Cambrionix
CHARGE • CONNECT • MANAGE

User Manual

PDS-C4

Table of Contents .1

Your PDS-C4 at a glance .2

The PDS-C4 has been designed primarily for desktop use, being highly compact and quiet. It provides 60 واط to each of its 4 charging power of منافذ USB 2.0 من النوع allowing mobile, ports C devices to be charged quickly, safely and reliably. All ports can be controlled using Cambrionix software to allow charging and/or data transfer while monitoring important port and device information.

The PDS-C4 can charge attached USB devices without using a local computer and our intelligent charging algorithm allows almost any device to be charged at its optimum rate (up to 3 أ). The firmware can be up-dated to allow new charging profiles to be added, ensuring the PDS-C4 can charge the latest devices. It is ready to charge out-of-the-box and to sync devices when attached to a host computer.

When a local (host) computer is attached, the host can control operation of the ports using freely available software. Device charging and synchronisation can be monitored through Cambrionix's LiveViewer App, the Application Programming Interface (API) or Command Line Interface (CLI). Cambrionix's free monitoring and control software can be downloaded from www.cambrionix.com/software

Key Features .2.1

Scalability
Up to 16 devices can be connected at once using multiple hubs

Power
Each port can charge devices up to 3 أ (60 واط)

Transfer Data Seamlessly
Each high speed port can transfer data up to 480 ميجابت في الثانية

This user manual is for informational purposes only, it contains information for start-up and operation of this product. Note: the contents and the product described are subject to change without notice. To avoid injuries and damage observe the safety instructions of the user manual.

This manual has been arranged to follow IEC/ICEE 82079-1 standards. This is to facilitate the easier understanding and location of information relating to the PDS-C4. Any errors or omissions can be reported back using our support ticket system (see"Help and Support") this way any issues can be collected and fixed.

Understanding and observing the instructions in this user manual are prerequisites for hazard-free use and safety during operation. This user manual cannot cover all conceivable applications. If you would like additional information or if problems arise that are not sufficiently addressed in this manual please ask your distributor or contact us directly using the means preferred which are located on the back cover of this manual.

⚠الحذر **Personal Injury and Damage to the product** Observe the safety instructions in this user manual •	📖

Signal word panel .3.1

Depending on the probability of serious consequences, potential dangers are identified with a signal word, the corresponding safety colour, and if appropriate, the safety alert symbol.

⚠الحذر
Indicates a potentially hazardous situation which, if not avoided, may result in moderate or minor (reversible) injury.

الحذر
Indicates a potentially hazardous situation which, if not avoided, may result in damage to the product and/ or its functions or of a property in its proximity.

Safety alert symbol .3.2

.Use of the safety alert symbol indicates a risk of injury

Observe all measures that are marked with the safety alert symbol in order to avoid injury

Pictograms .3.3

Warning Signs

Fire Hazard   Electrical hazard

Mandatory action signs

Mandatory regulation   Read operating instructions

Product modification .3.4

Cambrionix products are designed and manufactured to meet the requirements of UK and International safety regulations. Modifications to the product could affect safety and render the product non-compliant to relevant safety standards, which could result in injury or damage to the product.

⚠**الحذر**

Electric shock or personal injury may occur

• Do not modify the product in any way

الحذر ⚠	⚠
• Do not dismantle the product	

الحذر ⚠	🔥
Fire or personal injury may occur	
• Do not obstruct air vents on the product • Do not cover the product in combustible material	

الحذر	❗
Damage to your product may occur	
• Do not bend or compress any part of the product	

Power supply .3.5

.This section describes safety precautions you must follow when using the power supply

الحذر ⚠	⚡
Electric shock or personal injury may occur	
• Do not use a damaged power cord or plug, or a loose power socket • Do not touch the power plug with wet hands • Do not allow liquids to come into contact with the unit or power supply	

الحذر	❗
Damage to your product may occur	
• Do not short circuit the Power Supply Unit (PSU) supplied with your product • Do not disconnect the power cord while the product is being used	

<table>
<tr><td style="text-align:center">

الحذر

Do not bend or pull the power cord with excessive force •

</td><td style="text-align:center">

!

</td></tr>
</table>

Storage and Installation .3.6

This section describes safety precautions you must follow when installing and storing your PDS-C4.

<table>
<tr><td style="text-align:center">

⚠️**الحذر**

Electric shock or personal injury may occur

Do not place the power cord near heat sources •
Connect the plug to an earthed socket •

</td><td style="text-align:center">

⚡

</td></tr>
</table>

<table>
<tr><td style="text-align:center">

الحذر

Damage to your Cambrionix product may occur

Operate the product only in an environment where the ambient •
temperature is inside the operating temperature range
Operate the product only in an environment where the relative humidity is •
inside the operating range
Be careful not to leave the power cord underneath a heavy object •

</td><td style="text-align:center">

!

</td></tr>
</table>

<table>
<tr><td style="text-align:center">

⚠️**الحذر**

Overheated power sockets may cause a fire

Do not overload the power socket that your hub is connected to •
Insert the power plug all the way into the socket so that it is not loose •

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🔥

</td></tr>
</table>

Getting Started .4

This manual provides a reference for end-users who are installing for the first time and using their hub thereafter. As well as a guide for product safety-related information.

The PDS-C4 is intended to be used in an indoor static environment in which the environment falls within the tested specifications to provide charge, sync and management functionality. For information on the environment specifications please see the physical specifications section of this manual.

Opening your product .4.1

When you have received your product please check the packing slip to ensure all products and quantities of them are correct before opening. This is to avoid retesting and repackaging any items which are not required.

When opening the packaging use a suitable method to open the box i.e. do not use a knife. This is to ensure the product is not damaged.

What's Included .4.2

- PDS-C4 Hub
- (2m Mains power cable (Country specified on order including fuse for UK plugs
- Power Supply Unit

جزء الوصف	رقم القطعة
وحدة امدادات الطاقة	200402

كابل الكهرباء البريطاني	200144
كابل الطاقة الأمريكي	200327
كابل طاقة الاتحاد الأوروبي	200329
كابل الطاقة AUS	200337
كابل الكهرباء IND	200341

Connecting to the mains .4.3

4 Connect the Power Supply Unit (PSU) to the hub using the سنون DIN plug. قم بتوصيل كبل الطاقة بوحدة PSU. تأكد من الالتزام بلوائح السلامة المحلية ، وقم بتوصيل كبل الطاقة بمأخذ الطاقة الرئيسي 100-250

فولت تيار متردد وقم بتشغيل المحور باستخدام مفتاح الطاقة الصغير الموجود بجوار موصل إدخال الطاقة في المحور. عند تشغيل الجهاز ، سيضيء مؤشر LED أحمر. المحور جاهز الآن لشحن الأجهزة المتصلة.

Periodic inspection should be made to power supply cables and any USB cables for any signs of damage. If any damage is found then replace damaged cord before further use.

4.4. الاتصال بالمضيف

Once the power is connected connect the PDS-C4 to your host system using a منفذ USB 2.0 من النوع C cable. قد يؤدي استخدام كبل مضيف غير صحيح إلى عدم التعرف على لوحة الوصل وجميع المنافذ اللاحقة من قبل مضيفك.

Please note that USB specifications require a minimum 100 mA charge current to be delivered during data transfer. As indicated in above, if the attached device has a BC1.2 compliant CDP port, the device can draw up to 3 أ while transferring data.

4.5. Registration

You may register your product at www.cambrionix.com/product-registration

4.6. Help and Support

FAQs and help can be found on the Help page here
- www.cambrionix.com/help_pages/help.
You can raise a support ticket for more in depth support here
- https://cambrionix.atlassian.net/servicedesk/customer/portals
You can also download any of our manuals and keep up to date at the link here
- www.cambrionix.com/product-user-manuals

When contacting support it will be helpful to supply us with the product information for the hub in question. This can be found on the Device Information Plate which is either on the underside or back of the unit. Including serial and PO numbers can help identify the product in question faster and speed up the process.

In this section you can find information information on how to use your hub in a charge only or a charge and sync application. You can also find information on managing your hub and changing port modes, connecting multiple hubs to one host and using Cambrionix Software.

LED Configuration 5.0.1

Your PDS-C4 has inbuilt LEDs used to show the state of the ports or devices. These LEDs can be configured to support your own use case, this can be controlled either by using the API to send commands directly or through separate software.

The default LED behaviour of the hub is below.

Behaviour	Colour
Port is in charge mode and is profiling the device	Flashing Red
Port is in charge mode and is charging	Red
Port is in sync mode and has a host connection	Yellow
Port is in charge mode and the device has reached the charged threshold	Green

Using without connecting to host .5.1

When the Hub is switched on and is not connected to a local host computer it is automatically configured to charge devices using its intelligent charging algorithm. Simply connect the devices to be charged to any of the available ports (not the Host Port) using USB - compliant cables.

Once the devices are connected, the algorithm will detect the highest charge rate allowable for each attached device. Charging at the optimum rate (up to 3 أ specified by the manufacturer) will commence once profiling is complete. Depending on the state of charge of the device attached, this may take tens of seconds.

Using when connected to host .5.2

Connecting the Hub to a host computer 5.2.1

C cable. Using an incorrect من النوع USB 2.0 منفذ Connect the PDS-C4 to your host system using a
host cable may result in the hub and all subsequent ports not being recognised by your host.

Charging 5.2.2

When the Host Port is connected to a local computer, the hub defaults to Sync mode and
charge currents are determined according to USB Implementers Forum (USBIF) Super-Speed
USB3 specifications. If the attached device complies with USB-IF Battery Charging
specification BC1.2 and supports Charging Downstream Port (CDP), the hub can provide
high-speed charging at up to 3 أ. If the connected device does not comply with BC1.2, the
charge current will be limited to 500 مللي أمبير in compliance with USB specifications.

If you wish to limit the charging to your devices whilst connected to your host system then you
can disable CDP on all ports by inputting the following commands.

The CLI commands for turning off the sync charg options, with a 1 or 0 per port.

```
settings_unlock
settings_reset
settings_set sync_chrg 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
settings_set alt_sync_chrg 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
reboot
```

This can also be done via the API if this is easier. Just supply that string (joined with \n) like:

```
cbrxapi.cbrx_connection_set(handle, "Settings", "settings_unlock\nsettings_reset\nsettings_
set sync_chrg 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0\nsettings_set alt_sync_chrg 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0\nreboot")
```

Note that settings_reset clears any previous settings, so if you need to retain something else, it
would be better to issue settings_display first, which gives you the entire settings which you
can then modify and re-issue in entirity.

Data Transfer 5.2.3

If you wish to transfer data, change applications, restore or update your mobile device, a data

connection to a local host computer is required. The hub is compatible with macOS®, Windows™ and Linux® operating systems and can transfer data between these operating systems and many mobile operating systems such as iOS™ and Android™.

In order to transfer data, connect the host port to your local (host) computer using a منفذ USB من النوع 2.0 C compliant cable. Any devices connected to the hub will now appear as if they were connected to the host computer's USB port.

5.2.4 واجهة الاتصال والبروتوكول

ال PDS-C4 يظهر كمنفذ تسلسلي افتراضي (يسمى أيضا UART أو VCP). في Windows ™ Microsoft ، سيظهر النظام كمنفذ COM. على macOS® ، يتم إنشاء ملف جهاز في الدليل /. هذا من الشكل dev/tty.usbserial S/ حيث S عبارة عن سلسلة تسلسلية أبجدية رقمية فريدة لكل جهاز.
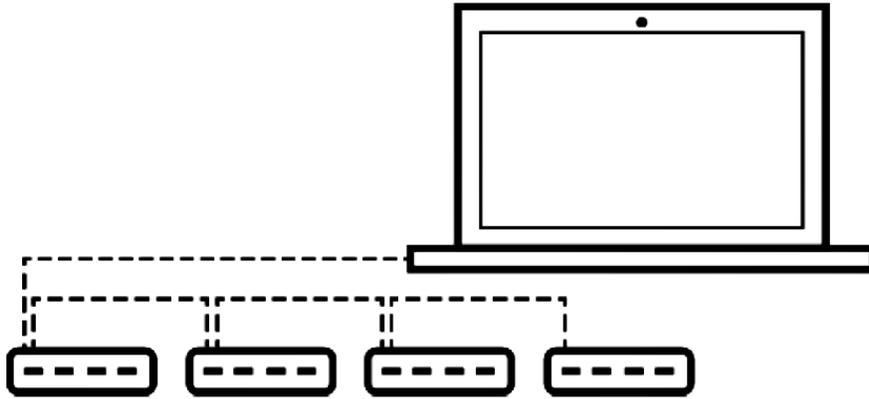
تتضمن الأجهزة محول FT230X USB إلى UART IC من FTDI International. في نظام التشغيل Windows 7 أو الأحدث ، قد يتم تثبيت برنامج التشغيل تلقائيا (إذا تم تكوين Windows لتنزيل برامج التشغيل من الإنترنت تلقائيا). إذا لم يكن الأمر كذلك ، أو إذا تم استخدام نظام التشغيل Mac® أو Linux® ، فيمكن تنزيل برنامج التشغيل من www.ftdichip.com. برامج تشغيل VCP مطلوبة. بالنسبة لأجهزة كمبيوتر Linux® أو Mac ، يجب استخدام برامج تشغيل نظام التشغيل الافتراضية.

يجب تعيين إعدادات الاتصالات الافتراضية على 115200 باود ، و 8 بتات بيانات ، وبدون تماثل ، وبت توقف واحد. يشار إلى هذا أحيانا بـ 8،115200، 1 ،N. لا يتم استخدام التحكم في التدفق. يجب تحديد مضاهاة طرف ANSI

إذا كنت ترغب في مزامنة المزيد من الأجهزة ، فيمكن توصيل لوحات وصل متعددة معا للسماح بإدارة المزيد من الأجهزة من كمبيوتر مضيف واحد في وقت واحد.

من أجل سلسلة المحاور المتعددة في سلسلة ديزي ، يجب توصيل كل محور بالطاقة الرئيسية بشكل فردي ويجب توصيل المحور الأول في السلسلة بالكمبيوتر المحلي من خلال "منفذ المضيف" للمحاور. يتم بعد ذلك توصيل منفذ المضيف للمحور التالي في سلسلة daisychain بأي من منافذ USB للمحاور الأولى المصب. تتم إضافة المزيد من المحاور بنفس الطريقة.

Manage Ports & Your PDS-C4 .5.4

Each port on your PDS-C4 can be managed either individually or all together. You can turn the ports off and on, change the port mode or change the charging profiles. This can be done either through LiveViewer or by connecting to the hub via the API.

Port Modes 5.4.1

Turn specific ports or the whole hub to sync mode (data and power channels open)	Sync
Turn specific ports on or off or switch the whole hub on or off. (no power and no data channels open)	Off

Charging Profiles 5.4.2

To ensure attached devices charge at their optimum rate, our smart USB hubs come with the below intelligent charging profiles built in:
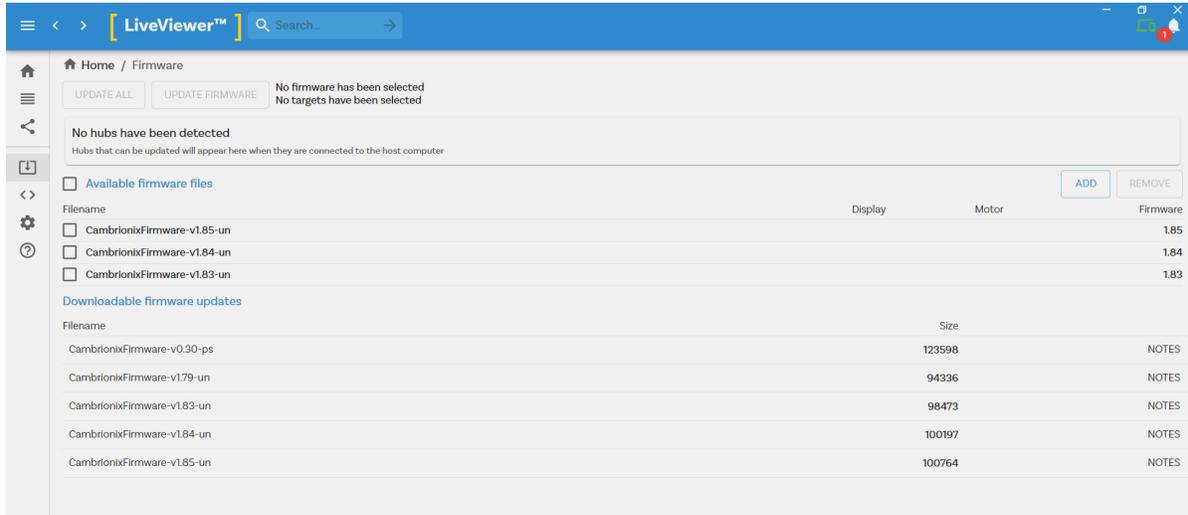
15W	1
27W	2
45W	3
60W	4

Firmware 5.4.3

The firmware can be kept up to date using our LiveViewer software. As part of delivering an easy user experience our LiveViewer application is now a set-and-forget solution. The LiveViewer application will find out what firmware your USB hub has and present an update for you, ready to just hit install.

To update the firmware first go to the firmware updater section of LiveViewer. Here you can see the available Firmware versions available to download and install to the hub. To download a firmware file click on the version under the "downloadable firmware updates" section. once downloaded it will appear in the "Available firmware files" section.

The current firmware version on the hub is displayed in the firmware updater section alongside the hubs name. This will appear red if a newer version is available or green if it is the most up to date.

To install the firmware onto the hub simply click the hub/ hubs connected that you want to update and then select the firmware version you want to upgrade to. Once selected press the update button at the top and the update will commence.

	الحذر	
	Your Cambrionix Firmware may get corrupted	!
	• Do not interrupt the Firmware update process	
	• Do not disconnect the power during the update process	

المزيد من الإنتاجية ، مما يوفر لك الوقت. يوفر Cambrionix ثلاث واجهات يمكن من خلالها مراقبة وإدارة Hub:

* LiveViewer
* واجهة برمجة تطبيقات Cambrionix
* تعليمات سطر الأوامر

The PDS-C4 uses string commands to communicate with the host system. These can be sent via the virtual serial port of the PDS-C4 directly, or the API can be used to provide other protocols that sends translated string commands. LiveViewer can use the API to interact with the devices through a user friendly application.

There are three different channels for both our LiveViewer application and the API. The three channels are Alpha/ Beta and Release. We would recommend using the release version of both the API and LiveViewer.

We will push bug fixes and any updates through Alpha and then onto Beta before it is merged into the Release version. If you have found a bug that we have a fix for, the Alpha and Beta releases may already have addressed these and implemented fixes.

Installing-Software 5.5.1

Cambrionix has 2 pieces of software which can be used to manage the devices and your hub using different host systems. In this section we have instructions and information on using our software on 3 of the most popular host systems.

Our software is available to download from www.cambrionix.com/software, you will find software available for Windows™, Mac® and Linux® Systems.

To install on Mac® and Windows™ systems download the install files from the above link, once downloaded run the install process and dialogue boxes will appear to help you through installation and initial set up.

For Linux® systems download the install files from the website at the above link. Once downloaded, you can either install it from the desktop GUI, or from the command line via:

```
sudo apt install ./
```

after this command you will need to enter the file name that has just been downloaded from our website.

5.5.2 LiveViewer

LiveViewer is an Application that can be downloaded from www.cambrionix.com/products/liveviewer . Once downloaded and installed on the host computer, LiveViewer allows you to switch the ports on and off, set the port to charge only, or to sync mode. LiveViewer's home page shows the following information about all the ports:
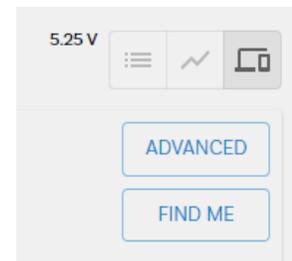
- Status (attached/disconnected)
- Mode (Charge/Sync/Off)
- Profile (Charging profile)
- Duration (how long the device has been attached)
- End time (time the battery reaches a threshold (full) level)
- Current (instantaneous charge current in mA)
- Energy (present energy rate)

Tick boxes adjacent to each port symbol allow that port mode to be changed. When the port is in Sync mode, only instantaneous current can be monitored through LiveViewer. When the port is in Charge mode, the charge profile, instantaneous current, energy rate, duration of charge and end time are displayed. In addition to individual port information and control, LiveViewer displays the hub rail voltages, time since switched on, total instantaneous current and power, and temperature. Further information on LiveViewer is available on our website.

إعدادات NVRAM

يوجد داخل المحور الخاص بك بعض الإعدادات المحددة التي يمكن التحكم فيها تسمى "عدم وجود إعدادات ذاكرة الوصول العشوائي المتغيرة" والتي يشار إليها باسم إعدادات NVRAM. يتحكم هؤلاء في مجموعة متنوعة من الإعدادات المختلفة على PDS-C4 .

يمكنك الانتقال إلى إعدادات NVRAM عن طريق فتح LiveViewer واختيار Hub الذي تريد الاتصال به. بمجرد اختيار لوحة الوصل المتصلة ، انتقل إلى الأيقونة أدناه في أعلى يمين الشاشة من LiveViewer وانقر فوق Advanced.

بمجرد الضغط على Advanced ، سينقلك هذا إلى صفحة الإعدادات المتقدمة حيث يمكنك عرض وتغيير إعدادات NVRAM ، بما في ذلك العودة إلى إعدادات المصنع الافتراضية.
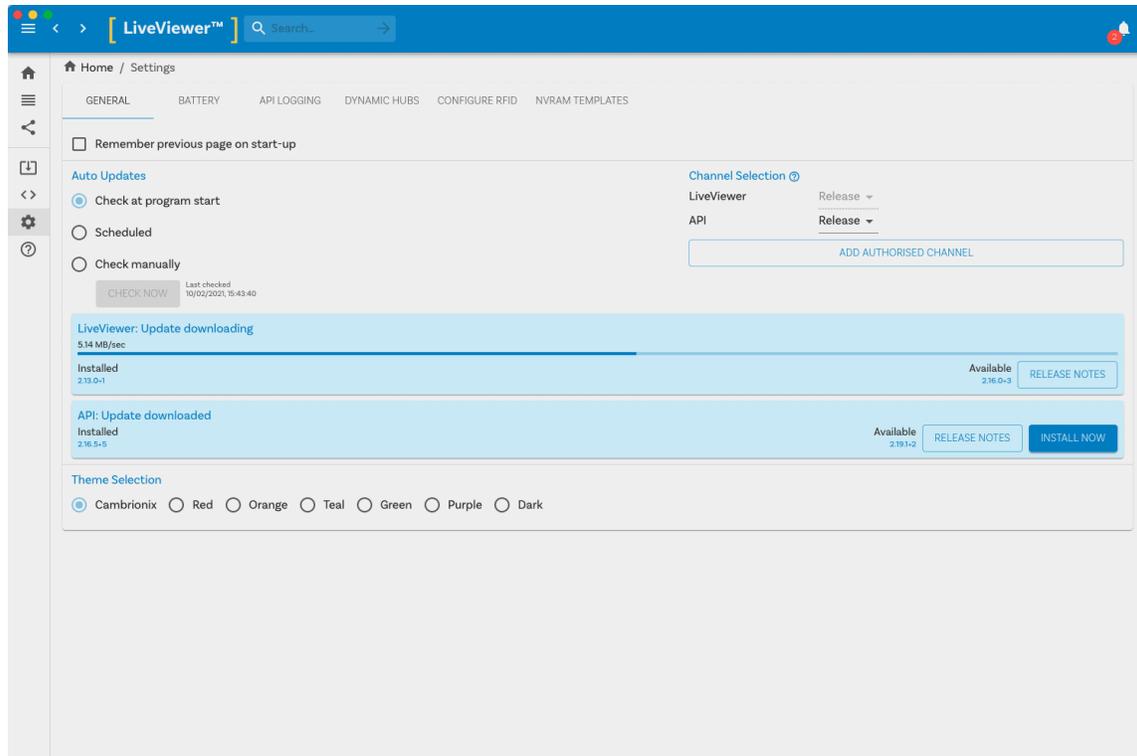
Cambrionix API 5.5.3

Cambrionix API allows you to monitor and control each port in more detail and to integrate these functions into your own workflow processes. The API comprises a daemon that can be downloaded from www.cambrionix.com/products/api and installed on the host machine. Port information and control can be provided through the API using JavaScript Object Notation (JSON) Remote Procedure Calls (RPC) over TCP. JSON-RPC calls send a request to the API to "Get" port, device or Hub information, or "Set" port functions (such as mode). A library of sample Python code can be obtained from www.cambrionix.com/products/api to help you integrate many of these functions into your process workflow alongside the full User Guide.

Updating Software 5.5.4

By using LiveViewer you will be able to automatically download and install the most up to date software (LiveViewer and the Cambrionix API)

By going into the settings section on the left hand side of LiveViewer you can navigate to the general tab and under this can see the options for keeping both LiveViewer and the API up to date.

You can select when you would like the automatic software checks to take place or if you prefer can change to a manual update selection. You can also select which version of the software you would like to use between the options of Alpha, Beta or Release.

When you have some software updates available you can select install now to begin the installation process, a progress bar will appear to show the installation status. From this bar you can also view the release notes for the version of the software you are looking at.

5.5.5 Removing Software

If you wish to uninstall the software (Cambrionix LiveViewer and Cambrionix API) from your host system this can be done by the following steps. One thing to note when removing the API is to check you have also removed the recorder service which will install alongside it.

Windows

To remove the software from a windows system you can do so by going into "Add or remove programs" find the software you wish to remove and then selecting it and pressing "uninstall

®macOS

To remove the software from a macOS® system Locate the application in the Finder, Drag the application to the Trash, or select the application and choose File > Move to Trash. At this stage you may be asked to enter the name and password of an administrator account on your Mac®. Then to completely delete the application, choose Finder > Empty Trash.

®Linux

To remove software on Linux® there are two options.

The first is to use Software centre, then either use the list of installed applications or the search bar to find the software you wish to remove. Once you have selected the application click on the remove button and you will be prompted for a password, enter the password and the software will be removed.

The second way you can remove software is by using the command line. All you need to do is to use the command in the following fashion:

```
sudo apt remove program_name
```

You'll be asked to enter your account password. When you enter it, nothing is visible on the screen. You will need to confirm removal it will ask for your conformation, press the enter key or Y key: Keep in mind that you'll have to use the exact package name in the apt remove command otherwise it will show 'unable to locate package error'. What you can do is to type the first few letters of the program you want to uninstall. And then hit the tab key. It will show all the installed packages that match those letters at the beginning of their names.

5.5.6 Command Line Instructions (CLI)

Command Line Instructions can be used to control and monitor the functions of the hub and attached devices. In order to use the command line interface a serial terminal emulator must be installed on the host computer. Examples include Serial, ZTerm, PuTTy, and Minicom. If you would like more information please look at our more in depth information here www.cambrionix.com/cli

Two example commands can be seen below, you can use these commands to check hub information and health.

Action	Command
Show hardware and firmware information	system
Show voltages, temperatures, errors and boot flag	health

Cleaning the product is generally not required, although in some instances it may be necessary if excess dirt/ dust/ hair has accumulated, or if minor liquid spillages have occurred on the module during operation or storage.

⚠️**الحذر**

Electric shock or personal injury may occur

• If there is a dirt/ spillage over a ventilation slot, external data/ power connector or product aperture, please remove power from the unit without touching the liquid and contact Cambrionix immediately

• تأكد من إيقاف تشغيل المنتج وإزالة سلك الطاقة من المنتج. أمسك كبل الطاقة من القابس ولا تلمس القابس أو سلك الطاقة بأيدي مبللة أو رطبة ، فقد ينتج عن ذلك صدمة كهربائية

• امسح المنتج بقطعة قماش نظيفة وجافة وناعمة. لا تستخدم المنظفات التي تحتوي على الكحول أو المذيبات أو عوامل نشطة السطح. لا ترش الماء أو المنظفات مباشرة على المنتج

• بلل قطعة قماش ناعمة وجافة في الماء واعصرها جيدا لتنظيف المنتج كما هو مطلوب

• جفف المنتج جيدا بمجرد انتهاء التنظيف

• أعد توصيل سلك الطاقة واستخدم المنتج كما هو موصى به بمجرد اكتمال التنظيف والتجفيف

Product Specifications .6

The PDS-C4 is manufactured in the المملكة المتحدة

6.1. متطلبات طاقة الإدخال

مساهمة الجهد	24 فولت تيار مستمر
المدخلات الحالية	15 أ
اتصال الإدخال	4 سنون DIN

6.2. انتاج الطاقة

الجهد الناتج	21V كحد أقصى
تيار الإخراج (الحد الأقصى لكل منفذ)	3 أ
طاقة الإخراج (الحد الأقصى لكل منفذ)	60 واط
طاقة الإخراج (الإجمالي)	200 واط

6.3. المواصفات المادية

موصلات الإدخال	1 USB 2.0 x من النوع C
منفذ التوسع	1 USB 2.0 x من النوع C
موصلات الإخراج	4 منافذ USB 2.0 من النوع C
أقصى سرعة لنقل البيانات لكل منفذ	480 ميجابت في الثانية
نطاق درجة حرارة التشغيل المحيطة	0-35 درجة مئوية
الرطوبة النسبية	5٪ إلى 95٪ دون تكاثف
أبعاد	106 × 126 × 36 ملم
وزن	1.6 كجم

6.4. المواد الاستهلاكية ووضع الأوامر

فيما يلي قائمة بأي من المنتجات الاستهلاكية التي قد تحتاجها PDS-C4 بما في ذلك الكابلات التي ستحتاجها لتوصيل الأجهزة بالموزع.
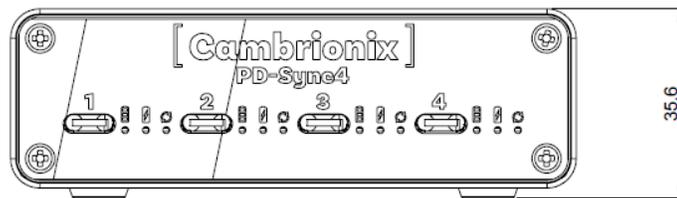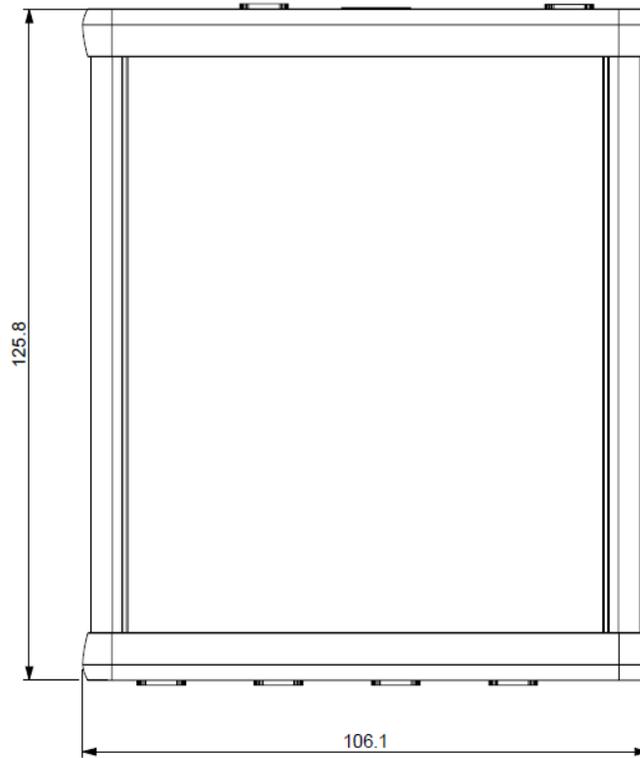
4 منافذ USB 2.0 من النوع C	الكابلات

إذا كنت بحاجة إلى أي قطع غيار ، مثل كابلات الطاقة أو منفذ USB 2.0 من النوع C كابل ، يمكن طلبها من خلال اقتباس رقم جزء المنتج ورقم قطعة الغيار (متاح من قسم ما هو مدرج)

يمكن طلبها من البائع أو شريك الحل الذي اشتريته PDS-C4 من أو من Cambrionix مباشرة.

للعثور على أحد شركائنا المحليين لك ، يرجى زيارة www.cambrionix.com/partners حيث يمكنك التعرف على البائعين والموزعين المحليين الذين يمكنهم مساعدتك والعثور على معلومات الاتصال الخاصة بهم.

250Vdc-100	Input Voltage
4A @ 115VAC	Input Current
2A @ 230VAC	
60Hz-50	Input Frequency
C14	Input Connector
24V	Output Voltage
9.2A - 0	Output Current
221W	Output Power
pin DIN-4	Output Connector
x 85 x 46mm 210	Dimensions

Troubleshooting .7

If you experience any issues with your PDS-C4 then please try the following solutions, if your issue is not addressed in this section then please contact your local vendor or Cambrionix.

Initial troubleshooting tips .7.1

Some tips and information to check first.

- If you plug a device (phone, usb stick) into the hub, does it appear to the OS.
- If you directly connect the same device to the port the hub is in, does it appear to the OS.
- Try switching updater cables with one that is working/ use cable in a hub which is working

Logging through LiveViewer .7.2

If you are experiencing a bug or an issue we may ask you to obtain some logs of the behaviour so we can see in more detail what is happening. In order to get logs of the behaviour you can use the following steps to get a zip file of the logs.

1. Open LiveViewer (if this is not already downloaded then go onto our website and download both the API and LiveViewer) www.cambrionix.com/software
2. Once in LiveViewer on the left hand side of the screen select the settings section.
3. Once in the settings section select the API tab at the top of the screen
4. In the API section click the "select all" tick box and then click the save button.
5. After this is enabled use the hub in a way that causes the issue you are seeing
6. Wait for the issue to take place i.e. When updating an iPad the device disconnects
7. Make a note of the time that the issue takes place and then go back to the API page in LiveViewer and press the zip logs.
8. Once you have the logs un tick the "select all" box and save your settings
9. Send the logs into us for us to take a look at.

Hardware Failure .7.3

If the Hardware fails then the LEDs can flash in a pattern to give information on the type of failure that has occurred. The power LED will flash the pattern if no leds are present on the downstream ports.

The unit will blink 4 times followed by 8 long or short flashes which then repeat, the flashes are a number in binary which should match a number in our error code list.

i.e if the LED flashes the following - BBBB SLSSSLSS, the binary number is 01000100.

7.4. Device connection.

If you are having device connection issues please read through the following common solutions to see if this resolves the behaviour you are observing.

اتصال جهاز غير مستقر

يمكن أن يكون لبعض الأجهزة اتصالات غير مستقرة مع النظام المضيف الخاص بك من خلال PDS-C4 . لقد لاحظنا هذا السلوك فقط في الأجهزة الصغيرة جدا ومن خلال تعطيل CDP ، أدى ذلك إلى حل جميع المشكلات واستقرار الاتصالات.

يمكنك تعطيل CDP من خلال إعدادات NVRAM إما بالانتقال إلى الإعدادات المتقدمة وإيقاف تشغيل "شحن Alt Sync" أو بالمرور عبر API والتعطيل عبر الرمز. على سبيل المثال باستخدام سطر الأوامر ستكون التعليمات على النحو التالي.

```
settings_unlock
settings_set sync_chrg 0000000000000000
```

أجهزة غير معروفة

في بعض الأحيان داخل Liveviewer ومدير الجهاز ، قد يظهر الجهاز المتصل كجهاز غير معروف.

قد يكون هذا بسبب النظام المضيف المعني الذي يحتاج إلى الوثوق به على الجهاز. يمكن القيام بذلك على الجهاز نفسه عند الاتصال الأولي.

قد يكون هذا أيضا بسبب عدم كفاية عدد نقاط النهاية المتوفرة على وحدة تحكم USB في النظام المضيف. هذا قيد داخل وحدة تحكم USB ولا يمكن حله إلا إذا قمت بتوصيل عدد أقل من أجهزة USB بوحدة التحكم المعنية.

لا يمكن توصيل أي أجهزة أخرى

في بعض الأحيان قد تصل إلى حد نقطة النهاية لوحدة تحكم USB الخاصة بك وقد يمنعك هذا من القدرة على توصيل أي أجهزة أخرى بنظامك المضيف.

إحدى الطرق التي يمكنك من خلالها توفير مساحة أكبر هي تغيير التوصيلات من USB3 إلى USB2. يمكنك تغيير الاتصال عن طريق تعطيل USB3 في BIOS عند بدء التشغيل.

هناك طريقة أبسط بكثير وهي استخدام كبلات USB2 بدلاً من كبلات USB3 وهذا سيحد من الاتصال بـ USB2

7.5. Hub connection issues

If you are having issues with the hub and connecting to your host system please see below troubleshooting solutions.

المحور غير متصل بالمضيف

إذا كنت ترى أن ملف PDS-C4 لا يتصل بالنظام المضيف ، فقد تكون إحدى المشكلات ناتجة عن عدم تحديث برامج تشغيل USB على نظامك المضيف. من الممارسات الجيدة التأكد من أن لديك أحدث برامج التشغيل والتحديثات المثبتة على نظامك المضيف ، والتي يتم التعامل معها عادةً بواسطة نظام التشغيل ، ولكن في بعض الأحيان قد تتطلب تحديثًا مباشرةً من الشركة المصنعة لوحدات تحكم مضيف USB ، والتي يمكن العثور عليها على موقع الويب الخاص بهم.

برامج تشغيل USB المطلوبة هي برامج تشغيل FTDI والتي يمكن العثور عليها من الموقع https://ftdichip.com/drivers/

لا يمكن الوصول إلى منفذ COM

قد تحصل على رسالة خطأ تفيد بأنه "تعذر فتح COM (ثم رقم) (تم رفض الوصول).

وذلك لأن التطبيق يتحكم في منفذ COM الذي يتصل به الموزع ولا يمكن لأي تطبيق لاحق الوصول إلى لوحة الوصل. لحل هذه المشكلة ، ستحتاج إلى إغلاق أي تطبيقات تتحكم في منفذ COM قبل فتح منفذ آخر.

7.6. No GUI

If you are using a headless system with no GUI then and you require to enable logging for support issues you can use the following command to create the logging cfg file manually:

```
echo *=DEBUG>/etc/opt/cambrionix/cambrionix.log.cfg
```
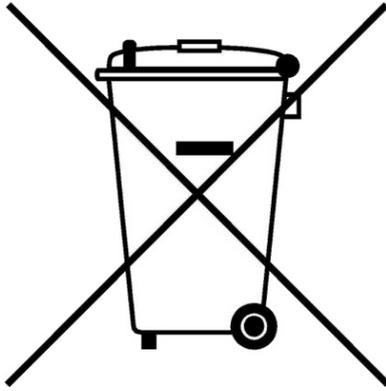
Then after re-producing the problem, you can zip the logs from the folder

```
var/log/cambrionix/
```

.You may delete the file below when you are finished with it

etc/opt/cambrionix/cambrionix.log.cfg/

Disposal of Old Electrical & Electrical Equipment (Applicable in the European Union and other (European countries with separate collection systems

This product is subject to Directive 2012/19/EU of the European Parliament and the Council of the European Union on the waste electrical and electronic equipment (WEEE), and in jurisdictions adopting that Directive, is marked as being put on the market after August 12, 2005, and should not be disposed of as unsorted municipal waste. Please utilize your local WEEE collection facilities in the disposition of this product and otherwise observe .all applicable requirements

."Cambrionix PRN (Producer Registration Number) For the UK is "WEE/BH191TT

If you wish to return or fix a damaged product first look at the terms on our website
www.cambrionix.com/terms-conditions

Before a product is returned please contact support using the methods detailed in the "Help
and Support" section.

What do I do if my order arrives and something the .9.1 product is faulty or is physically damaged?

- If you have received your order in a damaged box and/or the product has physical damage please contact Cambrionix Customer Support. Please provide photos of the damaged box and/or product when contacting Customer support.
- If an item in your order does not have physical damage but is not functioning properly or will not power on, please contact Customer Support and provide as much information as possible and including any steps followed to troubleshoot internally.
- Please include photos of the damaged box and/or product when contacting Customer Support.
- Note: If you have received your order in a damaged box and the damage was indicated to the courier please provide us with a copy of the delivery note detailing this.

What happens after I have requested a Return? .9.2

- If you have not purchased the Product(s) direct from Cambrionix please contact the vendor the item was originally purchased from for their returns process.
- Once you have notified Cambrionix of your return, Cambrionix will arrange for collection of the Product(s) or provide instructions and details for you to return the Product direct.
- When returning your Product(s) please only send back the items that were advised through the support process.
- Return your Product(s) in original packaging where you can. Where the original packaging is not available then use suitable packing methods, which will ensure that the product cannot be subject to impact damage. i.e. double walled cardboard box with 50mm of soft material.
- Product(s) not returned in their original condition may result in additional costs, please refer to the warranty and terms section on our website.

- Where Cambrionix arranges collection, return shipping will be free, unless Cambrionix notified you otherwise.
- When contacting us about returning a product please provide the following information.
  - Collection Address
  - Weights and dimensions of shipment
  - Preferred collection date and time.

Compliance and Standards .10

- شهادة CB
- تم اختباره وتمييزه بعلامة CE
- تم اختبار الجزء 15 من لجنة الاتصالات الفيدرالية وتمييزه
- يقع داخل حاوية حريق بمواصفات UL94-VO
- متوافق مع RoHS
- تم اختبار السلامة بشكل مستقل بواسطة معمل التأمين (UL) ضمن ملف # E346549

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