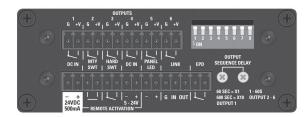


# TSD-SEQ6 Sequencer Controller







### **Description**

The AtlasIED TSD-SEQ6 Sequencer Controller features 6 outputs that are configurable individually to be either a 24VDC output or Hard Switch Contact Closure (CC). There are two separate output sequence time delay trimmers ranging from 1 second to 10 minutes. Activation can be done via the front panel or remotely via Hard Switch CC, Momentary Switch or DC Voltage. The TSD-SEQ6 also incorporates an Emergency Power Down (EPD) port for local fire codes. You can link two TSD-SEQ6 units together giving you 12 sequenced outputs.

The TSD-SEQ6 is part of a full line of AtlasIED Time Saving Devices. These compact (1.5" x 4" x 2.75") units are designed to solve some of the common audio system problems in the easiest, most efficient, and cost-effective way. All models are made from high quality components and include removable individual I/O connectors for quick and precise wiring, separate ground terminals for all I/Os assuring secured connections, and removable level controls that can be replaced with tamper-resistant security covers. The TSDs are highly efficient and meet most energy standards as one 24V DC power supply (available separately) can power multiple Atlas Time Saving Devices.

#### **Features**

- · 6 Sequenced Outputs
- Assignable 24VDC or Hard Switch Contact Closure (CC) per Output
- Sequence 1 is Adjustable: Delay Time 1 Second to 10 Minutes
- Sequences 2 6 are Adjustable: Delay Time 1 Second to 1 Minute
- Remote Activation via 5-24VDC,
   Momentary Contacts, Hard Switch Contacts
- Status Indicator for Each Output
- Emergency Power Down "EPD" Port
- Link Out for Two TSD-SEQ6 Controllers
- Voltage Output for Remote LED Status Display
- Separate Wiring Port for Each I/O
- Cable Management System
- Multiple Mounting Configurations
- Removable Phoenix Style I/O Connectors
- Meets Most Energy Standards
- Compact Chassis Design

### Interfaceable Atlas Products

- ECM-20
- ECM-20M
- ECM-15SH
- ECM-20SH
- ECM-30
- ECM-2063

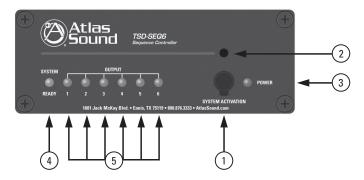
### Installation

- Churches
- Restaurants
- · Sports Bars
- Schools
- · Industrial Facilities
- House of Worship



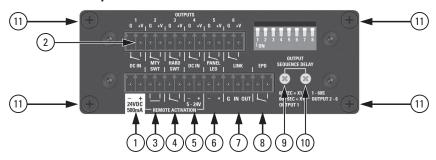
## TSD-SEQ6 Sequencer Controller

### **Front Panel Description**



- 1. System Activation Switch Press to activate the ON or OFF sequence.
- System Activation Switch Security Cover If you do not want to use the Front Panel Activation Switch, place the security cover over the switch and secure using the retainer screw.
- 3. Power LED Illuminates Blue when 24VDC power is present.
- System Status/Ready LED Flashes Green during a sequence and will illuminate steadily when sequence is complete indicating the system is powered up. When the LED is Off, it indicates the system is in the Off mode.
- 5. Channel Output LED Each of the 6 outputs have their own LED which illuminates Red when the specific channel / output is active.

### **Rear Panel Description**



TSD Input/Output connections are removable for easy system wiring. The connectors have a 3.5mm pitch between pins.

- 1. DC Power Input Each TSD that requires DC power comes with a 2 position connector for an external 24VDC power supply (sold separately). Because of the TSD's low power consumption, a single external power supply may power more than one TSD. Please refer to the specifications on current requirements in milliamps to match with the appropriate power supply. Please observe the polarity of the wiring to this connector. Note: It is acceptable to exceed the current requirements of the TSDs but NOT safe to use a power supply that is below the current requirement of the device. Use a power supply with a 500mA capacity (Atlas TSD-PS24V500MA).
- Channel Output There are 6 channel output control ports. Each output can be assigned to provide a 24VDC output or a Hard Switch Contact Closure (CC). See the Function Settings for Output configuration below.
- Remote Activation Momentary Switch Port Remote System activation can be done several hundred feet away via a momentary contact closure type switch.
- Remote Activation Hard Switch Contact Closure (CC) Port Remote System activation can be done several hundred feet away via a Hard Contact closure type switch.
- Remote Activation 5 24VDC Port Remote System activation can be done several hundred feet away by applying 5 - 24VDC. Only a few milliamps of current is required.
- 6. Panel LED Port This port can be used to power an LED on a remote panel for system status indication. The 24VDC Output will pulsate during a sequence and remain at a steady state when the sequence is completed and all outputs are on.
- 7. Link Control Port You can combine two TSD-SEQ6 units together to make a 12 step sequence system. Note: Pay special attention to the Input and Output terminals. Connect the Output from unit 1 (Master) to the Input of unit 2 (Slave). Connect the Output from unit 2 (Slave) to the Input of unit 1 (Master). Pay close attention to this or the Link Out will not work. See the Function Settings for the Master/Slave configuration below.



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## TSD-SEQ6 Sequencer Controller

- 8. EPD "Emergency Power Down" Port When an urgent system shut down is required, short the two pins together and the sequence portion will be bypassed and turn Off all outputs at the same time. This EPD feature is commonly used with fire control systems.
- 9. Delay Pot for Sequence 1 Output The time between Sequence 1 Output and Sequence 2 Output can be set by rotating the pot following the indicators on the panel. In X1 mode the delay time adjustment is from 1 second to 60 seconds. In X10 mode the delay time adjustment is from 10 seconds to 600 seconds, or 10 minutes. See the Function Settings below for Sequence 1 Output X1 or X10 configuration.
- 10.Delay Pot for Sequences 2-6 The time between Sequence 2 Output and Sequence 6 Output can be set by rotating the pot following the indicators on the panel. Whatever the time is set to will be the time between Sequenced outputs.
- 11.Cable Management Retainer Points Each TSD includes two cable retainer straps for securing the included cable management retainers. Remove one of the rear panel screws, align the panel hole with a retainer and firmly tighten the screws.

## **Dip Switch Function Identification**

#### SWITCH FUNCTIONS

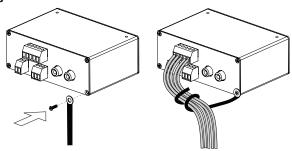
1	2	3	4	5	6	7	8
RELAY ASSIGNMENT CONTACT CLOSURE OR 24VDC						LINK	OUTPUT 1
OUT 1	OUT 2	OUT 3	OUT 4	0UT 5	OUT 6	ASSIGNMENT	DELAY
24VDC	24VDC	24VDC	24VDC	24VDC	24VDC	MASTER	X1
CC	cc	cc	CC	CC	CC	SLAVE	X10

#### **Switch Position**

- DIP SW # 1-6 Channel Output Assignment Each output can be assigned to deliver a Hard Switch Contact Closure (CC) or +24VDC output when activated by the Sequence for Output Channels 1-6.
- DIP SW # 7 Link Assignment Configuration This switch determines if the unit is to be a Master or a Slave unit. The Master unit is always the first in line of the sequence.
- DIP SW # 8 Sequence Output 1 Time Delay In the X1 setting the adjustable time delay setting
  is from 1s to 60s and in the X10 position the time delay setting is from 10s to 600s, or 10 minutes.



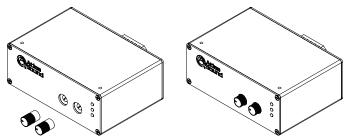
### **Cable Management**



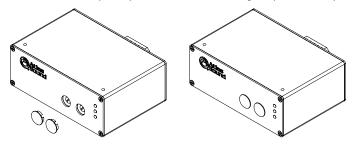
### **Knob and Security Cover**

All front panel level controls feature a removable knob that can be replaced with an included security cover. Follow these steps to prevent potentiometer damage or unwanted changes.

Knob Installation - Turn the potentiometer shaft fully counter-clockwise. Align the knob indicator
to the lowest setting on the panel and the potentiometer shaft slot. Carefully press the knob onto
the potentiometer shaft. Do not force or damage may occur to the potentiometer.



Security Cover Installation - Remove the knob from the panel and insert the cover. Small pliers may be required to remove the knobs. Align the security cover to the level control panel hole. Push the cover into the hole until it snaps into place. Do not force or damage may occur to the potentiometer.





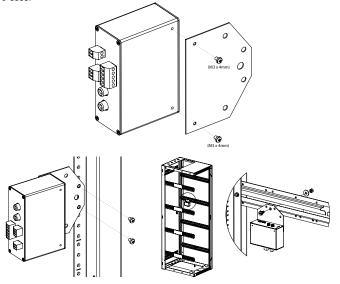
### Mounting

Listed below are the ways to mount the TSD and the optional accessories that can be purchased.

 Velcro<sup>™</sup> - Each unit includes two 2" x 2" pieces of industrial-grade Velcro<sup>™</sup> with adhesive backing to adhere to any flat surface. Clean all surfaces before applying the adhesive side of the Velcro<sup>™</sup>.



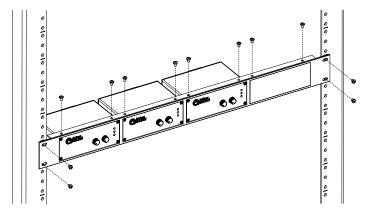
2. Multi Mount Plate - Each TSD includes a versatile multi-position mounting plate. This plate allows the TSD to be mounted to any surface; but is ideal for use with rear rack rails or side rack hat channels. Use the included M3 x 4mm screws to install the plate on the TSD. Note: Only use the included M3 x 4mm screws as other screws may be too long and will cause internal damage to the TSD. The multi-position mounting plate is a new addition being included with TSDs. If the TSD being used did not include the mounting plate, contact AtlasIED customer service at 1-800-876-3333.



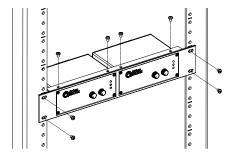


### **Optional Mounting Accessories**

TSD-RMK 19" Width Rack Mount Kit - For 19" rack mounting, AtlasIED offers an optional rack
mount kit, the TSD-RMK. This rack mount kit can support up to four TSD units. The kit includes
three blank panels designed to fill any unused slots. Use the included hardware to mount the TSD
into the rack mount kit using the top mount screw holes on the TSD.

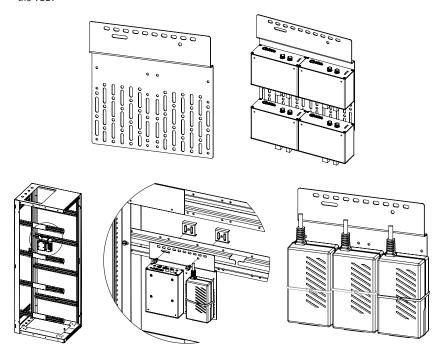


TSD-RMKHR Half Width Rack Mount Kit - AtlasIED offers an optional rack mount kit that can be used in half width rack applications including the AtlasIED WMA-HR and AWR-HR models. The TSD-RMKHR can support up to two TSDs. Included is an extra blank panel to fill one of the spaces if only one TSD is being used.



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TSD-RRMK Rear Rack Mounting Kit - For complete flexibility in mounting a TSD or TSD external
power supplies the optional TSD-RRMK is available. The TSD-RRMK can support mounting of
either two larger TSDs with external power supplies or up to 4 TSD models. Note: Only use the
included M3 x 4mm screws as other screws may be too long and will cause internal damage to
the TSD.



### **Specifications**

Description Sequence Controller

Chassis Color Black
Chassis Material Aluminum

Outputs

Type Qty 6, Sequenced Channel Output, Selectable 24VDC or CC Connection Removable 3 Position Captive Screw 3.5mm Spacing

Type Qty 1, Link Input/Output

Connection Removable 3 Position Captive Screw 3.5mm Spacing
Type Qty 1, Output 24VDC for Remote Panel LED Indicator
Connection Removable 2 Position Captive Screw 3.5mm Spacing

**Sequence Activation Controls** 

Type Oty 1, Momentary Switch Front Panel

Type Qty 1, Momentary Switch Port

Connection Removable 2 Position Captive Screw 3.5mm Spacing

Type Qty 1, Hard Switch Contact Closure (CC) Port

Connection Removable 2 Position Captive Screw 3.5mm Spacing

Type Qty 1, DC Voltage Port

Connection Removable 2 Position Captive Screw 3.5mm Spacing

Type Qty 1, Emergency Power Down (EPD)

Connection Removable 2 Position Captive Screw 3.5mm Spacing

Controls

Dip Switch Function • Output 1-6, Assign 24VDC or Contact Closure (CC)

Link Assignment

• Sequence Output 1 Time Setting: X1 or X10

Output 1 Sequence Delay Trim Pot, 1 sec - 60 sec or 10 sec - 10 min (Selectable)

Output 2 - 6 Sequence Delay Trim Pot, 1 sec - 60 sec

Indicators

Sequence Status Green, Qty 1
Output Sequence Status Red, Qty 6
Power Blue

**Power Requirements** 

Voltage 24VDC, 500mA
Power Consumption Current 100mA
Power Consumption VA Watts 2.4W

Dimensions H 1.5" (39mm) x W 4" (101mm) x D 2.75" (70mm)

Weight 6oz, .165kg



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## TSD-SEQ6 Sequencer Controller

**Included Accessories** 

Velcro<sup>™</sup> Industrial-Grade

Cable Retainers Oty 2
System Switch Security Cover Oty 1

**Optional Accessories** 

TSD 24VDC Power Supply

TSD-RMK 1 RU 19" Width Rack Mount Panel (Supports 4 TSD Units)
TSD-RMKHR 1 RU Half Rack Width Panel (Supports 2 TSD Units)

TSD-RRMK Rear Rack Mounting Kit

**Safety and Certifications** 

External Power Supply cUL, CE, RoHS, TUV



### **Limited Warranty**

All products manufactured by AtlasIED are warranted to the original dealer/installer, industrial or commercial purchaser to be free from defects in material and workmanship and to be in compliance with our published specifications, if any. This warranty shall extend from the date of purchase for a period of three years on all AtlasIED products, including SOUNDOLIER brand, and ATLAS SOUND brand products except as follows: one year on electronics and control systems; one year on replacement parts; and one year on Musician Series stands and related accessories. Additionally, fuses and lamps carry no warranty. AtlasIED will solely at its discretion, replace at no charge or repair free of charge defective parts or products when the product has been applied and used in accordance with our published operation and installation instructions. We will not be responsible for defects caused by improper storage, misuse (including failure to provide reasonable and necessary maintenance), accident, abnormal atmospheres, water immersion, lightning discharge, or malfunctions when products have been modified or operated in excess of rated power, altered, serviced or installed in other than a workman like manner. The original sales invoice should be retained as evidence of purchase under the terms of this warranty. All warranty returns must comply with our returns policy set forth below. When products returned to AtlasIED do not qualify for repair or replacement under our warranty, repairs may be performed at prevailing costs for material and labor unless there is included with the returned product(s) a written request for an estimate of repair costs before any nonwarranty work is performed. In the event of replacement or upon completion of repairs, return shipment will be made with the transportation charges collect.

EXCEPT TO THE EXTENT THAT APPLICABLE LAW PREVENTS THE LIMITATION OF CONSEQUENTIAL DAMAGES FOR PERSONAL INJURY, ATLASIED SHALL NOT BE LIABLE IN TORT OR CONTRACT FOR ANY DIRECT, CONSEQUENTIAL OR INCIDENTAL LOSS OR DAMAGE ARISING OUT OF THE INSTALLATION, USE OR INABILITY TO USE THE PRODUCTS. THE ABOVE WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

AtlasIED does not assume, or does it authorize any other person to assume or extend on its behalf, any other warranty, obligation, or liability. This warranty gives you specific legal rights and you may have other rights which vary from state to state.

### Service

Should your Atlas TSD require service, please contact the AtlasIED warranty department at 1-877-689-8055, ext. 277 to obtain an RA number.

AtlasIED Tech Support can be reached at 1-800-876-3333 or support.atlasied.com.

Visit our website at www.AtlasIED.com to see other Atlas products.

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