RTC Manufacturing, Inc.
AP22 & M2M Cheat Sheet

Time Switch Info: Master Group # ________ Group # ________ Location # ________

Make sure to note the time switch address information (Master Group, Group, and Location Numbers) for this location. You can find this information on RTC Connect.

Once the AP22 has been mounted and connected, cut the zip tie (if present) that secures the modem to the silver bracket. Slide the modem off the bracket so the AP22 keyboard is accessible.

Use the AP22 Keyboard to issue the following commands:

1. **Time Switch Address** - Press 22 * (enter)
   This screen displays the location address information. Verify that the information on the screen is correct. If correct, press * (enter) three times to return to the main screen. If incorrect, enter the correct master group, group and location numbers for this location by keying in the numbers and pressing * (enter) to advance the cursor to the next spot. Use the zero before single digit numbers (ex. MG2, G3, L1 would be inputted as 02* 03* 01*). The final * (enter) should take you back to the home screen.

2. **Latitude and Longitude** - Press 41 * (enter)
   Use a smartphone or another device to determine the GPS coordinates of the location in digital format (DD.DDDDD). On this AP22 screen, Input the latitude and longitude by pressing a number, followed by the * (enter) key to move to the next digit on the screen. The Longitude will likely need to begin with a leading zero. Ignore the negative sign for longitude. After inputting the last number on the longitude line, pressing * (enter) will take you back to the home screen.

3. **Communication Verification** - Press 39 * (enter)
   The 39 Command screen will scroll the IMSI and IMEI numbers of the modem. Then the screen will scroll to the CREG status. It should read “Registered OK” or “Roaming”. Press # (exit) to return to the home screen.

4. **Signal Strength** - Press 38 * (enter)
   The screen will display the signal strength of the modem. This number is in dB and ranges from -101 to -40, with -40 being stronger than -101. Ideally, it should read -95 or better (closer to -40). If it doesn’t, an external antenna may be required. Press # (exit) to return to the home screen.

5. **Manual On** – Press 1* (enter) 1 * (enter)
   This will turn the relay on and the lamps should flash.

6. **Digital Adjust** - Press DA ** (enter enter)
   The screen will revert back to the home screen, then scroll through a “3G Connection Active” screen, a “Transmitting” screen, back to the home screen, and then to a “SMS Tx/ RX Commo In Progress” screen, before returning to the home screen. This command is manually connecting to the server to reprogram the AP22 with the latest code.

**Manual Off** – Press 1* (enter) 1 * (enter)
This will turn the relay off and the lamps should stop flashing.

Return the modem to the mount on the front of the time switch and installation is complete.