HLP Q330 Station Installation (Last revision 05/21/2007 DEJ)

STATION NAME: OR075 OPERATOR: Maureen Mark David Noelle
MONTH: 10 DAY: 8 YEAR: 2007 ARRIVAL TIME (local): 12:00 PM
SENSOR TYPE: ESP SENSOR S/N: 1397
Q330 S/N: 10062689 BALER S/N: 066605 GPS S/N: 022670780
Handheld GPS Sta Loc: Lat: N43.20037 Lon: W119.49735 Elev: 1390 m
POWER: BATT-1: 12.8V BATT-2: 12.8V Solar panel output (~18V): 19.5V

Connect cables:
1) Build power system 2) Connect Q330 (Qnet) to baler 3) Q330 (GPS) to GPS
4) power to Q330 5) Cline to Q330 (console)

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[Warning: Q330 does not supply power to Clie, and cable draws continuous power. Disconnect cable from Clie when not in use.]

Clie >Q330Beta > Cms > Cloning
> Select file to clone (STS2 (HLS01) or Guralp (HLG01)
> Station names
> Click "Palm overrides 330" in dropdown
> Check "Edit/Verify"
> IP Addresses: Un-Check "Edit/Verify"
> Send
> Station Names > DP4 > New (Enter Station Name in ALL CAPS, up to 5 characters)
> Save/Reboot
> Views (from dropdown) > Data Recording > DP3
> Confirm that Station: is same as sensor clone name (e.g. HLG01)
> Views (from dropdown) > Data Recording > DP4
> Confirm that station name and sample rates are correct.

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Connect Sensor to Q330. Verify that sensor configuration matches sensor type.
Unlock sensor. For Guralp, to unlock from Clie: Views: > Sensor. Set duration = 10 sec. > Unlock A.
Views > Sensor (click "refresh") Mass Positions (V10 < 15 (Guralp); < 25 (STS-2))
Voltage (V10) CH 1: 2 CH 2: 2 CH 3: 2
Set Duration = 10 and click Center A command if any channel > 15 (Guralp); > 25 (STS-2) and click Refresh

Views > Quickview (waveform monitor) > chan1, 2, 3 > Start: Write down Max Min Midpoint (click "stop" to record values)
CH 1 41/68 8 391.4 CH 2 25865 -16653 52428 CH 3 768 206 168 7591 CH 2

Views > System
Last GPS Lock: 10 mins ago
Phase Error: 0
Clock Quality: Good, Phase (H)
Input volts: 13.1
Last boot: 2007-10-08 23:32:46
Q330 Software Version: 1.87

Status > GPS (confirm GPS lock)
GPS Time: 2007-10-08 23:46:17
GPS Date: 2007/10/08 00:00
Lat: 43.208426 Lon: 119.49735
Elev: 1399 m

Status > Data Port Txr > Data4
Packet Buffer: 120960 (increasing? (refresh))
Cmds > Baler cmds > Turn on Baler: > Send baler cmd*. Check baler is on (solid green light):
Status > Data Port Txr > Data4. Packet Buffer decreases to zero? Yes Packets Sent: 464

[Note: If the Q330 does not transfer data to the Baler try clearing the Baler *Association* by holding the Baler Attention button until the light turns solid red (~5 sec). Release the button and then, after the light begins to flash green, press the Attention button once to shut down the Baler. Repeat the process once more, ending in Baler shutdown. Press Attn button once to turn Baler on and check that data transferred.]

Status > General > Total ReSyncs: 89

Commands > Make Docfile. add station name (STA) to default filename, Conf-YrMoDy-Q330-STA, and delete "Conf__ accounting for station names 4 or more characters in length.

DEPARTURE TIME (local): 5:00 PM

*PLEASE DETAIL SPECIAL PROBLEMS ON BACK OF THIS SHEET, AND NOTE BELOW*


HLP Q330 SERVICE SHEET (v6) (Last revised 06/22/07 DEJ)

STATION: ___________ Month: ___________ Day: ___________ Year: ___________ ARRIVAL TIME (local): ___________
OPERATOR: ___________ POWER: BATT-1: ___________ BATT-2: ___________
SENSOR MASS POSITION: > Views > Sensors > Boom Positions
  1: ___________ 2: ___________ 3: ___________
  Use Center A to center any CH > +/-15 for Guralp; > +/-25 for STS-2. Check here v
  Continue with Center A command (and update) until all channels are < +/- 15 or 25.
  Enter final mass positions: 1: ___________ 2: ___________ 3: ___________

> Views > Data Recording > DP3 *Station: HLG/C > DP4 *Station: CRC/25
[DP3 Station should match program (HLG?? for Guralp, HLS?? for Streckeisen), DP4 Station should match station name]

> Views > System: (use Refresh to Update)
  Last GPS Lock: ___________ 23 min ago
  Phase error: ___________
  Clock quality: ___________ SD LOCK 10 sec or less (H)
  Input volts: ___________
  Temperature: ___________ 14°C
  Last Boot: ___________ 23 April 14:46
  Last Resync: ___________ 23 April 14:22

> Views > System: Turn GPS ON. Status > GPS
  Locked?: [ ]
  Satellites viewed: ___________
  Satellites used: ___________
  Time: ___________ 17:09
  Date: ___________ 23 April 2017
  Latitude: ___________ 43.2653217°
  Longitude: ___________ 78.498576°
  Elev (m): ___________ 1372.2

Calibration and Waveform Monitor

☐ > Cmds > Calibration: DURATION bar: 240 s (wrongly labeled "min" on Clie); SETTLING bar: 6 min.; TRAILER bar: 1 m
☐ > Cmds > Calibration > Waveform > STEP: AMPLITUDE bar: -24 db Guralp or -18 db STS2; STEP POLARITY: Positive
☐ > Cmds > Calibration > CALIBRATE CHANNELS: ISelect all 3 channels; START: 1 minute; IStart
  Sit Quietly for 12 min and note local start time here: ___________
  Click Stop, then O.K. when finished.

☐ > Views > Quickview (waveform monitor) > chan 1, 2, 3: Start: Write down Max Min Midpoint (click "stop" to record values)
  CH 1 ___________ 1941 ___________ 172 ___________ 2 CH 2 ___________ 2859 ___________ 3129 ___________ 2441 ___________
  CH 3 ___________ 1763 ___________ 2771 ___________ 1622 ___________
☐ Microseisms visible? [ ] (check if yes)

☐ > Status > Data Port Txf > Data4 *Packet Buffer: Increasing? (press Refresh)
☐ > Cmds > Baler > ISend command to baler (Baler should turn on, with packets being sent)
☐ > Status > Data Port Txf > Data4 *Packet Buffer: Decreases to zero? *Packets Sent: ___________ 3/17/09
☐ > Commands > Baler Cmds > iTurn Off Baler (wait for slow green blink = idle)
☐ > Swap out Baler
☐ > Status > Data Port Txf > Data4 *Packet Buffer: Increasing?
☐ > Cmds > Baler > ISend command to baler (Baler should now be on)
☐ > Status > Data Port Txf > Data4 *Packet Buffer: Decreases to zero? *Packets Sent: ___________ 3/17/09
[Note: If the Q330 does not transfer data to the Baler try clearing the Baler "Association" by holding the Baler Attention button until the light turns solid red (~5 sec). Release the button and then, after the light begins to flash green, press the Attention button once to shut down the Baler. Repeat the process once more, ending in Baler shutdown. Press Attn button once to turn Baler on and check that data transferred.]

☐ > Status > General *Total Resyncs: ___________
☐ Commands > Make Docfile (A bug here means you should delete "Conf," at the start of the default filename, append the station name to end of the remaining default filename and click OK. Check that name is correct.)

DEPARTURE TIME (local): ___________ 4:59 PM local

*PLEASE NOTE GENERAL STATE OF THE STATION AND ANY SPECIAL PROBLEMS IN SPACE BELOW*

some moisture
HLP Q330 SERVICE SHEET (v8) (last revised 20080716 MJF)

STATION: OR075  Month: 9  Day: 16  Year: 2008  ARRIVAL TIME (local): 11:15
OPERATOR: Cooper/Nunes  POWER: BAT1: 13.4  BAT2: 13.4
SENSOR MASS POSITION: Views > Sensors > Boom Positions
1: 2: 3:
Use Center A to recenter if any CH > +/- 15 for Guralp; > +/- 25 for STS-2. Check here.
Continue with Center A command (and update) until all channels are < +/- 15 or 25.
Enter final mass positions: 1: 2: 3:

Views > Data Recording > DP3 *Station: HLG01 > DP4 *Station: OR075
[DP3 Station should match program (HLG?? for Guralp, HLS?? for Streckeisen), DP4 Station should match station name]

Views > System: (use Refresh to Update)
Last GPS Lock: 0 min ago
Phase error:
Clock quality:
Input volts:
Temperature:
Last Boot: 2008-09-16 18:21:34
Last Resync: 2008-09-16 18:22:43

Views > System: Turn GPS ON. Status > GPS (20 minutes later)
Satellites viewed: 14  Satellites used: 10
Time: 18:49:34
Date: 16/09/2008
Latitude: 48.2083800
Longitude: 119.4915900
Elev (m): 1402.4

Calibration, Recheck of Sensor Mass Positions, and Waveform Monitor

Cmds > Calibration: DURATION bar: 6 min (if running Q330Beta V1.441); SETTLING bar: 6 min; TRAILER bar: 5
Cmds > Calibration > Waveform > STEP, AMPLITUDE bar: -24 db Guralp or -18 db STS2; STEP POLARITY: Positive
Cmds > Calibration > CALIBRATE CHANNELS: Enter all 3 channels; START: 1 minute; !Start.
Sit quietly for ~18 min and note local start time here:

Views > Sensors: Use Center A to recenter if any CH > +/- 15 for Guralp; > +/- 25 for STS-2. Check here.
Enter final mass positions: 1: 2: 3:

WAVEFORM MONITOR: Views > Quickview > chan1,2,3 > Start: Enter Max Min Midpoint (click "stop" to record values)
CH 1 1975 599 76.4  CH 2 -1662 -3790 103.8  CH 3 -1970 -2324 93.8
Microseism: 

Status > Data Port Txr > Data4 *Packet Buffer, Increasing? (press Refresh)
Cmds > Baler > !Send command to baler (Baler should turn on, with packets being sent)
Status > Data Port Txr > Data4 *Packet Buffer (Decreases to zero)? Packets Sent: 444
Commands > Baler Cmds > !Turn Off Baler (wait for slow green blink = idle)
Swap out Baler
Status > Data Port Txr > Data4 *Packet Buffer, Increasing?
Cmds > Baler > !Send command to baler (Baler should now be on)
Status > Data Port Txr > Data4 *Packet Buffer, Decreases to zero? Packets Sent: 65
(Note: if the Q330 does not transfer data to the Baler try clearing the Baler "Association" by holding the Baler Attention button until the light turns solid red (~5 sec). Release the button and then, after the light begins to flash green, press the Attention button once to shut down the Baler. Repeat the process once more, ending in Baler shutdown. Press Attn button once to turn Baler on and check that data transferred.)

Status > General > Total Resync: 92
Commands > Make Docfile (A bug here means you should delete "Conf." at the start of the default filename, append the station name to end of the remaining default filename and click OK. Check that name is correct.)

Station running normally on departure, but questionable. Tarps replaced.

DEPARTURE TIME (local): 11:55

"PLEASE NOTE GENERAL STATE OF THE STATION AND ANY SPECIAL PROBLEMS IN SPACE BELOW"
Q330 was off when arrived at station. Cycled power + came to life. GPS does not respond. 9 sat used, 0 in view!!
Q330 lost power again when baler was removed. Recycled power and came back on. GPS claims on for 1 min even a quarter of an hour later. Recall, this GPS took almost an hour to lock on initial install. Finally came to lock.

Station running normally on departure, but questionable. Tarps replaced.
HLP Q330 DEMOBILIZATION SHEET (v3) (last revised 20090904 MJF)

STATION: DROTS  Month: 09  Day: 16  Year: 2019  ARRIVAL TIME (local): 9:40 AM
Q330 S/N: 1118  OLD BALER S/N: 05-606
SENSOR MASS POSITION: > Views > Sensors > Boom Positions
1: -4  2: -13  3: -22
Use Center A to recenter if any CH > +/-15 for Guralp; > +/-25 for STS-2. Check here.
Continue with Center A command (and update) until all channels are < +/- 15 or 25.
Enter final mass positions: 1: -4  2: -10  3: -10

> Views > Data Recording > DP3 *Station: HLG60 > DP4 *Station: 00075
[DP3 Station should match program (HLG?? for Guralp, HLS?? for Streckeisen), DP4 Station should match station name]

> Views > System: (use Refresh to Update)
Last GPS Lock: 2019-06-28 00:14
Phase error: 0.14
Clock quality: 0.12
Input volts: 13.6
Temperature: 11.6
Last Boot: 2019-06-28 03:32:23
Last Resync:

> Views > System: Turn GPS ON. Status > GPS
Locked?: 
Satellites viewed: 11
Satellites used: 8
Time: 05:49:54
Date: 06/19/2019
Latitude: 43.2583476
Longitude: 119.4114864
Elev (m): 1390.4

Calibration

Cmds > Calibration: DURATION bar: 6 min (if running Q330Beta V1.44); SETTLING bar: 6 min; TRAILER bar: 5
Cmds > Calibration > Waveform > STEP: AMPLITUDE bar: 24 db Guralp or -18 db STS2; STEP POLARITY: Positive
Cmds > Calibration > CALIBRATE CHANNELS: [Select all 3 channels; START: 1 minute; IS tart .
Sit quietly for ~18 min and note local start time here: 9:54 AM

Status > Data Port Txf > Date4 *Packet Buffer [Increasing? (press Refresh)
Cmds > Baler > SEND command to baler (Baler should turn on, with packets being sent)
Status > Data Port Txf > Date4 *Packet Buffer (Decreases to zero)? Packets Sent: 87-9216
Cmds > Commands > Baler Cmds > ITurn Off Baler (wait for slow green blink = idle)

DEMOBILIZE STATION

SENSOR
- sensor is a 37: lock masses twice with power on using breakout box; confirm masses pegged; disconnect breakout box (NB: May need to connect AUX power cable to breakout box first, or use HCU with power cable)
- sensor is an STS2: disconnect breakout box; lock masses with power off
- Confirm alignment of sensor with vault alignment line. If not aligned, enter misorientation value: N14
- Remove sensor; enter sensor information: Type: ESF  Serial #: F397
- Enter assumed declination from installation (as written on sensor pad): 1940
- Confirm Brunton compass declination is set to same value as that written on pad
- Measure orientation of vault alignment line (N-S for Guralp; E-W for Streckeisen). Enter orientation: N182
If measured orientation does not appear to be correct, double check measurement and confirm with at least one other team member!

DATALOGGER
- Disconnect power box
- Disconnect data logger (all cables); enter serial #: 418
- Label baler with station name and date 06
- Disconnect batteries; cover terminals with plastic caps or tape
- Disconnect solar panels and GPS; enter GPS serial #: 02260200

"PLEAS E NOTE GENERAL STATE OF THE STATION AND ANY SPECIAL PROBLEMS IN SPACE BELOW"

Sensor was jostled slightly when taking cookie out of the barrel. Also, we had trouble inserting the caps to lock