

APRS Event Tracker Set-up Instructions

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This document contains basic information for setting up APRS devices as trackers. If you find errors in this document or if you are using a device that is not on this list, please email the author.

IMPORTANT: Before you use these instructions, make sure that your device is properly connected to a GPS receiver (if applicable) and that it sends a APRS 1200 baud beacons with your call sign and position. This document is not intended as tutorial for setting up your particular radio as a general APRS device. This document only gives specific instructions for setting the parameters we feel necessary for proper event tracker operation.

Kenwood TH-D7A

Set call sign: Go to Menu 2-1 and enter the tactical call sign exactly as given.

Set Beacon Info: Go to Menu 2-5 and set Position Ambiguity to *Off*.

Set APRS symbol: Go to Menu 2-8, select *Others*, and then enter the symbol code and table identification code exactly as given. Be careful to not reverse the symbol code and table identification code.

Set Status Text: Go to Menu 2-9 and set one of the status text memories to your call sign. Do not enter anything else in this status text. Select that status text by pressing the [*] key. An asterisk should appear next to the number of your selected status text. Note, because we are using tactical call signs, it's very important that the status text be set to your call sign so that your tracker is properly identified.

Set the status text TX rate: Go to Menu 2-A and select *1/1*. This will transmit your call sign every time your station beacons its position.

Set APRS path: Go to Menu 2-B and enter the APRS packet path exactly as given.

Set APRS beacon method: Go to Menu 2-C and select *Auto*.

Set APRS beacon interval: Go to Menu 2-D and select the interval exactly as given. Generally, we use fixed-interval beaconing for our events rather than SmartBeaconing.

Do not set your device as a digipeater unless instructed.

See the TH-D7A Advanced Features Manual pages 7 through 17 for more info.

Kenwood TM-D700A

Set call sign: Go to Menu 3-1 and enter the tactical call sign exactly as given.

Set Beacon Info: Go to Menu 3-5 and set Position Ambiguity to *Off*.

Set APRS symbol: Go to Menu 3-8 select *Others*, and then enter the symbol code and table identification code exactly as given. Be careful to not reverse the symbol code and table identification code.

Set Status Text: Go to Menu 3-9 and set one of the status text memories to your call sign. Do not enter anything else in this status text. Select that status text by pressing the [Use] key. An asterisk should appear next to the number of your

selected status text. Note, because we are using tactical call signs, it's very important that the status text be set to your call sign so that your tracker is properly identified.

Set the status text TX rate: Go to Menu 3-A and select *1/1*.

Set APRS path: Go to Menu 3-B and enter the path exactly as given.

Set APRS beacon method: Go to Menu 3-C and select *Auto*.

Set APRS beacon interval: Go to Menu 3-D and select the interval exactly as given.

Do not set your device as a digipeater unless instructed.

See the TM-D700 Specialized Communications Instruction Manual pages 17 through 26 for more info.

Kenwood TM-D710A

Set call sign: Go to Menu 600 and enter the tactical call sign exactly as given.

Set Beacon Info: Go to Menu 606 and set Speed to *On*, set Altitude to *Off*, and set Position Ambiguity to *Off*.

Set Status Text: Go to Menu 608 and set one of the status text memories to your call sign. Do not use Status Text 5 which includes [Freq MHz]. Do not enter anything else in this status text. Select that status text by pressing the [USE] key. An asterisk should appear next to the number of your selected status text. Set the status text TX Rate to *1/1*. Note, because we are using tactical call signs, it's very important that the status text be set to your call sign so that your tracker is properly identified.

Set APRS station icon: Go to Menu 610 select *Others*, and then enter the symbol code and table identification code exactly as given. Be careful to not reverse the symbol code and table identification code.

Set APRS beacon method and interval: Go to Menu 611 and select *Auto*. Generally, we use fixed-interval beaconing for our events rather than SmartBeaconing. Select the interval exactly as given. Set Decay Algorithm to *Off*. Set Proportional Pathing to *Off*.

Set APRS path: Go to Menu 612 and select *New-N PARADIGM*. If the given path includes WIDE1-1, set WIDE1-1 to *On*. Set Total Hops so that the resulting Packet Path is exactly as given.

Do not set your device as a digipeater unless instructed.

When you get out of Menu mode, make sure to press the [BCON] button to turn on beaconing.

See the TM-D710 CD-ROM manual pages APRS-8 through APRS-13 for more info.

Kenwood TH-D72A

Set call sign: Go to Menu 300 and enter the tactical call sign exactly as given.

Set APRS lock to prevent accidental changes to the APRS beaconing: Go to Menu 302 and select *On & PTT & TNC*.

Set Beacon Info: Go to Menu 370 and set Speed to *On*. Go to Menu 371 and set Altitude to *Off*. Go to Menu 372 and set Position Ambiguity to *Off*.

Set Status Text: Go to Menu 390 and set one of the status text memories to your call sign. Do not enter anything else in this status text. Select that status text by pressing the [MHz] key. An asterisk should appear next to the number of your

selected status text. Set the status text TX rate to *1/1*. Go to Menu 3A0 and set QSY in Status to *Off*. Note, because we are using tactical call signs, it's very important that the status text be set to your call sign so that your tracker is properly identified.

Set APRS Station Icon: Go to Menu 3C0 and select *Others*. Go to Menu 3C1 and enter the symbol code exactly as given. Go to Menu 3C2 and enter the table identification code exactly as given. Be careful to not reverse the symbol code and table identification code.

Set APRS beacon method: Go to Menu 3D0 and select *Auto*. Generally, we use fixed-interval beaconing for our events rather than SmartBeaconing.

Set APRS beacon interval: Go to Menu 3D1 and select the interval exactly as given.

Set Decay Algorithm: Go to Menu 3E0 and select *Off*.

Set Proportional Pathing: Go to Menu 3E1 and select *Off*.

Set APRS path: Go to Menu 3H0 and select *New-N*. If the given path includes WIDE1-1, go to Menu 3H1 and set WIDE1-1 to *On*. Go to Menu 3H2 and Set Total Hops so that the resulting Packet Path is exactly as given.

When you get out of Menu mode, make sure to press the [BCON] button to turn on beaconing.

Do not set your device as a digipeater unless instructed.

See the TH-D72 CD-ROM manual pages APRS-9 through APRS-19 for more info.

Yaesu FTM-350R and FTM-350AR

Set Beacon Info: Go to Set Mode Item E13 and set "1 Ambiguity" to *OFF*, "2 SPD/CSE" to *ON*, and "3 ALTITUDE" to *OFF*.

Set Status Text: Go to Set Mode Item E14 and set one of the status text memories to your call sign. Do not enter anything else in this status text. Do not include the opposite band frequency data in your status text. Go to item "1 SELECT" and select the status text memory that you just created. Go to "2 TX RATE" and select *1/1*. Note, because we are using tactical call signs, it's very important that the status text be set to your call sign so that your tracker is properly identified.

Set APRS beacon method: Go to Set Mode Item E15 and set "1 AUTO" to *ON*, set "2 INTERVAL" to the beacon interval as given, set "3 PROPORTIONAL" to *OFF*, set "4 DECAY" to *OFF*. Generally, we use fixed-interval beaconing for our events rather than SmartBeaconing.

Set APRS path: Go to Set Mode Item E20 and select the path as given. If a path other than "WIDE1-1" or "WIDE1-1,WIDE2-1" is specified, go to one of the Digi Path memories (E21 through E26), enter the path as given, and select that Digi Path memory in E20.

Set call sign: Go to Set Mode Item E29 and enter the tactical call sign exactly as given.

Set APRS station icon: Go to Set Mode Item E32 and press the [USER] key, and then enter the symbol table ID and symbol code exactly as given. Be careful to not reverse the symbol code and symbol table code.

Do not set your device as a digipeater unless instructed.

When you get out of Set Mode, Press the [F] repeatedly until the [SMART FUNCTION] key category changes to “F-3” mode. Press the [BCON] key repeatedly to select “Auto” beacon mode to *ON*. Make sure to press the [B-TX] button to turn on beaoning.

See the FTM-350 Series APRS Manual for more info.

Yaesu VX-8R

To enter the APRS/GPS Set Mode, press the MENU key repeatedly until “STATION LIST” appears on the display, then press and hold the MENU key for one second to enter the APRS/GPS Set Mode.

Set APRS beacon interval: Go to Set Mode Item 12 and select the interval exactly as given.

Set Status Text: Go to Set Mode Item 13 and set one of the status text registers to your call sign. Do not enter anything else in this status text. Select that status text by pressing the PTT key. Note, because we are using tactical call signs, it’s very important that the status text be set to your call sign so that your tracker is properly identified.

Set APRS beacon method: Go to Set Mode Item 14 and select *Auto*.

Set APRS path: Go to Set Mode Item 15 and enter the APRS path exactly as given into one of the Digi Paths. Select that Digi Path by pressing the PTT key.

Set call sign: Go to Set Mode Item 20 and enter the tactical call sign exactly as given.

Set APRS symbol: Go to Mode Item 22, select “[YY] User”, and select the symbol code exactly as given.

See the VX-8R User Manual starting on page 80 for more info.

Yaesu VX-8DR

To enter the APRS/GPS Set Mode, press the MENU key repeatedly until “STATION LIST” appears on the display, then press and hold the MENU key for one second to enter the APRS/GPS Set Mode.

Set APRS beacon interval: Go to Set Mode Item 12 and select the interval exactly as given.

Set Status Text: Go to Set Mode Item 13 and set one of the status text registers to your call sign. Do not enter anything else in this status text. Select that status text by pressing the PTT key. Note, because we are using tactical call signs, it’s very important that the status text be set to your call sign so that your tracker is properly identified.

Set APRS beacon method: Go to Set Mode Item 14 and select *Auto*.

Set APRS path: Go to Set Mode Item 15 and select the path as given. If a path other than “WIDE1-1” or “WIDE1-1,WIDE2-1” is specified, got to one of the Digi Path memories (P4 through P8), enter the path as given, and press PTT to select the path you entered.

Set call sign: Go to Set Mode Item 20 and enter the tactical call sign exactly as given.

Set APRS symbol: Go to Mode Item 22, select ICON4, then select the symbol table code and symbol code exactly as given.

See the VX-8DR User Manual starting on page 80 for more info.

Yaesu VX-8GR

To enter the APRS/GPS Set Mode, press the MENU key repeatedly until “STATION LIST” appears on the display, then press and hold the MENU key for one second to enter the APRS/GPS Set Mode.

Set APRS beacon interval: Go to Set Mode Item 12 and select the interval exactly as given.

Set Status Text: Go to Set Mode Item 13 and set one of the status text registers to your call sign. Do not enter anything else in this status text. Select that status text by pressing the PTT key. Note, because we are using tactical call signs, it's very important that the status text be set to your call sign so that your tracker is properly identified.

Set APRS beacon method: Go to Set Mode Item 14 and select *Auto*.

Set APRS path: Go to Set Mode Item 16 and select the path as given. If a path other than “WIDE1-1” or “WIDE1-1,WIDE2-1” is specified, go to one of the Digi Path memories (P4 through P8), enter the path as given, and press PTT to select the path you entered.

Set call sign: Go to Set Mode Item 22 and enter the tactical call sign exactly as given.

Set APRS symbol: Go to Mode Item 24, select ICON4, then select the symbol table code and symbol code exactly as given.

See the VX-8GR User Manual starting on page 70 for more info.

Byonics TinyTrak 3

Byonics TinyTrak 4

Argent Data OpenTracker1, Tracker2 (any Argent Data device using the OTWINCFG program)

The following screen shot will show you where the settings are for the parameters we'd like for you to set.

In Profile 1, set your Callsign, Path, Symbol Table, Symbol Code, TX Every XX Sec (beacon rate), and Timeslot as given to you. Set the Comment Text to your call sign. Do not enter anything else in the comment text. In Reporting Options, check Course/Speed and Compressed; do not check anything else. Select Profile 2 and then press the Copy from Profile 1 button. This will make both profiles the same. If we use the Profile Switching feature, we will give you further instructions.

The screenshot shows the 'OpenTracker Configuration' window. At the top, there are tabs for 'Profile 1' and 'Profile 2', and a 'Firmware Build 54908' label. The main configuration area is divided into several sections:

- General Settings:** Callsign (HHSAGA-9), Baud rate (1200 Baud selected), Path (WIDE1-1,WIDE2-1), Symbol Table (A), Symbol Code (>), Temp. Adjust (0 °C), Quiet Time (16), Text (K9SQL), and In (Comment selected).
- Reporting Options:** A list of checkboxes including Altitude, Course/Speed (checked), Time (DHM selected), GPS Quality, Temperature, Voltage, Compressed (checked), and Telemetry every (0).
- Transmission Control:** TX Every (60) Sec, Use SmartBeaconing, Use PTT Input, Enable timeslotting (checked), and Timeslot (3).
- Position:** GPS (selected) or Fixed, with fields for North and West coordinates, and a checkbox for 'Don't require GPS fix'.
- Waypoint Output:** Enable, Characters (6), Use Custom Symbols, and Limit To (Miles).
- Counter:** Enable, Reset on Transmit, and 250 debounce (mSec).
- Power Control:** Enable, Active Low, and 3 delay (seconds).
- Radio Interface:** TX Audio Level slider, TX Delay (198 mSec), Don't transmit if supply < (0.00) Volts, Invert Carrier Detect, No PTT out on PTT in, Software DCD (checked), and External Squelch.

At the bottom, there are radio buttons for 'Metric' and 'English', and buttons for 'Copy from Profile 2', 'Save to File', 'Load from File', 'Connect', and 'Quit'.