SECTION 5

USER'S MANUAL

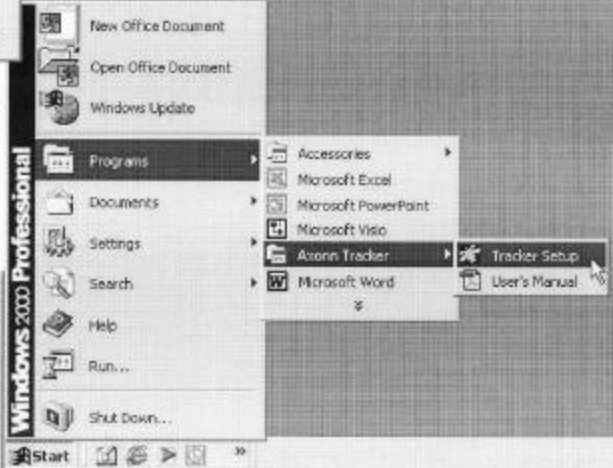# Quickstart AXTracker Setup – PC / PDA Tool

1) Software Installation

• Serial interface requires USB-Serial install as well as AXTracker Setup program install

• Follow instructions for USB-Serial driver install or plug in device and use driver CD as needed.

• Insert AXTracker application CD and follow installation procedure.
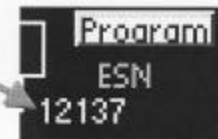
2) Launch Setup Program

• Start program (as shown at right) using:

Start/Programs/Axonn Tracker

• Setup Program should launch loading the DEFAULTPROFILE as shown below:

Profiles Comm About

EZSetup | Interval | Alarms | Options | Info

GPS Fix

Tx Interval 1   Day   Hr   Min
Randomize ✔ 0   12   0

Delay To Start   Day   Hr   Min
Randomize ✔ 0   12   0

Alarm 1 | Off | No GPS Fix
Alarm 2 | Off | No GPS Fix

Sleep   7+ years   Program
Default   ESN
RUN   Batt $$$ Msg **********

Windows 2000 Professional

- New Office Document
- Open Office Document
- Windows Update
- Programs ▶
  - Accessories ▶
  - Microsoft Excel
  - Microsoft PowerPoint
  - Microsoft Visio
  - Axonn Tracker ▶
    - Tracker Setup
    - User's Manual
  - Microsoft Word
- Documents ▶
- Settings ▶
- Search ▶
- Help
- Run...
- Shut Down...

Start

• Connect cable to AXTracker and click under ESN to query for AXTracker serial number.

• Program displays "Querying..." then responds by displaying ESN of connected AXTracker.

• System is ready to program device

Program
ESN
12137

1

3) Using pre-programmed AXTracker settings:

• If device is preprogrammed and only needs initiation:

    • Click RUN

    • Click OK

    • Device is running

Sleep	7+ years	Program
Default		ESN
RUN	Batt $$$ Msg	12137

Run Command
Command OK.
Ok

4) Custom Configurations: Single Interval Setup

• Example: Setup device for 3 location fixes a day, begin operating immediately, randomize fix time by 10 minutes, no alarms enabled:

• Use EZSetup Tab to get started.

• Disable Randomize (turns off tool randomization)

• Set TX Interval1 to 8 hours (3 times a day)

• Clear Delay-to-Start (begin operating now)

• Disable alarms (Off)

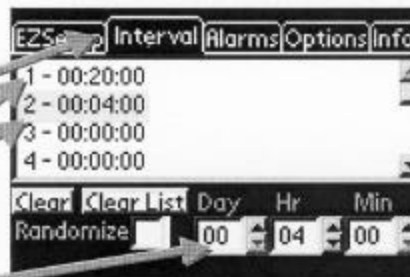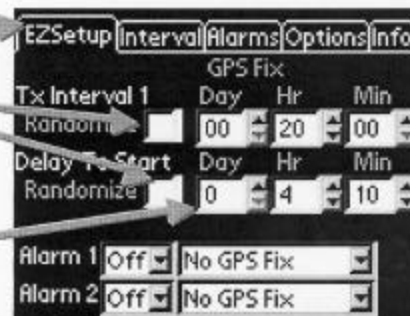• Set TX Interval2 is a zero (Interval tab)

EZSetup	Interval	Alarms	Options	Info

GPS Fix

Tx Interval 1   Day   Hr   Min
Randomize   00   8   00

Delay To Start   Day   Hr   Min
Randomize   0   0   0

Alarm 1   Off   No GPS Fix
Alarm 2   Off   No GPS Fix

Sleep	4.9 years	Program
Default		ESN
RUN	Batt $$$ Msg	13442

EZSetup	Interval	Alarms	Options	Info

1 - 00:08:00
2 - 00:00:00
3 - 00:00:00
4 - 00:00:00

Clear   Clear List   Day   Hr   Min
Randomize   00   00   00

• Setup Satellite Transmitter (Options/Xmitter)

• Set TX Frequency to channel A

• Set TX attempts to 3

• Set Max and Min intervals to 600/300

• Set Power level to Low

• Set Dither (TX randomization) to 10 minutes

• Program device with settings

• Run to begin device operation

EZSetup	Interval	Alarms	Options	Info

RF Channels A ✔   B   C   D
Attempts   3
Retransmitt interval
Max   600   secs   Min   300   secs
Power   Low
Dither   10   mins

Xmitter	Messages	Randomize	Batt $

Sleep		Program
		ESN
RUN	Batt $$$ Msg	13442

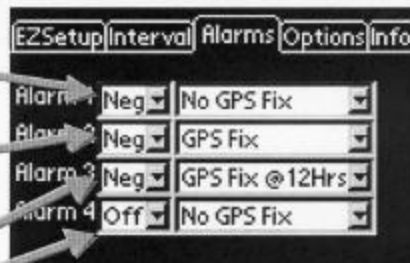# 5) Custom Configurations: Staggered Interval Setup

• Example: Setup device for location fixes every day at 10:00 AM and 2:00 PM, begin operating tomorrow with first report at 10 AM, randomize fix time by 10 minutes, no alarms enabled:

- • Setup device as simple interval (4) above.
    - • Disable alarms, randomization etc.
- • Set repeating interval times using Interval Tab
- • Set TX Interval1 to 20 hours
- • Set TX Interval2 to 4 hours (note interval sum equals 24 hours)
- • Highlight interval and use controls at bottom to adjust
- • Select EZSetup to set Delay-to-Start
- • Remove tool randomization (uncheck)
- • This example assumes it is now 9:50 AM. Set Delay-to-Start equal to 4 hours, 10 minutes. Unit will delay beginning service life till 2:00 PM then begin executing a 20 hour delay. First GPS fix and message will occur at 10:00 the next day.
- • Program device
- • Run program. Device is executing Delay-to-start followed by staggered interval timers

Screen 1:

| EZSetup | Interval | Alarms | Options | Info |

1 - 00:20:00
2 - 00:04:00
3 - 00:00:00
4 - 00:00:00

Clear | Clear List | Day | Hr | Min
Randomize | | 00 | 04 | 00

Screen 2:

| EZSetup | Interval | Alarms | Options | Info |

GPS Fix

Tx Interval 1 | Day | Hr | Min
Random | | 00 | 20 | 00

Delay To Start | Day | Hr | Min
Randomize | | 0 | 4 | 10

Alarm 1 Off No GPS Fix
Alarm 2 Off No GPS Fix

Sleep | Program
Default | 7+ years | ESN
RUN | Batt $$$ Msg | 13442

6) Custom Configurations: Using Alarms

• Alarm 1 setup for immediate, no GPS message. Contact closure on alarm 1 will cause a satellite transmission with null (zero) GPS location data.

• Alarm 2 setup for GPS location. Contact closure on alarm 2 will cause satellite transmission following successful GPS location determination.

• Alarm 3 setup to provide hourly location updates following contact closure. Programmed interval schedule is temporarily suspended on alarm 3 assertion.

• Alarm 4 is disabled.

| EZSetup | Interval | Alarms | Options | Info |

Alarm 1 Neg No GPS Fix
Alarm 2 Neg GPS Fix
Alarm 3 Neg GPS Fix @12Hrs
Alarm 4 Off No GPS Fix

7) Advanced Options: Manual Messaging

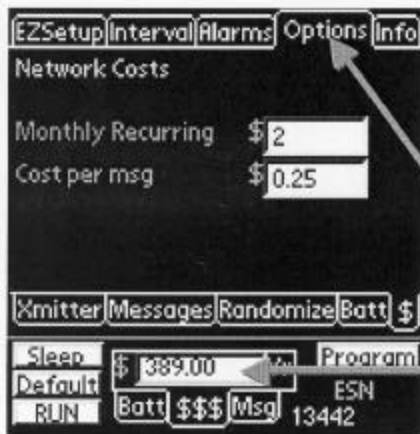• Using the PDA tool to force messaging and confirm GPS operation:

• Send Setup Message forces device to immediately transmit type 3 setup message

• Send Truncated GPS Message forces device to determine GPS location, then append data from scroll window in a type 1 message. Data is space delimited, hexadecimal format. First byte (FF in example is bit masked to 6 Msbits).

• Send Raw Payload Message forces device to send 8.75 bytes of user data from scroll window in a type 2 message. Data is space delimited, hexadecimal format. First byte (FF in example is bit masked to 6 Msbits). Subsequent 8 bytes are sent in order.

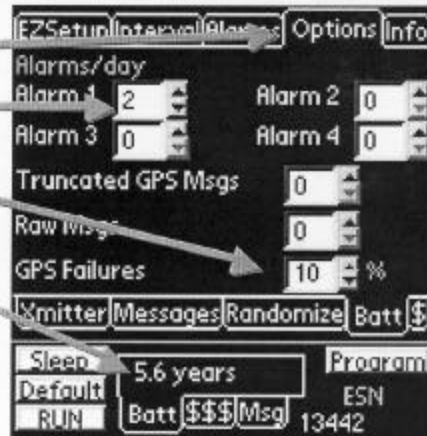• Get GPS data forces device to determine GPS location. Response is message indicating lock time.

• NMEA GPS data is posted to INFO tab

| EZSetup | Interval | Alarms | Options | Info |

Send Setup Message

Send Truncated GPS Message
FF 12 34

Send Raw Payload Message

Get GPS Data

| Xmitter | Messages | Randomize | Batt | $ |

8) Advanced Options : Cost & Message estimator

• Use Options/Batt to estimate occurrence of non-scheduled events (alarms and serial messaging)

• Set events per day to be used by battery life estimator.

• Adjust GPS failure if device is to be mounted with poor visibility to sky.

• Entries used in battery life estimate

• Use Options/$ to set network costs. Entries used to calculate device operational costs per year.

• Network estimates based on messages per year at provided network costs.

| EZSetup | Interval | Alarms | Options | Info |

Network Costs

Monthly Recurring $ 2
Cost per msg $ 0.25

| Xmitter | Messages | Randomize | Batt | $ |

Sleep $ 389.00
Default Program
RUN | Batt | $$$ | Msg | ESN 13442

| EZSetup | Interval | Alarms | Options | Info |

Alarms/day
Alarm 1 2   Alarm 2 0
Alarm 3 0   Alarm 4 0

Truncated GPS Msgs   0
Raw Msgs   0
GPS Failures   10 %

| Xmitter | Messages | Randomize | Batt | $ |

Sleep   5.6 years   Program
Default
RUN | Batt | $$$ | Msg | ESN 13442