Cambrionix SyncPad54 Port Large Capacity Data Duplicator User Manual

Contents

Cambrionix

Cambrionix SyncPad54 Port Large Capacity Data Duplicator

Your SyncPad54 at a glance

The SyncPad54 has been designed primarily for desktop use, being highly compact and quiet. It provides 2.5W of charging power to each of its USB 2.0 Type-A ports, allowing mobile devices to be charged quickly, safely and reliably. All ports can be controlled using Cambrionix software to enable charging and data transfer while monitoring important port and device information. The SyncPad54 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 0.5A). The firmware can be updated to enable new charging profiles, ensuring the SyncPad54 can charge the latest devices. It is ready to charge out-of-the-box and sync devices when attached to a host computer. When a local (host) computer is connected, the host can control the operation of the ports using available software. Device charging and synchronisation can be monitored through Cambrionix's LiveViewer App, the Application Programming Interface (API) or the Command Line Interface (CLI). Cambrionix's free monitoring and control software can be downloaded fro **www.cambrionix.com/software** For the SyncPad54, a host will need to be connected to the hub before initial charging will take place; once the hub is up and running, you will not need a host connected unless you power cycle the hub, in which case a host will need to be connected for the initial power-up. You can download the latest version of this manual and all product user manuals from our website at the following link. **www.cambrionix.com/product-user-manuals**

Key Features

Transfer Data Seamlessly
Each high-speed port can transfer data up to Maximum downstream speedGbps

Power
Each port can charge devices up to 0.5A (2.5W)

Scalability
Up to 54 devices can be connected at once using multiple hubs

Safety

This user manual is for informational purposes only, it contains information for the 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 in the user manual.
This manual has been arranged to follow the IEC/ICEE 82079-1 standard. This is to facilitate the easier understanding and location of information relating to the SyncPad54. Any errors or omissions can be reported using our support ticket system (seeHelp and Support). This way, any issues that are discovered can be acted on quickly and we can update the documentation to reflect this. 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 possible 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.

CAUTION

- Personal Injury and Damage to the Product
- Always observe the safety instructions in this user manual

Signal word panel
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.

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

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

Safety alert symbol

- 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
These symbols will be used throughout this documentation to alert to any potential dangers or any actions that must be taken.

Warning Signs	
 Electrical hazard	 Fire Hazard

Mandatory action signs	
 Read operating instructions	 Mandatory regulation

Product modification
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 with relevant safety standards, resulting in injury or damage to the product.

CAUTION

- An electric shock or personal injury may occur
- Do not modify the product in any way. Do not dismantle the product. Do not open the product

CAUTION

- Fire, or personal injury may occur
- Do not obstruct air vents on the product. Do not cover the product in or place near combustible material.

CAUTION

- Damage to your product may occur
- Do not bend or compress any part of the product.

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

CAUTION
An 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.

CAUTION

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. Do not bend or pull the power cord with excessive force. Do not use a power supply that exceeds the power supply specifications within this manual

Storage and Installation
This section describes safety precautions you must follow when installing and storing your SyncPad54.

CAUTION

- 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.

CAUTION

- 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.

CAUTION

- Overloading the brackets may cause failure
- The rack brackets for all our products are not designed to be used in a mobile application, bracket failure could occur if the units are not supported fully e.g Shock during road transport.

Getting Started

This manual provides a reference for end-users installing for the first time and using their hub afterwards. As well as a guide for product safety-related information. The SyncPad54 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. Please see the physical specifications section of this manual for information on the environment specifications.

Unpacking your product
When you have received your product, please check the packing slip inside the box to ensure all contents and quantities are correct before opening. This is to avoid retesting and repackaging any items that 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.

CAUTION

- Personal Injury and Damage to the product
- There will be a label on the hub advising you to read the User manual before use. This will need to be removed before use as it may be covering host ports, vents etc.

What’s Included

- USB 2.0 Type-B Cable (to provide communication between the host system and hub)
- SyncPad54 Hub
- 2m Mains power cable (Country specified on order including fuse for the UK plugs)

- Power Supply Unit

Part description	Part number
USB 2.0 Type-B updater cable	200499
Power Supply Unit	200421

Part description	Part number
UK Power cable	200144
US Power cable	200327
EU Power cable	200329

Part description	Part number
AUS Power cable	200337
IND Power cable	200341

Connecting to the mains
Connect the Power Supply Unit (PSU) to the hub using the 4-pin Mini-DIN plug. Connect the power cable to the PSU. Make sure you adhere to local safety regulations, connect the power cable to the 100 – 250 VAC mains power outlet and switch the hub on using the small power switch located adjacent to the power input connector on the hub. When the device is switched on, a red LED next to the power input will be illuminated. The hub is now ready to charge attached devices. Periodic inspections should be made to power supply cables and any USB cables for any signs of damage. If any damage is found, replace the damaged cord before further use.

Connecting to a Host
Once the power is connected, connect the SyncPad54 to your host system using a USB 2.0 Type-B cable. Using an incorrect host cable may result in the hub and all subsequent ports not being recognised by your host. Please note that USB specifications require a minimum 100 mA charge current to be available during data transfer. As indicated in above, if the attached device has a BC1.2 compliant CDP port, the device can draw up to 0.5A whilst transferring data.

Charging
Your SyncPad54 will allow your device to charge at the maximum rate possible up to 0.5A. The way that charging takes place is the SyncPad54 will provide the device with a capability to charge and the device's USB charging controller will determine the maximum amount of charge it wants to draw down. Although a maximum charge rate of 0.5A is possible, the device itself determines the exact rate and as such you may not see the maximum amount of charging on every device type that is connected.

Cables
Some USB cables are for data transfer only, and some are for power delivery only. Some options can handle both tasks. Be sure to verify a cable's abilities before purchasing it and select a cable that can handle the speeds and power transfer that you require. We would advise using the cable that was provided with the device to connect to our hubs.

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

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, please supply 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. Providing serial and Purchase order numbers can help identify your specific product and speed up the process.

Using your SyncPad54
In this section, you can find information using your hub in charge or sync application. You can also find information on managing your hub, changing port modes, connecting multiple hubs to one host and using Cambrionix Software.

Fan Behaviour
Your SyncPad54 has an inbuilt fan used to cool the product when internal temperatures rise above a set threshold. On power up the fan will spin for approximately a second before turning off. The temperature at which the fan should begin to cool the device is 60 °C, the fan will be at max speed when the internal temperature reaches 80. Once the SyncPad54 is below the internal temperature of 60 the fan will switch off.

Using without connecting to a host
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. 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 0.5A) 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. For the SyncPad54, a host will need to be connected to the hub before initial charging will take place; once the hub is up and running, you will not need a host connected unless you power cycle the hub, in which case a host will need to be connected for the initial power-up.

Using when connected to a host

Connecting the Hub to a host computer
Connect the SyncPad54 to your host system using a USB 2.0 Type-B cable. Using an incorrect host cable may result in the hub and all subsequent ports not being recognised by your host.

Charging
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 1.5A. If the connected device does not comply with BC1.2, the charge current will be limited to 500 mA 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. You can disable CDP through Internal hub settings either by going through the advanced settings and turning “Sync charge” off or through the API and disabling it via code. For example, the instructions would be below using the command line. The CLI commands for turning off the sync charge 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\n-
settings_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 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 entirety.

Data Transfer
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 Cambrionix API and software 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 USB 2.0 Type-B compliant cable. Any devices connected to the hub will now appear as if they were connected to the host computer's USB port.

Communication Interface and Protocol
The SyncPad54 appears as a virtual COM port (VCP). On Microsoft Windows™, the system will appear as a COM port, the COM port number can be found in device manager. On macOS®, a device file is created in the / directory. S is an alpha-numeric serial string unique to each device

```
/dev/tty.usbserial S
```

Devices incorporate a USB to UART converter IC from FTDI International. On Windows 7 or later, a driver may automatically be installed (if Windows is configured to download drivers from the internet automatically). If this is not the case, or if a Mac® or Linux® platform is used, the driver may be downloaded from www.ftdichip.com. The VCP drivers are required. For Linux® or Mac computers, the default OS drivers should be used. The default communications settings are as below, ANSI terminal emulation should be selected.

Communication setting	Value
Number of bits per second (baud)	115200
Number of data bits	8

Communication setting	Value
Parity	None
Number of stop bits	1
Flow control	None

Cleaning your SyncPad54
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.

CAUTION
An electric shock or personal injury may occur If there is dirt/ spillage over a ventilation slot, external data/ power connector or product aperture, please remove power from the unit without touching the liquid and seek advise before reapplying power

- Ensure that the product is switched off and the power cord is removed from the product. Hold the power cable by the plug and do not touch either the plug or the power cord with wet or damp hands as an electrical shock may result
- Wipe the product with a clean, dry and soft cloth. Do not use detergents that contain alcohol, solvent or surface-active agents. Do not spray water or detergent directly onto the product
- Mildly dampen a soft and dry cloth in water and wring thoroughly to clean the product as required
- Dry the product thoroughly once the cleaning has finished
- Reconnect the power cord and use your product as advised once cleaning is complete

Product Specifications

The SyncPad54 is manufactured in the UK

Input Power Requirements

Input Voltage (V)	12
Input Current (A)	13
Input Connector	4-Pin Mini-DIN

Output Power

Output Voltage (V)	5
Output Voltage Tolerance (%)	+/-5
Output Current, Max per Port (A)	0.5
Output Power, Max per Port (W)	2.5
Output Power, Total (W)	160

Rail value limits

Physical specifications

Upstream connector type	USB 2.0 Type-B
Downstream connector type	USB 2.0 Type-A
Maximum Downstream Data Speed per Port (Gbps)	Maximum downstream speed
Ambient Operating Temperature range °C	0-35
Relative, non-condensing, humidity operating range (%)	5 – 95
Dimensions WxDxH (mm)	430 x 86 x 28
Weight (kg)	1.5
Number of Downstream ports	54

Ports Lifetime
Standard USB connections have a minimum rated lifetime of 1,500 cycles of insertion and removal. USB-C receptacles have a minimum rated lifetime of 10,000 cycles of insertion and removal. This is an industry-standard.One thing you can do to prolong the lifetime of the ports on your SyncPad54 is to use “sacrificial cables” in between the hub and your charging cables so when you repeatedly connect/ disconnect you are only going to wear the cables rather than the hub.

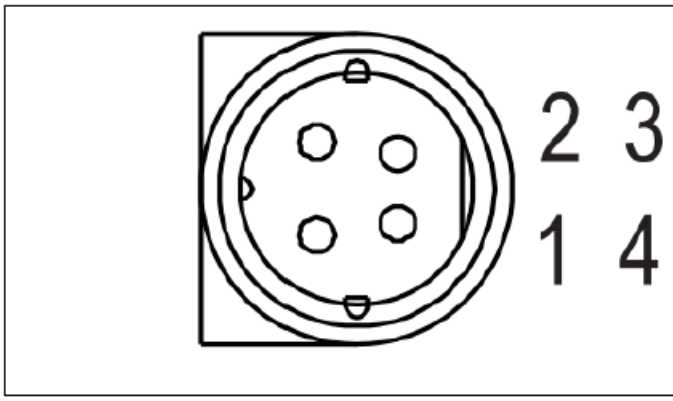
Consumables and Placing Orders
Below is a list of any Consumable products you may require for your SyncPad54 including the cables you will require to connect devices to the hub.

- Cables USB 2.0 Type-A

If you require any spare parts, such as the power cable or USB 2.0 Type-B cable, these can be ordered by quoting the product part number and the spare part number (available from the Getting Started section). These can be ordered from the reseller or solution partner you purchased your SyncPad54 from, or from Cambrionix directly. To find one of our partners local to you please visit **www.cambrionix.com/partners** where you can learn about the local vendors and distributors that can assist you and find their contact information.

Power Supply

Input Voltage (V)	100-240
Input Current @ 115VAC (A)	4
Input Current @ 230VAC (A)	2
Input Frequency (Hz)	50-60
Input Connector	C14
Output Voltage, Max (V)	12
Output Current, Max (A)	15
Output Power, Max (W)	180
Output Connector	4-Pin Mini-DIN
Dimensions WxDxH (mm)	210 x 85 x 46



Pin	Function
1	+Vo
2	+Vo
3	-Vo
4	-Vo

- -V is connected to AC input ground.

Troubleshooting

If you experience any issues with your SyncPad54; please try the following troubleshooting steps, if the issue is not addressed in this section, please get in touch with your local vendor or Cambrionix. To contact Cambrionix Support please see Help and Support.

Common troubleshooting tips
Some tips and information to check first.

- If you directly connect the same device to the port the hub is in, does it appear to the OS.
- If you plug a device (phone, USB stick) into the hub, does it appear to the OS (device manager/system info etc.).
- Try switching the cables with ones that are working/ use cable from a hub that is working.

Logging through LiveViewer
If you are experiencing a bug or an issue, we may ask you to obtain some logs of the behaviour, to see in more detail what is happening. To get logs of the behaviour 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.
4. In the API section click the “cog” button on the right hand side of the local API
5. Click the “select all” tick box and then the save button.
6. After this is enabled, use the hub in a way that causes the issue you are seeing.
7. Wait for the issue to occur, i.e. device disconnects.
8. Make a note of the time and date that the issue occurs then go back to the API page in LiveViewer, and press the zip logs.
9. Once you have the logs un-tick the “select all” box and save your settings.
10. Send the logs to us for us to take a look at.

The API keeps a maximum of 20 logs at 256Mb each, so the latest one is usually smaller. If a crash occurs, you will see a smaller log file and the next instance of API shuffles the existing ones

Hardware Failure
If the Hardware fails the LEDs can flash in a pattern to determine the type of failure. The power LED will flash the pattern if no LEDs are present on the downstream ports. The unit will blink four times, followed by eight long or short flashes, which then repeat. The flashes are a number in binary which matches a number in our error code list. i.e if the LED flashes the following – B SLSSSLSS, the binary number is 01000100.

Device connection
If you are seeing any device connection issues please read through the following troubleshooting steps to see if this resolves the observed behaviour.

Device issues when updating
We have found that during updates on some devices the connection can be dropped or lost on the device, this is due to devices going in and out of the bootloader and requiring different power levels. In most instances disabling CDP and changing the ports to always be on has resolved this issue for our customers. You can disable CDP through Internal hub settings either by going through the advanced settings and turning “Sync charge” off or through the API and disabling it via code. For example, the instructions would be below using the command line.

```
settings_unlock
settings_set sync_chrg 0000000000000000
```

You can set the ports to always be on through Internal hub settings through the advanced settings and turning “Ports On” settings to always on for each port. When you set the port to always be on you will need to set a default profile on each port for when the port(s). There is a desription for each profile within LiveViewer or Cambrionix Connect.

Unstable device connection
Some devices can have unstable connections with your host system through the SyncPad54. We have only observed this behaviour in a very few amount of devices, disabling CDP and setting the ports to always be on has resolved all issues and the connections are stable. You can disable CDP through Internal hub settings either by going through the advanced settings and turning “Sync charge” off or through the API and disabling it via code. For example, using the command line, the instructions would be as below.

```
settings_unlock
settings_set sync_chrg 0000000000000000
```

You can set the ports to always be on through Internal hub settings through the advanced settings and turning “Ports On” settings to always on for each port. When you set the port to always be on you will need to set a default profile on each port for when the port(s). There is a description for each profile within LiveViewer or Cambrionix

Connect.

Battery information for Android
If you are observing an issue displaying battery information on Android devices ensure firstly you have the ADB tool installed and open then try these things in order.

1. Check that developer options are enabled on the Android device, and then that USB debugging is also enabled.
2. If you have done this step and it still does not work, go to Developer Options and click 'Revoke USB debugging authorisations'. Unplug the cable and reconnect.
3. If this still doesn't work, turn off the developer options at the top, re-enable it, and re-enable 'USB Debugging'.
4. You can get detailed info directly from ADB at each step to diagnose things:

```
adb.exe shell dumpsys battery # Use -s SERIAL_NUMBER as first options
        if you have more than 1 Android attached
```

Unknown devices
Sometimes, within Liveviewer and Device Manager, the connected device may show up as an unknown device. This can be due to the host system needing to be trusted on the device. This can be done on the device itself on the initial connection. This could also be due to an insufficient number of endpoints available on the USB controller in the host system. This limitation within the USB controller can only be resolved if you connect fewer USB devices to the controller in question. For Apple devices there is a setting called "USB accessories" which can be activated, Once activated it will reduce the number of times a device will need to be unlocked/ trusted. More information can be found at the link **https://support.apple.com/en-gb/HT208857**.

Cannot connect any more devices
Sometimes, you may reach the endpoint limit of your USB controller and this may stop you from being able to attach any more devices to your host system. You can create more space is to change connections from USB3 to USB2. You can change the connection by disabling USB3 in the BIOS on startup. A much simpler way is to use USB2 cables instead of USB3 cables, limiting the connection to USB2.

Hub connection issues
If there are issues with the hub and connecting to your host system, please see below for troubleshooting solutions.

Hub not connecting to the host
If you see that the SyncPad54 is not connecting to the host system, one of the issues may be caused by the USB drivers on your host system not being up to date. It is good practice to ensure you have the latest drivers and updates installed on your host system, which is usually handled by the OS, but sometimes may require an update directly from the USB host controllers manufacturer, which will be found on their website. USB drivers required are FTDI drivers, which can be found on the site **https://ftdichip.com/drivers/**.

Cannot access the COM port
You may get an error message stating "COM (and then a number) could not be opened (Access is denied)". This is because an application has control over the COM port that the hub is connected to, and no subsequent application can access the hub. To resolve this, you will need to close any other applications that are using the COM port before trying to use the COM port.

Using with a headless system
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
```

Software troubleshooting
Some users have noted that the API can cause a high level of CPU usage. This can sometimes be linked to the API recorder service. If you are finding this and you are not using it then we would recommend to uninstall it from your system entirely. Information on how to uninstall programs can be found in the Removing Software section.

Disposal

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”.

Returns and Damaged Products

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 if my order arrives with an issue?

- If you have received your order in a damaged box and/or the product has physical damage please contact Cambrionix Customer Support or your distribution partner. 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 or your distribution partner and provide as much information as possible and including any steps followed to troubleshoot internally.
- Please include photos of the damaged box and 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?

- 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 the 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 the original packaging where you can. Where original packaging is not available, 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 WxDxH (m) of shipment
    - Preferred collection date and time.
    - Product serial number(s) (this can be found on a label on the rear or underside of the unit)
    - Purchase order number(s)

Compliance and Standards

- CB Certificate
- CE Tested and marked
- FCC Part 15 Tested and marked
- Housed within a UL94-VO specification fire enclosure
- RoHS Compliant
- Independently safety tested by the Underwriters Laboratory (UL) under file #E346549

Terms and Conditions

The use of Cambrionix hubs is subject to the Cambrionix Terms and Conditions, the document can be downloaded and viewed using the following link.
https://downloads.cambrionix.com/documentation/en/Cambrionix-Terms-and-Conditions.pdf

Use of Trademarks, Registered Trademarks, and other Pro-tected Names and Symbols

This manual may refer to trademarks, registered trademarks, and other protected names and or symbols of third-party companies not related in any way to Cambrionix. Where they occur these references are for illustrative purposes only and do not represent an endorsement of a product or service by Cambrionix, or an endorsement of the product(s) to which this manual applies by the third-party company in question. Cambrionix hereby acknowledges that all trademarks, registered trademarks, service marks, and other protected names and /or symbols contained in this manual and related documents are the property of their respective holders “Mac® and macOS® are trademarks of Apple Inc., registered in the U.S. and other countries and regions.” “Intel® and the Intel logo are trademarks of Intel Corporation or its subsidiaries.” “Thunderbolt™ and the Thunderbolt logo are trademarks of Intel Corporation or its subsidiaries.” “Android™ is a trademark of Google LLC” “Chromebook™ is a trademark of Google LLC.” “iOS™ is a trademark or registered trademark of Apple Inc,in the US and other countries and is used under license.” “Linux® is the registered trademark of Linus Torvalds in the U.S. and other countries” “ Microsoft™ and Microsoft Windows™ are trademarks of the Microsoft group of companies.”

“Cambrionix® and the logo are trademarks of Cambrionix Limited.”

Cambrionix Patents

Title	Link	Application Number	Grant Number
Syncing and Charging Port	GB2489429	1105081.2	2489429
CAMBRIONIX	UK00002646615	2646615	00002646615
CAMBRIONIX VERY INTELLIGENT …	UK00002646617	2646617	00002646617
MOD IT DS	GB2591233	6089600	6089600
MOD IT	eSearch	007918669	007918669
MOD IT	90079186690001	007918669-0001	90079186690001
MOD IT	90079186690002	007918669-0002	90079186690002
MOD IT	90079186690003	007918669-0003	90079186690003
MOD IT	90079186690004	007918669-0004	90079186690004
MOD IT	90079186690005	007918669-0005	90079186690005
MOD IT	90079186690006	007918669-0006	90079186690006
MOD IT		195761	195761
MOD IT DS		30202007995X	30202007995X
MOD IT MM		30202007994Y	30202007994Y
MOD IT STACK		30202007993P	30202007993P
MOD IT DS	6077253	6077253	6077253
MOD IT DS	3a2f8b88e935	202012311	202012311
MOD IT DS		195759	195759
MOD IT DS		329440-001	
MOD IT DS		29/735,477	D936,001
MOD IT	6077254	6077254	6077254
MOD IT MM	6077255	6077255	6077255
MOD IT MM	2a6ebe915fe9	202012310	202012310
MOD IT MM		195758	
MOD IT MM		329441-001	

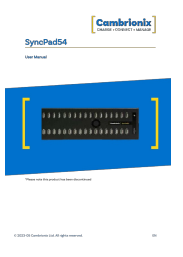
Title	Link	Application Number	Grant Number
MOD IT MM		29/735,479	
MOD IT	6077256	6077256	6077256
MOD IT STACK	6077257	6077257	6077257
MOD IT STACK	081a4b9c69eb	202012312	202012312
MOD IT STACK		29/735,475	D936,000
MOD IT DS LUGS	6089601	6089601	6089601
MOD IT MM	6089602	6089602	6089602
MOD IT DS LUGS	6089603	6089603	6089603
MOD IT STACK	6089604	6089604	6089604
MOD IT	6089605	6089605	6089605

Cambrionix Limited The Maurice Wilkes Building Cowley Road Cambridge CB4 0DS United Kingdom

- +44 (0) 1223 755520
- enquiries@cambrionix.com
- www.cambrionix.com

Cambrionix Ltd is a company registered in England and Wales with the company number 06210854

Documents / Resources

	Cambrionix SyncPad54 Port Large Capacity Data Duplicator [pdf] User Manual SyncPad54 Port Large Capacity Data Duplicator, SyncPad54, Port Large Capacity Data Duplicator, Large Capacity Data Duplicator, Capacity Data Duplicator, Data Duplicator

References

- Cambrionix: USB Hub Experts - Smart Managed USB Hubs
- Help Home - Cambrionix
- Partners - Cambrionix
- Product Registration - Cambrionix

- Product User Manuals - Cambrionix
- Software - Manage Your Devices With Cambrionix Software
- Terms & Conditions - Cambrionix
- Jira Service Management
- Drivers - FTDI
- IP Australia | Australian Design Search
- IP Australia | Australian Design Search
- IP Australia | Australian Design Search
- Allow USB and other accessories to connect to your iPhone, iPad or iPod touch – Apple Support (UK)
- Terms & Conditions - Cambrionix
- Find a registered design - GOV.UK
- Find a registered design - GOV.UK
- Find a registered design - GOV.UK
- Find a registered design - GOV.UK
- Find a registered design - GOV.UK
- Find a registered design - GOV.UK
- Find a registered design - GOV.UK
- Find a registered design - GOV.UK
- Find a registered design - GOV.UK
- Find a registered design - GOV.UK
- Find a registered design - GOV.UK
- Find a registered design - GOV.UK
- Find a registered design - GOV.UK
- Find a registered design - GOV.UK
- Find a registered design - GOV.UK
- User Manual