



UniTrak¹

USER'S GUIDE

PRODUCT OVERVIEW

The Sentinel UniTrak 1-Piece Global Positioning Satellite device is the latest addition to our TrakSeries line of offender supervision products. Sentinel's 1-Piece GPS unit is a device that is securely attached to the program participant's ankle, which is worn for the duration of the participant's time in the program—providing continuous tracking of the participant's movements while away from the residence. UniTrak has the capability of operating on either CDMA or GSM networks, and as a Sentinel advantage, UniTrak can also provide redundant residential radio frequency monitoring through the use of our Platinum home-based receiver. This design allows for the use of our “Redundant GPS over RF” tracking and monitoring model that eliminates the common issues found in other GPS units.

UniTrak's Features

UniTrak provides more than thirty (30+) hours of continuous monitoring service on a single charge, built-in vibration motors for alert purposes, and locally stores more than 100 geographic zones in the unit. For battery recharging, the device utilizes a power cord with a special magnetized adaptor that connects to the bottom of the device with a break-away design that prevents any damage to the device or cord.

Sentinel's 1-piece GPS device is made of a hypoallergenic, non-irritating plastic and consists of only three (3) pieces - the GPS unit, the ankle strap, and the holding bracket; it weighs a mere 6.5 ounces fully assembled. UniTrak is installed on the program participant—without the use of tools—in less than five (5) minutes due to the unique snap-and-lock design Sentinel uses in its TrakSeries offender supervision equipment. This secure locking mechanism is also part of the UniTrak's tamper features; the unit cannot be unlocked or removed without leaving “tell-tale” signs of the tamper efforts of the program participant.

Sentinel's UniTrak is designed to overcome tamper attempts in a variety of ways. Once the device is properly installed on the participant's ankle, UniTrak cannot (over)

be removed unless the strap is cut or severed, thereby compromising the strap and generating a tamper alert. Also, if the offender attempts to remove the GPS unit itself from the strap harness, a tamper alarm will also be generated. Violations are immediately processed in real-time, except for passive programs that involve historical reporting timeframes. Notification timelines are determined by the agency, and Sentinel is capable of notifying authorized staff immediately or within a designated time-frame. All client participant information is maintained in SenTrak, our secure web-based monitoring application database.

UniTrak's Tracking Capabilities

Sentinel's secure, web-based monitoring system, SenTrak, is capable of continuously initiating, receiving, and storing all calls and voice responses of the participant as well as the data sent by the field monitoring equipment; all events are recorded with the date and time of each occurrence. All field units report-in either via landline or cellular networks to our Monitoring Center.

Our GPS tracking units communicate with the Global Positioning System satellite constellation operated by the United States Federal Government. The UniTrak has a twelve (12) channel GPS receiver to continuously track satellites – the best acquisition capability in the GPS industry; other vendors' GPS units utilize only three or four (3 or 4) in order to determine their location. When in use, the GPS units relay the data via local cell towers that report into our Monitoring Center. This information is then deciphered and alerts are then sent to the designated personnel.

All of our GPS customers are supported by our continuous operations (24/7) Monitoring Center personnel.

TABLE OF CONTENTS

Chapter 1: Technical Specifications

6	Components
10	Spec Sheet

Chapter 2: Installation Process

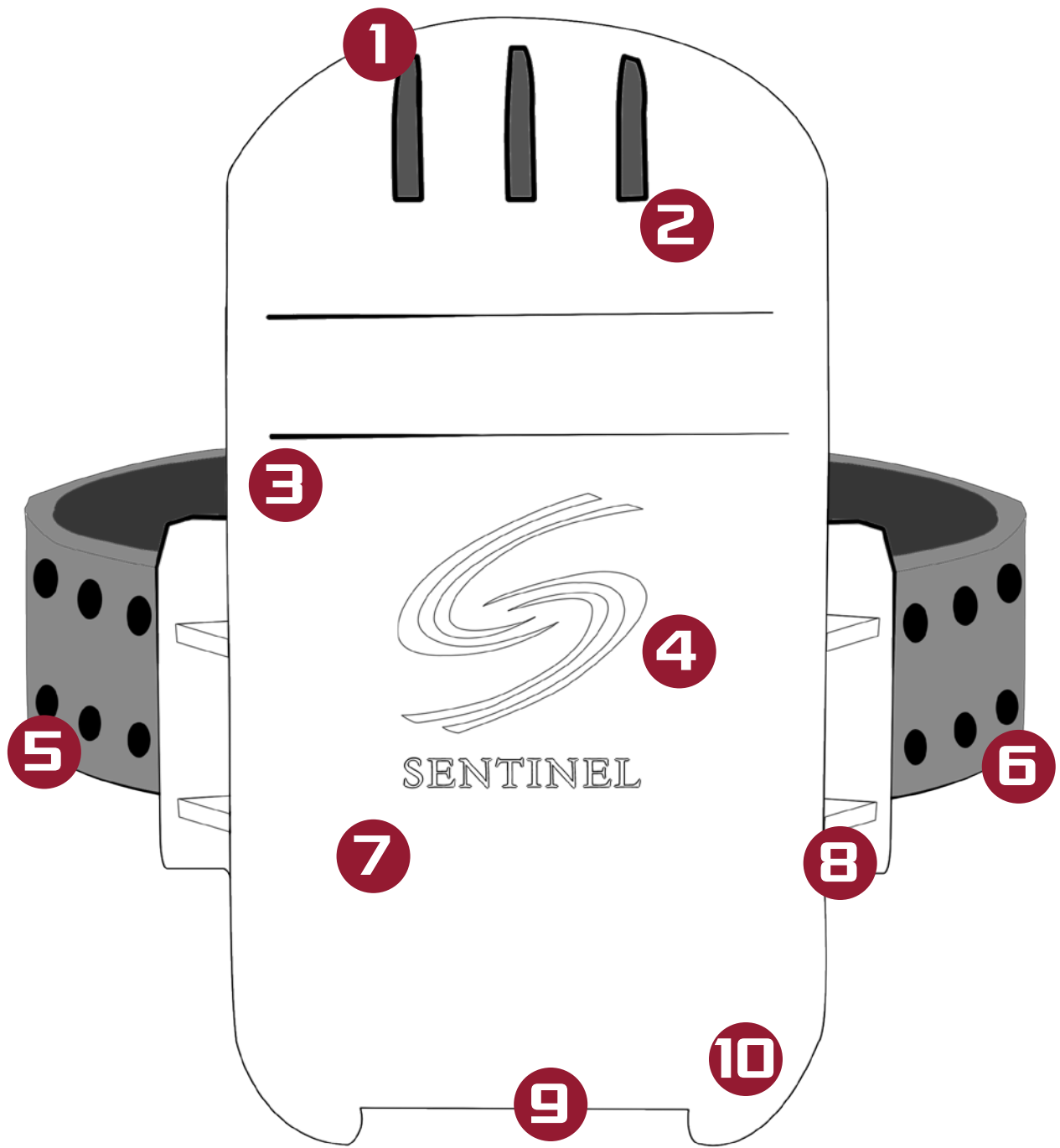
12	Client Setup
22	Installing UniTrak
29	Connecting UniTrak and the ACU

Chapter 3: How It Works

38	Acquiring Points
39	Tracking Modes

TECHNICAL SPECIFICATIONS





COMPONENTS

- 1 LED lights notify offender of status and messages
 - A. A static red light (non-blinking) means there are two (2) hours of battery life remaining
 - B. A static yellow light (non-blinking) means there are six (6) hours of battery life remaining
 - C. A static green light (non-blinking) means the unit is in TAMPER mode
 - D. A red and yellow light will blink at the same time when the unit is plugged in to charge; the red light will continue to blink while the unit is charging
 - E. The red light remains on and blinking for up to one (1) hour after the unit has been unplugged
- 2 Minimalist, ergonomic design to maximize comfort
- 3 On-board memory stores zones and tracking data
- 4 Industry leading battery life of 30+ hours
- 5 Buckle-less strap for easy installation without the need for tools
- 6 Comfortable, hypoallergenic strap
- 7 Durable, water- and shock-resistant design
- 8 Tamper alert technology
- 9 Easy to use "break-away design" charging port
- 10 Vibration motor for alert purposes



Sentinel's one-piece GPS device is made of a hypoallergenic, non-irritating plastic and consists of only three (3) pieces - the GPS unit, the ankle strap, and the holding bracket; it weighs a mere 6.5 ounces fully assembled.

COMPONENTS



The UniTrak GPS unit is made of a non-irritating, polycarbonate ABS plastic. The unit is sealed and designed to operate under normal atmospheric conditions and temperatures. It is 100% water-proof and shock-resistant and allows a participant to conduct all normal daily activities, including showering, without affecting the unit's operation. The GPS unit is easily cleaned / sanitized with a germicidal cleaner, such as do-it ALL™.



UniTrak's ankle-strap is 14.5" long and adjustable in ½" increments. It is made of a proprietary, hypoallergenic Elastomer material and contains a non-metal conductive material that will not cause injury to the installer or wearer. A "tamper" alert will be reported by the UniTrak if cut.

The strap is disposable.



The backplate, used to lock and secure the UniTrak GPS unit and strap to the participant's ankle, is made from a non-irritating, polycarbonate ABS plastic. Tools are not needed to secure the GPS unit to the backplate; the entire unit is secured in place with a snap-and-lock design.

The backplate is disposable.

SPEC SHEET

SIZE	4.5" x 2.5" x 1.5"
WEIGHT	6.5 oz. w/ battery, backplate and strap
TYPE OF TRANSCIEVER	FM (Frequency Modulated)
TRANSMITTING FREQUENCY	~433 MHz
TRANSCIEVER RANGE	450' (150 m) Free Air +/- 10%
TRANSMISSION INTERVAL	15 - 20.5 seconds +/- 10%
TYPE OF GPS RECEIVER	High Sensitivity Multi-Channel Receiver
GPS CAPTURE RATE	One (1) latitude and longitude coordinate per minute
GPS TRANSMISSION INTERVAL	Latitude and longitude delivered every 10 minutes
ALARMS MONITORED	Zone Alert, Low Battery, Charge On, Charge Off, Tamper
OPERATING TEMPERATURE RANGE	32° F - 158° F (0° C - 70° C) +/- 10%
STRAP TYPE	Conductive, hypoallergenic, tamper detecting, multi-layer strap
STRAP LENGTH	14.5" (36.8 cm)
BATTERY TYPE	Lithium-Ion Rechargeable Battery
BATTERY LIFE	24 - 32 hours on full charge
ENCLOSURE TYPE	High impact, hypoallergenic, water- and moisture-proof, shock-resistant plastic
LOCKING BASE PLATE	Disposable, high-impact, hypoallergenic, water- and moisture-proof, shock-resistant plastic
UNITRAK COMPONENTS	Transmitter body, locking snap-on backplate, strap, six-foot charging cable

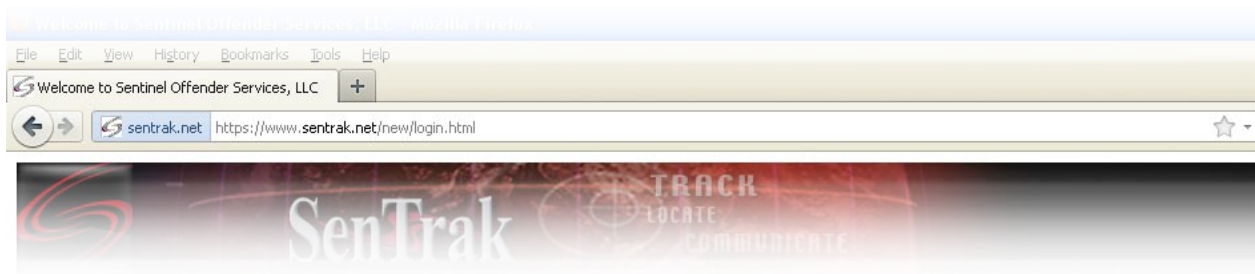
INSTALLATION PROCESS



This section describes the installation process of the UniTrak 1-Piece GPS device. In brief, installation occurs in four (4) easy steps:

- Charge the UniTrak 1-Piece GPS device
- Enter the participant's information and required data in SenTrak
- Acquire network coverage and GPS signal
- Install the unit on the participant

IMPORTANT NOTE: UniTrak must be charged for a **minimum** of 90 minutes before the start of the installation process to ensure the two (2) batteries within the unit are fully charged. Once fully charged, go to <https://www.sentrak.net> and log-in with your Sentinel-provided username and password.



1. Click on the **Add Client** tab.



CLIENT SETUP

- The screen will refresh and client information fields will appear. Fill-in all required fields highlighted red.

Offender Management Solutions That Work for You

SENTINEL

[Home](#)[Group Status](#)[Client Status](#)[Add Client](#)[Edit / Delete](#)[Schedule](#)[Reports](#)

NEW ENROLLMENT
This form allows an offender to be enrolled in any of our monitoring systems in SenTrak. Mandatory fields are indicated in RED, as they are required to proceed.

Once all necessary offender information is entered, press "Submit" to proceed, and create a court schedule. If an error is made, press "Reset" to undo changes.

First Name:

Last Name:

SSN:

DOB:

Jan. ▾

01 ▾

2005 ▾

Language:

English:

☐

Spanish:

☐

Gender:

Male:

☐

Female:

☐

Address:

County:

City:

State:

Zip:

Home Ph:

()

-

i.e. (999)555-1212

Work Ph:

()

-

i.e. (999)555-1212

Acct. Type:

▾

Time Zone:

▾

Dock:

No ▾

Select Acct. Type to access fields below.

TrakMate Ph:

()

-

i.e. (999)555-1212

TrakMate IMEI:

i.e. 351242000002850 or 145243BA

Transmitter ID:

i.e. 18072

Receiver Type:

▾

Receiver ID:

i.e. 15929

Select "Yes" for Dock to access the field below.

Dock ID:

i.e. 01234

☐ Send OTA

Court:

Court Number:

PO First Name:

PO Last Name:

Offense:

REF #:

Client Type:

▾

CL #:

▾

Co-Pay:

Comments:

Submit

Reset

3. Click the arrow for the **Acct. Type** field to access the drop-down menu
 - a. If the client does not have an ACU (home-based receiver), select from the drop-down menu:
 - “GPS1” for *Passive* tracking, or
 - “GPS2” for *Intermediate* tracking, or
 - “GPS3” for *Active* tracking
 - b. If the client has an ACU (home-based receiver), select from the drop-down menu:
 - “RF/GPS1” for *Passive* tracking, or
 - “RF/GPS2” for *Intermediate* tracking, or
 - “RF/GPS3” for *Active* tracking

SENTINEL
Offender Management Solutions That Work for You

Home Group Status Client Status Add Client Edit / Delete Schedule Reports

NEW ENROLLMENT
This form allows an offender to be enrolled in any of our monitoring systems in SenTrak. Mandatory fields are indicated in RED, as they are required to proceed.

Once all necessary offender information is entered, press "Submit" to proceed, and create a curfew schedule. If an error is made, press "Reset" to undo changes.

First Name: **Last Name:**

SSN: **DOB:** Jan. 01 2005

Language: English: ☐ Spanish: ☐ **Gender:** Male: ☐ Female: ☐

Address: **County:**

City: **State:** **Zip:**

Home Ph: () - i.e. (999)555-1212 **Work Ph:** () - i.e. (999)555-1212

Acct. Type: **Time Zone:**

Dock:

Select Acct. Type to a w.

TrakMate Ph: - i.e. (999)555-1212

TrakMate IME: i.e. 351242000002850 or 145243BA

Transmitter ID: i.e. 18072

Receiver Type:

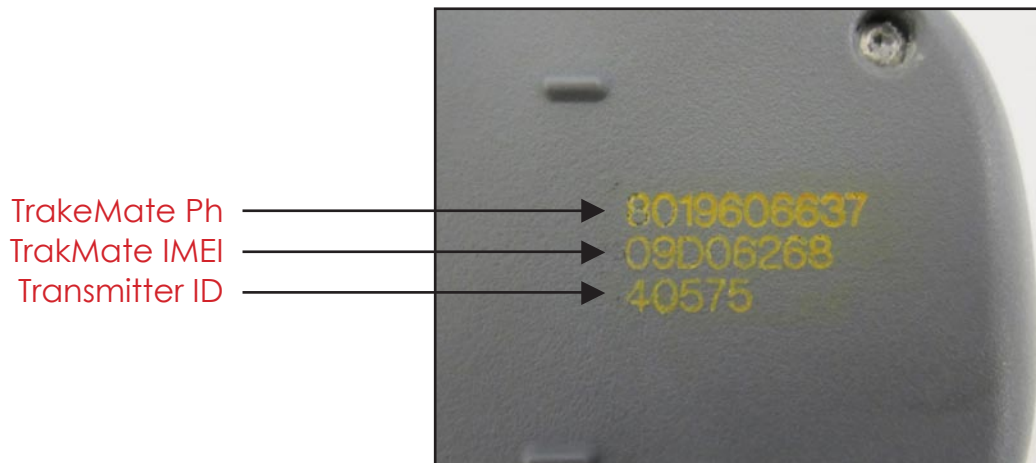
Receiver ID: i.e. 15929

Select "Is" for Dock to access the field below:

Dock ID: i.e. 01234

CLIENT SETUP

4. When the **Acct. Type** is selected the gray fields will become activated and will appear **red**.
- **TrakMate Ph** field, type the first number listed on the back of the UniTrak device
 - **TrakMate IMEI** field, type the second number listed on the back of the UniTrak device
 - **Transmitter ID** field, type the last number listed on the back of the UniTrak device; if the client will be assigned an Area Control Unit (home-based receiver), it is important to make note of the transmitter ID as it will be required for installation of the ACU
- NOTE:** When entering any serial number, only zeros (0) are used – not the letter “O”.



5. If the program participant has been assigned an ACU (home-based receiver), click the arrow for the **Receiver Type** field to access the drop-down menu

- Select “ACU” for a *landline* home-based receiver unit
- Select “Cell ACU” for a *cellular* home-based receiver unit

To prevent data loss, if an error is made, press "Reset" to undo changes.

Act. Type: Date Zone:

Dock: No

Select Act. Type to access fields below.

TrakMate Ph: () - i.e. (999)555-1212

TrakMate IMEI: i.e. 351242000002850 or 145243BA

Transmitter ID: i.e. 18072

Receiver Type:

Receiver ID: i.e. 15929

Select "Yes" for Back to

Dock ID: i.e. 01234

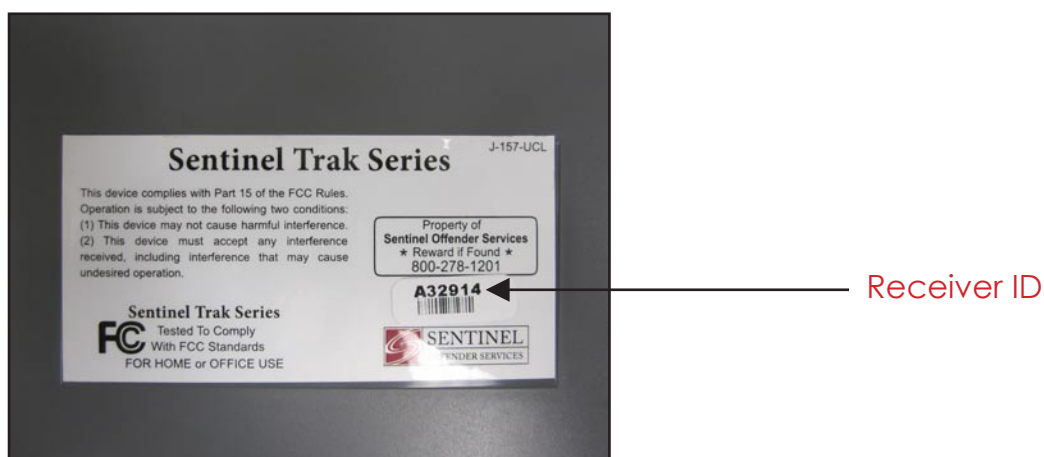
☐ Send OTA

Court: Court Number:

PD First Name: PD Last Name:

6. Type receiver number (provided on the underside of the home-based receiver) in the **Receiver ID** field.

NOTE: do not include letters. For example, “A12345” would be entered as “12345”.



CLIENT SETUP

7. Select the checkbox next to “**Send OTA**” and click the **Submit** button at the bottom of the page. This will send the entered client information to our Monitoring Center system to update the system.

Transmitter ID: i.e. 18072

Receiver Type:

Receiver ID: i.e. 15929

Select "Yes" for Dock to access the field below.

Dock ID: i.e. 01234

☒ Send OTA

Court: Court Number:

PO First Name: PO Last Name:

Offense:

REF #: Client Type:

8. The page will update and the **Create Client Schedule** screen will appear.
NOTE: The default setting for each client schedule is “Closed” – the client would not be permitted to leave the residence at all for the day.

SENTINEL
Home
Group Status
Client Status
Add Client
Edit / Delete
Schedule
Reports

CREATE CLIENT SCHEDULE

The schedule will define the leave and return times for each day of the week. This schedule will remain in effect until modified by a change in the permanent or temporary schedule.

Using the pulldown menus in each day's leave and return windows, you will select the appropriate times. You can set up to three distinct curfews for each day of the week.

Once a schedule is entered for each day of the week, select "Submit" to implement the schedule.

Closed: Selecting the "Closed" box will result in a participant's schedule being "Locked Down". This selection implies the participant is *not* permitted to leave his/her residence. You do not enter times in the pulldown menus if you are creating a "Closed" schedule.

Open: Selecting the "Open" box will permit the participant to leave and return at anytime throughout the day or night without generating an alert. An open schedule implies the client has been given permission to leave the residence.

Create Client Schedule

JOHNATHAN DOE

Client ID: ID304093

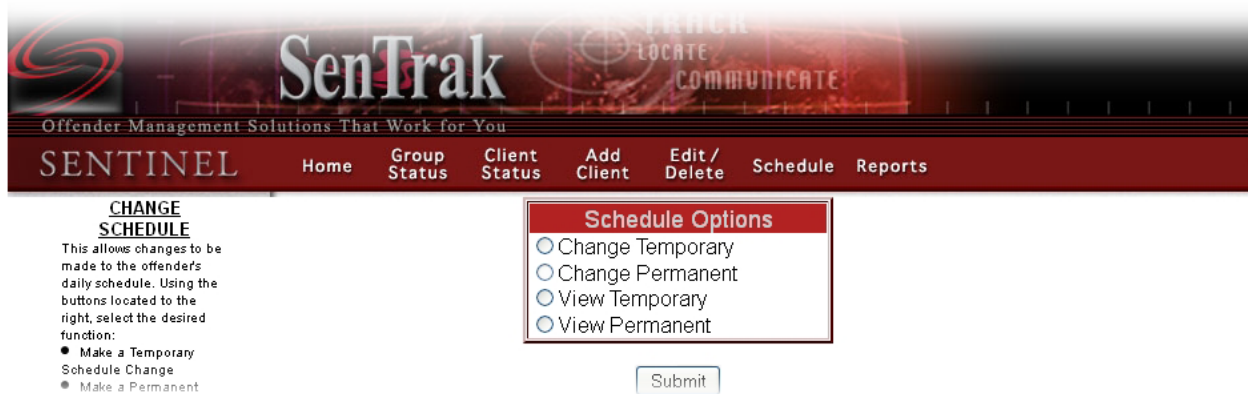
RF/GPS3

	Closed	Open	Leave 1	Return 1	Leave 2	Return 2	Leave 3	Return 3	Wrap
SUN	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>	<input type="checkbox"/>
MON	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>	<input type="checkbox"/>
TUE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>	<input type="checkbox"/>
WED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>	<input type="checkbox"/>
THU	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>	<input type="checkbox"/>
FRI	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>	<input type="checkbox"/>
SAT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>	<input type="checkbox"/>

9. Enter the client's leave and return schedule by selecting the days of the week and the specific times of the day the client is permitted to leave his/her residence.
10. Once the information is correctly entered, click the **Submit** button at the bottom of the page.

11. The page will update and the “Schedule Options” screen will appear.

This screen provides options on updating the temporary and permanent schedules of the participant.



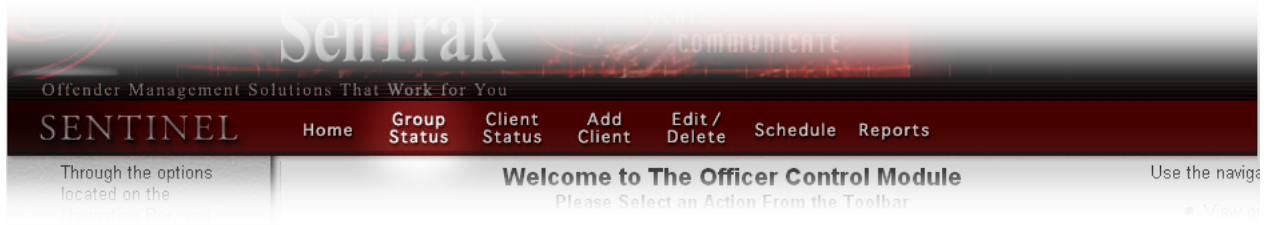
12. To continue the installation process, **Log out** of SenTrak by clicking on the **Home** tab and clicking the “**Log Out**” selection at the bottom of the page.

13. Unplug the UniTrak 1-Piece GPS device from the charging cord and take the unit **outdoors** so that it can acquire GPS from the orbiting satellites.

14. **Wait** for the **green** light to come on; this will take approximately 10 minutes during which the unit is acquiring network coverage and GPS. The unit will also show that it is in TAMPER status.

CLIENT SETUP

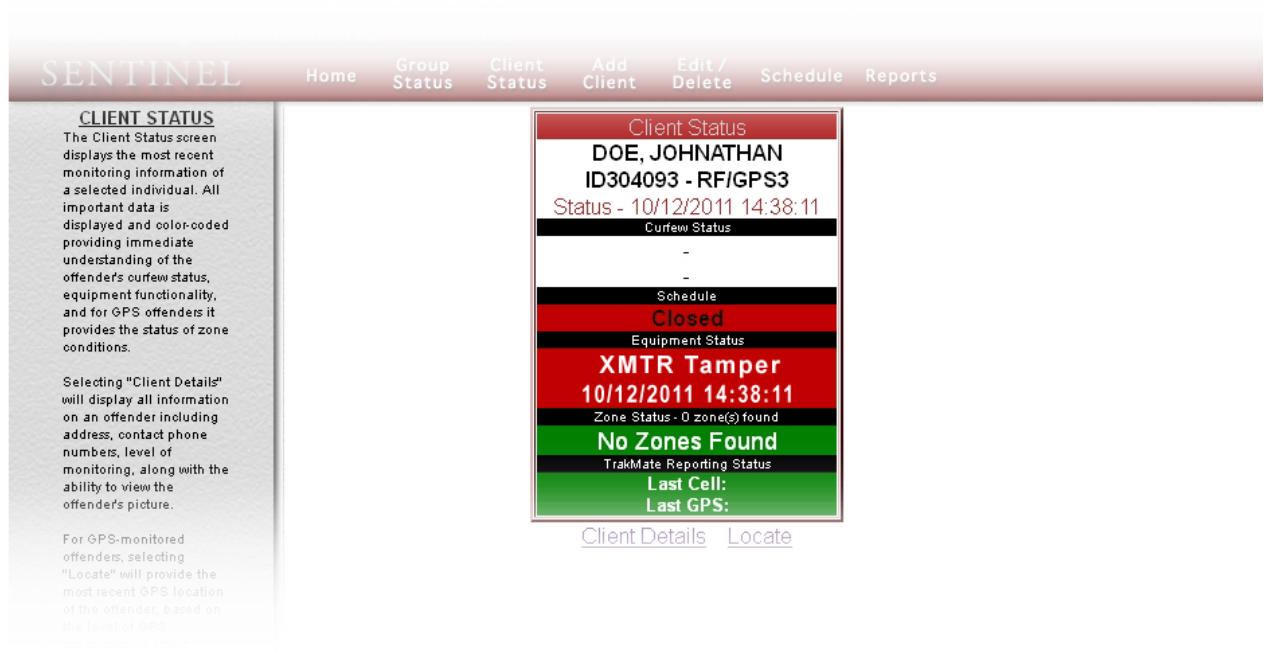
15. Take the unit back inside and **log in** to SenTrak (<https://www.sentrak.net>) using your Sentinel-provided username and password.
16. Click the **Group Status** tab and select "Additions". Click the **Submit** button.



17. The "**Additions**" screen will appear with the recently added client(s). Click the arrow to access the drop-down menu to select the client you want. Click the **Submit** button.

NOTE: "Equipment Status" will show that the UniTrak device is in TAMPER.

18. Click the **Locate** button to verify the location of the GPS device.



19. The screen will refresh and a map will appear with a **red star** (★) indicating a GPS point has been received. Choose “Map”, “Satellite”, or “Hybrid” to change the display of the map. (“Hybrid” has been selected in the image below.)

SENTINEL

HomeGroup StatusClient StatusAdd ClientEdit / DeleteScheduleReports

LOCATE

For offenders on GPS supervision, this feature provides the latest GPS information on the offender's location, based on the level of GPS supervision being used by the Agency. The yellow star represents the offender's latest position.

For more detailed information, the Zoom In button can be selected to provide additional mapping details. For a wide view of the offender's position surroundings, the Zoom Out button will provide a larger view of the offender's surrounding area.

For viewing historical information, select the History button to proceed. Use the pull down menus in the date and time fields

Client:ID30057 - DOE, JONATHAN TrakMate: (801)259-7173
Home:123 FAKE ST IRVINE, CA

MapSatelliteHybrid

History

CLIENT SETUP

20. UniTrak is now ready for installation on the participant's ankle.

IMPORTANT NOTE: Network coverage and GPS signal ***must be acquired prior to installation*** of the device on the program participant's ankle. Please refer to steps 17 - 25 under Installation Process: Client Setup.

After acquiring network coverage and GPS and confirming the location on the map, installation of the UniTrak 1-Piece GPS device on the program participant's ankle can be performed in approximately five (5) minutes ***without*** the need for special tools.

Sizing the Strap

NOTE: The ½" increment sizing lines should be showing on the **outside** (away from the client's skin) of the strap during installation.

1. Insert the end of the strap with the quality control numbers (shown in 2 circles) into the backplate.



INSTALLING UNITRAK

2. Press the end of the strap with the four (4) holes against the four (4) posts on the backplate securing the end of the strap to the backplate.



3. Ask the participant to stand. ***The strap should be sized against the ankle with the participant standing.***
4. Place the backplate against the participant's skin directly above the anklebone – outside of the leg – and wrap the strap around the client's ankle.
5. Insert the loose end of the strap into the other side of the backplate looping the strap around the participant's ankle.



6. Pull the loose end of the strap to tighten the strap around the participant's ankle, leaving enough space so that one (1) finger can be inserted between the strap and the client's leg. The strap should be snug but not pinch the ankle. The backplate should firmly lie against the side of the client's leg and not allow the GPS device to spin around the client's ankle.

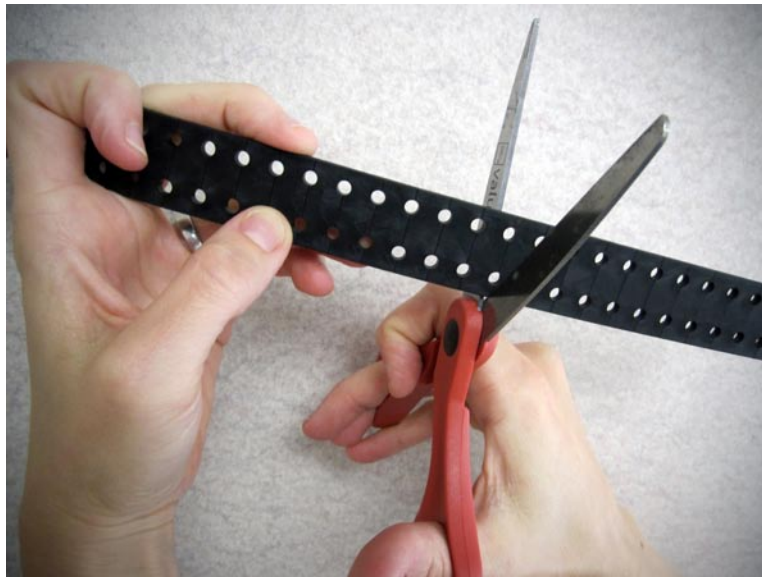


7. Using a pen, mark where the strap should be cut on the ½" increment lines.
NOTE: You should leave enough room on the strap length for the four (4) holes of the strap's loose end to securely fit over the remaining four (4) posts of the backplate. When in doubt, always cut the strap longer than what is needed and recheck the size.



INSTALLING UNITRAK

8. Remove the strap and backplate from the participant's ankle and cut the strap at the mark made during Step 6.



Installing the Strap

9. Reinsert the strap end with the quality control numbers (non-cut end) through the backplate and press the four (4) holes on the strap-end on the four (4) posts on the backplate securing the end of the strap to the backplate.

NOTE: The sizing lines must be on the **outside** (away from the client's skin).

10. Ask the participant to stand. ***The strap should be sized against the ankle with the participant standing.***
11. Place the backplate against the participant's skin directly above the anklebone – outside of the leg – and wrap the strap around the client's ankle.
12. Insert the loose strap end (cut end) into the other side of the backplate looping the strap around the participant's ankle.
13. Pull the loose end of the strap (cut end) to tighten the strap around the participant's ankle, leaving enough space so that one (1) finger can be inserted between the strap and the client's leg. The strap should be snug but not pinch the ankle. The backplate should firmly lie against the side of the client's leg and not allow the GPS device to spin around the client's ankle.

14. Press the four (4) holes on the loose end of the strap (cut end) against the four (4) posts of the backplate securing both ends of the strap to both sides of the backplate



Installing the UniTrak

15. While the two (2) ends of the strap are attached (but NOT locked in place) to the backplate, line-up the unit's securing clips to the backplate's securing clips (located on the outer edges of the backplate) and squeeze one (1) side of the UniTrak unit together with the backplate until an audible **click** is heard.



INSTALLING UNITRAK

16. Squeeze the other side of the UniTrak GPS unit to the backplate until an audible **click** is heard.

NOTE: The securing clips guide the GPS unit and backplate together in order to securely attach the GPS unit, strap, and backplate to the participant's ankle. Two (2) clicks should be clearly heard as the GPS unit is fastened to the backplate with this snap-and-lock design.

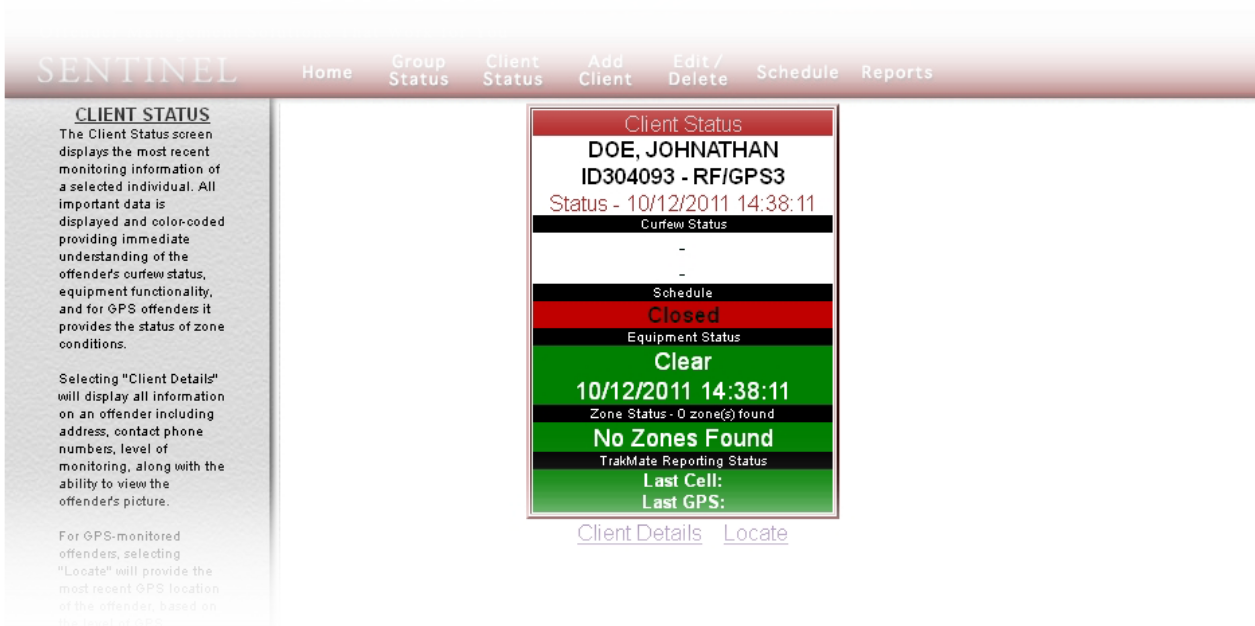


17. Confirm the UniTrak GPS unit is securely fastened to the backplate by trying to pull the two (2) pieces apart. If any gap appears between the GPS unit and the backplate, firmly squeeze the two (2) together until another **click** is heard.



INSTALLING UNITRAK

18. Proper installation is confirmed when the **green** light on the device turns off (NO lights showing on the UniTrak) and the "Equipment Status" on the **Client Status** screen within SenTrak (<https://www.sentrak.net>) reads "Clear".



19. Installation of the UniTrak 1-Piece GPS device is complete for a client without an ACU (home-based receiver).

We have provided installation instructions for the ACU (home-based receiver) on the following pages.

CONNECTING UNITRAK AND THE ACU

Connecting the ACU (home-based receiver) to the UniTrak GPS device

The Area Control Unit (ACU) is only for clients who are enrolled in a GPS and RF program.

The Platinum DualTrak II is Sentinel's newest ACU and features the latest in home monitoring technology. To ensure that unauthorized personnel do not access the unit's settings mode, the Platinum DualTrak uses a secure code to access the **Function Mode** instead of the external software lock used with older generations of home-based receivers.

1. Make sure the AC power cord is securely tightened to the back of the ACU; if not, twist the end of the cord to make sure that it is screwed on tightly.
2. Plug the loose end of the ACU's power cord (large black box with plug) in to a standard wall outlet.
 - a. The ACU will make a "beep" noise and boot up similar to a computer; the LCD will display the ACU number (receiver number located on the underside of the ACU used in Step # 6 under "Client Setup") on the left-hand side and the UniTrak number (transmitter number) on the right-hand side.

NOTE: The transmitter number (right-hand side of the LCD screen) must match the 3rd number on the back of the UniTrak – the transmitter number used in Step # 4 under "Client Setup". **Verify that the numbers match** by checking the ACU display against the transmitter number noted when entering information in to Sentrak during Client Setup: Installation Process (#4).
 - b. The ACU will enter **Run Mode** and display the date and time.

3. If the UniTrak number (transmitter number on the right-hand side of the LCD screen) does not match the number shown on the underside of the UniTrak (the transmitter number used in Step # 4 under "Client Setup"), the transmitter serial number must be changed in the ACU to match the number on the underside of the UniTrak. **The UniTrak and ACU will not communicate if these numbers do not match.** To change the transmitter number:

- a. The following code **must** be entered on the front panel of the ACU (home-based receiver) to access the **Function Mode**:



- Press the "a" button three (3) times
- Press the "*" button one (1) time
- Press the "a" button one (1) time
- Press the "b" button one (1) time
- Press the "a" button one (1) time

IMPORTANT NOTE: If the access code is incorrectly entered, the ACU will be locked for 30 minutes. The unit's LCD will display LOCKED and the buttons will remain inactive.

- b. The LCD screen will display two (2) choices:
- A = Function Mode
 - B = Turn ACU Off
- c. Press the "A" button to enter **Function Mode**
- d. Continue pressing the "A" button to scroll through **Function Mode** until the LCD screen reads:
- A = Next Function
 - B = Configure
- e. Press the "B" button to access the "Configure" feature
- f. This will enter the **Extended Function Mode** and the LCD screen will display:
- A = Next Function
 - B = Set Language

CONNECTING UNITRAK AND THE ACU

- g. Press the “A” button to scroll through **Extended Function Mode** until the LCD screen displays:
 - A = Next Function
 - B = Set PID
- h. Press the “B” button to access “Set PID”; this will allow you to enter the correct UniTrak number (the transmitter number used in Step # 4 under “Client Setup”) so that the number on the underside of the UniTrak and the number within the ACU match.
- i. The cursor will blink over the 1st number:
 - To change this number, press the “B” button until the number you want is displayed. For example, if the number reads “0”, you will press the “B” button five (5) times to show the number “5” on the screen.
 - Once this number is correct, press the “A” button to move the cursor to the next number.
 - Repeat this procedure until all of the numbers now match the UniTrak number (the transmitter number used in Step # 4 under “Client Setup”) on the underside of the UniTrak.
 - When all of the numbers have been changed to match, press the “A” button to move the cursor off the LCD screen.

NOTE: If a number is incorrectly entered, press the “B” button to place the cursor back on the 1st number and move cursor as described in Step “i” above to the desired number to change.
- j. Press “A” button to move to the screen display:
 - A = Next Function
 - B = Exit
- k. Press the “B” button to exit.
- l. The ACU will go through a re-boot sequence again and display the ACU number (receiver number on the left-hand side) and the modified UniTrak number (transmitter number on the right-hand side). **Confirm UniTrak number and transmitter number are the same.** If not, repeat Steps “a” through “k” above.

4. When the UniTrak number (the transmitter number used in Step # 4 under “Client Setup”) on the underside of the UniTrak and the transmitter number in the ACU (transmitter number on the right-hand side) match, the ACU is ready for “Quick Install” within **Function Mode**.

- a. The following code **must** be entered on the front panel of the ACU (home-based receiver) to access the **Function Mode**:



- Press the “a” button three (3) times
- Press the “*” button one (1) time
- Press the “a” button one (1) time
- Press the “b” button one (1) time
- Press the “a” button one (1) time

IMPORTANT NOTE: If the access code is incorrectly entered, the ACU will be locked for 30 minutes. The unit's LCD will display LOCKED and the buttons will remain inactive.

- b. The LCD screen will display two (2) choices:

- A = Function Mode
- B = Turn ACU Off

- c. Press the “A” button to enter **Function Mode**; the screen will read:

- A = Next Function
- B = Clear Events

- d. Press the “B” button to access the “Clear Events” feature

- Press the “A” button to actually clear the event memory within the ACU
- Press the “B” button again to access the “Clear Events” feature
- Press the “A” button again to clear the event memory within the ACU; doing so twice makes sure that the ACU's memory has been completely wiped clean.

- e. Press the “A” button to move to the next function; the screen will display:

- A = Next Function
- B = Quick Install

CONNECTING UNITRAK AND THE ACU

- f. Press the “B” button to access the “Quick Install” feature
 - The LCD screen will display “Waiting for PID”; the PID is the UniTrak number (the transmitter number used in Step # 4 under “Client Setup”)
 - Once the PID is located, the screen will display:
 - A = Continue
 - B = Set Range
 - Press the “B” button to set the range. The range should be set for “000”; if it does not show all zeros (0) the range must be changed to read “000”.
 - Press the “B” button to display the cursor over the 1st number
 - Press the “B” button until the number reads “0”
 - Press the “A” button to move the cursor to the next number.
 - Repeat this procedure until all of the range numbers read “0”.
 - When all of the numbers read “0”, press the “A” button to continue
 - The LCD screen will display:
 - *Check Phone Line* for a landline-based ACU
 - *Everything Ok, Calling in Now* for a cellular-based ACU
5. Instructions for completing the ACU installation for the individual landline-based and cellular-based units are provided below.

To finalize the installation of a LANDLINE-based ACU:

1. Take the phone line and plug it in to the back of the ACU in the hole marked "Line"
2. The LCD screen display will read *Everything Ok, Calling in Now*
3. The LCD screen will then display *Starting Call* with a timer
4. The LCD screen will then display *Phone in Use* and a receiver icon will blink
5. Once the call is successful, the LCD screen will display *Call Successful*
6. The ACU will automatically perform this call-in function twice to make sure the unit is successfully communicating with Sentinel's National Monitoring Center
7. After the second call-in, the ACU will automatically switch to **Run Mode**; the hook-up is complete.
8. Log in to <https://www.sentrak.net> using the Sentinel-provided username and password and click **Reports**
 - a. The "Report Menu" screen will appear
 - b. Click "All Activity" under the desired client's name; if the desired client's name is not showing in the "Individual" field, click the arrow to access the drop-down menu of client names.
 - c. Click the **Submit** button
 - d. The "Individual: All Activity" screen will appear; in order to confirm a "good hook up", the screen should read:
 - *Events Cleared*
 - *Hello*
 - *Enter* [or *Unscheduled Enter* if the client's schedule has not yet been entered in SenTrak]

CONNECTING UNITRAK AND THE ACU

To finalize the installation of a CELLULAR-based ACU:

1. As the cellular-based ACU calls Sentinel's National Monitoring Center, the LCD screen will change. The screen will 1st read: *Everything Ok, Calling in Now*
2. The LCD screen display will change to read *Modem Off*
3. The LCD screen display will change to read *Modem On*
4. The LCD screen display will change to read *Registering Modem*
5. The LCD screen display will change to read *Registered*
6. The LCD screen display will change to read *Signal*
7. The LCD screen display will change to read *Connected*
8. Once the call is successful, the LCD screen will display *Call Complete*
9. The ACU will automatically enter **Run Mode**
10. The ACU is preparing to make a second call to Sentinel's National Monitoring Center within five (5) minutes; this will be performed automatically to make sure the unit is successfully communicating with Sentinel's National Monitoring Center. However to speed-up this process:
 - a. The following code **must** be entered on the front panel of the ACU (home-based receiver) to access the **Function Mode**:



- Press the "a" button three (3) times
- Press the "*" button one (1) time
- Press the "a" button one (1) time
- Press the "b" button one (1) time
- Press the "a" button one (1) time

IMPORTANT NOTE: If the access code is incorrectly entered, the ACU will be locked for 30 minutes. The unit's LCD will display LOCKED and the buttons will remain inactive.

CONNECTING UNITRAK AND THE ACU

- b. The LCD screen will display two (2) choices:
 - A = Function Mode
 - B = Turn ACU Off
 - c. Press the “A” button to enter **Function Mode**
 - d. Continue pressing the “A” button until the screen reads:
 - A = Next Function
 - B = Clear Events
 - e. Press the “B” button to force the ACU to automatically call in to Sentinel's National Monitoring Center
11. After the second call-in, the ACU will automatically switch to **Run Mode**; the hook-up is complete.
12. Log in to <https://www.sentrak.net> using the Sentinel-provided username and password and click **Reports**
- a. The “Report Menu” screen will appear
 - b. Click “All Activity” under the desired client's name; if the desired client's name is not showing in the “Individual” field, click the arrow to access the drop-down menu of client names.
 - c. Click the **Submit** button
 - d. The “Individual: All Activity” screen will appear; in order to confirm a “good hook up”, the screen should read:
 - *Events Cleared*
 - *Hello*
 - *Monitor Check-In*
 - *Enter [or Unscheduled Enter if the client's schedule has not yet been entered in SenTrak]*

HOW IT WORKS

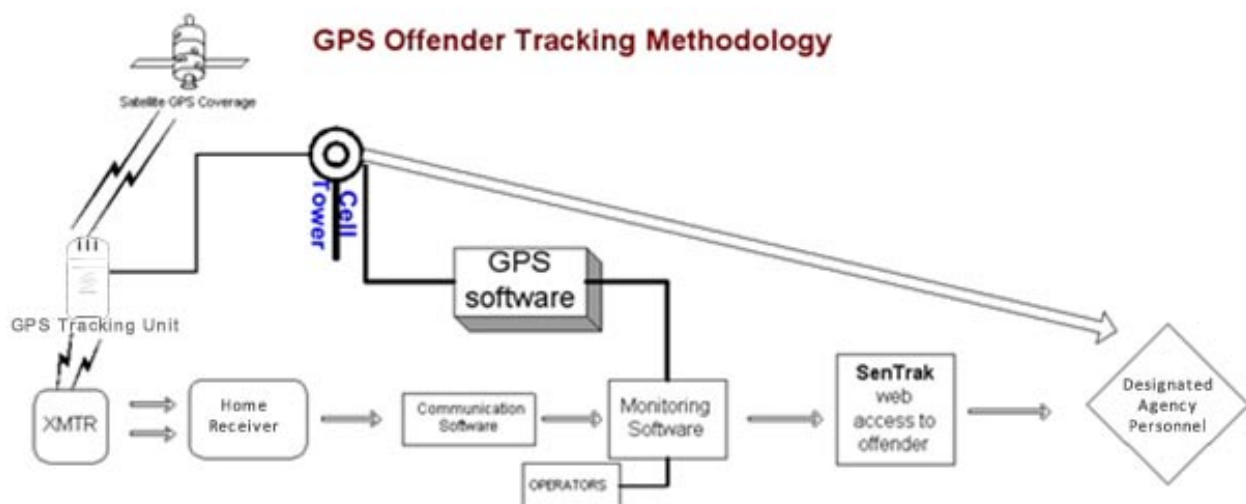


ACQUIRING POINTS

The UniTrak GPS tracking unit communicates with the Global Positioning System satellite constellation operated by the United States Federal Government and is capable of gathering GPS points at whatever frequency required by an agency. The UniTrak has a twelve (12) channel GPS receiver to continuously track satellites – the best acquisition capability in the GPS industry.

UniTrak obtains data regarding its position from orbiting satellites and transmits the information to our National Monitoring Center for processing. Individual notifications depend using either landlines or cellular networks, depending on customer requirements. Individual notifications depend on agency requirements. UniTrak collects position points at a rate of one-point-per-minute, stores this data in its on-board memory, and sends the information to Sentinel's National Monitoring Center at designated intervals based on the tracking mode selected by the agency – Active, Hybrid, or Passive. Please see the next page for information on the tracking modes.

Sentinel's monitoring system deciphers the information received by UniTrak and alerts are sent to the designated personnel as required (email, pager, telephone, etc.). Each position point consists of six (6) pieces of data used to accurately track the program participant: longitude, latitude, date, time, direction of travel, and speed of travel.



TRACKING MODES

Sentinel's UniTrak 1-Piece GPS device can use either a CDMA or GSM cellular network to communicate with Sentinel's National Monitoring Center and provides three (3) distinct levels of tracking – Active, Hybrid, or Passive – without the need for a software or hardware reconfiguration. In each tracking mode, UniTrak acquires the same position data at the same rate – one point per minute; however, the frequency of transmission of the data to Sentinel's Monitoring Center is affected by the tracking mode as described below.

In **Active** tracking mode, the UniTrak communicates the acquired position points every ten (10) minutes to provide real-time tracking data. In the event of an alert or tamper, the data is sent immediately.

In **Hybrid** tracking mode, the UniTrak will provide “intermediate” tracking where data can be polled as needed by the authorized staff member (Sentinel or Agency). Points are still gathered on a minute by minute basis so there is no loss of tracking data. This system is commonly used when immediate agency staff response is not guaranteed, such as for after-hour/holiday time frames. Similar to Active, geographic zones can be used but there is no real-time notification as that is a feature of active tracking.

In **Passive** tracking mode, the UniTrak acquires and stores data points over a four (4) hour period and then sends the collected information to the Monitoring Center at the time of docking. All data and reporting is done on a historical, next day basis.

However, the monitoring system is programmed to generate an alarm if any GPS unit is one (1) hour or more late for a regular check-in with our National Monitoring Center.

COPYRIGHT