

# Hardware Array Circuit 1.0 - Solo 3 Install guide

## **Legal Notice**



Before reviewing this installation guide, please read the following information carefully.



# Pod Point is not responsible for installation and/or commissioning works performed by a 3rd party

In the absence of any negligence or other breach of duty by Pod Point, Pod Point is not responsible for any injury, loss or damage caused by any works, services, products or equipment provided or performed by the customer or a third party (and not by Pod Point or a party for which it is responsible) in relation to the installation and/or commissioning of the Array Circuit.

If the installation and/or commissioning of the charger is not performed by Pod Point, it is the customer's responsibility to ensure that any third party appointed to install and/or commission the Array Circuit is appropriately qualified and does so in compliance with all applicable regulations and with reference to the guidance provided in this document (and associated documents linked within). Pod Point provides this guidance as a reference only and it is not a substitute for the appointment of competent persons to carry out installation and commissioning.

The Array Circuit is **not intended** to be installed by 3rd parties.

A **dedicated supply** is required, installation should not be done using a common supply.



Do not open, move, modify, rewire, tamper or interfere with your Array Circuit once it has been installed.

The customer must ensure that an installed Array Circuit is not opened, moved, modified, re-wired, or otherwise tampered or interfered with, without first referring to Pod Point's latest technical guides and/or notifying Pod Point directly and complying with Pod Point's recommendations.

Please also see the charger's applicable warranty terms which may be affected by taking such action. If you have any concerns in relation to a Pod Point that has already been opened, moved, re-wired or otherwise has been tampered or interfered with, please notify Pod Point directly so that appropriate advice can be provided, noting that Pod Point assumes no responsibility for your installation by virtue of providing such advice.

In the absence of any negligence or other breach of duty by Pod Point, Pod Point is not responsible for injury, loss or damage caused by the Array Circuit. being opened, moved, modified, re-wired or otherwise tampered or interfered with by the customer or a third party (and not by Pod Point or a party for which it is responsible).

# **Array Circuit - Safety**



#### **Safety Instructions**



This symbol is used throughout this guide to indicate a warning. Failure to follow these warnings could result in failure of the equipment, personal injury or result in the warranty being void.



This symbol is used throughout this guide to indicate danger. Failure to follow the instructions within this guide could result in personal injury or electric shock.

- This product shall only be installed by suitably qualified and competent persons.
- This product shall only be maintained by suitably qualified, competent and instructed persons.
- Installation and maintenance work should be carried out in accordance with the current version of BS 7671 and any other national or local regulations, legislation or guidance applicable at the time of installation. Please also consider referencing the IET Code of Practice for Electric Vehicle Charging Equipment Installation
- It is the responsibility of the person(s) carrying out the installation work to ensure all instructions and methods described in this guide are followed at all times.
- Pod Point cannot accept any responsibility where this installation guide has not been followed.
- Standards, specifications and designs change from time to time, information contained within this guide may be subject to change without notice.
- To ensure electrical safety, this product must be maintained in accordance and in line with recommendations made in this guide.
- This product must not be adapted or modified in any way, doing so could result in personal injury or damage to the equipment. Adaptations, modifications or other unauthorised interference with the product may void your warranty. Please see our Warranty Terms and Conditions for more details on this.
- Physical damage to the product may result in unsafe conditions, ensure electricity supplies are isolated and the product is not used if damaged consult Pod Point for further information and repair.



DANGER! Hazardous Voltage - Never make any unauthorised amendments to the internal components of this product. Ensure that the supply to the Array Circuit is isolated and locked off before installation and maintenance activities are carried out.

# **Array Circuit 1.0**





#### Earthing Arrangements

The Array Circuit must be connected to a permanent, metallic earthing system in accordance with the current version of BS 7671 and any other applicable local and National regulations.

The Array Circuit is suitable for connection to the following earthing systems:

TN-C-S (PME)*	TNS	TT**
<b>⊘</b>	$\odot$	<b>⊗</b>

The installer is responsible for ensuring that the earthing system used is adequate and meets the requirements detailed within the current version of BS 7671.

- \* Any circumstances where a Solo Charger is to be installed externally, an open PEN protection device must also be installed at the source of supply.
- \*\* Additional considerations should be made when the Array Circuit is connected to a TT earthing system. An RCD will **always** be required at the source of supply where a TT earthing system has been used either for the whole installation or locally for the charger only.

Where an RCD is required for a TT earthing system, the RCD **must** be a Type B >100mA time delayed.

#### **Electrical connection**

Cables being terminated to the Array Circuit must be done so to avoid unintentional damage - appropriate cable glands **must** be used at the point of entry to the cable connection enclosure, cables must be stripped to the correct length to avoid excess copper showing at the termination. Terminations must be tightened within the specified torque of:

Component	Torque (Nm)
All EAE Components	See EAE Documentation
PP-E-170094 - 100A Input MCB	3.5
PP-E-210410 - 100A Output RCCB	2.5
PP-E-210414 - Earth Terminal	10
PP-A-170103 - Array Controller	0.5

Cables must be correctly identified by colour within the connection enclosure.

Array Circuit 1.0

# **Array Circuit 1.0**



This system **should not be** installed without a project specific design produced by Pod Point, to be read in tandem with this guide.

This install guide details the installation procedure for the Array Circuit 1.0 (Solo). The Array Circuit version 1.0 consists of:

- Pod Point's Array Circuit Distribution Board
- Elbagate's MK E-Line Busbar
- Elbagate's Tap-off Box
- Pod Point's Data Box

Dependant on the electrical supply, this system can provide a modular increase from 3 to 27 installable units by using a smart load monitoring system. The modularity of this system is due to the Tap-off Points and Boxes, where the maximum capacity infrastructure is installed in one go and each additional Solo can be wired into the pre-existing infrastructure., The Array Circuit 1.0 is compatible with the original Solo and Solo 3 only.

#### Included materials:

- Array Circuit Busbar & Busbar Components (*site specific*)
- Array Circuit Distribution Board

#### Materials required to complete this installation:

Description	Qty			
(PP-M-170167-1) 40mm Armoured cable gland	Site specific			
(PP-M-170166-1) 20mm Armoured cable gland	Site specific			
5-core cable	Site specific			
2-core cable	3x per site Length - site specific			
Unistrut / Basket Tray	Site specific			
PVC Conduit 20mm <sup>2</sup>	Site specific			
20mm² Steel Saddle Clamps	Site Specific			
(PP-K-220074) Data Box Kit	[Ideally] 1x per Chargepoint installed [Min.] 0.5x per Chargepoint installed			
(PP-K-220073) Tap-off Box Kit	1x per Chargepoint installed			



#### Information

Description	Value
Weight of Distribution Board (incl. packaging)	16.3 kg
EMC Environment Classification	Class A - Immunity Class B - Emissions
Maximum input short-circuit current (Supply PFC)	10 kA
Rated conditional short-circuit current (Icc)	10 kA*
Upstream short-circuit protective devices necessary	Min. 100A Min. 10kA

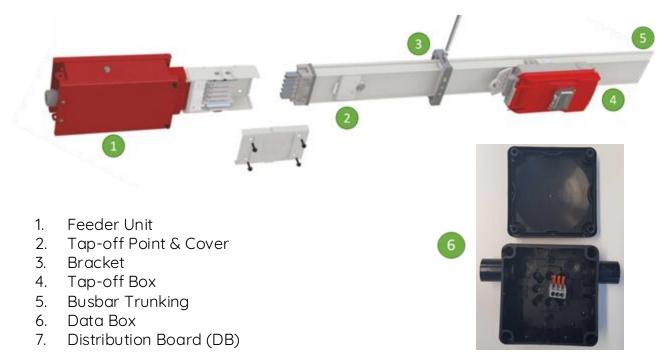
<sup>\*</sup>based on the lowest maximum breaking capacity of internal switchgear



The prospective fault current at the supply input to the Array Distribution Board **must not exceed**10kA



#### Reference list of Terms



#### Installation of EAE Busbar Components/System

All components provided by Elbagate (EAE) should be fitted and installed as per their specifications and in accordance with their guidelines. Pod Point does not take ownership or responsibility of their product or methodology. This guide only provides detail on using the product to fit the purpose of the Array Circuit and its related components.

The Busbar Trunking used is the Elbagate E-Line MK version, details can be found here: <a href="https://www.eaeelectric.com/busbar-systems/e-line-mk-busbar">https://www.eaeelectric.com/busbar-systems/e-line-mk-busbar</a>

#### Primary Installation and Secondary Installation Overview

The Array Circuit installation is to occur in two distinct stages:

- Stage 1 The entirety of the passive infrastructure (Distribution Board, Busbar, Tap-off Boxes and Data Boxes) is installed. No Chargepoints are installed at this time.
- 2. <u>Stage 2</u> Upon a specific request, a Chargepoint is installed in the typical fashion. This then gets fitted into its own dedicated Tap-off Box along the Busbar.

Note: The reference notation of the following steps (i.e. X.Y.Z.) refer to Stage X, Phase Y and Step Z.

Array Circuit 1.0



# Stage 1

## Phase 1: Installation of Distribution Board - AC-DB-01-UAA ONLY



DANGER! Hazardous Voltage - Never make any unauthorised amendments to the internal components of this product. Ensure that the supply to the Array Circuit is isolated and locked off before installation and maintenance activities are carried out.

1.1.1. Measure and cut the trunking (and conduit if necessary) where the Distribution Board (DB) will be installed. Unlock the lid and unscrew the cover.



Figure 1. Array Circuit Distribution Board

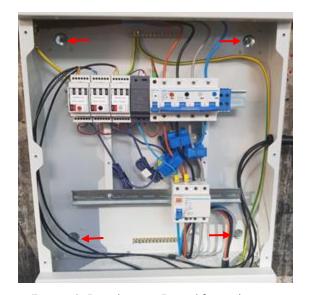


Figure 2. Distribution Board fixing locations

- 1.1.2. Mark 4 holes using the locations identified in Figure 2. Drill the 4 holes in the wall where the Distribution Board will be fitted.
- 1.1.3. Fit the Distribution Board on the wall using 4x appropriate screws.
- 1.1.4. Remove the appropriate knock outs from the side(s) of the Distribution Board where the incoming supply, outgoing supply and outgoing Data cables (via trunking, armoured cable and/or conduit) will be connected.



Figure 3. Example set-up for connecting Distribution Board to Feeder Unit

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**1.1.5.** Strip the mains cables from the incoming supply, feed through knockout to Distribution Board using an appropriate gland.





Figure 4. Supply to Distribution Board

**Care point:** Make sure stripped cables reach the 100A MCB on Upper DIN Rail.

**1.1.6.** Connect the outgoing supply and Earth to the corresponding Busbar Feeder Unit, fixing to the wall/ceiling as appropriate. Use the EAE Install Manual for correct torque settings.



Figure 5. Wiring of Busbar Feeder Unit

**1.1.7.** Feed the cable through the Distribution Board gland, then measure and strip the cables down to be fitted to their corresponding terminals.

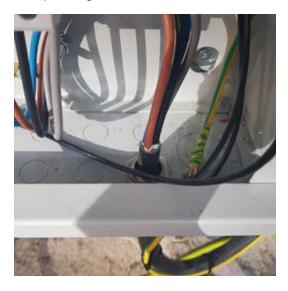
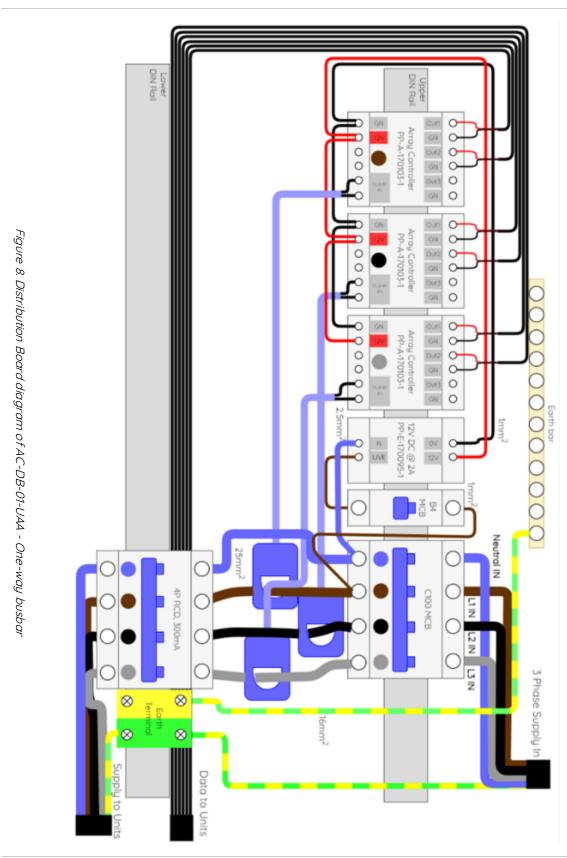


Figure 6. Supply to Busbar gland connection to Distribution Board



Figure 7. Lower DIN Rail RCCB connected to Busbar Supply Cable

1.1.8. Connect the Busbar supply to the Lower DIN Rail RCCB and Earth terminal, as seen in Figure 8 below.



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**1.1.9.** Screw L1 (brown), L2 (black), L3 (grey) and Neutral (blue) at the bottom of RCCB(s) on the Lower DIN Rail. Fit the earth wire into the earth terminal on the Lower DIN Rail. Live and Neutral wires should be screwed to a torque of 2.5Nm, Earth to a torque of 10Nm.

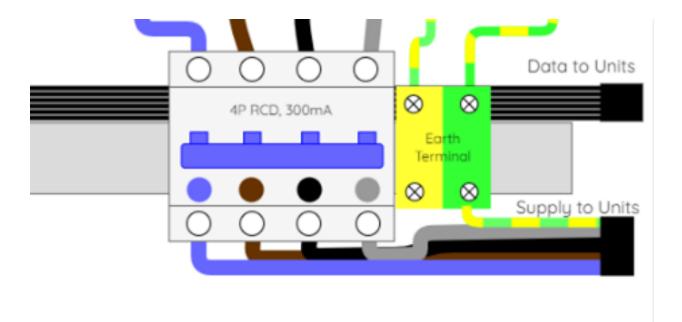


Figure 9 Supply to Busbar for AC-DB-01-UAA - One-way



Figure 10. Earth Terminal Block

**1.1.10.** Feed all 6 Data cables through appropriate knockout(s) using (a) gland(s). Label appropriately.

Care point: Ensure enough length to reach Array Controllers on Upper DIN Rail.

Care point: Ensure the Data cables are identifiable

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**1.1.11.** Cut and strip Data cables to appropriate lengths and fit into the corresponding Array Controller "OUT 1" AND "GND", see Figure 11.

**Care point 1:** Make sure that you are connecting the shielded wire to the correct Array Controller for that phase.

**Care point 2:** Ensure shielding is connected into the ground pin of the controller.

**Care point 3:** The grounds within the controllers are commoned. All Out connections should be connected **separately** to their associated phase, e.g. L1 controller must only connect to Chargers supplied from L1.

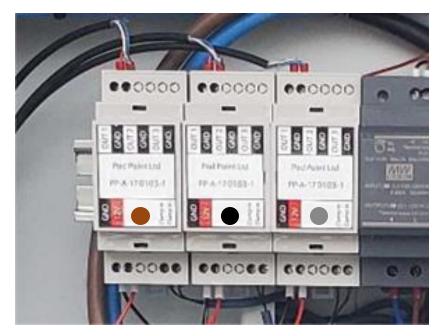


Figure 11. Array Controller connections - showing only 1x per phase for simplicity

**1.1.12.** Feed Data cables through conduit(s) to the first Data Box, attached to the first bracket.

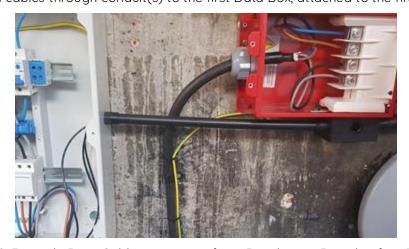


Figure 12. Example Data Cable connection from Distribution Board to first Data Box



**1.1.12.** All Array controllers must each be connected to both wires (Live and GND) per Data cable.

**Care point:** Ensure that each Data cable is clearly identified in an appropriate manner.

- **1.1.13.** Screw on the cover of Distribution Array Board.
- **1.1.14.** Attach all stickers supplied with the boards on the cover.
- **1.1.15.** After initial verification and testing, see steps and Figure 13 below for order of energisation.

- **1.1.15.1.** Switch on main 100A MCB (see Picture 14 below)
- **1.1.15.2.** Switch on 1-pole 2A MCB feeding the array controllers (see Picture 9 below)
- **1.1.15.3.** Switch on lower DIN rail RCCB(s) (the number of RCCBs will depend on the SKU)

**Care point:** All Solo Chargers must be connected to the Internet via Wi-Fi and must be configured for use with an Array system.



Figure 13. Order to turn on power



# Stage 1

Phase 1: Installation of Distribution Board - AC-DB-01-UBA ONLY



DANGER! Hazardous Voltage - Never make any unauthorised amendments to the internal components of this product. Ensure that the supply to the Array Circuit is isolated and locked off before installation and maintenance activities are carried out.

This page has intentionally been left blank as a placeholder for the installation of the Array Circuit 1.0 Distribution Board AC-DB-01-UBA SKU variant.

A later release of this this document shall detail the necessary installation steps once they are finalised and agreed by all relevant parties.

# Array Circuit 1.0- Preparation of Busbar



### Phase 2: Preparation of Busbar Trunking



DANGER! Hazardous Voltage - Never make any unauthorised amendments to the internal components of this product. Ensure that the supply to the Array Circuit is isolated and locked off before installation and maintenance activities are carried out.

**Care point:** The Busbar Trunking can be installed in a number of methods; wall mounted, roof mounted and/or roof suspended, see Figures 16, 17 and 18.

**1.2.1.** Measure and mark distances along route so as to ensure a minimum of **2x Brackets per 2m** length of Busbar Trunking is installed. Brackets should be installed in front of Tap-off Points where possible.

**Care point:** Ensure these Brackets do not cover Tap-off Points or Busbar joints and leave sufficient space for a Tap-off Box to be fitted.

**1.2.2.** Measure and mark distances along route where Data Boxes are to be installed. Data Boxes should be placed between 2 EV parking bays, so as to provide Data connection for 2 future Solo Chargers



Figure 14. Correct Bracket positioning

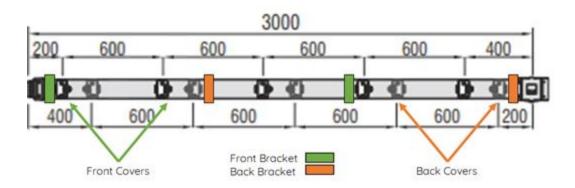


Figure 15. Idealised Bracket Spacing on example 3m length

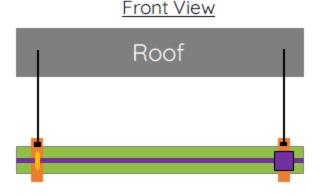
# Array Circuit 1.0 - Data cables



#### Phase 3: Recommended Installation of Data Cables



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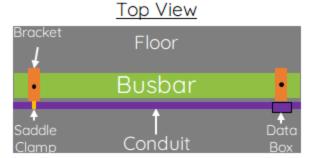


Figure 16. Roof Suspended (not to scale)

- **1.3.1.** Due to the number of ways that the Busbar can be mounted, 3 methods are recommended by Pod Point. All use the same system of saddle clamps and Data Boxes fixed to Unistrut alongside the Busbar.
- **1.3.2.** Install Data Boxes to Unistrut/Brackets in locations identified in Step 1.2.2.
- **1.3.3.** Install saddle clamps at appropriately spaced distances to secure Conduit to Unistrut or Bracket.

**Care point:** Saddle clamps **must** be installed prior to busbar if using the same Bracket for both data and busbar fixation.

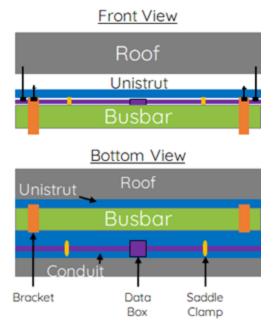
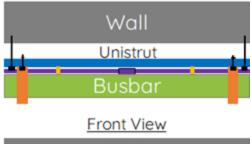


Figure 17. Roof Mounted (not to scale)

Top View



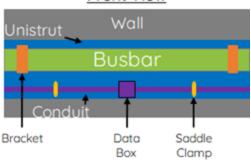


Figure 18. Wall Mounted (not to scale)

Array Circuit 1.0

# **Array Circuit 1.0 - Data cables**



**1.3.4.** Fit conduit into saddle clamps and into Data Boxes as needed until end of Array Circuit, see Figures 19 and 20.



Figure 19. Conduit fixed to saddle clamp



Figure 20. Example Conduit fitted to Data Box

**Care point:** Final length of conduit must terminate into a Data Box, regardless of EV bay location.

**1.3.5.** Feed and label the first set of Data cables, i.e. those connected to the far left hand side of the Array Controllers, through the first Data Box, as seen Figure 21.

**Care point:** Ensure each cable is correctly identified in a sensible fashion. For example, 1-L1 denotes the first pair "1-" of the "L1" Array Controller.



Figure 21. First set of Data cables in Data

Box

**1.3.6.** Feed the next set of Data cables into the Data Box. Loop once, zip-tie and mark these cables as the second pair per Live. See Figure 22 and 23.



Figure 22. Looped, zip-tied and marked second set of Data cables



Figure 23. All 6 Data cables inside first Data Box

**Care point:** Ensure each cable is correctly identified in a sensible fashion **in each box**.

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### Phase 4: Installation of Tap-off Box



DANGER! Hazardous Voltage - Never make any unauthorised amendments to the internal components of this product. Ensure that the supply to the Array Circuit is isolated and locked off before installation and maintenance activities are carried out.

- **1.4.1.** Identify the EV Charging Bay where the Chargepoint will potentially be installed.
- **1.4.2.** Identify corresponding Tap-off Point to install Tap-off Box. This will be the closest, unless obstructed Point.
- Ŕ

DANGER! Hazardous Voltage - follow the safe isolation procedure

**1.4.3.** Open Tap-off Box and fit RCBO to Neutral and appropriate Live wires.



Figure 24. Tap-off Box with L1 connected to RCBO

1.4.4. Stick associated Live label onto RCBO.

**1.4.5.** Open busbar Access Cover exposing conductors within, as seen in Figure 25.



Figure 25. Exposed Tap-off Point, cover to be removed



**1.4.6.** With the box open, fit the conductor points at the bottom of the Tap-off Box into the Tap-off Point and push straight into the Busbar. The Tap-off Box will click into place.



Figure 26. Tap-off Box fitted to Busbar (Top)

**Care point:** Ensure the Tap-off Box is mounted so that the **handle is on the same side as the Tap-off Cover** relative to the conductors.

**1.4.7.** Remove knockout(s) from lid of Tap-off Box to expose RCBO, close lid and latch.



**1.4.8.** Fit sealing wire through holes alongside latch on Tap-off Box. Crimp into the ferrule (and tag if provided). Repeat with the flip-up latch, as seen in Figure 28.





Figure 28. Tap-off Box locations to be sealed by crimped wire

Figure 27. Tap-off Box fitted to Busbar (Front)



# Stage 2

# Phase 1: Connecting Chargepoint to Tap-off Box & Data Cable



DANGER! Hazardous Voltage - Never make any unauthorised amendments to the internal components of this product. Ensure that the supply to the Array Circuit is isolated and locked off before installation and maintenance activities are carried out.

- **2.1.1** Identify EV Charging Bay where the Chargepoint will be/has been installed and the corresponding Data Box.
- **2.1.2.** Identify corresponding Tap-off Box. This will be the closest, unless path is obstructed.



**CAUTION:** Ensure power is off and proved dead prior to install.

- **2.1.3.** Cut wire sealing Tap-off Box, then feed Supply to Unit cable through side gland in Tap-off Box. Make a gland hole if necessary.
- **2.1.4.** Cut Neutral, Live and Earth cables to length and fit into their corresponding terminals on RCBO and Earth Stud, as seen in Figure 29.



Figure 29. Tap-off Box with L2 connected to RCBO

- **2.1.5.** Feed the Data Cable to the Data Box through the appropriate knockout.
- **2.1.6.** Strip and fit the **incoming** Signal and Ground into the 3-way terminal blocks, as seen in Figure 30.

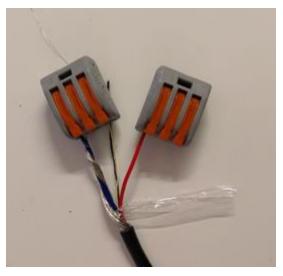


Figure 30. Incoming Data cables as if fitted to a unit, only showing 1 phase pair of Data Cables for clarity

**Care point 1:** Ensure the each terminal block contains exclusively Signal or Ground cables, with no cross-contamination.

**Care point 2:** All Ground cable(s) **must** be fitted alongside the wire shielding, as shown in the images.



**2.1.7.** Strip and fit the **outgoing** Signal and Ground into the 2-way terminal blocks. Each block should be fully populated with either Signal or Ground cables respectively as seen in Figure 31.

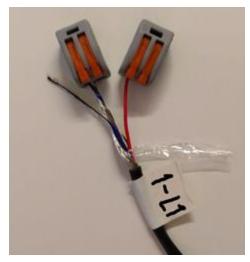


Figure 31. Outgoing Data cables as if fitted to a unit, only showing 1 phase pair of Data Cables for clarity

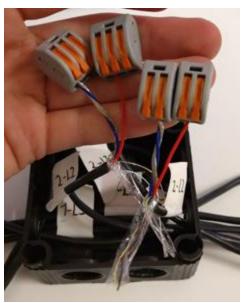


Figure 32. Incoming and outgoing Data cables wired into 3 and 2 lever terminals

**Care point:** All Ground cable(s) **must** be fitted alongside the wire shielding, as shown in the images.

- **2.1.8.** Feed the two Data cables to and from the Chargepoint through an appropriate knockout in the Data Box. Label appropriately, i.e. "1-L1 IN", "1-L2 OUT".
- **2.1.9.** Fit the Data cable **to** the Chargepoint into the incoming **3-lever terminals**, as shown in Figure 33.

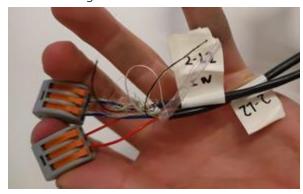


Figure 33. Data cable to the Chargepoint fitted to the 3-lever terminals

**Care point:** Ensure that the Data cable being tapped off is identical to the Live fitted to the Tap-off Box.

**2.1.9.** Fit the Data cable **from** the Chargepoint into the outgoing **2-lever terminals**, as shown in Figure 34.

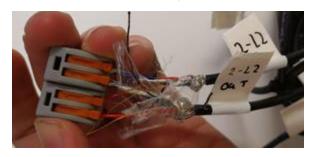


Figure 34. Data cable from the Chargepoint fitted to the 2-lever terminals

**Care point:** Ensure that all Data cables are correctly labeled.



**2.1.10.** Fit all wires and terminal blocks inside the Data Box, as seen in Figure 35.

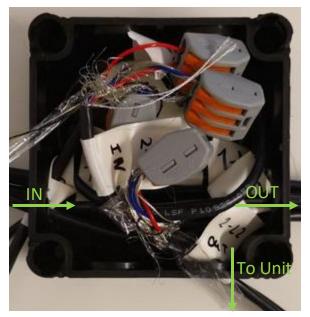


Figure 35. Data Box with one Chargepoint connected

- **2.1.11.** To fit a second unit, repeat steps 2.1.5. to 2.1.9., using a second set of terminal blocks and a separate knockout.
- **2.1.12.** Fit all wires and terminal blocks inside the Data Box, as seen in Figure 36.

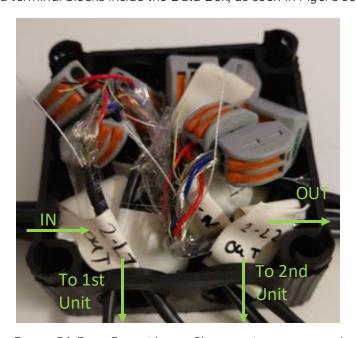


Figure 36. Data Box with two Chargepoints connected



**2.1.13.** Fit sealing wire through holes alongside latch on Tap-off Box. Crimp into the ferrule (and tag if provided). Repeat with the flip-up latch, as seen in Figure 37.





Figure 37. Tap-off Box locations to be sealed by crimped wire

**2.1.14.** The Supply to Unit cable and Data Cable are now correctly connected to the Busbar and Distribution Board. The install now continues as per typical Domestic Install guidelines from this step onwards. See Figure 38 for reference.





Figure 38. Examples of a Tap-off Box and Data Box fitted to Busbar and feeding a Chargepoint

# Array Circuit 1.0 - Testing and Commissioning



# Stage 3

## Phase 1: Testing and Pre-Commissioning

#### 3.1.1. Electrical testing

Upon the completion of the installation of the Array Circuit, the installer must carry out initial verification and testing of the supply circuit(s) and final circuit / busbar as set out in BS 7671.

Certification should be issued to the client upon completion of the installation.

#### 3.1.2. Pre commissioning

Visually inspect the Array Circuit installation to ensure:

The Array Circuit distribution boards are securely fixed and that IP ratings have been
maintained
The busbar is securely fixed with all tap-off covers secured into position
Cable containment is securely fixed with lids where applicable fitted
All cables are adequately glanded and secured
There is no damage to supply conductors or the busbar
All supply and final circuits are identified at the distribution point
Warning labels have been fitted where required
Data cables have been identified and labelled
Data connection points are securely fixed with lids fitted where required

The Array Circuit system can now be powered on ready for commissioning.

# Array Circuit 1.0 - Testing and Commissioning



### Phase 2: Commissioning

#### 3.2.1. Set-up:

Before testing of the Array system can commence, the individual Solo chargers must be connected to the supply and electrically tested (Ze, Zs etc.). Following this process each Solo must be connected to Wi-Fi (see instructions included in the box for this process).

Commissioning of units require the PG number of each Solo and also the maximum supply the main distribution board has allocated to it.

The commissioning process allocates each Solo the maximum supply available, the commissioning data is then downloaded to each Solo and stored in its non-volatile memory. As this process may take 5 minutes to complete, all units should be done at once.

**Please note:** when Wi-Fi and internet connection has been established the Solo status light will illuminate Blue with a Pink flash (Solo chargers with white LEDs cannot be commissioned).

Following online commissioning of all Solo Smart Chargers, a simple confirmation that all are receiving data from the Array Controllers can be conducted.

- Check all Solo chargers are indicating normal operation (Blue/Pink). Any units that indicate a Red status LED should be checked to ensure cables are correctly fitted and rectified.
- 2. After confirming all are OK, switch the supply off to the Array control board (2A MCB).
- 3. All Solo chargers should error (red LED), confirming Array failsafe operation.

Turn MCB back on, Solo should recover and return to a normal state.

Normal state Er

Error state (Array error)

Normal state













#### Solid White

The Solo does not have a Wi-Fi signal or network access



#### Flashing Blue/Pink

The unit is communicating with Pod Point. (normal State)

# **Array Circuit 1.0 - Testing and** Commissioning



	Solo Chargers per electrical phase								
Approximate max Resistance at Array output (Ohms)	1	2	3	4	5	6	7	8	9
	103	53	36	29	24	19	17	15	14

#### 3.2.2. Fault checking of Array system:

If some or all of the Solo chargers error after commissioning (Red LED), check for 12VDC at the output of the power supply in the Array controller, if it is lower, isolate the 12V feeds to each Array module to determine if an excessive load is limiting the 12V supply.

If it is found one or more are causing the supply to limit, check the resistance of the output(s) of the Array module terminals (with 12V PSU switched off), typical resistances aiven above.

If a lower reading is obtained than expected it indicates either a short circuit on the data cable or one of the Solo chargers have been miswired (signal and ground terminals swapped), if the resistance is significantly higher it indicates an open circuit or one of the terminals inside the Solo is not correctly mated to the data cable (this failure usually only affects one or 2 units).

If DC voltages and resistances are in order suspect a defective Array module.



Array controller PSU indicator lamp (normal).

#### Solo status light





Solid green

The Solo is

charging a vehicle.



The EV is waiting to start a scheduled charge (set by your vehicle)

Flashing green



#### Solid white

EV's battery is full OR The Unit does not have a Wi-Fi signal or no network access



#### Flashing blue/pink

The unit is communicatina with Pod Point. (normal state)



#### Flashing yellow

Charging has been paused by Array sustem.



#### Solid/flashing red

There is a fault with the charger or Array sianal

Array Circuit 1.0

Install guide

PP-D-210401-2

# Array Circuit 1.0 - Testing and Commissioning



#### Phase 3: Maintenance

#### 3.3. Maintenance

The Array Circuit requires ongoing maintenance to ensure it remains safe for continued use and to ensure longevity.

Maintenance tasks should only be carried out by Pod Point.



Pod Point recommends that RCDs fitted within the Array Circuit installation should be manually checked for operation **every 6 months** in line with recommendations within BS 7671.



Pod Point recommends that the Array Circuit is inspected and tested at least **every 12 months**, these checks will ensure the internal safety devices are operational.



In very high use locations, it is recommended to reduce the inspection frequency to **every 6 months**, it will be the responsibility of the installer to assess the requirement to inspect more frequently than every 12 months.

To arrange a service visit, please contact us via:

www.pod-point.com/contact