



**University of Maine 2012 Blueberry Project, 10 disease model units
AgriNET US Cellular telemetry, Spectrum Mini, Spectrum sensors
For: Seanna Annis**

Tuctronics

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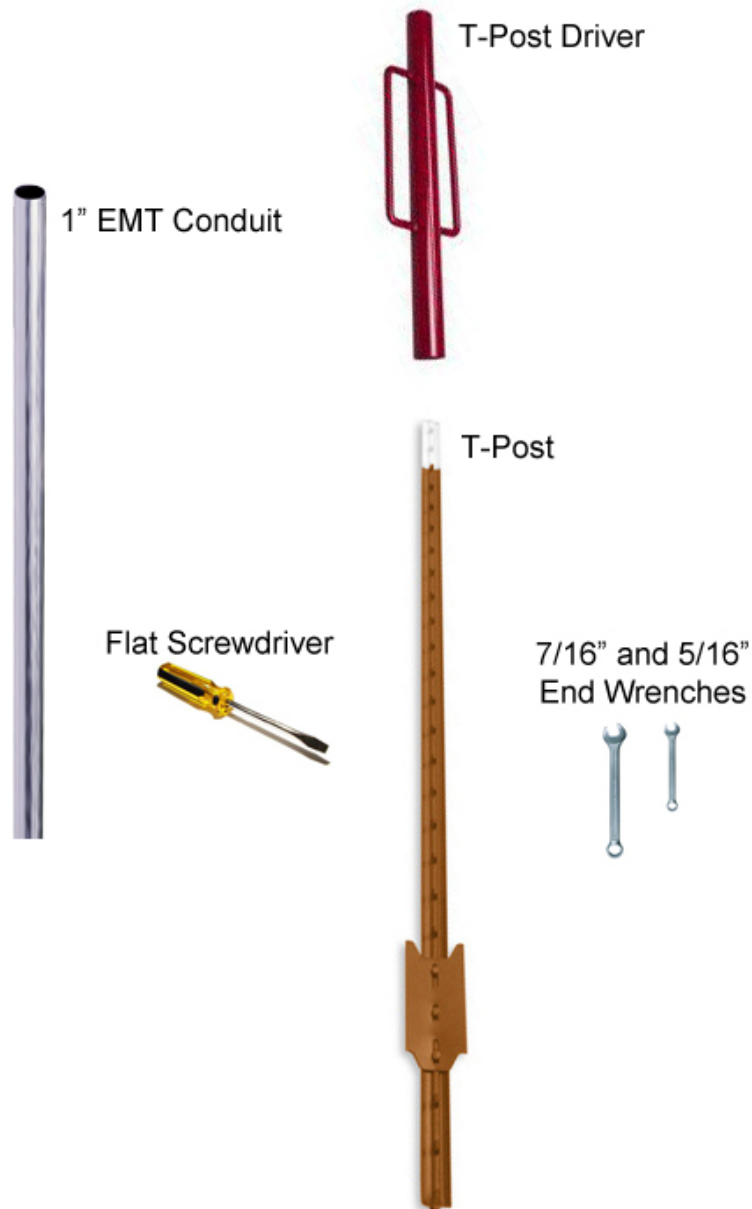
(509) 301-0640

(509) 382-2149

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Materials and Tools needed for Installation

T-post cut to 4' length
1" EMT cut to 3' length
T-post driver
7/16" end wrench
flat blade screw driver
5/16" end wrench or socket for hose clamps



All installation materials may be aquired at Home Depot or Lowes.

Prices found online:

T-Post Driver around \$28

5' T-Post around \$6

10' of 1" diameter EMT conduit around \$7

Installation Procedure

Drive T-post 2' into ground, leaving 1' above ground for conduit post.

Attach 1" EMT conduit to T-post with hose clamps, allowing the conduit to stand 2' above top of T-post.

Slide clamp on Mini station down conduit to just above T-post top and tighten hex nuts, securing Mini station to conduit.

Slide clamp on leaf wetness sensor down conduit to 1.5 feet above ground and tighten hex nuts, securing sensor to conduit.

Slide pipe clamps into struts on the back of telemetry box.

Slide telemetry box down conduit while guiding clamps.

Tighten clamp bolts so telemetry box is secured above leaf wetness sensor. Make sure not to block leaf wetness sensor from the sky. If needed adjust leaf wetness sensor position to opposite side of conduit from telemetry box.

Slide hose clamp on conduit.

Attach brackets to solar panel.

Slide pipe clamp into strut on solar panel bracket.

Slide pipe clamp on solar panel bracket on conduit.

Tighten pipe clamp to conduit, securing solar panel, make sure solar panel faces South.

Slide hose clamp over lower solar panel bracket and tighten to secure solar panel support arm.

Arrange Mini station in ground sensors as desired.

Use wire ties to secure all wire to conduit.

Press the "Display" button on Mini station. Check Mini Station time and date. If not correct, press the "Set" button, press the down arrow, the Mini will display "set Time and Date". Press "Set" button. Adjust date and time with arrows from left to right, press "Set" button to move on to the next value. After setting AM/PM, press the "Set" button one more time to set the time and date.

Install battery on bottom of telemetry box with terminals left. Attach battery terminals, red wire to positive terminal and black wire to negative terminal. As you attach the second terminal watch the power LED on modem to blink.

Close telemetry box door. Call Todd Tucker at (509) 301-0640 or (509) 382-2149 to make sure telemetry is successful. The telemetry is triggered by the Mini station every hour and at 20 and 40 minutes after the hour, according to the time on the Mini station.

PCB terminal

From Top Left:

- 1 Battery negative
- 2 Battery positive
- 3 Solar negative
- 4 Solar positive
- 5 DB9 black
- 6 DB9 green
- 7 DB9 white
- 8 unused
- 9 Modem power negative
- 10 Modem power positive
- 11 unused
- 12 unused

University of Maine 2012 Blueberry Project Unit Numbers

Blueberry Weather 1

MEID DEC: 268435456810863547

MDN and MSID is 2073568563

Lock code is 000000 or 895861

Wx S/N: 5285

Blueberry Weather 2

MEID DEC: 268435456810863546

MDN and MSID is 2073560837

Lock code is 000000 or 841052

Wx S/N: 4751

Blueberry Weather 3

MEID DEC: 268435456810863538

MDN and MSID is 2073564521

Lock code is 000000 or 946328

Wx S/N: 4573

Blueberry Weather 4

MEID DEC: 268435456810863556

MDN and MSID is 2073567591

Lock code is 000000 or 088629

Wx S/N: 4570

Blueberry Weather 5

MEID DEC: 268435456810929762

MDN and MSID is 2072995821

Lock code is 000000 or 164631

Wx S/N: 4567

Blueberry Weather 6

MEID DEC: 268435456810929771

MDN and MSID is 2072996031

Lock code is 000000 or 292513

Wx S/N: 4415

Blueberry Weather 7

MEID DEC: 268435456810929720

MDN and MSID is 2072997531

Lock code is 000000 or 971490

Wx S/N: 4575

Blueberry 8

MEID DEC: 268435456810929760

MDN and MSID are 20735644523

Lock code is 000000 or 735690

Wx S/N: 4572

Blueberry 9

MEID DEC: 268435456810929767

MDN and MSID are 2073568437

Lock code is 000000 or 690708

Wx S/N: 4566

Blueberry 10

MEID DEC: 268435456810929844

MDN and MSID are 2079446840

Lock code is 000000 or 583646

Wx S/N: 4574

