

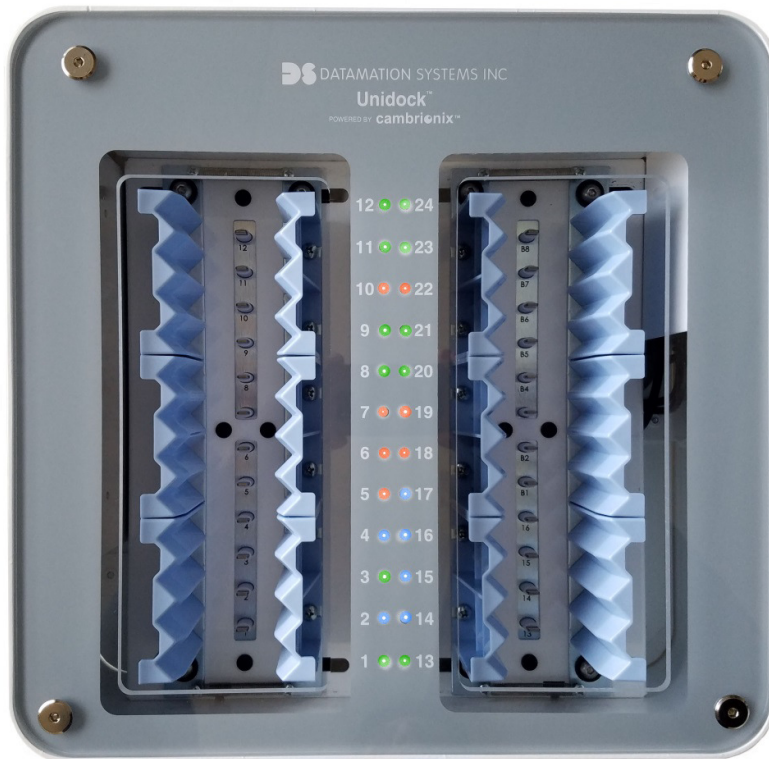
# Datamation Systems, Inc.

## UniDock™

### Universal Sync & Charge Docking Station

## User Manual

DS-UniDock-24



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# 24 Port Universal Sync & Charge UniDock

Thank you for purchasing UniDock. For optimum performance and safety, please read and follow these instructions carefully before connecting, operating or using this product.

## 1.0 INTRODUCTION

This product is a high-performance SMART sync and charge universal multi-bay docking station for mobile devices. It is equipped with a 16 port programmable USB 2.0 Cambrionix intelligent hub. The 24 ports can be outfitted with MFi cables having Lighting connectors or cables with Micro-USB or USB-C cables. Each port provides up to 2.1 Amps at 5V for charging. It also fasts charges @ 1.5 Amps) when in sync mode (i.e., when a host is connected). The UniDock is equipped with 24 customizable multi-color LED indicators for a comfortable status display. This product is easily integrated with third party mobile device management software using the available API (see 10.0 below).

## 2.0 FEATURES

- DS-UniDock-24 input rating: 100-240 VAC, 281.6 watts, 50/60 Hz
- 24 plus two- USB connectors:
  - 24 USB 2.0 A ports, provide 5V/2.1A per port for output. Each port is equipped with the intelligence to automatically identify and profile devices attached in order to optimize charging, even with certain peripheral pass-through devices.
  - Two - additional USB 2.0 ports on the back of the UniDock for expansion or additional peripherals; also provide up to 5V/500mA for output.
- Interchangeable with MFi Lighting, USB-C or Micro-USB cables.
- Adjust to fit mobile devices with a variety of cases up to iPhone 7Plus with Otter Box case or as small as an uncased iPod. Compatible with most Android or Windows phones and many peripherals such as batteries and scanners.
- Simultaneous sync and charge feature allows fast charge while in sync mode.
- Updatable firmware (allowing the UniDock to be future-proof as new device profiles are used)
- Multi-Color LED indicators easily differentiate the status of a connected device by fully customizable color signals.
- Open API for integration with third party applications (see 10.0 below).
- Host connector compatible with Windows, Mac OS and Linux.
- Ability to daisy-chain several UniDocks for larger footprint and expandability.

### 3.0 SPECIFICATIONS

<b>INPUT/OUTPUT</b>	
Input	100-240VAC 50/60Hz; 281.6 watts
Output	24 USB-A: 5V/2.1A 2 USB-A: 5V/500mA
<b>PROTECTION</b>	
Over current	Yes
Short circuit	Yes
Over temperature protection	Yes
Overvoltage Protection	Yes
<b>PERFORMANCE</b>	
AC Leakage Current	0.25mA max at 240VAC input
Ripple And Noise	≤250mV
Turn on delay time	3s max
Rise time	20mS
Efficiency	USB-A: ≥80% USB-C: ≥81.4%
<b>MECHANICAL</b>	
Color	White with MedStyle Blue
Size	14 ½"W x 14 ½"D x 6"H
Weight	20 lbs
Accessory	P/N: 46060 wrench, Allen 5/32" T-handle
Product Part Number	14554 DS-UNIDOCK-24-2.0
User Manual	English Version
<b>ENVIRONMENTAL</b>	
Operating Temperature Range	0~40°C
Storage Temperature Range	-20 ~ 80°C
Operating Relative Humidity	5% ~ 90% RH
<b>REGULATORY APPROVALS</b>	
Sync-Charge Board	UL
Power Adapter	UL
<b>SURFACE TREATMENTS</b>	
Acrylic top	Scratch resistant surface treatment
White wrap paint	Anti-bacterial powder coating
<b>LIMITED WARRANTY</b>	One year (Proof-of -Purchase Required)

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## 4.0 PACKAGE CONTENTS

Before setting up your UniDock, please check the packaging and make sure the following items are contained in the shipping carton (one each).

- Main Unit with 24 connector cables pre-installed (MFi for Apple or Micro-USB if specified)
- Power Cord
- USB-A to B Cable
- Allen wrench: Cushion-Grip Looped T-Handle Key, 5/32" Size, 6-13/16" Overall Length

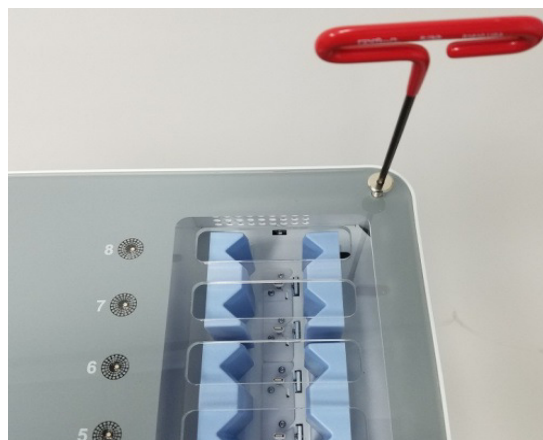
## 5.0 SET-UP & ADJUST

### SETTING THE UNIDOCK TO THE SIZE OF THE DEVICE

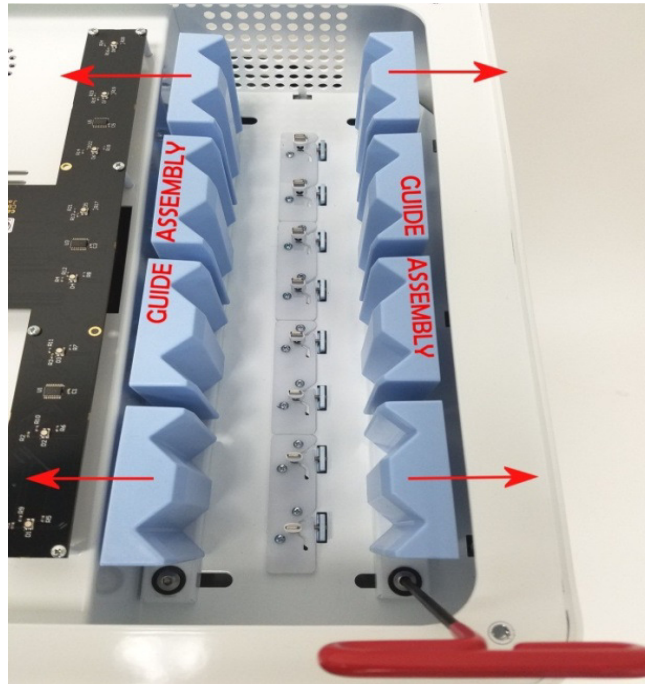
The guides of the unit need to be adjusted to align the connectors for a complete connection. There are two rows of blue plastic guides that should be adjusted for the devices you use.

**Note: Power off and disconnect the power cord before proceeding with Step 1.**

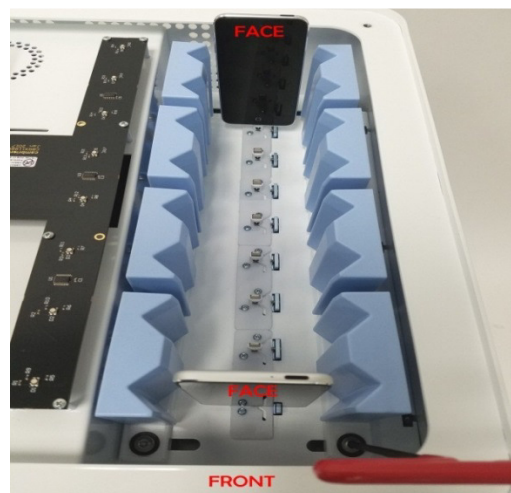
- Step 1
  - Remove the top cover. Use the provided T-handle Allen wrench to remove the four screws from the top of the UniDock. Set them aside in a safe place and set aside the acrylic top.



- Step 2
  - Using the same Allen key, loosen each of the socket screws on the ends of the guide assemblies (1/2 turn of the Allen key is enough to loosen the screws). Slide the guides to the widest position and snug the screws to hold the guides open.

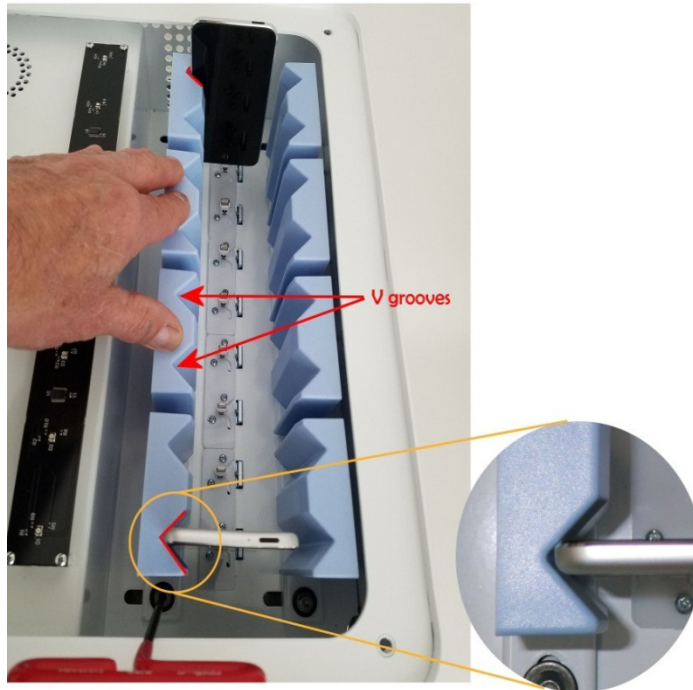


- Step 3
  - Insert/Connect two of your mobile devices, one to the front and one to the rear plug (cable connectors) of one set of the guides. Place both devices facing forward (as shown). This is to establish your device's spacing (width).



- Step 4

- Loosen the front and back screws (1/4 to 1/2 turn) on one guide assembly. It should snap inward. Loosen the screws for the second guide assembly in the same manner. The guides are “sprung” to help center and position the guides in relation to the connectors on the base. Use the Allen key to tighten the two front and two rear socket screws.



The device should center in the V groove when properly positioned

- Step 5

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- Connect the remaining devices in the row and check that each one slides in and out freely as well as connects securely and with little effort. Repeat the adjustment process if the devices are not consistently docking easily.
  - Step 6
    - Repeat steps 1-5 for the second row of devices.
  - Step 7
    - Reinstall the top cover and replace the four screws, using the Allen key. Reattach the Allen key in its holder at the back of the UniDock.

## 6.0 OPERATION

### OPERATION PROCEDURES

Power on the dock by connecting a standard IEC C13 power cord (provided) with its protective earthing conductor to a socket-outlet with earthing connector. Turn the power switch on. Insert devices in slots firmly. After a pause of approximately thirty seconds, the devices will register its status and its corresponding LED light will indicate its status. The default settings for the LED's are as follows:

**RED** – Charging

**GREEN** – Fully Charged

**BLUE** – Simultaneously Sync and Charge (In this mode a full charge of up to 1.5 amps is being delivered to the device while a USB host cable is connected from the dock to a PC/Mac).

In Sync/Charge Mode (UniDock connected to a host computer), all connected devices will be visible on a host MDM application (mobile device management software). UniDock works with most USB-enabled MDM software including Apple Configurator and Apple iTunes, as well as Ground Control and other third party applications.

Developers can use the intelligent features of the sync-charge board and create custom scripts and commands for a wide range of functionality through the UniDock's open API. See 7.0 below.



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## 7.0 API INFORMATION

An Application Programming Interface (API) is available for developers who want to integrate, control or retrieve information from UniDock connected devices. Support is available for GNU/Linux, Microsoft Windows and Apple Macintosh computers. (See 10.0 below)

The API consists of a service module or daemon that is loaded on a host computer. The service module is accessed via JSON-RPC calls over a TCP/IP socket. We can provide sample Python code complete with the necessary JSON library code to be able to make the necessary calls for controlling this unit to the host computer.

It is, of course, possible to access the API from any programming environment that has support for making JSON-RPC calls over a TCP/IP socket.

Examples of features that can be enabled this API:

- Setting LED controls for patterns such as blinking or alternating colors
- Read charge status of specific devices
- Trigger alarms for devices removed
- Set times for functions such as sync or charge

## 8.0 TROUBLESHOOT

1. If no lights are illuminated when the UniDock is powered on, check that the power cord is fully inserted into the back of the UniDock and the other end fully inserted into a working wall socket-outlet with an earthing connection. Confirm that the power switch is on.
2. If power is present but the devices will not charge, remove and reinsert devices into their slots. Be sure to insert each device completely so that the connectors engage. **Never force a device that is not properly aligned.**
3. If the devices are not connecting or charging as expected-- i.e., flashing on/off and stuck in a loop, or beeping -- a firmware update may be required. Download and install the firmware update from our support site (see 10.0 for link).
4. Changing cable connectors should be performed by Datamation Systems service support group. Contact us for details at (800) 724-4339.

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## 9.0 LIMITED WARRANTY

Datamation Systems warrants the UniDock to be free from defects in design, materials, assembly and craftsmanship for one year from the date of purchase to the original retail purchaser. Proof of purchase will be required to obtain warranty services.

## 10.0 SUPPORT AND CONTACT INFORMATION

Datamation Systems, Inc.  
125 Louis Street  
South Hackensack, NJ 07606 USA  
201-329-7200  
800-724-4339

[support@ipadcarts.com](mailto:support@ipadcarts.com)  
[www.ipadcarts.com](http://www.ipadcarts.com)

Video Instructions for Adjusting Guides

<https://tinyurl.com/UniDock-setup>

Firmware Update

<http://www.cambrionix.com/downloads/firmware-updater/>

API Instructions

<http://www.cambrionix.com/downloads/cambrionix-universal-charger-api/>

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