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

STATION NAME: NV001 OPERATOR: Trench / Eager / Long / Ford
MONTH: 5 DAY: 29 YEAR: 2008 ARRIVAL TIME (local): 2:15 pm
SENSOR TYPE: Guralp EPS SENSOR S/N: T3151
Q330 S/N: 14626 BAERLE S/N: 0622 GPS S/N: 06240082
Handheld GPS Sta Loc: Lat: 41.76664 N Lon: 118.66614 W Elev: 1287.3 m

Connect cables:

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

Clio > Q330 Beta > Cloning
> Select file to clone (STS2 (HLG01) or Guralp (HLG01))
> Station names
> [Click "Palm overrides 330" in dropdown
> ] Check "Edit/Verify"
> IP Addresses: Un-Check "Edit/Verify"
> Send
> Station Names > DF > 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 Guralp, to unlock from Clio: Views: > Sensor. Set duration = 10 sec. > Unlock A.
> Views > Sensor (click "refresh"): Mass Positions (V"10 < 15 (Guralp); < 25 (STS-2))
Voltage ("10") CH 1: CH 2: CH 3: Set Duration = 10 and click Center A command if any channel > 15 (Guralp); > 25 (STS-2) and click Refresh
> Views > Quickview (waveform monitor) > chan 1, 2, 3 > Start: Write down Max Min Midpoint (click "stop" to record values)

CH 1 -2036 -2008 95.7 CH 2 273 1177 2538 CH 3 181 -2077 -717.9

> Views > System
Last GPS Lock: 2 mins ago
Phase Error: 0.00001
Clock Quality: 30 (meas. T)
Input volts: 12.3 V

> Status > GPS (confirm GPS lock)
GPS Time: 23:50:02 GPS Date: 2008-05-27 23:02:06
GPS Lat: 41.76664 N GPS Lon: 118.66614 W Elev: 1287.3 m

> Status > Data Port Tx/Rx > Data4 Packet Buffer: 32400 (increasing? (refresh))
> Cmds > Baler cmd> Turn on Baler: Send baler cmd*: Check baler is on (solid green light)
> Status > Data Port Tx/Rx > Data4 Packet buffer decreases to zero? Packets Sent: 392
(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.)

> Status > General > Total ReSyncs: 66

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

DEPARTURE TIME (local): ___

"PLEASE DETAIL SPECIAL PROBLEMS ON BACK OF THIS SHEET, AND NOTE BELOW"
HLP Q330 SERVICE SHEET (v8) (last revised 20080716 MJF)

Station: WJO01 Month: 09 Day: 09 Year: 2008 Arrival time (local): 6:35 am
Q330 S/N: 1432 Old baler S/N: 067.86 New baler S/N: 5528.7
Sensor mass position: > Views > Sensors * Boom Positions
1: 20 2: -10 3: 15
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: 0 2: 6 3: -3

> Views > Data Recording > DP3 * Station: HLQ01 > DP4 * Station: WJO01
[DP3 Station should match program (HLQ?? for Guralp, HLS?? for Streckeisen), DP4 Station should match station name]

> Views > System: (use Refresh to Update)
Last GPS Lock: 900 min ago
Phase error: 2 ± 2 µs
Clock quality: OH lock, Frozen (4)
Input volts: 12.6
Temperature: 31°C
Last Boot: 2008-05-29 23:02:06

Calibration, recheck of sensor mass positions, and waveform monitor

☐ > cmds > Calibration: Duration bar: 6 min (if running Q330 Beta 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: 2: 3:

Waveform Monitor: > Views > Quickview > chan1,2,3 > Start: Enter Max Min Midpoint (click "Stop" to record values)
CH 1 100 100 117.2 CH 2 100 -700 116.6 CH 3 -318 -132 195.5
Microseism? \\ Microseism? \\ Microseism? \\ 

☐ > Status > Data Port Txr > Data4 * Packet Buffer Increasing? (press refresh)
☐ > cmds > Baler > Isend command to baler (baler should turn on, with packets being sent)
☐ > Status > Data Port Txr > Data4 * Packet Buffer (Decreases to zero)? Packets Sent: 891276 17
☐ > Commands > Baler > !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: 891289

(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 (~6 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.)

☐ > Status > General > Total Resyncs: (add)
☐ > 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): 7:00 pm

*PLEASE NOTE GENERAL STATE OF THE STATION AND ANY SPECIAL PROBLEMS IN SPACE BELOW*
HLP Q330 DEMOBILIZATION SHEET (v3) (last revised 20090904 MJF)

STATION: NVO01  Month: 9  Day: 16  Year: 2009  ARRIVAL TIME(local): 1:26 AM
Q330 S/N: 1000  OLD BALER S/N: 0S 552
SENSOR MASS POSITION: > Views > Sensors *Boom Positions
1: 12  2: 5  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: 2: 3: ______

> Views > Data Recording > DP3 *Station: HLG 01 > DP4 *Station: NVO01
[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: 11 m.s < ago
Phase error: 0
Clock quality: 30 lock, -0.32Hz (h/1)
Input volts: 12.6 V
Temperature: 32 C
Last Boot: 2008-06-29 23:52:06
Last Resync: 2009-01-01 00:01:20

> Views > System: Turn GPS ON. Status > GPS
Locked? Y
Satellites viewed: 6
Satellites used: 6
Time: 20:32:13
Date: 16/06/2009
Latitude: 41.9660 017
Longitude: 118.6611 017
Elev (m): 1271.4

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: ISelect all 3 channels; START: 1 minute; IStart .
Sit quietly for ~18 min and note local start time here: 1:35 AM

> 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)? Packs Sent: 411047252
> Commands > Baler Cmds > ITurn Off Baler (wait for slow green blink = idle)

DEMOBILIZE STATION

SENSOR
☐ If sensor is a 3T: 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)
☐ 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: 2
☐ Remove sensor; enter sensor information: Type: LCLL01  ESP  Serial #: 73151
☐ Enter assumed declination from installation (as written on sensor pad): 15° 40'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 Streckeisen). Enter orientation: N 2° W

If measured orientation does not appear to be correct, double check measurement and confirm with at least

GPS S/N 06240022