INSTALLATION & USER’S GUIDE
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WARRANTY & LIMITATION OF LIABILITY

Standard 12-Month Limited Warranty

THE FOREGOING WARRANTY APPLIES ONLY WITH RESPECT TO AUTHORIZED UPLINK DEALERS OR OTHER AUTHORIZED UPLINK RESELLER PURCHASING AN UPLINK 4500 EZ OR OTHER UPLINK DEVICE DIRECTLY FROM UPLINK. UPLINK DEVICES PURCHASED FROM AN UPLINK DISTRIBUTOR OR OTHER THIRD PARTY RESELLER ARE NOT WARRANTED TO THE PURCHASER BY UPLINK AND ARE COVERED SOLELY AND EXCLUSIVELY BY SUCH WARRANTY AS MAY BE SEPARATELY OFFERED BY THE DISTRIBUTOR OR RESELLER.

Except as otherwise agreed by Uplink in writing, Uplink warrants to authorized Uplink distributors or other authorized resellers who purchase Uplink Devices directly from Uplink that for 12 months following the date of purchase, said Uplink Devices will be free of defects in materials and workmanship when installed, operated, maintained, and serviced in strict accordance with Uplink’s requirements. If an Uplink Device covered by the foregoing warranty fails because of a defect in materials or workmanship within the 12-month warranty period, Uplink will, at its sole option and at no charge, repair or replace it or arrange for its repair or replacement. Uplink’s agreement to repair (using new or reconditioned parts) or replace (with an equivalent new or reconditioned device) an Uplink Device found by Uplink to be defective in materials or workmanship is the distributor’s/reseller’s exclusive remedy; this remedy will not be deemed to have failed of its essential purpose so long as Uplink is willing and able to repair or replace a defective Uplink Device as provided above or, at its sole option, to refund the purchase price paid. Any returns must be made in accordance with Uplink’s then-current RMA process. Uplink Devices that have been repaired or replaced hereunder are warranted only for the remainder of the term of the original warranty. THE FOREGOING WARRANTY IS LIMITED AND IS THE ONLY WARRANTY OFFERED. IT IS NON-TRANSFERRABLE. UPLINK MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT, INTEROPERABILITY WITH THIRD
PARTY SERVICES, SYSTEMS, AND FACILITIES, AND NON-OBSOLESCENCE. THE WARRANTY SET FORTH FURTHERMORE DOES NOT COVER UPLINK DEVICES THAT (A) HAVE BEEN IMPROPERLY INSTALLED, OPERATED, OR SERVICED; (B) HAVE BEEN TAMPERED WITH; OR (C) HAVE BEEN SUBJECTED TO ENVIRONMENTAL EXTREMES.

Limitation of Liability

NEITHER UPLINK NOR ITS THIRD PART SERVICE PROVIDERS SHALL BE LIABLE TO ANY UPLINK DISTRIBUTOR OR RESELLER, ANY INSTALLER, ANY END USER OF AN UPLINK DEVICE OR UPLINK SERVICE, OR ANY OTHER THIRD PARTY FOR ANY CONSEQUENTIAL, INCIDENTAL, INDIRECT, EXEMPLARY, PUNITIVE, OR SPECIAL DAMAGES INCLUDING, WITHOUT LIMITATION, LOST DATA, SALES, REVENUES, OR PROFITS, REGARDLESS OF THE FORESEEABILITY OF SUCH DAMAGES. NEITHER UPLINK NOR ITS SERVICE PROVIDERS SHALL BE LIABLE FOR ANY CLAIM RESULTING FROM OR RELATING TO (A) THIRD PARTY CRIMINAL ACTIVITY OR FRAUD; (B) ACTS OR OMISSIONS OF UPLINK DISTRIBUTORS AND RESELLERS, END USERS OF UPLINK DEVICES OR UPLINK SERVICES, OR OTHER THIRD PARTIES; OR, (C) EXCEPT AS OTHERWISE MANDATED BY APPLICABLE LAW, BREACHES OF PRIVACY OR DATA SECURITY TRACEABLE TO THIRD PARTIES. NEITHER UPLINK NOR ITS SERVICE PROVIDERS SHALL BE LIABLE FOR ANY CLAIM RESULTING FROM THE FAILURE OF AN UPLINK DEVICE, UPLINK SERVICE, THIRD PARTY EQUIPMENT OR SERVICE, OR ANY END USE THEREOF INCLUDING, WITHOUT LIMITATION, A HEALTH, MEDICAL, ALARM, SAFETY, OR SECURITY APPLICATION, EVEN IF THE CLAIM IS ATTRIBUTABLE IN WHOLE OR IN PART TO AN ACT OR OMISSION OR OTHER FAULT ON THE PART OF UPLINK OR ITS SERVICE PROVIDER. IN NO EVENT SHALL UPLINK’S AND ITS SERVICE PROVIDER’S TOTAL, CUMULATIVE LIABILITY FOR ANY ONE OR MORE RELATED OR UNRELATED CLAIMS EXCEED AN AMOUNT EQUAL TO THE AGGREGATE AMOUNT PAID BY THE CLAIMANT FOR UPLINK SERVICE DURING THE 12 MONTH PERIOD PRECEDING THE DATE OF THE EARLIEST EVENT GIVING RISE TO THE SUBJECT CLAIM(S).
TECHNICAL SUPPORT

Technical Support is available **Monday through Friday, 8:00 AM to 8:00 PM EST** excluding holidays. Before calling or emailing Technical Support please ensure you have read the entire installation guide.

To be able to help you, Technical Support will need you to provide:

- Login name
- Password
- Serial number of the unit

**UPLINK Technical Support**

3330 Cumberland Blvd. Suite 700
ATLANTA, GA 30339
1-(888) 9-UPLINK, 1-(888)-987-5465
Fax 1-(888)-542-9105
Log in: https://login.uplink.com

For Customer Support, call **1-888-9-UPLINK**, or visit **www.uplink.com**

DESCRIPTION

The Uplink 4500EZ is an “always on,” multi-purpose, FCC-certified device capable of sending and receiving alarm signals or other data over the GSM Cellular Network. When connected to an alarm system, the 4500EZ will send alarm signals over the cellular network to Uplink’s alarm processing center, that will forward the signals to the appropriate monitoring station and/or selected email addresses.

The 4500EZ can be connected to an alarm system using up to four inputs on the 4500EZ. Each of these inputs can be set up to send a selected signal to the monitoring station. Contact ID, SIA, Modem Ile/Illa² and Pulse 4/2 (:20 PPS) formats are supported.

The 4500EZ also has two configurable relay outputs to send signals to alarm panels or control other devices.
INSTALLATION STEPS

Before beginning installation: If you are not yet an Uplink dealer, register by visiting www.uplink.com and click on the “new dealer account” tab.

Step 1. Activate the system. The Uplink 4500EZ operates “out of the box” with most commercial panels. No additional programming or equipment is required. To activate with default functions, go to www.uplink.com (or ex.uplink.com for web-enabled mobile phones), or call 1-888-987-5465. Consult the Quick Installation Guide included with the 4500EZ.

Step 2. Install the antenna on the top of the unit.

Step 3. Position the unit for maximum signal strength. Connect the unit to a 12V DC, 500mA power supply. Be sure the area is dry and free from interference of metal objects and obstructions.

Step 4. Determine network availability and signal strength.
   a) GSM signals strength should be -100dB minimum. Relocated the unit or install a high-gain antenna if necessary.

<table>
<thead>
<tr>
<th>TABLE 1: LED INDICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>LED</td>
</tr>
<tr>
<td>-----</td>
</tr>
<tr>
<td>ON</td>
</tr>
<tr>
<td>OFF</td>
</tr>
<tr>
<td>OFF</td>
</tr>
<tr>
<td>Slow Blink</td>
</tr>
<tr>
<td>Fast Blink</td>
</tr>
<tr>
<td>ON</td>
</tr>
<tr>
<td>SOLID ON</td>
</tr>
<tr>
<td>FAST BLINK</td>
</tr>
<tr>
<td>SLOW BLINK</td>
</tr>
</tbody>
</table>

NOTE: If after waiting for at least three minutes and this LED is Flashing FAST, call Uplink customer support at 1-888-987-5465 to check for network availability in your area.
**Step 5.** Disconnect the unit from the power supply before wiring. The standard configuration for the Uplink 4500EZ is to leave DIP switches S3 and S4 set to “OFF” (Input 1 triggered by 9V DC to 12V DC or an open collector). For detailed wiring instructions and alternative configurations, see pages 8-9.

**CAUTION:** Do not connect the unit to a receptacle controlled by a switch. **CAUTION:** Improper connections at the power connector may result in damage to the unit.

**Step 6.** Configure the unit. Set the DIP switches on the front panel of the unit according to the following table:

**TABLE 2: DIP SWITCH SETTINGS**

<table>
<thead>
<tr>
<th>DIP SWITCH Functionality</th>
<th>S8</th>
<th>S7 and S6</th>
<th>S5</th>
<th>S3 and S4</th>
<th>S2 and S1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Off</td>
<td>Reserved</td>
<td>Off</td>
<td>S3</td>
<td>Reserved</td>
</tr>
<tr>
<td></td>
<td>On</td>
<td>(set to OFF)</td>
<td>On</td>
<td>S4</td>
<td>(set to OFF)</td>
</tr>
<tr>
<td></td>
<td>On</td>
<td>Reserved</td>
<td>On</td>
<td>Input 1 Type</td>
<td>Reserved</td>
</tr>
<tr>
<td></td>
<td>Off</td>
<td>(set to OFF)</td>
<td>Off</td>
<td>Standard Input</td>
<td>(set to OFF)</td>
</tr>
<tr>
<td></td>
<td>OFF</td>
<td>Reserved</td>
<td>ON</td>
<td>Pulse Counter</td>
<td>Reserved</td>
</tr>
<tr>
<td></td>
<td>ON</td>
<td>(set to OFF)</td>
<td>OFF</td>
<td>Timed Bell</td>
<td>Reserved</td>
</tr>
<tr>
<td></td>
<td>ON</td>
<td>(set to OFF)</td>
<td>ON</td>
<td>Sampled Siren</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

(INSTALLATION STEPS continued next page)
INSTALLATION STEPS (cont.)

Step 7. When you have finished wiring and configuring the unit, wait at least two minutes then test the connection to the central station by creating an alarm from the panel.

FIGURE 2:
MODEL 4500EZ
UNIT WIRING

Input 1 (Selectable Via DIP Switches)

A. Standard Input - (DIP switches S3 OFF, S4 OFF) This mode configures the unit to be tripped from a DC voltage ranging from 9 V DC to 12 V DC or an open collector.

B. Timed Bell - (DIP switches S3 ON, S4 OFF) This mode configures the unit to be tripped from a DC voltage ranging from 9 V DC to 12 V DC. The unit reads a pulsed voltage as a fire signal and a steady voltage as a burglary signal. It may be necessary to place a 1K Ohm resistor in parallel to prevent false alarms when using panels with supervisory voltage on the bell circuit. Some panels with supervised bell circuits may require a 1K Ohm resistor in the circuit. Contact Technical Support for further details.

C. Sampled Siren* - (DIP switches S3 ON, S4 ON) 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 Timed Bell instead of Sample Siren. This is an option on most panels.

Input 4 (DIP switch S8 ON) A trigger of INPUT 4 from high-to-low and back-to-high causes the 4500EZ to reset. The high-to-low-to-high must be held for at-least 100 msec.

(UNIT WIRING continued next page)
UNIT WIRING (cont.)

*Inputs 2, 3, and 4 (and Input 1 if Standard Type)

![Wiring diagram for voltage trip]

**Voltage Trip** - Inputs 2, 3, and 4 (and 1 if set for standard input) can be tripped by applying 12 V to the + input and 0 V to the - input. A signal must be continuously present for 500 ms.

![Wiring diagram for open collector trip]

**Open Collector** - Inputs 2, 3 and 4 (and 1 if set for standard input) can be tripped by applying 12 V to the + input and the Open Collector output of the panel to the - input. A signal must be continuously present for 500 ms.

**Outputs** - Outputs can be used to signal communication trouble to the alarm panel or can be used to control other devices at the installation site. Outputs 1 and 2 are dry contact relays rated for a maximum of 100 mA at 24 V DC, and are in the normally closed condition (selectable to NO).
**Power Supply** - The customer-supplied 12 V DC power supply/battery charger should be capable of supplying 500 mA peak for brief high current demands of the radio during transmission.

**ANTENNA SPECIFICATION**

The following types of antennas should be used with this unit:

- **Antenna type:** External Dual Band ¼ wave antenna (included with unit)
  - **Maximum Antenna Gain:** 3.0 dBi
  - **Antenna connector:** SMA

- **Antenna type:** External Dual Band ¼ wave antenna Magnet mount (available separately)
  - **Maximum Antenna Gain:** 3.5 dBi
  - **Antenna connector:** SMA
  - **Cable length and loss:** 3 meter, RG-174, total loss 2.8 dB
FCC & INDUSTRY CANADA REGULATORY COMPLIANCE

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.

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. If not installed and used in accordance with the instructions, it can cause harmful interference to radio communications. Interference may 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, try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that which the receiver is connected to.
- Consult the dealer or an experienced technician for help.
FCC RF EXPOSURE INFORMATION

In August 1996 the Federal Communications Commission (FCC) of the United States with its action in Report and Order FCC 96-326 adopted an updated safety standard for human exposure to radio frequency electromagnetic energy emitted by FCC regulated transmitters. Those guidelines are consistent with the safety standard previously set by both U.S. and international standards bodies. The design of this unit complies with the FCC guidelines and these international standards. For more information about RF exposure, please visit the FCC website at www.fcc.gov. THE TERM “IC:” BEFORE THE CERTIFICATION/REGISTRATION NUMBER ONLY SIGNIFIES THAT THE INDUSTRY CANADA TECHNICAL SPECIFICATIONS WERE MET.

THE EXTERNAL ANTENNAS USED FOR THIS UNIT MUST PROVIDE A SEPARATION DISTANCE OF AT LEAST 20 CM FROM ALL PERSONS AND MUST NOT BE CO-LOCATED OR OPERATED IN CONJUNCTION WITH ANY OTHER ANTENNA OR TRANSMITTER.
FOR SALES, PRODUCT INFORMATION & TECHNICAL SUPPORT

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