SYSTEM OPERATION MANUAL

Rev 1.2

WELCOME TO ALLTORQUE HD

Congratulations on your new AlltorqueHD Torque Link device with Bluetooth wireless connection technology. This smart device utilities a free companion App "AlltorqueHD" allowing your smartphone to display, control and log your data.

This application is intended to support only official AlltorqueHD products, under the following designations:

Torque Spools　　**Torque Hubs**　　**Torque Links**

A Bluetooth connection to a smartphone running AlltorqueHD is necessary for operation, and most modern Apple or Android phones are compatible.

Tension Link
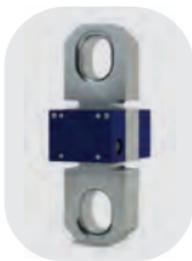
Connecting to a Tension Link to perform load testing is a secondary function within the AlltorqueHD app.

SAFETY

INTENDED USE

Our system operates by taking true torque readings between the drive head and the pile. It is critical that proper installation steps have been followed, as the hardware is subjected to dangerous amounts of torque.

⚠ WARNING!

Risk of Injury

Failure to use the device properly poses a substantial risk of injury.

Install as per best practice.
Operate only within the force/torque range of your hardware's specifications.
Discontinue using the device if it exhibits visible damages.

NOTICE!

Risk of Damage

Improper use of the device may result in damage.

Do not expose the hardware to strong magnetic fields (e.g. transformers). This could cause errors in data or otherwise damage the device.
Do not set up the device near strong heat sources (eg. ovens or radiators).
Do not operate with an open battery compartment.

Risks associated with using batteries

Use common sense with our battery packs, do not open, short or damage.
Replace only with same type battery, and charge only with provided charger.

HARDWARE SETUP

TORQUE SPOOLS

1. Bolt tooling on top to accommodate the drive it is going to be installed on.

2. Bolt tooling to the bottom of the spool.

3. Go to work.

TORQUE HUBS

1. Slide the hub over the output shaft and use pin to hold the hub to the drive head.

2. Bolt on tooling to the bolt circle.

3. Go to work.

TORQUE LINKS

1. Slide the link over the output shaft of drive and use pin to hold the link to the drive.

2. Can use existing tooling by sliding it over the output shaft of the link.

3. Go to work.

APP SETUP

Downloading the application requires an active internet connection, and can be found on the App Store (for Apple phones) or the Google Play Store (for Android phones).

You can find it by searching for "AlltorqueHD" or by scanning one of the following QR codes:

iOS

Android

COMPATIBILITY

The following smartphones and tablets with Bluetooth® (Bluetooth® 4.0 and higher) are compatible with the devices and the app:

USER ACCOUNT & LOGIN

At the time of your AlltorqueHD hardware purchase, one or several accounts will have been set up - giving you access to the AlltorqueHD App and allowing for your data to be stored on the cloud.

Email Login - enter your email and the password given to you by your AlltorqueHD contact.

First time login: Depending on your company's security policy, the app could prompt for a new password.

It is Highly Recommended to use a strong password.
6+ Characters, Use a Capital Letter, Symbol & Number.

APPEARANCE

The AlltorqueHD App can run in light or dark mode. This can be changed by an option in the settings at any time.

OPERATION

1 CONNECT TO DEVICE

When you are on location with your gear set up and ready to begin a job, the steps are as follows:
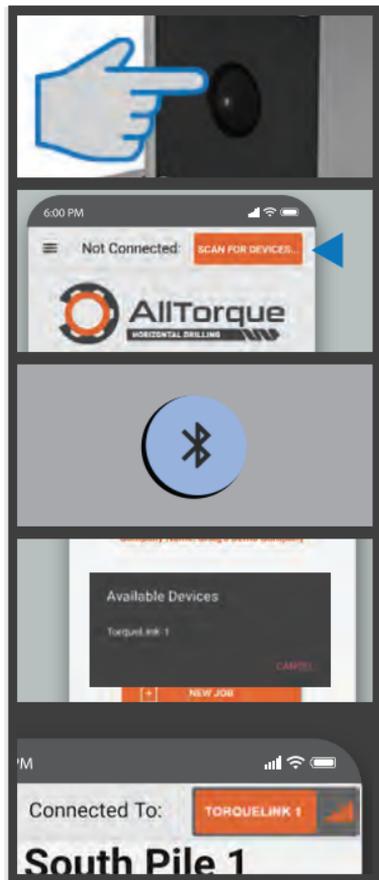
1 Push the black rubber button on your TorqueLink device. Look for the blue LED light to indicate that it is powered ON.

2 From the Home Screen on the AlltorqueHD App, tap the "Scan For Devices" button found in the top right of your screen.

3 If your phone's Bluetooth is turned off, you will be prompted to turn it on. Do so.

4 The "Available Devices" dialogue box will pop up. Tap to select the TorqueLink device you are using.

5 Verify that you are now "Connected to: Your TorqueLink Device". The signal strength indicator should have some bars if within 100m range of device.

Clicking the "New Job" button on the Home screen will prompt you for a name. It may be recommended to use something memorable about the work site, or job.

Each Job typically contains a number of Piles, each with data such as Torque, Depth, GPS location

After entering the Job Name, you are to input some details for the first Pile within your job.

3 **CREATE A NEW PILE**

New Pile Screen

← Connected To:	PILE SIMULATOR
Pile Name	South Pile 1
Target Torque	2000
Target Depth	40
Latitude	52.2569279 ⊙
Longitude	-113.7978964
Notes	
Reverse Torque Direction	
Reverse Rotation Direction	
CANCEL	DONE	ADD PHOTO

1 Set a Pile Name

2 Input Target Torque

3 Input Target Depth

GPS supplies Lat/Long values

Notes (Optional)

Add Photo (Optional) - allows you to capture a new image, or pick one from your photo directory.

Clicking "Done" in the New Pile dialogue will bring you to the Running Screen.

4 **RUN JOB**

This is the active data collection screen for an ongoing job. The readouts are as follows:

Running Screen

1. Menu Access Button
2. Connect/Disconnect Device
3. Signal Strength
4. Low/Critical Battery Warning
5. Current Pile Name
6. Name of Job containing Pile
7. Torque Readout of Device
8. Zero button to reset Torque
9. Current Device RPM Readout
10. Current Depth
11. Increment Value*
    *Tap to change values.
12. Toggle Graph/Slope Readout
13. Add Increment to Depth Value
14. Graphed Data - Torque, RPM
15. Start a New Pile in Same Job
16. Edit Values of Current Pile
17. View List of All Piles in Job
18. Add Photo to Current Pile Data

Add Increment

Best practices in pile installation involve measuring and marking incremental distances on the pile. Every time you see a marker hit ground level while digging, hit the 'ADD INCREMENT' button to update the recorded depth.

INCREMENT
(ft)

5

Tap the value to change the increment value. Ensure that the app Increment matches the distance marked on piles.

Chart / Slope *(Bullseye)*

The Slope or *Bullseye* function indicates the angle of your device and can be toggled into view by tapping the "Slope" Button. You can return to your graphed data by tapping the "Chart" button
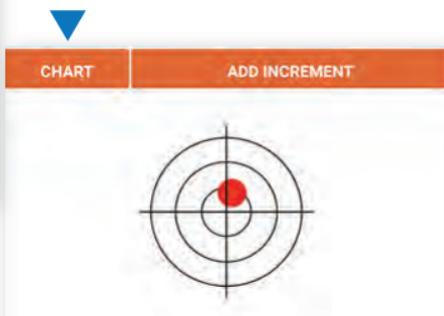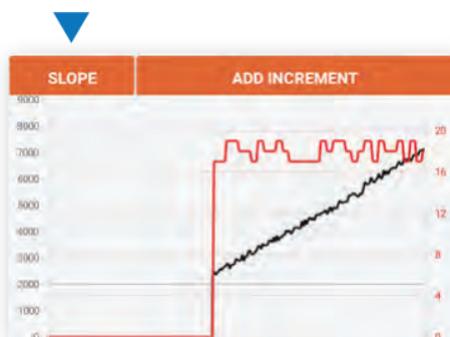
NEW PILE   EDIT PILE   PILE LIST   ADD PHOTO

New Pile

At any point you may click the "New Pile" button, and begin a fully separate set of data (intended to be the next pile in your job). If you need to return to a previous pile, that can be done by selecting it from the "Pile List".

Edit Pile

Allows for the editing of any information that was entered in the "New Pile" screen, for the pile that you currently have loaded.

Pile List

Displays the list of Piles that have been created for the current running Job. The user can select and resume any of the previously entered Piles.

Add Photo

Allows the user to add a picture to the current pile data. Can be immediately snapped by the camera, or taken from the smartphone's photos directory.

5 **REPORTS**

From the Pile List you can access the 'View Report' button. This will put your recorded data for the Job into our form and output a .PDF copy for your use.
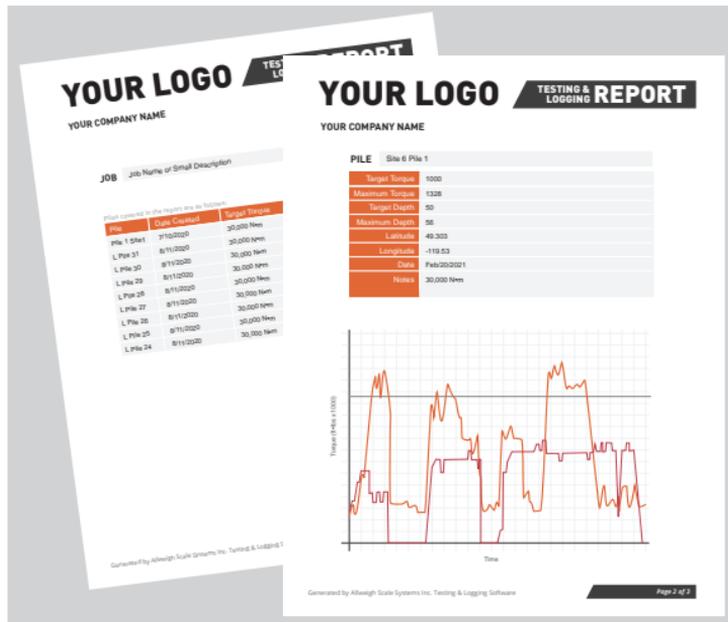
Export Report .PDF

When a report of your Job is exported out of the AlltorqueHD App, your phone handles it like any downloaded file. That means you may text, email, upload and share it as much as you like.

As long as your Job remains in the AlltorqueHD App, either locally or on the cloud, you may export more copies of the report at any time.

Tap the "Load Job" button on the Home Screen.

LOAD JOB

Select the job you wish to access from the Job History area.

You can toggle the view to see Jobs saved Locally on your phone versus Jobs synced to the AlltorqueHD Cloud.

←	Not Connected:	SCAN FOR DEVICES...
	LOCAL JOBS	CLOUD JOBS

JOB HISTORY

Job Name	Date
Example Job 1	2021-05-20 2:21:18 AM
RealNewJob	2021-05-19 3:02:38 AM
testjobbo2	2021-04-20 7:31:49 AM
Testjobbo	2021-03-23 7:51:30 AM

Tapping the Job name downloads it from the cloud to your device, and then takes you to the Pile List for the job.

From the Pile list you can connect to your device and resume the job, or View Report for all the pile data collected in the job.

7 **SETTINGS**

Application Settings are where you can adjust some quality of life options in the ATHD App.

They are pretty self explanatory.

APPLICATION SETTINGS

Connection Type	Bluetooth
Available Job Types	Ask When Creating Job
Auto Detect Location	⬤
Confirmation To Zero Sensor	⬤
Stay Connected While Sleeping	⬤
Keep Screen On While Connected	⬤
Attempt To Reconnect On Connnection Loss	⬤
Buffer Data On Connection Loss	⬤
Application Theme	Light
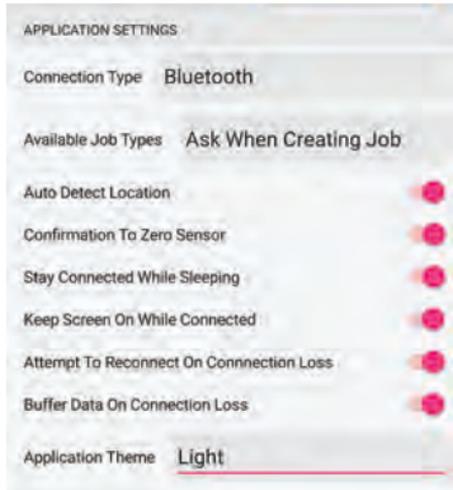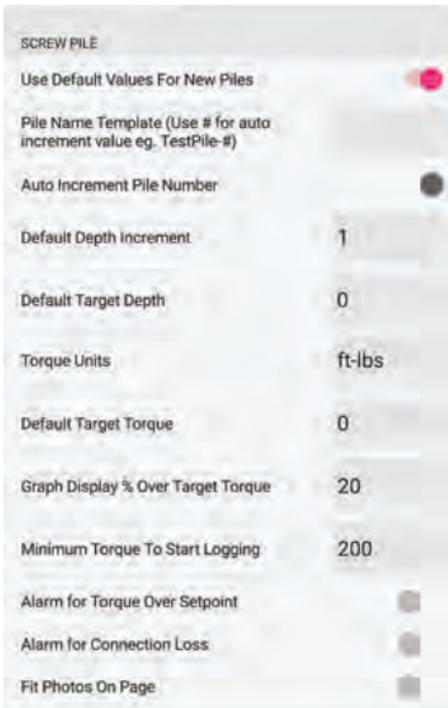
Screw Pile settings allow for some handy presets to be implemented.

Using a Pile Name template and proper units and increments can save time while running the job.

SCREW PILE

Use Default Values For New Piles	⬤
Pile Name Template (Use # for auto increment value eg. TestPile-#)	
Auto Increment Pile Number	⬤
Default Depth Increment	1
Default Target Depth	0
Torque Units	ft-lbs
Default Target Torque	0
Graph Display % Over Target Torque	20
Minimum Torque To Start Logging	200
Alarm for Torque Over Setpoint	⬜
Alarm for Connection Loss	⬜
Fit Photos On Page	⬜

SETTINGS (CONTINUED)

OPERATOR INFO

Operator Name   Jim Drillsman

Operator Logo   ◎ Your Logo

SELECT LOGO

EDIT LOGO

ADVANCED SETTINGS

Operator Info contains the Name and Logo that will be added to all the exported Report PDF files.

For logo, you can snap a picture or select a graphic already contained on the phone or tablet.

For best results use a white background.

NOTICE!

Advanced Settings are not to be accessed unless given explicit instructions by our service personnel.

Altering any of them on your own can result in completely inaccurate data.

TROUBLESHOOTING
POTENTIAL ISSUES & SOLUTIONS

Can't log in to the AlltorqueHD App.

- Do you have a user account provided by Alltorque or your sales rep?
- Did you enter the credentials correctly with correct capitalization
- Are you connected to the internet? The first time a phone or tablet is used to login it must have an internet connection, once it has successfully logged in it can be used offline
- Contact AllTorque to reset your password

Can't connect to device. - No device on scan.

- Is the power button on?
- Is the blue light on the power button on? If not and the button is on change the batteries
- Power cycle the device
- Is another user connected? Currently only a single connection is supported
- Is Bluetooth enabled on the phone/tablet?
- Is location services enabled on the phone/tablet? This includes both app permissions and global device permissions
- Move closer to the device, if range is consistently less than 100' contact Alltorque for support

Can't connect to device. - Device is available on scan.

- Is another user trying to connect? Currently only a single connection is supported
- Move closer to the device, if range is consistently less than 100' contact Alltorque for support
- Low battery?
- Power cycle the device
- Force close the app and try again

Connected to device but Torque and RPM stay at 0.

- Power cycle the device and force close the app then try again
- Contact Alltorque for support (requires an attempted fix with advanced settings or repair)

Torque is working but RPM is not.

- Power cycle the device and force close the app then try again
- Contact Alltorque for support (requires an attempted fix with advanced settings or repair)

Slope indicator does not show correct angle.

- This feature is in active development and may not work correctly on this release
- Contact Alltorque support for more info

Wireless connection drops every few minutes.

- Are batteries low?
- Move closer to the device, if range is consistently less than 100' contact Alltorque for support
- Test with a different phone/tablet to confirm it is not a limitation with the current phone/tablet

I can't find a certain job.

- Check the "Cloud Jobs" tab, as it may have been uploaded.

I can't resume a job.

- Some versions of the app do not support special characters in the job name, ensure the app is up to date
- Contact Alltorque support if the latest version still will not resume

CONTACT DETAILS

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