CLIPPER CREEK

A division of Enphase Energy, Inc.

KEEP THIS MANUAL

Use in conjunction with the HCS User Manual.

HCS Optional Features User Manual

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Model HCS

PLEASE NOTE

This user manual includes the latest information at the time of printing. Enphase Energy, Inc. reserves the right to make changes to this product without further notice. Changes or modifications to this product by other than an authorized service facility may void the product warranty.

Contact a Customer Service Representative with any questions about the use of this product. (877) 694-4194

WARNING: This product can expose you to chemicals, including Carbon Black, which is known to the State of California to cause cancer. For more information go to: www.P65Warnings.ca.gov

AVERTISSEMENT: Ce produit peut vous exposer à des agents chimiques, y compris Noir Carbone, identifiés par l'État de Californie comme pouvant causer le cancer. Pour de plus amples informations, prière de consulter: www.P65Warnings.ca.gov

ADVERTENCIA: Este producto puede exponerte a químicos, incluso Negro Carbón, que se conocido por el Estado de California como causante de cáncer. Para más información visite: www.P65Warnings.ca.gov

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HCS Optional Features User Manual, Version 2, February 2022

Manual Number: 7004-0036

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FCC INFORMATION

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

This product has been designed to protect against Radio Frequency Interference (RFI). However, there are some instances where high powered radio signals or nearby RF-producing equipment (such as digital phones, RF communications equipment, etc.) could affect operation.

If interference to the EVSE is suspected, the following steps should be taken before consulting a ClipperCreek Sales or Service Representative for assistance:

1. Reorient or relocate nearby electrical appliances or equipment during charging.
2. Turn off nearby electrical appliances or equipment during charging.

CAUTION: Changes or modifications to this product by other than an authorized service facility may void FCC compliance.

ATTENTION: Modifications apportées à ce produit par qui conque autre qu'un centre de service autorisé peut annuler la conformité FCC.

ATENCIÓN: Cambios o modificaciones a este product por otros que no sean un centro de servicio autorizado pueden anular el cumplimiento con la FCC.

INSTALLATION

Install the HCS EVSE in accordance with the instructions provided in the HCS User Manual. This manual provides information on configuring and operating optional features such as ChargeGuard, Share2, and COSMOS included with some HCS models.

A digital copy of the standard HCS User Manual can be found at: clippercreek.com/installation-manuals

OPTIONAL FEATURES

Overview

The HCS Series EVSE can be built with additional functionality including abilities for access control, shared circuit power, and load management.

These features can often be used together, but must be built to order. Reference the chart below to verify which combination of HCS expanded functionalities would best suit specific requirements.

Table 1: HCS Series Optional Features

HCS SERIES **Optional Features**	Built-In Key	External Key	*Shared Circuit Power	Load Management	Serial	# of Control Wires
ChargeGuard	X					0
ChargeGuard EX		X				2
Share2			X	X	X	8 or 15
COSMOS/Share2 with ChargeGuard	X		X	X	X	8 or 15
COSMOS/Share2 with ChargeGuard EX		X	X	X	X	10 or 15

**Not simultaneous with Load Management or Serial*

Contact a Customer Service Representative at (877) 694-4194 for additional information. Installation instructions for each expanded functionality follow.

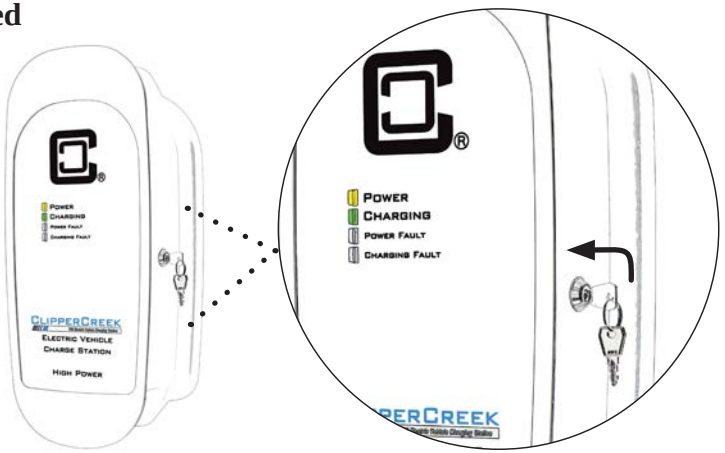
NOTE: Each HCS delivered with Optional Features that use Control Wires (see Table 3) comes with 3 feet (1 m) of conduit containing the communication wires. When using Share2, HCS stations can be placed up 100 feet (30.5 m) apart. ClipperCreek utilizes 24 AWG (American Wire Gauge) Belden cable for the communication harness. Other 24 AWG cabling is acceptable. The 8 Wire Harness uses Belden cable #9538; the 10 Wire Harness uses Belden cable #9540; and the 15 Wire Harness uses Belden cable #9541.

ChargeGuard Enabled HCS

ChargeGuard is a built-in key based access control option. Refer to these instructions to operate a ChargeGuard enabled HCS EVSE.

1. Connect the HCS EVSE to the vehicle with the SAE J1772 connector.
2. To enable charging:
   a) Insert the key into the switch located on the right side of the HCS EVSE.
   b) Turn the key 90° clockwise to the vertical position as shown in the **Figure 1**.
   c) The "CHARGING" LED light will illuminate green on the front panel, indicating the vehicle is now being charged.
3. To allow charging of Multiple Vehicles:
   a) Leave the key in the present vertical position. This allows disconnection of the EVSE from one vehicle and reconnection to the same or another vehicle without moving the key.
   b) The EVSE will be enabled and power will be available to vehicles as long as the key remains in the vertical position.

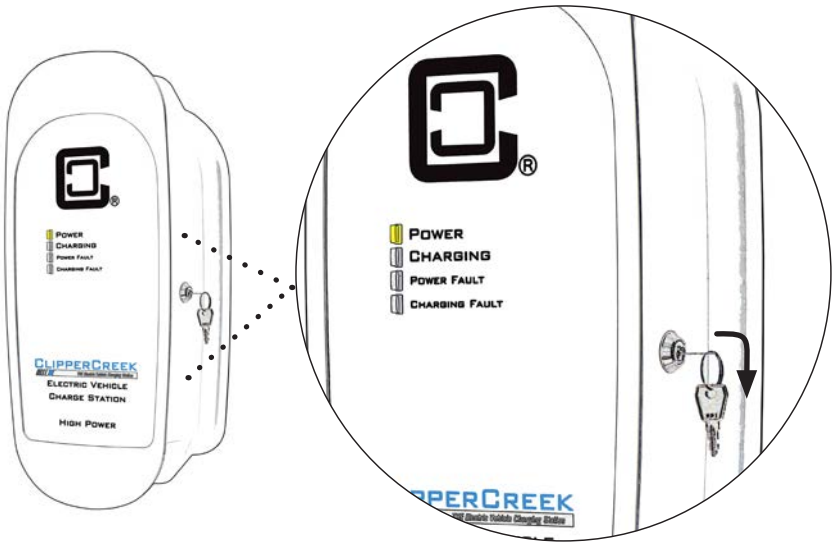
Figure 1: ChargeGuard ON or Enabled Position: Charging is enabled



NOTE: The key cannot be removed in the vertical position. See **Step 4** for key removal instructions.

4. To restrict access:
   a) Turn the key counterclockwise 90° as shown in **Figure 2**.
   b) Remove the key.
   c) If a vehicle is connected and charging, that vehicle will continue to charge as long it remains connected to the EVSE.
   d) Once the vehicle is disconnected from the EVSE, the EVSE will require the key to activate another charging session.

Figure 2: ChargeGuard OFF or Restricted Access Position: The EVSE will be enabled for as long as the vehicle remains plugged in. The EVSE will reset when the vehicle connector is unplugged.



Replacement Keys

Should replacement keys be required, contact the ClipperCreek office at (877) 694-4194. Please have the EVSE **serial number** available for reference.

NOTE: If the Share2 option is desired to work in conjunction with the ChargeGuard option, these two options **must be ordered and built at the same time (Share2 and ChargeGuard are factory-installed options and cannot be installed in the field)**. The optional Share2 feature allows two EVSE to share power supplied by one circuit breaker. Please refer to the Share2 Enabled HCS section of this User Manual for further instructions.

ChargeGuard EX Enabled HCS

ChargeGuard EX provides a simple interface to connect the ClipperCreek HCS EVSE to an existing building access control or other third party access control system. With ChargeGuard EX a momentary contact closure driven by successful authentication in an access control system can activate the HCS ChargeGuard EX enabled station for a single charging session. Alternatively, maintaining the contact closure will leave the station enabled for multiple charging sessions until the connection is released.

When the Orange and Yellow control wires are shorted together, the EVSE is “ON” and ready to charge a vehicle. When the wires are disconnected, the station is “OFF” and requires a valid activation through the access control system in order to begin charging again. Refer to **Figure 3** and **Figure 4**.

ChargeGuard EX can be utilized in two ways:

1. If individual access control is desired (for each charge session), the access control system will need to provide a momentary short to the Orange and Yellow wires which will activate the station for a single charge session. In this implementation once the vehicle is disconnected the station will require a successful authorization through the access control system.

2. If open access is desired, connect the Orange and Yellow wires for as long as open access is desired. As long as the Orange and Yellow wires are shorted together, the station will be enabled for use.

Figure 3: ChargeGuard EX with Orange and Yellow Wires

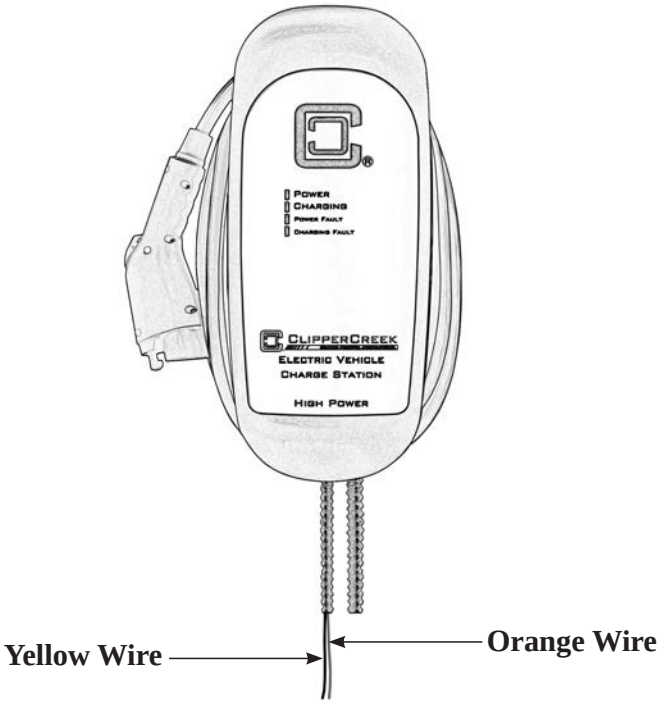


Figure 4: ChargeGuard EX Wire Detail

Please refer to these instructions to operate the ChargeGuard EX enabled HCS EVSE:

1. Connect the HCS EVSE to the vehicle with the SAE J1772 connector.
2. Enable charging by using access control.
3. The “CHARGING” LED light will illuminate green on the front panel, indicating the vehicle is now being charged.

Share2 Enabled HCS

Share2 allows two EVSE to share power supplied by one circuit breaker. When only one EVSE is charging a vehicle, the full charging capacity is available to that vehicle. When both EVSE are charging vehicles, each EVSE will offer 50% of the circuit capacity to each vehicle (thus "sharing" the circuit breaker).

The Share2 EVSE will have either a 15, 8 or 10 wire harness. Please refer to the Wiring Instructions for either the 15, 8 or 10 wires dependent on the particular harness configurations. **These harnesses have different color wires so it is important to follow the correct instructions per 15, 8 or 10 wire counts.**

CAUTION: DO NOT STRIP WIRES THAT ARE UNUSED.

ATTENTION: NE PAS DÉPOUILLER LES FILS INUTILISÉS.

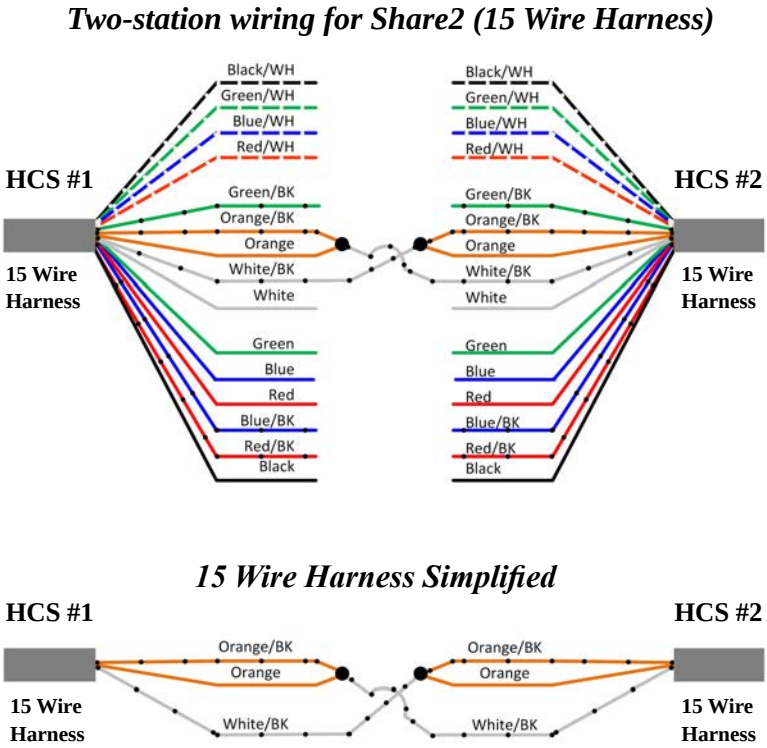
ATENCIÓN: NO CORTE LOS CABLES SI NO LOS ESTÁ UTILIZANDO.

Share2 Wiring Instructions: 15 Wire Harness

Follow the Wiring Diagram in **Figure 5** for proper wiring of a Share2 that utilizes a 15 wire harness. Wiring connections can be made in a junction box or pedestal body. **Strip the Orange/BK, Orange, and White/BK wires ONLY.** Use wire nuts (not included) to secure the Orange/BK and Orange wires to the opposing White/BK wire as indicated by the black dots in **Figure 5**.

NOTE: Wires with black dotted markings are referenced with "/BK" and wires with white dotted markings are referenced with "/WH."

Figure 5: Share2: 15 Wire Harness



Verify Share2 Function is Working Properly

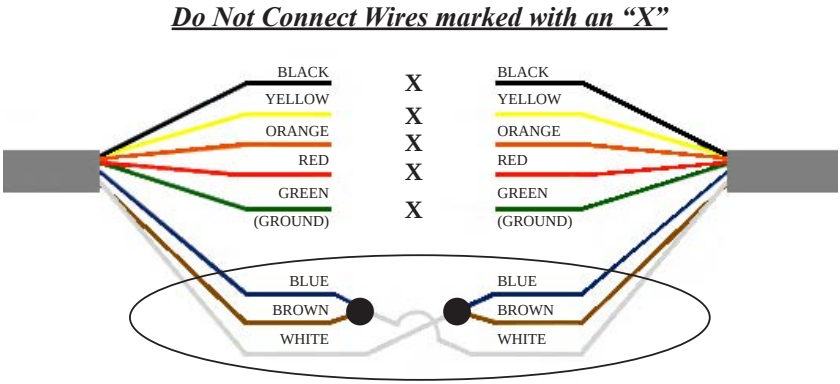
After wiring is complete use a DC volt meter to test functionality. Connect the volt meter negative lead to ground, then connect the volt meter positive lead to the White/BK wire. A measurement greater than 4V DC should be seen when a vehicle is not connected or not charging. A voltage less than 1V DC will be measured on the White/BK wire when a vehicle is charging.

> **NOTE:** There is a 5 second delay once one vehicle stops charging before the White/BK wire returns to greater than 4V DC and an additional 10 seconds before full circuit power will be available to the other vehicle.

Share2 Wiring Instructions: 8 and 10 Wire Harnesses

Follow the Wiring Diagram in **Figure 6** for proper wiring of a Share2 that utilizes an 8 or 10 wire harness. Wiring connections can be made in a junction box or pedestal body. **Strip the Blue, Brown and White wires ONLY.** Use wire nuts (not included) to secure the Blue and Brown wires to the opposing White wire as indicated by the black dots in **Figure 6**.

Figure 6: Share2: 8 or 10 Wire Harness



**For 10 wire COSMOS harness, do not connect grey and violet wires.*

Verify Share2 Function is Working Properly

After wiring is complete use a DC volt meter to test functionality. Connect the volt meter negative lead to ground, then connect the volt meter positive lead to the White wire. A measurement greater than 4V DC should be seen when a vehicle is not connected or not charging. A voltage less than 1V DC will be measured on the White wire when a vehicle is charging.

> **NOTE:** There is a 5 second delay once one vehicle stops charging before the White wire returns to greater than 4V DC and an additional 10 seconds before full circuit power will be available to the other vehicle.

Share2 Operating Instructions

1. Connect Vehicle #1 to either HCS #1 or HCS #2 with the corresponding SAE J1772 connector. Vehicle #1 will have access to the full power available through that circuit.
2. Connect Vehicle #2 to the remaining EVSE with the SAE J1772 connector. Each vehicle will now have access to half of the power available through that circuit.
3. If one vehicle disconnects or completes charging, the other vehicle will have access to the full circuit power after 15 seconds.

Figure 7: Share2 Connect Vehicle #1

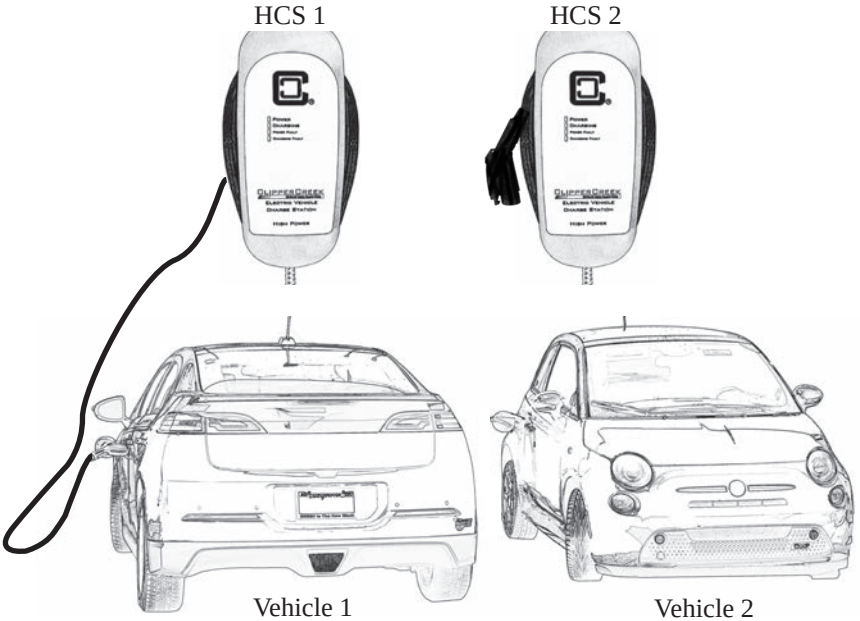


Figure 8: Share2 Connect Vehicle #2

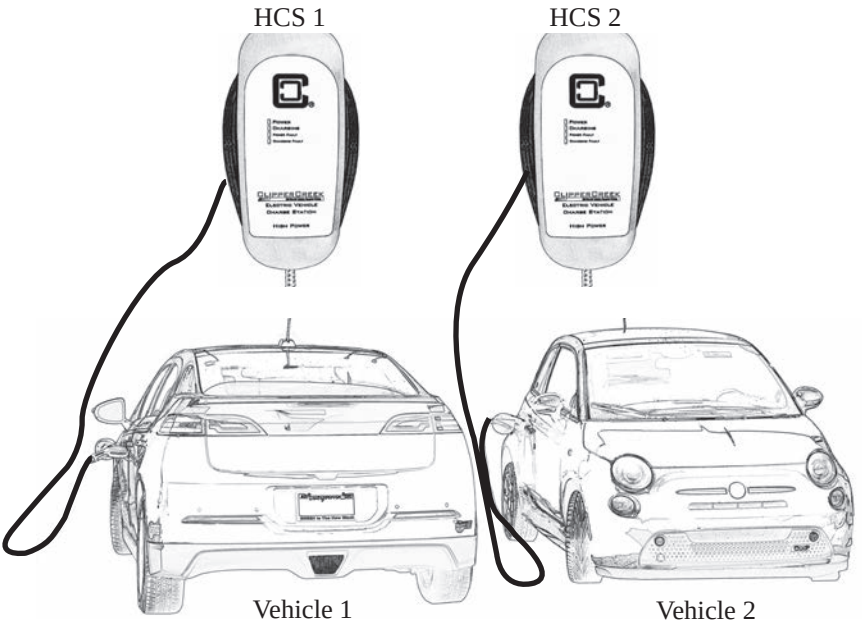
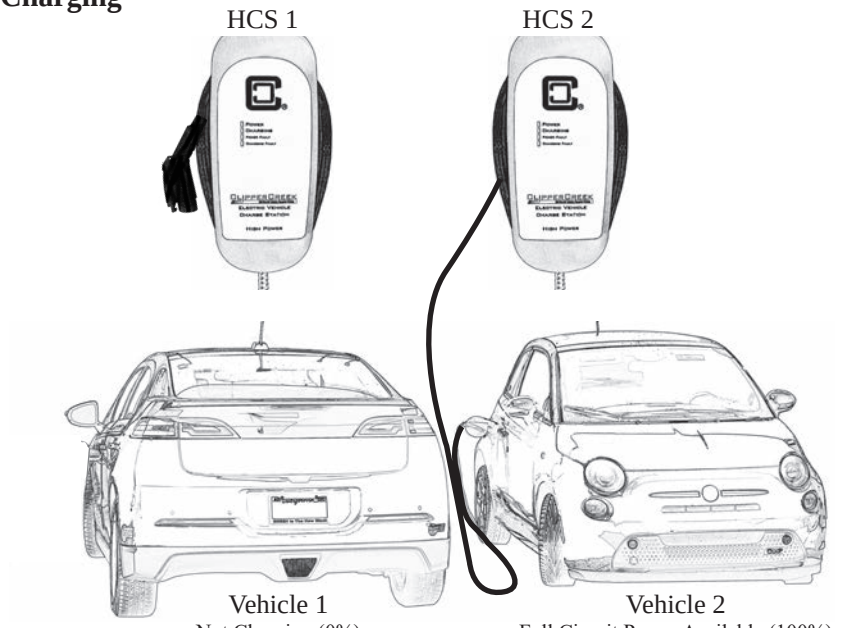


Figure 9: Share2 One of the Vehicles Disconnects or Completes Charging



COSMOS Load Management Enabled HCS

The COSMOS option is a Load Management Access Point which can be connected to a third party load management monitoring and control system to verify energy usage, optimize energy efficiency, and promote energy conservation.

The COSMOS Load Management Enabled HCS provides two ways to control energy usage:

1. The Digital Interface
2. The Serial Interface **(if the Serial Interface is used it will take precedence over the Digital Interface)**

The COSMOS enabled EVSE will have either a 15, 8 or 10 wire harness. Please refer to the Wiring Instructions for either the 15 or 8 and 10 wires dependent on the particular harness configurations. **These harnesses have different color wires so it is important to follow the correct instructions per 15 or 8 and 10 wire counts.**

CAUTION: DO NOT STRIP WIRES THAT ARE UNUSED.

ATTENTION: NE PAS DÉPOUILLER LES FILS INUTILISÉS.

ATENCIÓN: NO CORTE LOS CABLES SI NO LOS ESTÁ UTILIZANDO.

COSMOS Wiring Instructions: 15 Wire Harness

1. Determine whether the Digital Interface will be used with or without the Serial Interface in the installation.

NOTE: Contact ClipperCreek to obtain an NDA for documentation describing the Communication Protocol for the Serial Interface.

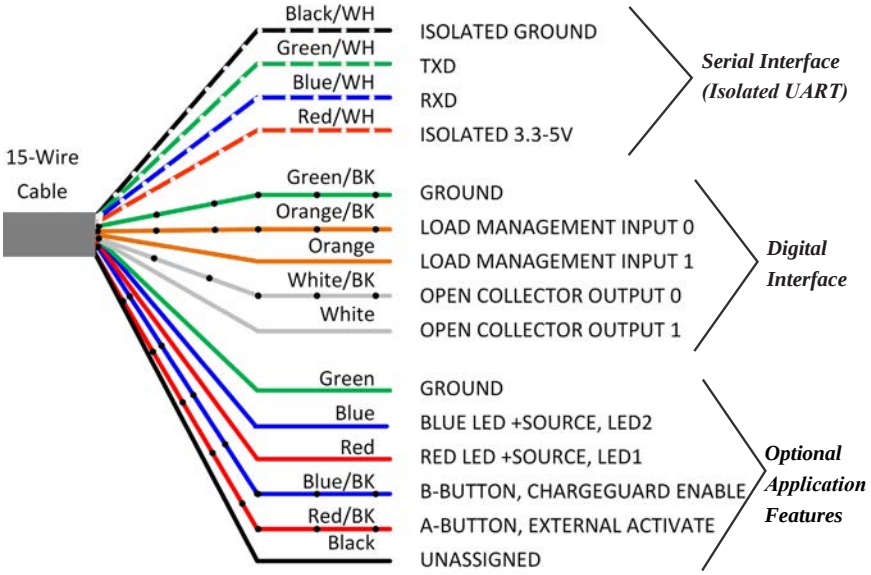
2. Confirm power to the EVSE is off and locked out.
3. Connect the appropriate interface wires to the desired controller. Please refer to **Table 2.**

Table 2: COSMOS Wiring Instructions: 15 Wire Harnesses

Wire Name	Input/Output	Interface	Wire Color	Ratings
Isolated Ground	Input	Serial Interface (Isolated UART)	Black/WH	Ground
TxD	Output		Green/WH	3.3 - 5V DC
RxD	Input		Blue/WH	
Isolated 3.3-5V	Input		Red/WH	3.3 - 5V DC, 20mA
Ground	Output	Digital Interface	Green/BK	Ground
Load Management 0	Input		Orange/BK	5V DC
Load Management 1	Input		Orange	5V DC
Open Collector Output 0	Output		White/BK	max:24V DC, 5mA
Open Collector Output 1	Output		White	max:24V DC, 5mA
Ground	Output	Optional Application Features	Green	Ground
Blue LED +Source, LED2	Output		Blue	5V, 8mA
Red LED +Source, LED1	Output		Red	5V, 8mA
B-Button, ChargeGuard Enable	Input		Blue/BK	5V, 0.5mA
A-Button, External Activate	Input		Red/BK	5V, 0.5mA
Not Used	---	---	Black	---

NOTE: Refer to **Figure 10**. The Black wire is unused.

Figure 10: COSMOS Serial and Digital Interface: 15 Wire



COSMOS Wiring Instructions: 8 or 10 Wire Harness

1. Determine whether the Digital Interface will be used with or without the Serial Interface in the installation.

NOTE: Contact ClipperCreek to obtain an NDA for documentation describing the Communication Protocol for the Serial Interface.

2. Confirm power to the EVSE is off and locked out.
3. Connect the appropriate interface wires to the desired controller. Please refer to **Table 3.**

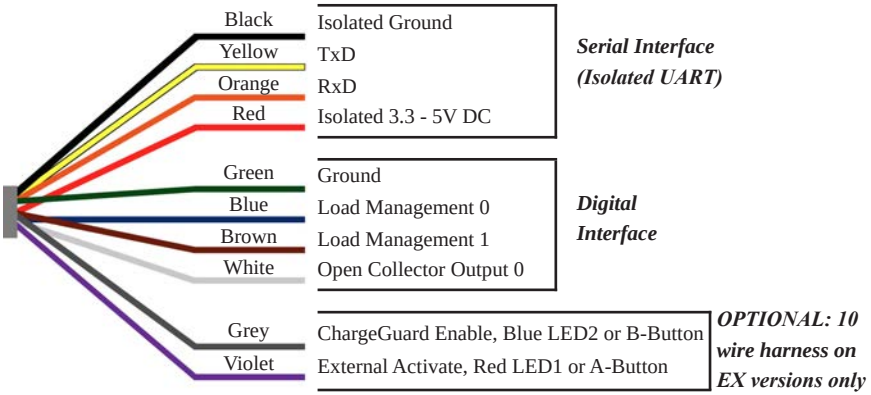
Table 3: COSMOS Wiring Instructions: 8 or 10 Wire Harnesses

Wire Name	Input/Output	Interface	Wire Color	Ratings
Isolated Ground	Input	Serial Interface (Isolated UART)	Black	Ground
TxD	Output		Yellow	3.3 - 5V DC
RxD	Input		Orange	
Isolated 3.3-5V	Input		Red	3.3 - 5V DC, 20mA
Ground	Output	Digital Interface	Green	Ground
Load Management 0	Input		Blue	5V DC
Load Management 1	Input		Brown	5V DC
Open Collector Output 0	Output		White	max:24V DC, 5mA
Blue LED +Source, LED2	Output	Optional Application Features, 10-wire only	Grey*	5V, 8mA
Red LED +Source, LED1	Output		Violet*	5V, 8mA
B-Button, ChargeGuard Enable	Input		Grey**	5V, 0.5mA
A-Button, External Activate	Input		Violet**	5V, 0.5mA

* These signals available on 10-wire LED EX cable
** These signals available on 10-wire ChargeGuard EX cable
Grey and Violet wires are not available on the 8-wire cable
All digital interface signals are available on the 15-wire cable

NOTE: Refer to **Figure 11**.

Figure 11: COSMOS Serial and Digital Interface: 8 or 10 Wire



COSMOS Digital Interface Connection

The Digital Interface wiring must be completed regardless of whether or not the Serial Interface is to be utilized in the installation. The Power Level is determined by the state of the Load Management Digital Inputs which can either be used independently **OR** will become the default power level if and when the Serial Interface is inactive. Refer to **Tables 5 and 6** for a 15 wire configuration or **Tables 7 and 8** for an 8 or 10 wire configuration.

COSMOS Digital Interface Compatibility

Refer to **Table 4**; contact ClipperCreek for additional information.

Table 4: COSMOS Digital Interface Compatibility

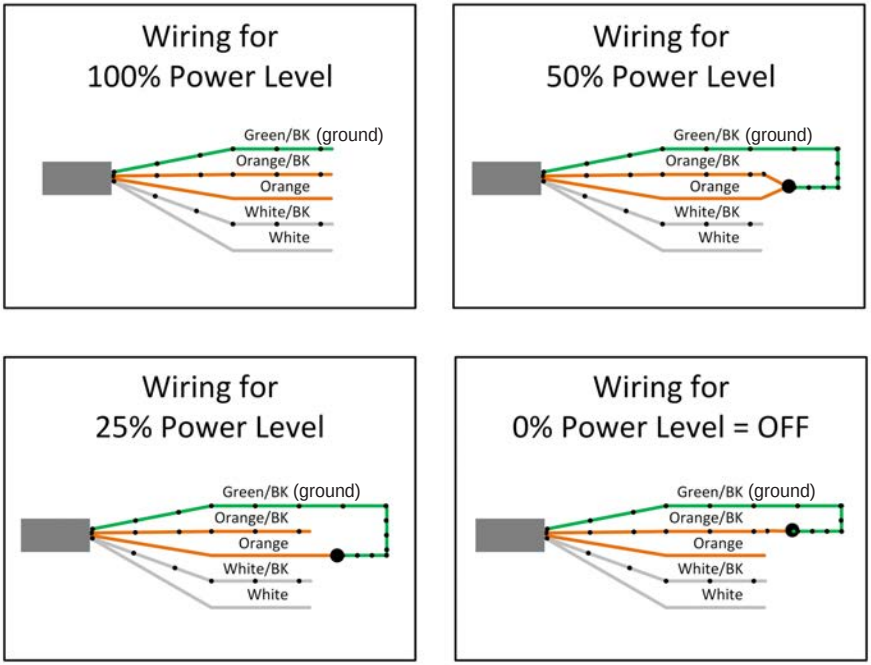
Compatible w/COSMOS Digital Interface			Notes
Product	Yes	No	
COSMOS Serial Interface	X		**The power-on default condition is determined by the Digital Interface.** If Serial Communication is lost for a period of 10 seconds or greater, the EVSE operation will revert to the Digital Input Condition. **An active Serial Interface takes precedence over the Digital Interface.**
ChargeGuard	X		The COSMOS Digital Interface can be used in conjunction with the Charge Guard option. However, if the Serial Interface connections are being utilized, then any such functionality is strictly under the control of the Serial Communication Controller as built into the end user application.
Share2		X	Share2 utilizes the COSMOS Digital inputs for a self-managed circuit sharing scheme and cannot be used with another external load controller that utilizes the COSMOS Digital Inputs.
PMD-10 Pedestal	X		Must be used with the ¼" NPT to ½" NPT Adaptor Assembly included with the COSMOS enabled HCS
Standard Pedestal	X		Must be used with the ¼" NPT to ½" NPT Adaptor Assembly included with the COSMOS enabled HCS

Table 5: COSMOS Load Management Digital Inputs: 15 Wire

Input	Load Management 0	Load Management 1	Power Level (% of max continuous current)
Color	Orange/BK	Orange	
State	Not Grounded	Not Grounded	100%*
	Grounded	Grounded	50%
	Not Grounded	Grounded	25%
	Grounded	Not Grounded	0% / Off

* Power Level is returned from a lower power setting to the 100% state after a ten second delay.

Figure 12: COSMOS Power Level Wiring: 15 Wire



COSMOS Open Collector Outputs: 15 Wire

The Optically-coupled Open Collector Output 0 (White/BK wire) indicates whether the vehicle is charging or not. Output 0 will be pulled low when the EVSE power contactor is energized and is returned to a logic high five seconds after the contactor opens.

The Optically-coupled Open Collector Output 1 (White) wire indicates whether a vehicle is connected. Output 1 will be pulled low when the vehicle is connected and is returned to a logic high five seconds after the vehicle is disconnected.

These outputs are designed to be compatible with the +12V/1kΩ Load Management High/Low or High/Off input terminal of the ClipperCreek CS series products as well as the +5V/10kΩ Load Management 0 or Load Management 1 of another ClipperCreek HCS equipped with the COSMOS interface. These outputs operate as shown in **Table 6**.

Table 6: COSMOS Open Collector Outputs: 15 Wire

Output	Open Collector Output 0	Vehicle State
Color	White/BK	
State	Grounded (Logic Low)	Charging
	Not Grounded (Logic High)	Not Charging*

Output	Open Collector Output 1	Vehicle State
Color	White	
State	Grounded (Logic Low)	Connected
	Not Grounded (Logic High)	Not Connected*

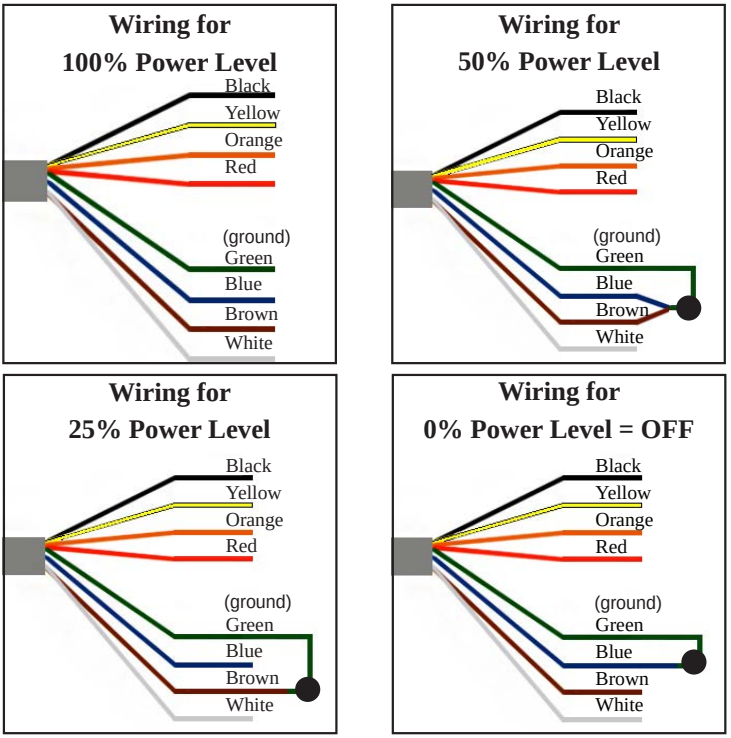
* The Open Collector Output signals return to the Not Grounded (Logic High) state five seconds after the vehicle stops charging or after unplugging the vehicle.

Table 7: COSMOS Load Management Digital Inputs: 8 or 10 Wire

Input	Load Management 0	Load Management 1	Power Level (% of max continuous current)
Color	Blue	Brown	
State	Not Grounded	Not Grounded	100%*
	Grounded	Grounded	50%
	Not Grounded	Grounded	25%
	Grounded	Not Grounded	0% / Off

* Power Level is returned from a lower power setting to the 100% state after a ten second delay.

Figure 13: COSMOS Power Level Wiring: 8 or 10 Wire



COSMOS Open Collector Output: 8 or 10 Wire

The Optically-coupled Open Collector Output 0 (White wire) indicates whether the vehicle is charging or not. Output 0 will be pulled low when the EVSE power contactor is energized and is returned to a logic high five seconds after the contactor opens.

This output is designed to be compatible with the +12V/1kΩ Load Management High/Low or High/Off input terminal of the ClipperCreek CS series products as well as the +5V/10kΩ Load Management 0 or Load Management 1 of another ClipperCreek HCS equipped with the COSMOS interface. This output operates as shown in **Table 8.**

Table 8: COSMOS Open Collector Output: 8 or 10 Wire

Output	Open Collector Output 0	Vehicle State
Color	White	
State	Grounded (Logic Low)	Charging
	Not Grounded (Logic High)	Not Charging*

* The Open Collector Output signal returns to the Not Grounded (Logic High) state five seconds after the vehicle stops charging.

NOTE: The 8 and 10 wire harnesses do not support Open Collector Output 1. Only the 15 wire harness supports both Outputs 0 and 1.

COSMOS ChargeGuard EX Enabled HCS

COSMOS ChargeGuard EX is an alternate COSMOS configuration that has two extra control wires to facilitate ChargeGuard functionality. COSMOS ChargeGuard EX is a standalone function, only enabled when the COSMOS Serial Interface is inactive.

> **NOTE:** All of the standard COSMOS, Share2, and Digital Load Management wiring as described in the COSMOS Load Management Enabled HCS section remain the same.

Activation of the COSMOS ChargeGuard EX enabled HCS unit can be enabled with items such as:

1. An RFID key card
2. An External button
3. A Remote connection

The two harnesses have different color wires so it is important to follow the correct instructions per 10 or 15 wire counts, on the following two pages. ChargeGuard EX is not available on the 8-wire cable.

COSMOS ChargeGuard EX: 15 Wire Instructions

The COSMOS ChargeGuard EX can be wired for either one time access or for continuous access until disabled. Control wires for a 15 wire harness are Blue/BK and Red/BK, as shown in **Figure 14** and **Table 9**.

> **NOTE:** If an electric vehicle is connected when a COSMOS ChargeGuard EX turns on after a power failure, one charge session will be allowed to accommodate for power outages.

Figure 14: COSMOS ChargeGuard EX Controls: 15 Wire

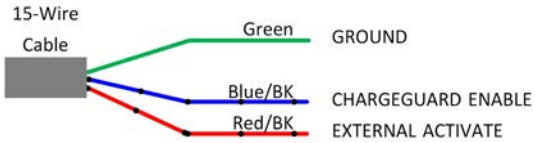
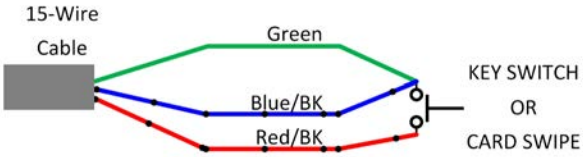


Table 9: COSMOS ChargeGuard EX Wiring: 15 Wire

ChargeGuard EX Wire	Color	Ungrounded	Grounded
ChargeGuard Enable	Blue/BK	Standard operation	ChargeGuard EX mode
External Activate	Red/BK	Charge not allowed	Allows charging session

To enable COSMOS ChargeGuard EX, wire the Green ground wire included in the 15-wire harness to the ChargeGuard EX Blue/BK wire as indicated in **Table 9** and shown in the **Figure 15**.

Figure 15: Enable COSMOS ChargeGuard EX: 15 Wire



COSMOS ChargeGuard EX Activation Instructions: 15 Wire

1. Connect the charge cord to the vehicle
2. Momentarily (> 0.1 second) ground the External Activate wire (Red/BK) to ground (Green and Blue/BK)

This COSMOS ChargeGuard EX activation will make the station available for charging until it is disconnected from the vehicle. This allows for higher vehicle functionality such as delayed charging and cabin conditioning.

Leaving the COSMOS EX Activate line grounded allows for continuous use the charging station regardless of how many times it is connected or disconnected from various vehicles.

COSMOS ChargeGuard EX: 10 Wire Instructions

The COSMOS ChargeGuard EX can be wired for either one time access or for continuous access until disabled. Control wires for a 10 wire harness are Grey and Violet, as shown in **Figure 16** and **Table 10**.

> **NOTE:** If an electric vehicle is connected when a COSMOS ChargeGuard EX turns on after a power failure, one charge session will be allowed to accommodate for power outages.

Figure 16: COSMOS ChargeGuard EX Controls: 10 Wire

Table 10: COSMOS ChargeGuard EX Wiring: 10 Wire

ChargeGuard EX Wire	Color	Ungrounded	Grounded
ChargeGuard Enable	Grey	Standard operation	ChargeGuard EX mode
External Activate	Violet	Charge not allowed	Allows charging session

To enable COSMOS ChargeGuard EX, wire the Green ground wire included in the 10-wire harness to the ChargeGuard EX Grey wire as indicated **Table 10** and shown in the **Figure 17**.

Figure 17: Enable COSMOS ChargeGuard EX: 10 Wire

COSMOS ChargeGuard EX Activation Instructions: 10 Wire

1. Connect the charge cord to the vehicle
2. Momentarily (> 0.1 second) ground the External Activate wire (Violet) to ground (Green and Grey)

This activation will make the station available for charging until it is disconnected from the vehicle. This allows for higher vehicle functionality such as delayed charging and cabin conditioning.

Leaving the External Activate line grounded allows for continuous use of the charging station regardless of how many times it is connected or disconnected from various vehicles.

CUSTOMER SUPPORT

Call a ClipperCreek Service Representative at any time, 24 hours a day, at the number below. **PLEASE HAVE THE MODEL NUMBER AND SERIAL NUMBER AVAILABLE WHEN CALLING.** This information is printed on the label on the side of the HCS enclosure. If a call is made after business hours or on weekends, please leave a name, telephone number, the unit serial number, and a brief description of the problem. A Service Representative will call back at the earliest opportunity.

Distributor Service Number Here

TO CONTACT CLIPPERCREEK DIRECTLY FOR SERVICE, CALL (877) 694-4194 MONDAY THROUGH FRIDAY BETWEEN 8:00AM AND 5:00PM PACIFIC TIME.

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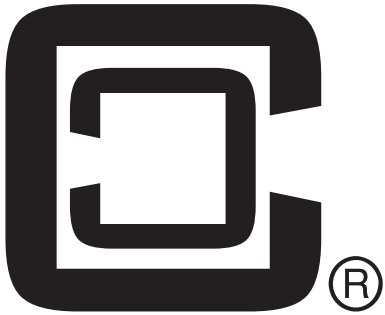

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