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INSTALLATION GUIDE FOR UPLINK 1500



Part # 1500-0020

1500 Installation Guide Table of Contents

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Warranty Information

Uplink guarantees this product for 36 months from the date of manufacturing. If a unit should be defective within the warranty period; it should be returned to the dealer from whom it was purchased. The unit then will be repaired or replaced at no charge. The warranty is limited to replacement cost of the unit. No warranty is expressed or implied on equipment used with unit or labor involved.

Liability Waiver

- ◆ Uplink will not be held responsible damage or defect caused by improper installation, failure to follow installation guidelines, deliberate misuse, careless handling, or acts of God
- ◆ No guarantee of performance other than that expressed in approved Uplink literature is authorized
- ◆ Use not consistent with standard security and fire protection protocol voids warranty and all guarantees related to product pricing and performance
- ◆ Manual is subject to change without notice

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Technical Support

- ◆ Technical support is available Monday through Friday 8:00am to 8:00pm excluding holidays
- ◆ Before seeking technical support please ensure you have read the instructions completely
- ◆ Technical support will need a login name, password, and the serial number of the unit to assist you

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Description of the Unit

The Uplink DigiCell 1500 is a multipurpose FCC certified Cellemetry Data Service Device capable of sending and receiving data over the AMPS Cellular Control Channel Network. The 1500 is powered using 12 VDC and has a full 3W transmitter with receiver sensitivity to -115dBm. The transmit frequency range of the Unit is 833.43-834.66 MHz. The receive frequency range is 878.43-879.66 MHz. The unit typically uses a quarter wave antenna with a frequency range of 824-896 MHz. The 1500 has 3 discrete inputs that can be tripped by a voltage, contact, or open collector output from the panel (refer to the diagrams in this manual). Input 1 can also be set (via dipswitches) to trip from the panel's bell or siren output, or to count pulses.

Getting Started

1. The 1500 must first be activated from the Numerex Solutions web site www.numerexsolutions.com

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Getting Started (cont.)

2. Remove the transceiver, power cord, and antenna from the box. Install the antenna on top of the transceiver.
3. Once the above steps are complete, mount or place the unit in an area that is free from any metal objects or obstructions. Ensure the unit is above grade level.
4. Determine how you wish to trip/wire the unit.
5. For wire insertion into the DigiCell 1500, use an 18 AWG with a clean-cut tightly twisted end. Press wire into lower opening of the appropriate input or output connector. **Do not use a tool for this step.** Ensure the wire is secure after insertion. To remove the wire, insert a small jewelers' screwdriver in the top of the opening and remove the wire. Ensure power has been disconnected before removing or inserting any wires.

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Wiring of the Unit



The maximum wire size that the terminal block can handle is 18 AWG.

WARNING: Damage to the 1500 can occur if the upper supply voltage of 15.0 VDC is exceeded. A nominal 12 VDC power supply is recommended for this device.

Power Supply - Positive side of the 12 VDC power supply needs to be connected to the 12V terminal and the ground to the negative terminal. The terminals are specified on the back of the unit. The current values are 80mA for standby and 1500mA for transmit (150ms transmit burst). A low DC signal will be sent if supply voltage is low for more than 5 seconds.

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Wiring of the Unit (cont.)

Inputs - Below are the input configurations that can be used with 1500 and are DIP Switch selectable on the unit (Reference the **Configuring the Unit** portion of this manual).

1. Input 1

Bell Trip - This mode configures the unit to be tripped from a DC voltage ranging from 6VDC to 24VDC. The unit reads a pulsed voltage as a Fire signal and a steady voltage as a Burglary signal.

Siren Trip - This mode configures the unit to be tripped from a Siren Driver or a Panel with a built in siren driver. The unit reads a steady tone as a fire signal and a yelping tone as a burglary signal. (Note: The input assumes that a speaker is connected to the panel. If you are not using a speaker we recommend using a Bell Trip instead of a Siren. This is a option on most panels.)

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Wiring of the Unit (cont.)

Pulse Counter - This mode configures the unit to count the number of times the unit has been tripped from a dry contact, DC voltage, or an open collector. The maximum frequency pulse is 40Hz. The count will be reported on request or every 12 hours.

2. Inputs 2 and 3

Voltage Trip - Inputs 2 and 3, (and 1 if set for standard input), can be tripped by applying 12V to the + input and 0V to the - input. A signal must be present for 500ms for an alarm to be sent.

Open Collector - Inputs 2 and 3, (and 1 if set for standard input), can be tripped by applying 12V to the + input and the Open Collector output of the panel to the - input. The signal must be present for 500ms for an alarm to be sent.

Output - Dry Contact relay output. Output type controlled by Dipswitch 7.

Trouble Output - The relay will remain closed as long as the unit has Power, Cellular Coverage, and a Cellemetry network.

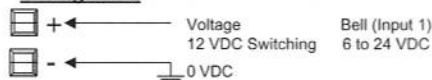
7

Wiring of the Unit (cont.)

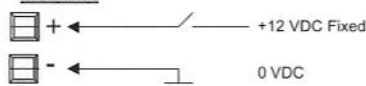
Controlled Output - Relay will be open except when turned on by the web site.

Wiring Examples

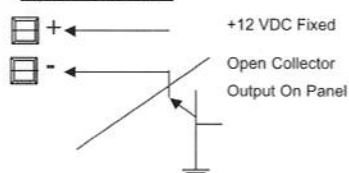
Voltage/Bell



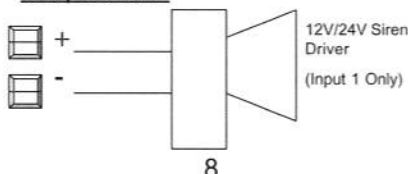
Contact



Open Collector



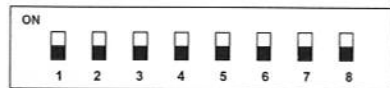
Sampled Siren



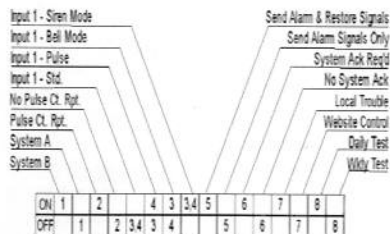
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Configuration of the Unit

The 1500 is configured through the use of DIP Switches. The functionality of the individual DIP Switches is shown below:



Dipswitch Configuration



S1 Preferred Cellular System

OFF = System A
ON = System B

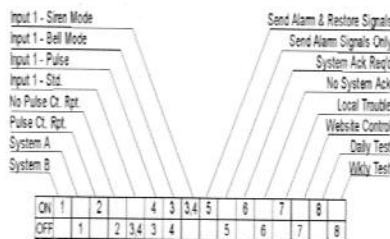
S2 Pulse Count Auto Report Option

OFF = No Pulse Count Report
ON = Pulse Count Report Every 12 Hours

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Configuration of the Unit

Dipswitch Configuration



S3 Used in conjunction with S4

S4 Input Type 1

S3	S4	Function
OFF	OFF	Standard Input
OFF	ON	Pulse Counter
ON	OFF	Timed Bell
ON	ON	Sampled Siren

S5 Inputs Report Options

OFF = Send Alarms Only
ON = Send Alarms and Restores

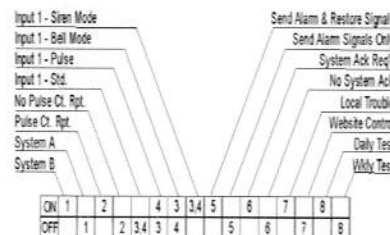
S6 Inputs Acknowledgement Option

OFF = 1 way
ON = 2 way (wait for page)

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Configuration of the Unit

Dipswitch Configuration



S7 Output Type

OFF = Website Remote Control
ON = Local Trouble Indicator (fail safe) (no power, Cellular service, or Cellemetry Network)

S8 Test Option

OFF = Weekly
ON = Daily

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Operating the Unit

Upon initial power up of the 1500, observe the LED's located on the front of the unit to determine the following:

LED Usage

1 Radio Comms

Intermittent Blink Transceiver Communication
Slow Blink Waiting for page
Fast Blink Registering

2 Signal Strength

OFF	< = -100dBm
Slow Blink	< = -90dBm
Fast Blink	< = -80dBm
On Solid	> -80dBm

3 Power/Cellular Service/Cellemetry Network

ON Solid if Powered
Slow Blink Powered but no Cellular Service
Fast Blink Powered but no Cellemetry Network Available

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