Connect cables:
1) Build power system
2) Connect Q330 (Qnet) to baler
3) Q330 (GPS) to GPS
4) Power to Q330
5) Clee to Q330/(console)
[Warning: Q330 does not supply power to Clee, and cable draws continuous power. Disconnect cable from Clee when not in use.]

Clee >Q330Beta > Cmnds > Cloning
> Select file to clone (STS2 (HLS01) or Guraip (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.

Connect Sensor to Q330. Verify that sensor configuration matches sensor type.
Unlock sensor: For Guraip, to unlock from Clee Views: > Sensor, Set duration = 10 sec. > Unlock A.
Views > Sensor (click "Refresh"), vr1 V position (V*10 < 15 (Guraip), < 25 (Q330-2))
Set Duration = 10 and click Center A command if any channel > 15 (Guraip); > 25 (STS-2) and click Refresh.
Views > Quickview (waveform monitor) > chan1, 2, 3 > Start: Write down Max Min Midpoint (click "stop" to record values)

Status > GPS (confirm GPS lock)
GPS Time: 28:16:04.485
GPS Date: 26.02.2007
Lat: 41.510699
Lon: 8.00267 G
Elev: 1164.62
Q330 Software Version: 1.8.9

Cmnds > Baler cmd: Turn on Baler, "Send baler cmd". Check baler is on (solid green light): 6
Status > Data Port Tlx: Data4
Packet Buffer: 5 (increasing? (refresh))
Status > Data Port Tlx: Data4. Packet Buffer decreases to zero? 6
(Packets Sent: 24 + 6
(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 Att button once to turn Baler on and check that data transferred.)

Commands: Make Clee file, add station name (STA) to default filename. Conf-YrMo-Dy-Q330-STA, and delete "Conf"
from start of filename or filename will be too long for station names 4 or more characters in length.)

*PLEASE DETAIL SPECIAL PROBLEMS ON BACK OF THIS SHEET, AND NOTE BELOW*
HLP Q330 SERVICE SHEET (Last revised 06/22/07 DEJ)

STATION: OR080  Month: 10  Day: 12 Year: 2007  ARRIVAL TIME (local): 11:55 am
OPERATOR: NOEL & LEFF  POWER: BATT-1: 13.9V  BATT-2: 13.8V
SENSOR MASS POSITION: > Views > Sensors *Boom Positions

1: 126  2: 3  3: -12

Use Center A to center 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: -10  2: 0  3: -12

> Views > Data Recording > DP3 *Station: HLS01  > DP4 *Station: OR080
[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: 71 min ago
Phase error: 0, 0,000,002
Clock quality: 3D lock
Input volts: 13.80 V
Temperature: 13°C
Last Boot: 2007-06-21 21:32
Last Resync: 2007-06-21 21:45

**Calibration and Waveform Monitor**

☐ > Cmds > Calibration: DURATION bar: 240 s (wrongly labeled “min” on Ciel); 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; ISStart.
Sit Quietly for 12 min and note start local start time here: ____________  Click Stop, then O.K. when finished.

> Views > Quickview (waveform monitor) > chan1,2,3 > Start: Write down Max Min Midpoint (click "stop" to record values)

CH 1 10267 5302 188.5  CH 2 9330 8754 138.0  CH 3 -13437 -15102 505.6
☐ Microseism visible?  (check if yes)

☐ > Status > Data Port Txfr > Data4 *Packet Buffer Increasing? (press Refresh)
☐ > Cmds > Baler > ISend command to baler (Baler should turn on, with packets being sent)
☐ > Status > Data Port Txfr > Data4 *Packet Buffer (Decreases to zero)?  Packets Sent: 980167110
☐ > Commands > Baler Cmds > ITurn Off Baler (wait for slow green blink = idle)
☐ Swap out Baler

☐ > Status > Data Port Txfr > Data4 *Packet Buffer Increasing?  Packets Sent: 8806901
[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: 486

> 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): 12:06

*PLEASE NOTE GENERAL STATE OF THE STATION AND ANY SPECIAL PROBLEMS IN SPACE BELOW*
HLP Q330 SERVICE SHEET (v6) (Last revised 06/22/07 DEJ)

STATION: OR080  Month: 05  Day: 17  Year: 2008  ARRIVAL TIME (local): 1:15
OPERATOR: warner, long  POWER: BATT-1: 13.46  BATT-2: 13.45
SENSOR MASS POSITION: > Views > Sensors > Boom Positions
> 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: 47 2: -39 3: 15

Views > Data Recording > DP3 > Station: HLS03 > DP4 > Station: OR080
[DP3 Station should match program (HLP?? for Guralp, HLS?? for Streckeisen), DP4 Station should match station name]

Views > System: (use Refresh to Update)
> Last GPS Lock: 11:05:59 min
> Phase error: -0
> Clock quality: 0Block, Frozen (H)
> Input volts: 13.35
> Temperature: 23.9
> Last Boot: 2007-11-10 12:11:23
> Last Resync: 2007-11-10 12:11:47

Views > System: Turn GPS ON. Status > GPS
> Locked?... Satellites viewed: 11
> Satellites used: 6
> Time: 14:24:48
> Date: 17/18/2008
> Latitude: 43.06367733
> Longitude: 117.6527917
> Elev (m): 113.1

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: Select all 3 channels; START: 1 minute; !Start.
Sit Quietly for 12 min and note local start time here: Click Stop, then O.K. when finished.

Views > Quickview (waveform monitor) > chan1,2,3 > Start: Write down Max Min Midpoint (click "stop" to record values)

CH 1: 1751 2713 203 32 3487 174.1 203 CH 2: 685 3 3487 174.1 203 CH 3: 4763 18542 783.8

□ Microseisms visible? (check if yes)

□ Status > Data Port Txfr > Data4 > "Packet Buffer: Increasing?" (press Refresh)
□ Status > Data Port Txfr > Data4 > "Packet Buffer: Decreases to zero?" (Packet Sent: 123453451)
□ Commands > Baler Cmds > Get Baler STATUS
Swap out Baler
□ Status > Data Port Txfr > Data4 > "Packet Buffer: Increasing?" (check if yes)
□ Commands > Baler > Send command to baler (Baler should now be on)
□ Status > Data Port Txfr > Data4 > "Packet Buffer: Decreases to zero?" (Packet Sent: 123453589)
[Note: If the Q330 does not transfer data to the Baler try clearing the Baler "Association" by holding the 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: 489"

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):

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

Colo bees, spiders
Funky Bailer Message
Lota Gopher holes around
HLP Q330 SERVICE SHEET (v8) (last revised 20080716 MJF)

STATION: ORDER Month: 09 Day: 11 Year: 2008 ARRIVAL TIME (local): 18:52
Q330 S/N: z19 OLD BALER S/N: 05214 NEW BALER S/N: 06314
SENSOR MASS POSITION: > Views > Sensors "Boom Positions
1: 41 2: -19 3: 7
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: 3 2: 1 3: 9

Views > Data Recording > DP3 *Station: HLS03 > DP4 *Station: OR084
[DP3 Station should match program (HLS?? for Guralp, HLS?? for Streckerseim), DP4 Station should match station name]
Views > System: (use Refresh to Update)
Last GPS Lock: 105 mins, ago
Phase error: 0
Clock offset: GD-6 lock, 10mm (1)
Input volts: 12.3Y
Temperature: 84C
Last Boot: 2008-07-13 04:19:40
Last Resync: 2008-07-13 04:19:40
Views > System: Turn GPS ON. Status > GPS
Locked?: X
Satellites viewed: 9 Satellites used: 8
Time: 02:04:40
Date: 12/19/2008
Latitude: 43.0035700 Longitude: 17.65258927
Elev (m): 127.7m

Calibration, Recheck of Sensor Mass Positions, and Waveform Monitor
☐ > 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; !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: 3 2: 1 3: 9

WAVEFORM MONITOR: >Views > Quickview > chan 1, 2, 3 > Start: Enter Max Min Midpoint (click "stop" to record values)
CH 1: 517 -138 49.0 CH 2: 10690 12185 49.0 CH 3: 5192 -349 463.4
Microseism? Y Microseism? Y

☐ > Status > Data Port Txf > Data4 *Packet Buffer Y. 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: 5258247
☐ > Commands > Baler Cmds > !Turn Off Baler (wait for slow green blink = idle)
☐ Swap out Baler
☐ > Status > Data Port Txf > Data4 *Packet Buffer Y. Increasing?
☐ > Cmds > Baler !Send command to baler (Baler should now be on)
☐ > Status > Data Port Txf > Data4 *Packet Buffer Y. Decreases to zero? Packets Sent: 5257195
[Note: If the Q330 does not transfer data to the Baler try clearing the Balers "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: 490
☐ > 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): 19:14

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

Solar panel down-reinstalled w/ cable + wire ties
new tarp installed
HLP Q330 DEMOBILIZATION SHEET (v3) (last revised 20090904 MJF)

OPERATOR: Gerald, Ken, Coleman  POWER: BATT-1: 13.53  BATT-2: 11.18
Q330 S/N: 818  OLD BALER S/N: 5156
SENSOR MASS POSITION: > Views > Sensors *Boom Positions
1: 0  2: 11  3: 6
Use Center A to re-center if any CH > +/-15 for Guralp; +/-25 for STS-2. Check here __ NOT DOCKED
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: HLS03 > DP4 *Station: CK080
[DP3 Station should match program (HLG7?? for Guralp, HLS?? for Streikheisen), DP4 Station should match station name]

> Views > System: (use Refresh to Update)
Last GPS Lock: 1:27 123 C
Phase error: -0.000 002
Clock quality: 0.731464 [0.02791.11]
Input volts: 13.7 5.4
Temperature: 24.6
Last Boot: 2009-02-22 10:18:09
Last Resync: 2009-02-22 10:18:29

Calibration
☐ > Cmds > Calibration: DURATION bar: 6 min (if running Q330Beta V1.44!); DURATION 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; START.
Sit quietly for ~18 min and note local start time here: 10:43

☐ > Cmds > Baler > iSend command to baler (Baler should turn on, with packets being sent)
☐ > Status > Data Port Txfr > Data4 *Packet Buffer = increasing? (press Refresh)
☐ > Status > Baler > Data4 *Packet Buffer (Decreases to zero)? Packets Sent: 145737256
☐ > Status > Baler > Data4 *Packet Buffer (Decreases to zero)? Packets Sent: 145737256

DEMobilize station

SENSOR
☐ If sensor is a 3T: lock masses twice with power on using breakout box; confirm masses pegged; disconnect break out box (NB: May need to connect AUX power cable to breakout box first, or use HCU with power cable)
☐ If 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: 0°
☐ Remove sensor; enter sensor information: Type: STS2  Serial #: 64229
☐ Enter assumed declination from installation (as written on sensor pad): 15.4°E
☐ 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 Streckheisen). Enter orientation: 90.0°E
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 datalogger (all cables); enter serial #: 818
☐ Label baler with station name and date
☐ Disconnect batteries; cover terminals with plastic caps or tape
☐ Disconnect solar panels and GPS; enter GPS serial #: 12340153

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