI Customer Support.
- DON'T: Use this product if the enclosure is broken, cracked, open or shows any other indication of damage.
  - Attempt to repair or service the unit yourself.

#### SAVE THESE INSTRUCTIONS

# Instructions De Sécurité Importantes



**AVERTISSEMENT:** est utilisé pour fournir un avertissement de tension dangereuse et possibilité de choc électrique.



**ATTENTION:** est utilisé pour fournir la prise de conscience de l'information de sécurité importante dans ces instructions.

#### **INSTRUCTIONS DE SÉCURITÉ IMPORTANTES**



AVERTISSEMENT: Seul le personnel qualifié devrait effectuer l'installation. Cette installation doit être effectuée en conformité avec tous les codes électriques/bâtiment locaux et ordonnances. Suivre les procédures de verrouillage/verrouillage.

Mauvaise connexion de l'équipement de mise à la terre chef d'orchestre peut entraîner un risque de choc électrique. Référence National Electrical Code, ANSI/NFPA 70 pour le bon dimensionnement du conducteur au sol.

Ne pas utiliser ce produit si le code de puissance souple ou le câble EV sont effiloché, a rompu l'isolation ou tout signe de dommage.



**ATTENTION:** Pour satisfaire les exigences d'exposition RF de la FCC pour les appareils mobiles de transmission, une distance de séparation de 20 cm ou plus devrait être maintenue entre l'utilisation de ce dispositif et les personnes au cours de l'opération de l'appareil. Afin d'assurer la conformité des opérations à plus proche que cette distance n'est pas recommandée. L'utilisation utilisée pour cet émetteur ne doit pas être détachée en conjonction avec tout autre antenne ou émetteur.

Considérations supplémentaires, ce qui contribueront à la sécurité de fonctionnement de cette unité sont les suivants :

- DO: Lire toutes les instructions avant d'utiliser ce produit.
  - L'appareil doit être supervisé lorsqu'il est utilisé autour des enfants.
  - En cas de problème, contactez votre installateur ou soutien à la clientèle CMI.
- NE PAS: N'utilisez pas que ce produit si l'enceinte est cassée, fissuré, ouvrir ou afficher toute autre indication de dommages.
  - N'essayez pas de réparer ou d'un service de l'unité de vous-même.

**ENREGISTREZ CES INSTRUCTIONS** 

# Introduction

The Model 3725-104 Payment Module operates as the central payment, access and communication system manager for a network of Electric Vehicle Supply Equipment (EVSE) charging systems.

When communicating between an EVSE and a Payment Module, your options are ZigBee Mesh or Serial RS-232. When communicating between a Payment Module and your network, your options are Cellular or Ethernet, where the unit communicates with third-party networks via the Gateway Module using an Ethernet connection. The Payment Module does not need to be physically connected to EVSEs when set up for wireless or cellular operation.

The Payment Module is packaged in a NEMA 3R-rated enclosure so it is designed to withstand the harshest elements, including direct rain and external icing. The 3725-104 is also rust-resistant.

The Payment Module has a user-friendly 3x4 keypad, with stainless steel snap domes for tactile feel. The keypad is also sealed to be weather-resistant. A 4x20 Position VFD (Vacuum Fluorescent Display) is designed to be seen clearly and easily outdoors. The VFD and character size provide greater luminescence and clarity. The 3725 also has an encrypted magnetic card reader, allowing payment with credit and debit cards. Card and card holder information is encrypted as it is transmitted to the credit card payment processor, and is never stored locally in the Payment Module. When a valid card authorization is received, the EVSE is activated, and the start of the transaction is stored both locally and transmitted to the central host. The charge is held against the card until charging is complete and the cable is removed from the vehicle, at which time the host computer is notified, payment is finalized, and fees are charged.

The layout of the Payment Module when connected to an EVSE is shown in Figure 1.



Figure 1

Figure 2 shows the location of the Payment Module when mounted on a dual 3704 EVSE.





Model 3725-104 EVSE Payment Module User Manual Copyright EVSE LLC 2016 All rights reserved. Patents pending

# Specifications

Product Code	Model 3725-104	
	Mounting: On EVSE Pole, Re	emote Pole or Wall
	Communication to EVSE: ZigBee Mesh or	Serial RS-232
	Communication to Network: Ethernet or Cellu	ılar
	Payment Method: Credit/Debit Car	d Magnetic Reader
	RFID Reader (Op	otional)
Electrical		
Voltage	+24 VDC @ 1 amp	
Power Consumption	Less than 24 watts (Based on Configuration)	
Hardware		
CPU	1 GHz	
Display	LCD, 4 rows, 20 alphanumeric characters per r	OW
Keypad	3x4 keypad, 1/2" keys on 5/8" centers, sealed, s	nap-dome
Credit Card Reader	Encrypted	
RFID Reader	Mifare/iClass-compatible	
Ethernet	IEEE 802.3 10Base-T and 802.3u 100Base-T	
ZigBee	Frequency: 2.4 GHz	
Environmental		
Operating Temp	-22F to +122F (-30C to 50C) Ambient	
Operating Humidity	0% to 90% non-condensing	
NEMA Rating	3R	
Compliance		
EMC	Meets FCC Class A, Canadian ICES-003	
Accessories		
Communication to EVSE (ZigBee)	Contains - FCC ID: MCQ-PROS2B, IC: 1846A-PROS	52B (optional)
Communication to Network	Contains - (V) FCC ID: N7N-SL5011, IC: 2417C-SL	5011 (optional)
(Cellular Modem)	- (A) FCC ID: N7N-SL8090, IC: 2417C-SL	8090 (optional)
KHD Keader	Contains - FCC ID: JQ6-MCLASSRP10E, IC:2236B	-MCLASSRP10E (option
General		
Weight	2.30 lbs.	
Sizo	4 in (W) x 17 9/16 in (H) x 2 1/2 in (D)	

\*Observe all required Lockout/Tagout procedures while making any electrical connections or servicing the unit.

		Network	Payment	Comm	Mount
		<u>Options</u>	<u>Options</u>	<u>Options</u>	<u>Options</u>
Payment Mo	odule				
Base Unit: 37	725-104	x	xx	x	xx
Cellular Com	munication Options (Etherne	t Included)			
Etherne	et	E			
CDMA (	Verizon)	V			
GSM (A	T&T, Sim Card Customer Supp	lied) A			
Payment Op	tions				
Insertio	n Mag Stripe Reader		09		
Insertio	n Mag Stripe and iCLASS Read	ers	10		
Insertio	n Mag Stripe and Blackboard V	/R100 Reader*	11		
(*I	ncludes 110 VAC/24 VDC pwr	supply for ZigBee)			
Communicat	tions Options				
Serial				S	
ZigBee				Z	
Mounting O	ptions				
None	(When mounted on EVSE pol	e as part of shipped asso	embly)		XX
Pole	(pole with Blackboard Reade	r Assembly, ZigBee)			PB
Pole	(standalone Pmt Mod with Po	ole w/ 24VDC power sup	oply, for ZigBee comr	n)	P1
Pole	with 1-2 Mux (includes stand	alone Pmt Mod, 3x6 pol	le, 1-2 EVSE, serial)		P2
Pole	with 1-4 Mux (includes stand	alone Pmt Mod, 3x6 pol	le, 1-4 EVSE,serial)		P3
Pole	with 5-8 Mux (includes stand	alone Pmt Mod, 3x6 pol	le, 5-8 EVSE serial)		P4
Wall	(with Blacboard Reader Asse	mbly, ZigBee)			WB
Wall	(Includes standard wall frame	e and 24 VDC power sup	ply, ZigBee com)		W1
Wall	with 1-2 Mux (includes Pmt r	nod, wall frame, mux, 1-	-2 EVSE, serial)		W2
Wall	with 1-4 Mux (includes Pmt N	Aod, standard wall fram	e, mux, 1-4 EVSE, ser	ial)	W3
Wall	with 5-8 Mux (includes Pmt N	Aod, standard wall fram	e, mux, 5-8 EVSE, sei	rial)	W4
KEY					
PA = 372	5-104-E-09-S-xxPayment Modul	e (E,CC,S)			PA (3725-A0400)
PB = 372	5-104-E-10-S-xxPayment Module	(E,CC,RFID ICLASS,S)			PB (3725-A0403)
PC = 3/2	5-104-E-09-2-xxPayment Module	e (E,CC,ZigBee)	\		PC (3725-A0404)
PD = 372	5-104-E-10-2-XXPayment Module	e (E,CC,RFID ICLASS,ZIgBee	)		PD (3725-A0405)
PE = 372	5-104-V-10-S-XX Payment Module	(CDMA Modem (V) CC PEI			PE (3725-AU4U2) PF (3725-AN/N1)
PG = 372	5-104-V-09-Z-xx Payment Module	e (CDMA Modem (V).CC 7i	gBee)		PG (3725-A0406)
PH = 372	5-104-V-10-Z-xx Payment Module	e (CDMA Modem (V).CC.RF	ID ICLASS.ZigBee)		PH (3725-A0407)
PI = 3725	-104-A-09-S-xxPayment Module	(GSM Modem (A),CC,S)			PI (3725-A0408)
PJ = 3725	5-104-A-10-S-xxPayment Module	(GSM Modem (A),CC,RFID	ICLASS,S)		PJ (3725-A0409)
PK = 372	5-104-A-09-Z-xxPayment Module	e (GSM Modem (A),CC,ZigE	Bee)		PK (3725-A0410)
PL = 372	5-104-A-10-Z-xxPayment Module	e (GSM Modem (A),CC,RFIE	O ICLASS, ZigBee)		PL (3725-A0411)

# LOCKOUT/TAGOUT



#### Warning: Disconnect power from service lines.

#### Avertissement: Déconnecter puissance de lignes de service.

Prior to performing electrical wiring for installation of the Gateway, ensure that power has been removed from the service lines originating from the service panel.

To maintain the safety of all persons in the area a lockout/tagout procedure should be followed per 29 CFR 1910.147.

Lockout is the placement of a lockout device on the service panel energy isolation device (circuit breaker) to ensure that the power source cannot be operated until the lockout device is removed. A lockout device utilizes a positive means such as a lock (key or combination lock with a circuit breaker lockout) to hold the breaker in a safe position to prevent energization.

Tagout is the placement of a tagout device (a tag or other prominent warning device) on an energy isolation device to indicate that the energy isolation device and the equipment being controlled may not be operated until the tagout is removed. The tagout device should be non-reusable, attached by hand, self-locking and non-releasing with a minimum unlocking strength of no less than 50 pounds.

The lockout approach shall be used unless the utilization of a tagout procedure will provide full personnel protection.

# Installation Overview

The 3725-104 is shipped either mounted to an EVSE or optional ZigBee Mesh mounting pole, or can be configured for mounting on a wall, with or without the optional ZigBee Mesh. The unit's pole-mount dimensions and mounting pattern are displayed below. For specific installation instructions, see the 3725 series of Installation Sheets.



Figure 3

# **Payment Module Operation**

The operating screens and language associated with your Payment Module will be unique to your installation. Basic operational screen examples are below.

### **Keypad Overlay**



### **Display Screens**

#### **EVSE Selection screen:**

1. The Selection (Main) screen prompts for the Watt Station number. Enter the station number using the numeric keypad:



2. Selecting a station number prompts the user to press **Enter** to confirm the selection:



Possible errors include the following:



3. The Payment Module then prompts the user to select L2 (Faster) charging, or L1 (Slower) charging using the Up Arrow (# 2) or Down Arrow (# 8) buttons:



NOTE: Charges and timeframes displayed below are examples.



4. Press Enter to select.

The charger now prompts the user to select how to handle a DR (Demand Response) event, again using the **Up Arrow** (# 2) or **Down Arrow** (# 8) buttons to scroll through choices:



Choices for handling DR events differ based on whether L1 or L2 Charging was selected previously:

#### L1 DR-Handling Choices



Stop Charging During Event Pay Nothing Until Charging Resumes

#### L2 DR-Handling Choices

Remain Charging	Reduce Charging 50%	Stop Charging
Charged Per Hour	Charged Per Hour	During Event
\$3.00 12AM - 6PM	\$2.00 12AM - 6PM	Pay Nothing Until
\$2.00 GPM - 12AM	\$1.00 6PM - 12AM	Charging Resumes

- 5. Press Enter at the option screen to select your choice.
- 6. The charger will now prompt for the user's cell phone number in order to provide text notifications of DR events and confirmation of the action taken.



7. Enter user's 10-digit cell phone number using the numerical keypad, and press Enter when done.

A confirmation screen displays showing the selections and purchase. **NOTE:** Information displayed below is an example.



- 8. Press Enter to accept (or CLR to cancel).
- 9. A Please Swipe Credit Card screen displays.



10. After processing the credit card, the charger instructs the user to plug in their vehicle.



11. Plugging the vehicle in to the station completes the process, and the Payment Module screen defaults back to the EVSE Selection screen.

# Accessing the Web Browser Interface

The Payment Module hosts a web browser-based application that allows you to manage the EVSE network and configure various options associated with each EVSE. In addition, it allows you to view current status and historical information that has been accumulated from each EVSE, and configure the Payment Module's own system.

The first step to gaining access to the Web interface is to open a web browser and establish a connection with the Module. Connections can be made over either Ethernet or a cellular connection.

**Note**: Acceptable browsers are Google Chrome and Internet Explorer; Internet Explorer must be in Compatability Mode.

#### **Ethernet Connection**

For an Ethernet connection, the default URL (case-sensitive) to contact the Payment Module is

<u>http://192.168.13.99:8080/Gateway/evse</u>. Open a browser and enter this address into the URL. If you want to change the Module's IP address after you have logged in, see *Changing the IP Address for an Ethernet Connection* on page 17. If you are working with a Network Management System, set up port forwarding between the public port (1-9999) to the internal IP address of the EVSE gateway.

If you cannot use the default URL from your network, use an Ethernet cable to plug your laptop directly into the back of the Payment Module.

- 1. Slide the Module up off the pole or wall, remove your network's Ethernet cable and plug the other end of the Ethernet cable from your laptop into the Ethernet port.
- 2. Bring up a browser on your laptop and enter the Module's default IP address into the URL.
- 3. Log into the Payment Module: Username=admin; Password=pass
- 4. Follow Steps 1-5 in *Changing the IP Address for an Ethernet Connection* on page 17.
- 5. Remove the Ethernet cable connecting your laptop to the Payment Module and plug in your network's Ethernet cable.
- 6. Slide the Module back onto the pole or wall.
- 7. From your network's browser, enter <a href="http://IP address]:8080/Gateway/evse">http://IP address]:8080/Gateway/evse</a> into the URL and log back into the Module.

#### **Cellular Connection**

When the Payment Module includes a cellular modem, the cellular modem <u>must</u> have a <u>static</u> LAN IP address. The private local area IP address of the cellular modem is 192.168.13.31/24. To obtain the public IP address of the cellular modem, consult your Cellular Internet Service Provider. The cellular modem will handle NAT-ing for the Payment Module. The default NAT configuration for the cellular modem is as follows:

- It will forward web traffic on tcp port 8008 to the Payment Module at 192.168.13.99:8080
- It will forward ssh traffic on tcp port 46 to the Payment Module at 192.168.13.99:22
- It will forward modbus traffic on tcp port 502 to the Payment Module at 192.168.13.99:502

Plug the chosen IP address into the URL(case-sensitive): <u>http://[IP address]:8008/Gateway/evse</u>

#### Logging In

Once a connection is established, the login screen displays.

C Login Info	
User	
Password:	
Login	

Enter the default username and password: Username: admin; Password: pass

Be sure to change these as soon as possible. See System Configuration on page 28 for more information.



Ethernet (Module)

### Changing the IP Address for an Ethernet Connection

1. Display the System Configuration screen by clicking **File** and selecting **Open Sys Config** from the dropdown list.

		Reservation Info
+ Add New EVSE	System Config Time Zone    NTP Settings    Network Settings   Sys Config Info	Enable Reservations
File     Zigbee Setup     Help	Login User:       admin         Login Password       ******         Version:       9923-100f         Zigbee Info       2         Zigbee Pan ID       43 4d 49 00 00 00 00 35         Query       Test         Zigbee         Maintenance Info         Days to Keep Local Messages       90         Days to Keep Charge History       90         Message Queue Info       Message	SMTP Info Host: Port: 25 Power Monitoring Settings Shutdown Delay (min): 1 Reset Backup Module Reset Gateway White List Badge Format O Decimal • Hex Cable Management Cable Retract Delay (Min): 5
	MQ URL: localhost MQ Post Office	Miscellaneous Outdoor Unit Has New Backup Module
		Disable Backup Module Watch Dog Timer

Save changes

2. Click the Network Settings tab. The following screen displays:

System Config T	Time Zone NTP Settings	Network Settings	
Custom Netwo	ork Settings		
IP Address:	192.168.0.99		
Netmask:	255.255.254.0		
Gateway:	192.168.0.10		
DNS Server:	192.168.0.15		
Save change	Refresh		
Default Network Settings			
Enable Default IP			

- 3. Enter a <u>public</u>, <u>static</u> IP address for the Payment Module in the **IP Address** field.
- 4. Fill in the remaining fields as necessary for your system's configuration.
- 5. Click Save Changes.
- 6. Select whether to reset the gateway now. Resetting takes a few minutes.
- 7. From your network's browser, enter <a href="http://IP address]:8080/Gateway/evse">http://IP address]:8080/Gateway/evse</a> into the URL and log back into the Payment Module.

# Setting Up a ZigBee Mesh Network

Within a ZigBee Mesh network, a Payment Module can interface with up to 32 EVSEs containing ZigBee modules. When setting up a network for the first time, you will need to add the EVSEs one at a time. These EVSEs will already have been installed at the site. Before you begin, make sure the covers of the EVSEs have been removed as you will need access to their GFI dip switches. See that EVSE's installation guide for those instructions. Refer to **Figure 4** for the EVSE's GFI dip switch location. You will also need the test payment card that came with the Payment Module (**Figure 6**). If you have misplaced this card, you can add the EVSE to the network via the Web Browser Interface. See that section on page 19.

**Note**: Power must remain on for the Payment Module and the EVSEs to ensure communication does not get interrupted before the process completes.



Figure 4

- 1. Turn on the Payment Module.
- 2. Turn on the first EVSE. This is usually the EVSE closest to the Payment Module.
- Slide that EVSE's GFI Dip Switch number 3 to Closed to put it into ZigBee Setup Mode (Figure 4). After a few
  moments, all the lights on the Control Module will begin flashing, letting you know the EVSE is now in ZigBee Setup
  Mode.





4. Insert the test card that came with the Payment Module into the Payment Module card reader to put the module into test mode.



Figure 6

- 5. Using the Payment Module's Up and Down arrows, scroll through the choices until you display Sync EVSEs and press Enter. The Payment Module displays Listening Mode. It will now find the EVSE that you put into ZigBee Setup Mode. This might take a minute or two.
- 6. When the EVSE is found, 1 EVSE Detected displays on the Payment Module.
- 7. Use the Up and Down arrows to highlight that EVSE and its ZigBee Module's identifying number and press Enter.
- 8. Use the Payment Module's keypad to enter a number for this EVSE. It will display in the Number: field. This is the number the customer will use when selecting an EVSE to use for charging. For example, if this EVSE is located in parking spot 33, assign it the number 33. Note: Use only numeric characters.
- 9. Press Enter.
- 10. The Payment Module updates this information, displays EVSE Updated, 0 EVSEs Detected and returns to Listening Mode. It is ready to discover the next EVSE to add to its network.
- 11. Slide that EVSE's Dip Switch 3 to the **Open** position. After a few moments, its Control Module will first show all lights on with no flashing, and then just the blue Power light will remain on. Replace that EVSE's cover.
- 12. Move to the next EVSE that will be part of this Payment Module's network. Repeat Steps 2-12 until all of this Payment Module's EVSE's have been added.
- 13. Once all EVSEs have been added, press **Clear** on the Payment Module to take it out of Listening Mode and return it to the Test Menu. Proceed to *Testing the ZigBee Mesh Network*.
- **Note**: Adding an EVSE to an existing, operational network interrupts communication within the network while the Payment Module is in Listening Mode. Tracking Data that occurred during the time the Payment Module was in Listening Mode will be collected after the Payment Module returns to live operational mode. No data will be lost.

#### Adding an EVSE Via the Web Browser Interface

You can also use the Web Browser interface to add an EVSE to a ZigBee Mesh Network. This can be useful if, for example, you have misplaced the Payment Module's test card. See *Logging In* on page 16 if you are not currently logged into the browser.

- 1. See the EVSE's installation guide for cover removal instructions and remove its cover.
- 2. Turn on the EVSE.

Listening Mode View ×

- 3. Slide that EVSE's GFI Dip Switch number 3 to **Closed** to put it into ZigBee Setup Mode (**Figure 4**). After a few moments, all the lights on the Control Module will begin flashing (**Figure 5**), letting you know the EVSE is now in ZigBee Setup Mode.
- 4. From the Main screen, select the **ZigBee Setup** dropdown menu and choose **Synch EVSEs**. The following screen displays:

se	File 🗸	Zigbee Setup 🗸	Help 🗸
	<	🖶 Synch EVSEs	$\rightarrow$
	EVSE S	🖶 🕂 Synch Payment S	tation
	🕨 🗁 Status	Exit Setup Mode	
	) 🔁 Client /	Apps	
			0

Update EVSE

Status View L Evse Number:

- 5. The Payment Module is now in Listening Mode and will find the EVSE whose GFI dip switch number 3 has been set to Closed. Its ZigBee Module ID will display in the empty area of the screen. Highlight that ZigBee number and enter a number for the EVSE in the EVSE Number field. This field only accepts numeric characters.
- 6. Click Update EVSE.
- 7. Slide the EVSE's Dip Switch 3 to the **Open** position. After a few moments, its Control Module will first show all lights on with no flashing, and then just the blue Power light will remain on. Replace the EVSE's cover. Proceed to *Testing the ZigBee Mesh Network*.

# Testing the ZigBee Mesh Network

- 1. Turn on the Payment Module.
- 2. Insert the test card that came with the Payment Module (Figure 6) into the Payment Module card reader to put the module into test mode and display the Test menu.
- 3. Use the Up and Down arrows to scroll to EVSE Info and press Enter.
- 4. Use the Up and Down arrows to scroll through the list of EVSEs connected to this Payment Module. Highlight an EVSE and press **Enter**.
- 5. The Payment Module sends a Charge message to that EVSE. If the message successfully went through, the yellow Connected light will be on on that EVSE's Control Module. It will remain on for five minutes. At this point you can plug the EVSE's cable into a tester to check that a charge is actually occurring, or connect it to a car to check charging.
- 6. Remove any EVSE from the Payment Module's network that did not receive the Charge message and repeat Steps 2-12 in *Setting Up a ZigBee Network*.
- 7. To remove an EVSE, press **CLR** on the Payment Module to return to the Test menu and use the Up and Down arrows on the Payment Module to scroll to Clear EVSE Number.
- 8. Press Enter.
- 9. Scroll through the EVSE list, highlight the one to remove and press **Enter**. You can now add this EVSE back into the Payment Module's network.
- 10. Once testing is complete, press CLR once more on the Payment Module to put it into regular operating mode.

### Testing the ZigBee Mesh Network Via the Web Interface

If you have misplaced the Payment Module's test card, you can test the network via the Web Interface Browser. It is assumed you have logged into the browser. See *Logging In* on page 16 for more information.



- 1. Turn on the Payment Module.
- 2. From the Main menu, expand the EVSE list and highlight the EVSE you just added. The following screen displays:

tatus View 001	3a20040da5320 ×	
EVSE Setup		Notes/Description
Name:	0013a20040da5320	Notes:
Radio Address:	00 13 a2 00 40 da 53 20	
Location:		
Type:	Overhead	
Evse Number:	3	Commands
	Imabled	
Enable Optional	Features	Start Charge Set Time Reset EVSE
Enable Dem	nand/Response	

- 3. Click Start Charge.
- 4. The Payment Module sends a Charge message to that EVSE. If the message successfully went through, the yellow Connected light will be on on that EVSE's Control Module. At this point you can plug the EVSE's cable into a tester to check that a charge is actually occurring, or connect it to a car to check charging.
- 5. After test completes, click **Stop Charge**.
- 6. Remove any EVSE from the Payment Module's network that did not receive the Charge message and repeat Steps 2-12 in *Setting Up a ZigBee Network*.
- 7. To remove an EVSE, highlight that EVSE on the EVSE Stations dropdown list and click **Delete EVSE** on the bottom of the screen you used to test the charge.

Repeating Intervals		
Heartbeat(sec):	60	
Export Power interval:	5	
Save changes Delete		

# Replacing a ZigBee Mesh Payment Module

In the event that you need to replace a Payment Module, install it as discussed in the 3725 series of Installation Sheets. After installation, perform the following steps to synch it back up with the existing ZigBee Mesh Network of EVSEs. You can perform these steps via the Payment Module itself, or the Web Browser Interface.

#### Via the Payment Module

- 1. Make sure the power is on to all the EVSEs in this Payment Module's network.
- 2. Choose an EVSE closest to this Payment Module. Refer to that EVSE's installation guide for cover removal instructions and remove its cover.
- 3. Slide that EVSE's GFI Dip Switch number 3 to **Closed** to put it into ZigBee Setup Mode (**Figure 4**). After a few moments, all the lights on the Control Module will begin flashing, letting you know the EVSE is now in ZigBee Setup Mode (**Figure 5**).
- 4. Turn on the Payment Module.
- 5. Insert the test card that came with the Payment Module (**Figure 6**) into the Payment Module card reader to put the module into test mode and display the Test menu.
- 6. Using the Payment Module's Up and Down arrows, scroll through the choices until you display Sync EVSEs and press Enter. The Payment Module displays Listening Mode. It will now find the EVSE that you put into ZigBee Setup Mode. This might take a minute or two.
- 7. When the EVSE is found, 1 EVSE Detected displays on the Payment Module.
- 8. The Payment Module can now find all the EVSEs associated with its network. These EVSEs begin displaying their ZigBee Module numbers on this screen. Once they have all displayed, **Open** Switch 3 on the EVSE's GFI. Its Control Module will first show all lights on with no flashing, and then just the blue Power light will remain on.
- 9. Replace the EVSE's cover. The network can now resume regular functions.
- 10. Press **Clear** on the Payment Module to put it into regular operating mode.

#### Via the Web Browser Interface

- 1. Make sure the power is on to all the EVSEs in this Payment Module's network.
- 2. Choose an EVSE closest to this Payment Module. Refer to that EVSE's installation guide for cover removal instructions and remove its cover.
- Slide that EVSE's GFI Dip Switch number 3 to Closed to put it into ZigBee Setup Mode (Figure 4). After a few
  moments, all the lights on the Control Module will begin flashing, letting you know the EVSE is now in ZigBee Setup
  Mode (Figure 5).
- 4. See *Logging In* on page 16 and log into the Web Browser.
- 5. From the main Web browser screen, select the **ZigBee Setup** dropdown menu and click **Synch Payment Station**. The following screen displays:

Status View	Config Mode View x

- 6. The Payment Module can now find all the EVSEs associated with its network. These EVSEs begin displaying their ZigBee Module numbers in the blank area of this screen. Once they have all displayed, **Open** Switch 3 on the EVSE's GFI. Its Control Module will first show all lights on with no flashing, and then just the blue Power light will remain on.
- 7. Replace the EVSE's cover. The network can now resume regular functions.

# Web Browser Interface Operation

The Web Interface allows you to manage the EVSE network and configure various options associated with each EVSE and payment module. In addition, it allows you to view current status and historical information that has been accumulated by the payment module from each EVSE.

# Changing EVSE Assigned Numbers (Serial Connection)

1. From the main screen, expand your list of EVSEs from the EVSE Station dropdown list and click the EVSE number you want to change. The following screen displays:

Status View 0013a20040b1374d x					
– EVSE Setup –					
Name:	ne: 0013a20040b1374d				
Radio Address:	dress: 00 13 a2 00 40 b1 37 4d				
Location:					
Type:	Overhead 💌				
Evse Number:	2				
	✓ Enabled				



2. Enter your preferred number and click **Save Changes** at the bottom of the screen.

Note: You will not be able to log back into the Payment Module's Web Browser page for approximately five minutes.

# Viewing EVSE Status and Messages

Once you have successfully logged in you will be brought to the EVSE status screen, which provides a list of all EVSEs in the system, as well as their current status.

1. Select File in the top left corner of the screen to get a dropdown list.

	+ Add New EVSE					U <u>L</u>	MMMM Geometric variaties	ME
Ę	File ▼ Zigbee Setup ▼ Help ▼ Prodet New Event ♥ Open Comm View ♥ Open Log View ♥ Add New Client App ♥ Open Sys Confin	Status Vier Table V Filter	w ×					
	>	Evt ID 1 2	EVSE 0013a20040da5320 0013a2004099de77	Code 0 0	Description READY READY	Data	Time Stamp 2015-08-14 08:43:43.0 2015-08-14 08:43:47.0	
	Dropdown List						Messages	

2. From the dropdown, select **Open Comm View.** This screen will automatically update to display any messages sent to or received from the EVSEs.

# Viewing Payment Module Information

You can view the ID number of the Payment Module's Magtek reader and, if applicable, the Raven cellular modem's ESN number. From the Help dropdown menu, click **Info**. The following screen displays:

Status View Info View X		₽
Payment Station Info	Magtek Serial Number: B0549D3	

# Status Reporting

The Status Report navigation tree allows users to view the current status of all EVSEs, review historical communication events, historical charge status and the current version of installed applications. You can export history and charging reports to your desktop. From the Main screen, click the ► arrow next to the **Status Reports** folder to expand and view available reports.

🛛 🗁 Status Reports
説 Current status
説 Historical events
🕄 Charge history
🕄 App Versions
🔝 Kiosk purchase history

#### **Current Status**

Current Status view provides a color-coded list of all EVSEs and their current state.

_	Table Viewer						
	Filter						
	Evt ID	EVSE	Code	Description	Data	Time Stamp	
	1	00 13 a2 00 40 b1 37 4	0	READY		2015-05-29 11:43:18.0	
	2	00 13 a2 00 40 99 de 7	0	READY		2015-05-29 11:43:21.0	
	3	00 13 a2 00 40 c4 2a o	5	HEARTBEAT EXPIRED		2015-05-12 10:32:31.0	

### **Historical Events**

The historical events view allows users to display a list of the events that were received by the Payment Module from each EVSE or a specified EVSE for the specified date range. Once a list of events is retrieved, specific events can be located by using the free-form text filter. Use the **Export** button to send this information into an Excel file.

Table Vi	ewer					
Filter	EVSE		▼ From: 10/27/2015 ↓ To:	01/27/2016	Go Export	
Evt ID	EVSE	Code	Description	Data	Time Stamp	
35998	0013a20040c27298	DISCON	CABLE DISCONNECTED	CABLE DISCONI	2016-01-26 13:40:09.0	-
35995	0013a20040c27298	MTR	MTR 17.752 160126134004	17.752	2016-01-26 13:40:04.0	
35996	0013a20040c27298	CHARG	CHARGE STOP	CHARGE STOP :	2016-01-26 13:40:04.0	
35997	0013a20040c27298	ОК	CABLE OK	CABLE OK	2016-01-26 13:40:04.0	

#### **Charge History**

Similar to historical events, charge history allows users to search for completed charge events. The charge event indicates the total power consumed by the vehicle, the vehicle ID if available, the driver ID if available, and the date/time of the event. Use the **Export** button to send this information into an Excel file.

– Table Vi	Table Viewer							
Filter	Filter EVSE From: 11/27/2015 Co 01/27/2016 Go Export							
ID	EVSE NAME	Vehicle ID	Driver ID	Power WHr	Mileage	VIN	Start Time	Stop Time
392	0013a20040c27298	Temple 10	briver 10	4.72	0		1/26/16 1:33:41 PM	1/26/16 1:40:04 PM
391	0013a20040c27298		free	0.0	0		1/26/16 1:32:48 PM	1/26/16 1:33:40 PM
390	0013a20040c27298			2.877	0		1/26/16 1:27:55 PM	1/26/16 1:29:51 PM
389	0013a20040c27298			1.379	0		1/26/16 1:26:23 PM	1/26/16 1:27:53 PM

### **App Versions**

Lists the current versions of applications installed on your system.

Versions					
Refresh					
App Name	Version				
System	9923-002				
WebApp	1.0.0.26				
PostOffice	1.0.0.34				
OcppWebServices	1.0.0.13				
ОсррАрр	1.0.0.13				
ADR-KIOSK-APP	1.0.1.0				

### Kiosk Purchase History

Similar to Charge History, Purchase History allows users to search for completed purchase events. The event indicates the total dollars purchased at an EVSE, the total minutes purchased, if the purchase was successful, and the date/time of the purchase. For cards with a preset value, their expiration date/time displays in the **Expiration** column. Use the **Export** button to send this information into an Excel file.

Status View Purchase	Status View Purchase History View X									
Table Viewer	Table Viewer									
Success True   EVSE Number  From: 11/26/2015  To: 01/26/2016  Go Export										
Payment Type	EVSE Number	Minutes	Total	Success	Purchase Time	Expiration				
Free Use	3	0	\$0.00	true	1/25/16 10:20:52 AM	1/25/16 10:25:52 AM				
Free Use	1	0	\$0.00	true	1/25/16 10:20:44 AM	1/25/16 10:25:44 AM				
Free Use	2	0	\$0.00	true	1/25/16 10:03:43 AM	1/25/16 10:08:43 AM				
Free Use	1	0	\$0.00	true	12/23/15 6:56:58 AM					
Free Use	2	0	\$0.00	true	12/17/15 1:18:46 PM					

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# Connecting to a Network Management System

If you are using a network management system (NMS) as part of your setup, you need to set up communication between the Payment Module and the NMS.

1. From the Main screen, click the ► arrow next to the Client App folder to expand it and click OcppApp. The following screen displays.

> 🧽 EVSE Stations	Status View OcppApp ×	
<ul> <li>Catalus Renorts</li> <li>Client Apps</li> <li>ADR-KIOSK-APP</li> <li>CERPAPP</li> <li>OcpWebServices</li> <li>System Apps</li> <li>System Apps</li> <li>White List</li> </ul>	Client App Info Name: OcppApp I Receive Message From EVSEs Enable Client Application	Class Name: com.controlmod.evse.gateway.clientapp.ocpp.OcppApp
> 😂 Venicle List > 😂 Kiosk	Retry Info Retry interval (Seconds): 5	Expiration Info Message Expiration (Minutes): 5 Expires

- 2. Click the Enable Client Application checkbox.
- 3. Click Save.
- 4. Click OcppWebServices.

🗁 EVSE Stations	Status View   OcppApp   OcppWebServices ×	
🗁 Status Reports		
🗁 Client Apps	Client App Info	
ADR-KIOSK-APP	Name: OcppWebServices	Class Name: com.controlmod.evse.gateway.clientapp.ocpp.OcppWebServiceApp
CoppWebServices	Receive Message From EVSEs	Receive Acks from EVSEs
🗁 System Apps	Enable Client Application	
🗁 White List		
🗁 Vehicle List		
🗁 Kiosk	Retry Info	Expiration Info
	Max Retries: 5	Message Expiration (Minutes): 5
	Retry interval (Seconds): 5	✓ Expires

- 5. Click the Enable Client Application checkbox.
- 6. Click Save.
- 7. You must now reset the Payment Module. Click **File** and select **Open Sys Config** from the dropdown list. The following screen displays:

System Config Time Zone NTP Settings Network Settings	Reservation Info	File 🗸 Zigbee Setup 🗸 He
Sys Config Info	Enable Reservations	Add New EVSE
Login User: admin		Open Log View
Login Parquerd ****	SMTP Into	Add New Client App
	Host:	🖶 Open Sys Config
Version: 9923-100f	Port: 25	
Zigbee Info	Power Monitoring Settings	
Zigbee Pan ID: 43 4d 49 00 00 00 00 35 Set PanID	Shutdown Delay (min):	
Query Test Zigbee	Reset Backup Module Reset Gateway	
Maintenance Info	White List Badge Format	
Days to Keep Local Messages 90	O Decimal	
Days to Keep Charge History 90	Cable Management	
Managan Output Tafa	Cable Detract Delay (Min):	
Message Queue Info	Miscellaneous	
MQ URL: localhost	Outdoor Unit	
MQ Post Office	Has New Backup Module	
	Disable Backup Module Watch Dog Timer	
	Save changes	

8. Click Reset Gateway. The Payment Module resumes operation in approximately 30 seconds.

Note: You will not be able to log back into the Payment Module's Web Browser page for approximately five minutes.

# White List

The white list provides a mechanism that allows EVSEs to turn on only for valid drivers, vehicles and Employee/Student ID RFID cards. When a card is swiped at the EVSE and it is not already charging a vehicle, it transmits the card data to the Payment Module with an indicator informing the module if the card passed or failed local validation against the white list in the EVSE. In the case of a card failure, to validate, the module determines if this card is valid in its white list and if so, loads the card into the EVSE and issues a Charge Start command.

### Adding RFID Cards

RFID cards each have a unique number in the bottom right corner. You need to add this number into the system before it can be configured into the White List.



From the Main screen, click the ► arrow next to the White List folder to expand it, click White List and the White List View tab. The following screen displays.



- 1. Enter the number from the RFID card in the *Card Number* field.
- 2. If this card is to be used only once, click the *One Time Use* box. Otherwise, you can leave all boxes unchecked if the card never expires or click the *Expires* box and enter the card's expiration date.
- 3. Click Save. Now if you enter the card's number in the field under the *Table Viewer* section, it will display.

#### Configuring the White List

Configuring the white list is done through the White List Config screen, which provides the following fields:

- Maximum Records to allocate in the white list (EVSE allocation)
- Record or card data length (MiFare RFID card length is 10 characters; MiFare Plus is 14 characters)
- Parent ID card data length Optional identifier that can be used to group cards together)
- Option to enable cards to expire after an expiration date

014			
+ Add New EVSE			<b>N</b> imeroran, connex.c. we:
File • Help •			
<ul> <li>EVSE Stations</li> <li>Status Reports</li> </ul>	Status View White List Config View *		a la
🕴 📴 Client Apps	White List Config Info		
System Apps	Max Records: 600	Record Length: 10	
White List White List White List White List Config	Parent ID Length: 0	Chable Expirations	

- 1. From the expanded White List folder, click White List Config and the White List Config View tab.
- 2. Fill in the fields and click **Save changes**.

# Vehicle List

Vehicle identification is accomplished by mapping a white list card to a vehicle. This is done through the use of the Vehicle List screen. Essentially, this adds or associates a white list card to the system mapped by the Payment Module to a particular vehicle. Vehicle information is tied to the card so it can be reported in the Charge History table.

+ Add New EVSE					4 MAN MAR Mersoner	MUMBLE ME
File v Help v						
EVS Rations     Status Reports     Status Reports     Status Reports     System Report     System Report     White List     White List     White List     White List     White List     White List     R     Volvide List	Satur View White Lift Record brild Gard Number Vear: Save Clear Table Viewer	Config View   White List View	Vehicle View *	VIN: Model: Mileage:		

# System Configuration

To display the System Configuration screen, click File and select Open Sys Config from the dropdown list.

	System Config Time Zone NTP Settings Network Settings	Reservation Info
	Sys Config Info	Enable Reservations
Add New EVSE	Login User: admin	SMTP Info
	Login Password ****	Host:
File → Zigbee Setup → Help → Add New EVSE	Version: 9923-100f	Port: 25
Open Comm View     Open Log View	Zigbee Info	Power Monitoring Settings
Add New Client App	Zigbee Pan ID 43 4d 49 00 00 00 00 35 Set PanID	Shutdown Delay (min): 1
Open Sys Contig      Dev Vehicle List	Query Test Zigbee	Reset Backup Module Reset Gateway
> 🗁 Kiosk	Maintenance Info	White List Badge Format
	Days to Keep Local Messages 90	O Decimal
	Days to Keep Charge History 90	Cable Management
	- Message Queue Info	Cable Detract Delay (Min):
		Miscellaneous
		Outdoor Unit
	Place of the second sec	Has New Backup Module
	•	Disable Backup Module Watch Dog Timer
		Save changes

The System Configuration screen provides setup information for the Payment Module, allowing you to configure options such as:

- Username used to access the web console.
- Password used to access the web console.
- Version refers to the system currently installed.
- ZigBee PAN ID Network ID that is assigned to all radios in the network during ZigBee Mesh Network setup.
- SetPANID button configures the USB ZigBee radio to use the preset PAN ID (used if replacing the USB ZigBee radio).
- Query ZigBees button sends a query to all EVSE radios to retrieve system status.
- Test ZiBee Queries ZigBee to make sure communication is working properly.
- Days to keep local messages retention period for status events.

- Days to keep charge history retention period for charge history.
- MQ URL tcp://localhost:61616 specifies the connection information for the Payment Module messaging interface.

Note: This value should not be modified unless directed to do so by Customer Support personnel.

- MQ Test Tests Message Queue operations.
- Post Office Test Tests the message sorting portion to make sure it's working properly.
- Reseravtion Info Enables/disables being able to reserve EVSEs over OCPP Web Services.
- Reset Gateway Resets the Payment Module.
- White List Badge Format Specifies the format to use for White List Badges; for both manual entry and OCPP transactions.
- Cable Management Sends a Charge Stop message to an ESVE who's dropped cable has not started charging after a specified time.

Enter your changes and click Save Changes. You can also change your time zone via the Time Zone tab.

#### Network Time Protocol (NTP) Settings

System Config Time Zone	NTP Settings	Network Settings	
NTP Settings			
Server IP Address:			
Save changes Refree	Set Time	]	

NTP is a standard Internet protocol used to keep devices in synch with a common standard time. This will ensure that data collected for the Payment Station is in synch with this common standard time. Ask your IT person for the NTP Server's IP Address that the Payment Station will keep its time synched with. Click **Save** to add the new address. Use **Refresh** to display the new IP address. Use **Set Time** to immediately update the PC's time with the NTP server.

Note: Set Time uses the saved IP Address, so if you change the IP, you need to make sure to save it before pressing this button.

After saving the NTP Server IP, click Set Time to synch the time. After that, the synch is automatically done daily.

#### **Network Settings**

Use this screen to enter custom network settings that you have received from your IT department. If you want to remove the ability to return to factory settings, click **Disable Default IP**. If you want the ability to return to factory settings, click **Enable Default IP**. Note that enabling default is the factory setting. This allows you to update your network settings while still allowing the 192.168.13.99 IP address to access the Payment Station until the you disable it. This is useful in case you incorrectly enter the IP Address when changing it. You can then access the Payment Station/Gateway to fix it.

System Config	Time Zone	NTP Settings	Network Settings			
Custom Net	work Setting	S				
IP Address:	192.168.	0.99				
Netmask:	255.255.	254.0				
Gateway:	192.168.	0.10				
DNS Server:	: 192.168.0.15					
Save chang	Save changes Refresh					
Default Network Settings						
Enable Defa	Enable Default IP					

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EVSE Stations
 Status Reports
 Client Apps

> 🗁 System Apps
> 🍅 White List

🕨 🗁 Vehicle List

# **Kiosk Configuration**

To display the Kiosk configuration screens, from the Main screen, click the ► arrow next to the **Kiosk** folder to expand and click **Payment Options**. The Kiosk Configuration screen displays.

lisplays.	Settings Charge Types Pricing Option	s Pricing Schedule Languages	Kiosk
Tabs	Payment Options External Credit Card Validator Prepay With Credit Cards Post Pay With Credit Cards Pay Per Charge With Credit Cardd Member Card External Member Card Validator Uberty Plug-In 400B Board Free Use	Setup (Setup) (Setup) (Setup) (Setup)	When selected and after you click <b>Save Changes</b> , the <b>Setup</b> button becomes live. Click to continue credit card setup as discussed in the <i>Setting Up Credit Cards</i> section.
	Kiosk Title: Reserve Length (Minutes): Cable Adjust Length (Minutes): Save changes	Watt Stations 5 5	

The Kiosk Configuration screen provides setup information for the Payment Module payment options, allowing you to configure options such as:

- External Credit Card Validator Authorizes the credit card via an extended version of OCPP 1.5. Note: This requires a client application to work successfully.
- Prepay With Credit Cards The customer selects the amount of time they need to purchase and they're allowed to
  charge for that length of time; once a customer disconnects, the session ends and the charge is deactivated until the
  next purchase.
- PostPay With Credit Cards A hold is put on a customer's credit card and they're allowed to begin charging; once the
  session ends, the length of time they were charging is totalled and charged against their credit card.
- Pay Per Charge With Credit Cards A customer is charged a flat fee and they are allowed to charge as long as they'd like; once a customer disconnects, the session ends and the charge is deactivated until the next purchase.
- Employee/Student ID Works with RFID cards. You must add this card ID to the White List to make it valid. See White List on page 25 for more information.
- External Employee/Student ID Validator Used with third-party OCPP servers.
- MDB Board Works like the Prepay With Credit Cards option, but works with customer-specific cards.
- Free Use Allows customers to charge for free.

Note: This option is automatically disabled at the Payment Station if any other payment method is selected.

- Show Event Action Screen If DR (Demand Response) is enabled, this should be checked so the customer can select their option.
- Show Confirmation Screen Enables/disables a final confirmation screen before asking the customer to pay.
- End Session After EVSE Reset If this is enabled, a charge session is automatically disabled when the EVSE is offline for over 5 minutes.
- Kiosk Title This is what is displayed on the top line of the idle prompt (Max 20 characters).

- Reserve Length After a purchase, an EVSE is reserved for a certain length of time to prevent two customers from accidently purchasing time on the same EVSE. This value is the same as the *Cable Retract Timer* field in the System Configuration screen.
- Cable Adjust Length If a customer tries to plug in their vehicle, but they don't think it was seated properly, even if the charge was started, they can unplug and seat the cable again without the session being ended. The charge still stops and if it was a motorized unit, the cable will attempt to retract, but the Payment Station will send another Charge Start to the EVSE.

Use the tabs at the top to access the remainder of the screens discussed in this section. For each screen, enter your changes and click **Save Changes**. When you have finished all your changes, click **Push To App** to update the running system.

#### Payment Considerations

On the average, companies are charging \$1 per hour, with a few charging \$2. Many add signs with 3-4 hour limits to ensure the charger is available for other EV drivers. At 18 cents per kilowatt hour, it costs about 60 cents per hour or \$2.40 to \$2.52 for 4 charging hours. How much mileage each charging hour adds to the car's battery depends upon the EV model the customer is driving.

#### Charge Type

This screen allows you to select what charge levels to offer your customers at your Payment Stations. L2 = Fast charge; L1 = Slow charge.

Settings Charge Types	Pricing Options Pricing Schedule Languages
Refresh	
✓ L2	
Save	

### **Pricing Options**

This screen allows you to configure the following options:

- Type L1=Level 1 slow charge; L2 = Level 2 fast charge (Default)
- Description What displays for the user when selecting Charge Level/Event Action
- Unit of Measure Displays how the customer will be charged
- Peak Price Price charged during peak times
- Non-Peak Price Price charged during normal business hours
- Price Code Assures the customer is charged what the display is showing (Admin use only)
- DR Code 1 = the base price (Admin use only)
- Language Supports multiple languages for the Payment Module's display.

Enter a peak price and non-peak price. If not using a peak price, enter the same dollar amount in both fields.

Settings Charge Ty	pes Pricing Options	Pricing Schedule	Languages			
Pricing Option						
ID:						
Type:				Description :		
Unit of Measure:				Currency:		
Peak Price:				Non Peak Price:		
Price Code:				DR Code:		
Language:	English					
Save changes	Clear Delete					
Туре	Unit of	Measure	Peak Price	Non Peak Price	Price Code	DR Code
L2	hour	ricasare	\$0.00	 \$0.00	12	1
L2	hour		\$0.00	\$0.00	12	1

### **Pricing Schedule**

Use this screen to specify the times that will charge peak prices.

Settings Charge	Types Pricing Options	Pricing Schedule Language	es	
Pricing Option				
ID:				
Day Of Week:	Sunday 🔻			
Peak Start:	12:00AM			Peak End: 12:00AM
Save	Clear Delete			
Day Of Week		Peak Start	Peak End	
Sunday		02:00P	02:00P	
Monday		02:00P	02:00P	
Tuesday		02:00P	02:00P	
Wednesday		02:00P	02:00P	
Thursday		02:00P	02:00P	
Friday		02:00P	02:00P	
Saturday		02:00P	02:00P	

#### Languages

Use the Languages tab to select your country's language for display. English is the default.

Settings Charge Types	Pricing Options	Pricing Schedule	Languages	
Refresh				
English				
Francais				
Save changes				

### Setting Up Credit Cards

Click **Setup** next to either *Prepay With Credit Cards, Post Pay With Credit Cards, Pay Per Charge With Credit Cards, External Credit Card Validator* or *MBD Board* on the Kiosk Payment Option screen to display the screens used in this section. This section discusses setting up the following:

- Credit Cards
- External Credit Cards
- MDB Credit Card Names

#### Credit Card Setup

Credit card processing for the Payment Module is handled through USA Technologies. Make sure you have an account with them before you continue.

Status View Kiosk Payment Options View Kiosk Credit Card View		ΰ
Credit Card Reader Data		
Serial Number: K3MTB00BD80	User Name: usat	
Password: 12559672	URL: https://ec-ecc.usatech.com:9443/soap/ec	
Misc Options		
Time Select Interval (Minutes): 15		
PreAuth: 5.0		

Serial Number – The system adds this number automatically. If, for some reason, you need to add it manually, you'll
need to obtain the serial number of the MagTek credit card reader from the back of the Payment Module. Add K3MT
to the *card reader's serial number*. For example, the identifier for the reader below would be K3MTB27E9D8. The
number will also be the identifier reported on all financial reports that you receive.



- User Name and Password Leave the User Name as **usat** and the Password as is so USA Technologies can update the password the first time you log in.
- URL This is USA Technology's URL.
- Time Select Interval The interval the time goes up when the user is selecting the amount of time they'd like to purchase
- PreAuth How much hold charge should be placed on the customer's credit card. (Used with **Post Pay With Credit Cards** option only.)

#### External Credit Card Setup

These fields are used for querying price information and for customers that don't use DR. Deselecting Send DR Data will leave those fields blank when authorizing.

Status View	Kiosk Paym	ent Options View	Kiosk Ext CC View 🗴		
- Misc Op	otions ———				
Custor	ner Name:	TestValue			
🗸 Sei	nd DR Data				
Save chan	ges				

#### **MDB** Setup

This is the card name displayed when the customer selects Payment Type at the Payment Station, since customers might have different names for each of their cards.

Status View Kios	k Payment Options View	Kiosk MDB View	×
- Misc Options			
Card Name:	Test Card Message		
	·		
Save changes			

# Moving, Transporting And Storage:



#### WARNING:

Ensure electrical power has been shut-off at the source before working with electrical wiring.



AVERTISSEMENT : Assurer l'alimentation électrique a été fermeture à la source, avant de travailler avec câblage électrique.

- Should the Model 3725-104 Payment Module need to be relocated, remove the unit in the reverse order that it was installed.
- Bag all attaching hardware and secure on/in the unit.
- Store the unit in a dry, low humidity area.
- Protect the unit using appropriate packaging.

# **Customer Support**

Should questions about installation, operation, optional features, maintenance or service arise, please call Technical Support at 1-888-753-8222 between the hours of 8:30 am to 5:00 pm EST, Monday to Friday.

Letter Service Department Attn: Jack Batalha, Director Product Support Control Module Inc. 89 Phoenix Avenue Enfield, CT 06082

Fax 1-860-741-6064

e-mail jbatalha@controlmod.com

# Warranty

#### FOB Enfield, CT

EVSE proprietary hardware products are warranted to be free from defects in materials and workmanship for a period of 1 (one) year from the date of receipt of the product. Customer can report an Equipment defect to the Control Module Service Division by (a) telephone between 8:00 A.M. and 4:30 P.M. (EST), Monday through Friday, excluding Control Module holidays, or (b) through the support website.

Telephone number: 800-527-4998

Email address: service@controlmod.com

The foregoing warranty does NOT include:

- Furnishing supplies for, painting or refinishing the product.
- Electrical work external to such product.
- Installation, maintenance or removal of alterations, attachments or other devices not furnished by EVSE, LLC.
- Services which cannot be practicably performed due to alterations in or attachments to the product.
- Services for accessories.
- Repair or replacement of defective product to the extent the defect is attributable to:
  - Neglect or misuse (including use of the product for purposes other than that for which it was designed)
  - Transportation, vandalism or burglary of the product, acts of terrorism, accident or disaster, or other external causes (including water, wind, lightning and dust)
  - $\circ$   $\;$  Alterations to the product or servicing of the product by a third party
- The foregoing warranty shall also not apply to the extent the defect in the product is due to the use of the product in conjunction with other products not manufactured by EVSE or to product from which the serial number has been altered, defaced or removed. This warranty extends only to the original purchaser of the product. It may not be assigned to any third party.

Disclaimer of All Other Warranties: THE WARRANTY SET FORTH ABOVE IS THE SOLE WARRANTY THAT EVSE PROVIDES WITH RESPECT TO THE EQUIPMENT. CUSTOMER ACKNOWLEDGES THAT CMI EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY, NON-INFRINGEMENT OR FITNESS FOR A PARTICULAR USE OR PURPOSE, OR ANY WARRANTY IMPLIED THROUGH COURSE OF CUSTOM OR USAGE OF TRADE.

<u>Disclaimer of Liability</u>: IN NO EVENT SHALL EVSE BE LIABLE TO CUSTOMER OR ANY THIRD PARTY CLAIMING THROUGH CUSTOMER FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOSS OF EARNINGS, PROFIT OR GOODWILL OR COSTS OF COVER, IN EACH CASE RELATING TO THIS WARRANTY OR TO THE EQUIPMENT, EVEN IF SUCH DAMAGES WERE FORESEEABLE AND EVEN IF THIS WARRANTY FAILS OF ITS ESSENTIAL PURPOSE.

# **EVSE LLC**

A Division of Control Module, Inc.

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