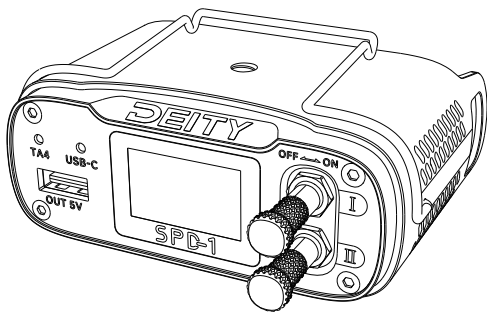


## Smart Power Distributor

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# SPD-1



## Product Manual

English

# Foreword

Thank you for purchasing the Deity Smart Power Distributor SPD-1

## Instructions

- Please read this product manual carefully.
- Keep this product manual. Always include this product manual when passing the products on to third parties.
- Heed all warnings and follow all instructions in this product manual



**WARNING:** Do not place the product near any corrosive chemicals. Corrosion may cause the product to malfunction.

- Only use a microfiber or dry cloth to clean the product.
- Operate carefully - dropping or hitting the product may cause damage.
- Keep all liquids away from the product. Liquids entering the product can short-circuit the electronics or damage the mechanics.
- Store the product in a dry, clean, dust-free environment.
- If your product malfunctions, please have it serviced by an authorized shop. The warranty does not cover repairs to devices that have been subjected to unauthorized disassembly, although you may request such repairs on a chargeable basis.
- The product is certified by RoHS, CE, FCC and KC . Please adhere to the operation standards. The warranty does not cover repairs arising out of the misuse of the product, although you may request such repairs on a chargeable basis.
- The instructions and information in this manual are based on thorough, controlled company testing procedures. Further notice will not be given if the design and specifications change.

## FCC Compliance Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and(2) This device must accept any interference received, including interference that may cause undesired operation.

**Warning:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the distance separating the equipment and receiver.
- Connect the device to a different power supply than that which the receiver is connected to.
- Consult the dealer or an experienced radio/TV technician for help.

## RF warning statement:

The device has been evaluated to meet general RF exposure requirements. The device can be used in portable exposure condition without restriction.

## Intended Use

Intended use of the Deity Smart Power Distributor SPD-1 includes:

- The user has read the instructions of this manual.
- The user is using the products within the operating conditions and limitations described in this product manual.
- "Improper use" means using the products other than as described in these instructions or under operating conditions which differ from those described herein.

## Packing List

Package includes the following items:

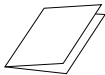
### 1. Smart Power Distributor SPD-1



SPD-1  
(1 pc)



SPD-T4BATT  
( TA4F to HiQ Battery CupF )  
(1 pc)



Warranty Card  
(1 pc)

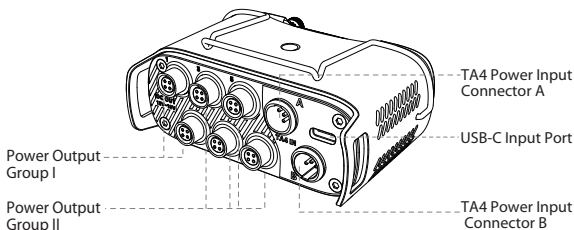
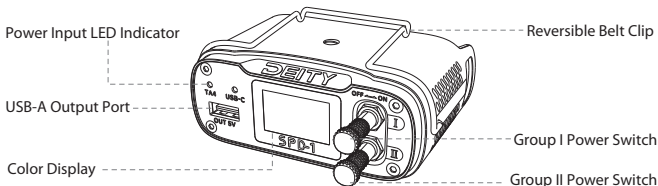


DEITY Logo Stickers  
(1 pc)

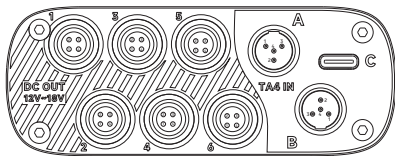


DEITY QR code card  
( 1pc )

# Nomenclature



# Connector Pinout



## Power Output Connectors (Group I, Group II)

1. DC-
2. No Signal
3. No Signal
4. DC+

## TA4 Power Input Connectors(A,B)

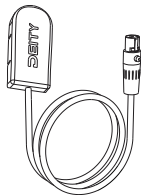
1. DC-
2. DAT
3. CLK
4. DC+

**NOTE:** The wiring pinout is different than the Remote Audio and PSC NP-1 TA4 battery cup wiring. Do not use any of the Remote Audio or PSC TA4 battery cups.

# Accessories For The SPD-1

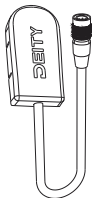
## 1. SPD-T4BATT

TA4F to Smart Battery Cup



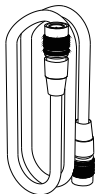
## 2. SPD-HRBATT

Compatible with 4-Pin Hirose to Smart Battery Cup



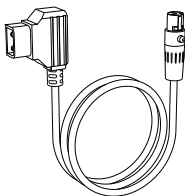
## 3. SPD-HRHR

Compatible with 4-Pin Hirose to 4-Pin Hirose



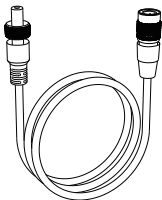
## 4. SPD-T4DT

TA4F to D-Tap



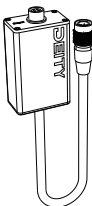
## 5. SPD-HRDC

Compatible with 4-Pin Hirose to 5.5mm DC Plug (DC5525)



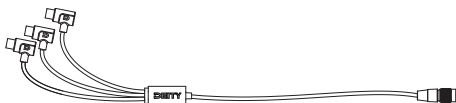
## 6. SPD-HRISO

Compatible with 4-Pin Hirose to Isolated 4P Connector

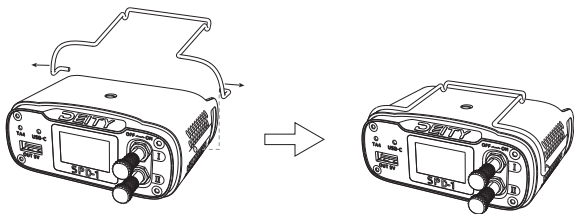


## 7. SPD-HR3U

Compatible with 4-Pin Hirose to Triple USB-C



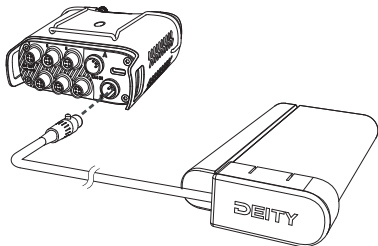
## Attaching the Clip

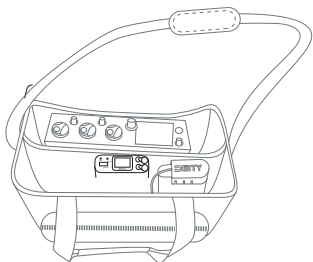


## Installations and Use

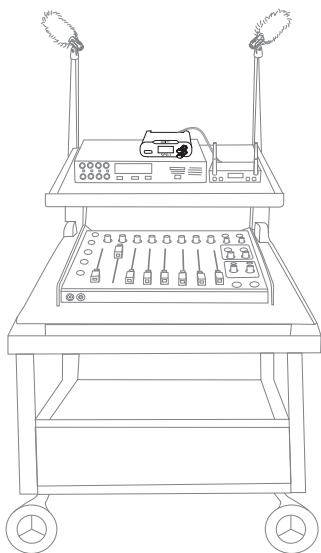
The SPD-1 is a compact and lightweight power distribution box with 6x protected outputs, 1x USB-A 5V output, 2x locking switches and a full featured fuel gauge. The fuel gauge provides all the information required to monitor the battery's state of charge (voltage, current, power, etc...). This product is designed for use in large sound bags or small location carts.

### 1. Use in sound bags





## 2. Use in small location carts



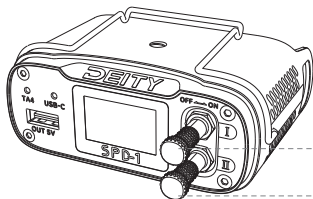
# Functions and Operation

## 1. Power Switches

Group I Power Switch : This switch enables the Group I power outputs.

Group II Power Switch: This switch enables the Group II power outputs.

Pull and toggle right /left to enable or disable the power outputs Group I & II.



Group I Power Switch

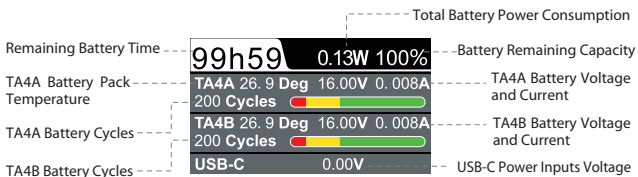
Group II Power Switch

## 2 . Home Screen Description

### 1) User Interface Overview

This display shows all the needed information regarding the state of charge of the battery.

\* When the SPD-1 is connected to 2 smart batteries (if connected to a no-smart battery, only the battery's voltage will be displayed). The micro controller in the SPD-1 communicates with the battery , and retrieves all information regarding its state of charge and displays them on the display like this:





## 2) Overload Warning Display

A warning message pops up when the SPD-1 is overloaded from either the TA4A and/or TA4B input. There is no output for Power Output Group I & II.

99h59	0.13W	100%
TA4A	26.9 Deg	16.00V 0.008A
200 Cycles		
TA4B		
USB-C	0.00V	

## 3) Home Screen Responses to Different Power Inputs

DEITY	
TA4A	16.00V
TA4B	16.00V
USB-C	0.00V

SPD-1 is powered by the 2x non-smart batterieies

DEITY	
TA4A	0.00V
TA4B	0.00V
USB-C	12.00V

SPD-1 is powered by only the USB-C input

DEITY	
TA4A	16.00V
USB-C	12.00V

SPD-1 is powered by a non-smart battery and the USB-C input

99h59	0.13W	100%
TA4A	16.00V	
26.9 Deg	0.008A	
200 Cycles		
USB-C	0.00V	

SPD-1 is powered by one smart battery only

## 3. TA4 LED indicator

When a TA4 input connects to a battery with 9V~13V, the TA4 LED stays red.

When a TA4 input connects to a battery with 13V~18V, the TA4 LED stays green.

When a TA4 input connects to a battery with more than 18V, the TA4 LED blinks red slowly.

When a TA4 input connects to a battery with less than 9V, the TA4 LED stays off if connected to a non-smart battery. The TA4 LED stays red if connected to a smart battery.

When a TA4 input connects to a smart battery, TA4 LED will change to red when the battery capacity falls below 10% .

#### **4. USB-C LED indicator**

When the USB-C input connects to 9V-12V, the USB-C LED stays green.

When the USB-C input connects to less than 9V, the USB-C LED stays off.

#### **5. USB-A Output Port**

SPD-1 features a standard USB-A port that outputs 5V/2A regulated.

#### **6. TA4 Power Input Connector A & B**

SPD-1 is compatible with any battery ranging from 12V ~18V. Users are able to hot swap between the two TA4 power inputs.

*\* When the power input falls below 6V, the SPD-1 will turn off automatically.*

*\* When the power input goes up to 24V, the SPD-1 will turn off automatically.*

*\* When the power input is over 7V, the SPD-1 can turn on.*

#### **7. Power Output Group I & II**

- SPD-1 features circuits with 7A over current protection on each power output (Group I & II).

- We suggest a total 10A max for power Group I and II and 5A max for total power output for each group.

- There are 2A polyswitch resettable fuses on each output of Group II and we suggest an output max of 5A for total power output on circuit Group II.

- SPD-1 will not output power when the input voltage goes up to 18V.

- We suggest connecting the Deity SPD-1 accessory SPD-HRISO (sold separately) to give a power output group isolation. This can help resolve ground loop issues.

# Specifications

- Built-in protection circuit for safety.
- All anodized aluminum CNC machined and extruded enclosure with laser engraving.
- 1.1" TFT Color Screen
- 12V-18V Suggested voltage range
- 2x TA4 inputs
- 1x USB-C input
- 2x Power Circuits (Group I & II)
- 6 x HRS unregulated outputs
- 1 x USB-A 5V/2A output
- Weight : 159g
- Size: 89\*82\*36mm

The following battery cups\* are compatible with the SPD-1:

- Audio Root eTA4f
- COGA Sound BPS TA4
- Deity SPD-T4BATT
- Remote Audio REM HIQCS1
- Sound Devices XL-SmartCup

**Power Output Group I: 7A Fuse**

**Power Output Group II: Each Output has 2A Fuse, 7A Fuse for total for Group II**

**Don't go over 5A total for Power Output Group I**

**Don't go over 5A total for Power Output Group II**

**Don't go over 10A for the whole box !**

*Tips: The illustrations in the manual are only diagrams for reference (Apply to SV: 1.0 version) . Due to the continuous development of new versions of the product, if there are any differences between the product and the user manual diagrams, please refer to the product itself.*

**DEITY**  
MICROPHONES

Inspection: Qualified

Add: F/3, Building 21, Longjun Industrial Estate, Heping West Road, Shenzhen,  
Guangdong

Detailed product manual for Smart Power Distributor SPD-1 can be found on [www.deitymic.com](http://www.deitymic.com)