

Length and Specimen App Handbook v.20200401

Table of Contents

Length App Cheat Sheet.....	1
FIRST LEG ONLY : DECK LEADS 4 STEPS	1
Pre-LEG checklist.....	4
SET SHAKE App settings for BOTH NEXUS AND SAMSUNG.....	6
PRE- HAUL checklist	8
Pairing tablets to Bluetooth devices.....	8
Pairing headsets to Bluetooth devices.....	9
Unpairing Bluetooth devices.....	9
Collecting LENGTH Data on DECK	11
Post-haul checklist for LENGTH.....	11
Create LENGTH file to export from tablet to Catch computer.....	11
Charging wands.....	11
How to concatenate lengths or species codes >120.....	12
Specimen App	13
Set-up tablet before collecting data using TOUCH ONLY specimen tablet.....	13
Pairing tablets to Bluetooth Blue Tiger Elite headsets	13
Set-up (brand NEW OUT OF BOX tablet only) tablet before downloading specimen voice app	13
Set-up tablet before collecting data using VOICE enabled specimen tablet	14
Collecting specimen data on deck using TOUCH ONLY specimen tablet.....	14
Collecting specimen data on deck using VOICE enabled specimen tablet	14
Best management practices.....	16
Post-haul checklist for Specimen	17
Charging headsets.....	17
Create specimen file to export from tablet to Catch computer	17
Directories where you find exported data files.....	17
Length/Specimen Apps Troubleshooting.....	17
Tablet and Catch Computer Bluetooth Pairing TROUBLESHOOT.....	18
Wand swipes barcode multiple times (i.e.: swipes same barcode twice) TROUBLESHOOTING....	18
Crashing Length App	18

Clearing Bluetooth Cache.....	19
Silver Nexus 7.....	19
Black Nexus 7s.....	22
Transferring Tablet Data to Catch Computer and Data_Ent Program.....	25
Pairing tablets to Catch computer using BlueSoleil application	25
Sending length.CSV and specimen.CSV file from tablet to Catch computer via Bluetooth.....	30
Uploading haul length and specimen file(s) into Data_Ent.mdb	30
Editing raw data in Data_Ent Program.....	31
Best practices.....	32
Change name of Bluetooth device.....	32
Installing new length or specimen applications.....	33
Peltor Headset/Bluetooth Cheat Sheet	34


Length App Cheat Sheet

FIRST LEG ONLY: DECK LEADS 4 STEPS


STEP 1)

At the beginning of the survey, each tablet needs to be given a unique Bluetooth name (naming convention is First letter of vessel name+sequential numbering, i.e. V1, V2, A1, A2, etc.). To change the tablet's Bluetooth name for:


Nexus tablets (for Samsung tablets see instructions below)

1. go to  (icon located near bottom of tablet screen)
2. Bluetooth
3. Tap the three vertical dots in upper right-hand corner
4. Tap rename this device
5. Go back to home screen

Samsung Tab A (white)

1. Go to **Settings** (gear icon located bottom left on screen)
2. Scroll down left column all the way to the bottom
 - a. Tap **About device**  About device
 - i. Top of right column tap **Device name**
 1. use keyboard on tablet to rename tablet
 - a. tap **DONE**

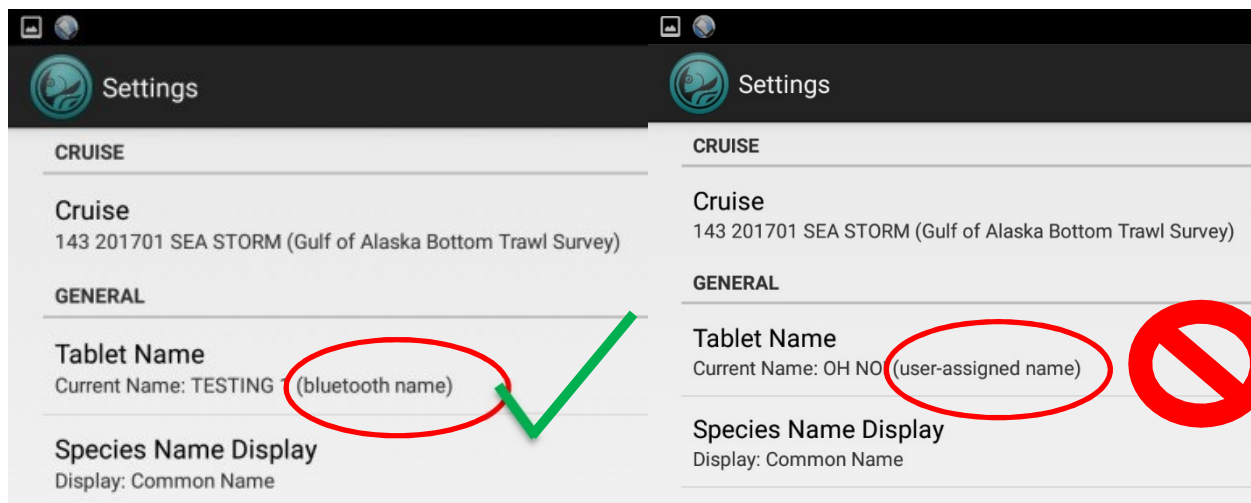
Samsung Galaxy S2

1. go to settings
2. scroll down left side all the way to the bottom and tap  About device
3. Tap "Device Name"- located 4th from top on RIGHT side
4. Rename tablet
5. Go back to home screen



STEP 2)

Now open Specimen or Length app (both apps are installed on all tablets). Please go through STEP 2 with each app.

1. Tap “Settings”- long click, hold for 2+ seconds (grey bar at the bottom of the screen)
2. Tap “Tablet Name”
3. Delete the (user-assigned) tablet name.
**The Bluetooth name that you assigned the tablet in the tablets settings will then be used for naming all the files.
4. REPEAT IN REMAINING APP(S)



STEP 3)

1. Open length/specimen app

 - a. Select SETTINGS [T] (long click)- hold finger on words for ~3 seconds
 - b. set CRUISE (tap on Cruise)
 - c. Select correct cruise/vessel
 - d. Tap back Triangle (bottom left) 
2. REPEAT ON REMAINING APPS AND TABLETS

STEP 4)

1. Open Length/ Specimen apps and select Delete Lengths or Delete Specimen
2. Make sure there are NO length or specimen data from other hauls. Delete length and specimen data for ALL hauls
 - a. Select Select Haul
 - b. Select haul
 - c. Select Delete ALL Cruise Data. In specimen apps, Select Delete X records for Haul X and continue until no specimen data remains in specimen apps.
 - d. Tap Exit
3. Now make sure all data and old data directories are deleted from each tablet too. Open Total Commander, Open SD-card, Open Pictures and Bluetooth folders and ensure that no data exists in these folders. Delete /Pictures/DataEntCM and /Pictures/DataEntMM directories and any other directories that contain data from previous years.

STEP 5)

1. Make sure all wands are set to 500 ms scan speed by, swipe Interblock Delay barcode for 500 ms (available from WWR2900 Pen Scanner Manual in RACE Survey App>Manuals and Instructions>Bluetooth Devices> WWR2900 WandManual.pdf, also available as laminated sheet in deck materials folder)

Pre-LEG checklist (first Nexus, followed by Samsung)

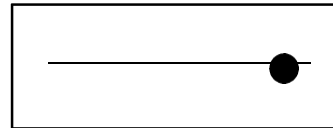
NEXUS tablet settings (Check these occasionally)

1. Tap settings icon: located bottom of the screen 3rd from the left
2. Display (left column, 3 down)
- a. *Brightness level* – MAX
 - i. Tap “Brightness level”, move circle all the way to the right
 - b. *Adaptive Brightness* –OFF
 - i. tap circle to turn on/off
 - c. *Sleep* – AFTER 30 MINUTES OF INACTIVITY
 - d. *Font size* – NORMAL
 - e. *When device is rotated* – STAY IN CURRENT ORIENTATION



Tap arrow (top left) of screen to go back to SETTINGS

3. Sound & notification (right column, 3 down)
- a. *Media Volume* –MAX
 - b. *Alarm Volume* –MAX
 - c. *Notification Volume* –MAX



Tap arrow (top left) of screen to go back to SETTINGS

4. Date & time (scroll down, left column, 2 up from bottom)
5. *Automatic date & time* – ON



- a. *Select time zone* – Alaska Daylight Time GMT-08:00
- b. *Use 24-hour format* – ON
- c. *Choose date format* – 12/31/2015 (not available on all tablets)

Tap arrow (top left) of screen to go back to SETTINGS

6. Wi-Fi – OFF (scroll to top, top of left column)



Tap arrow (top left) of screen to go back to SETTINGS

7. Bluetooth – ON (top of right column)



Tap HOME CIRCLE

Bottom center of screen



SAMSUNG Galaxy Tab S2/A6 (white) tablet settings (Check these occasionally)

How do I know it's a Samsung Galaxy Tab S2?

Samsung written on top of screen and when powering on (from off, not sleep) the screen says Samsung Galaxy Tab S2

1. Tap Settings Icon
(bottom right of screen)



2. Tap Display (7th from top, left column)



- a. Brightness–AUTO box checked
- b. Sleep – AFTER 5 MINUTES OF INACTIVITY
- c. Font–Small, Default
- d. Screen mode- Adaptive display

3. Sound & notification (left column, one above the display settings)

- a. Sound mode- Sound
- b. Tap Volume - Media, Alarm, Notification on MAX settings



Tap arrow next to Volume on top of screen



4. Date & time (left column, scroll to bottom, 3rd)

- a. Automatic date & time – ON



- b. Select time zone – Alaska Daylight Time GMT-08:00
- c. Use 24-hour format – ON

5. Scroll to top of left column

6. Wi-Fi – OFF

7. Bluetooth – ON
-

SET SHAKE App settings for BOTH NEXUS AND SAMSUNG

Tap shake icon: located bottom left of screen



1. Action when shaken

a. *Simple* (top right)

i. This icon should be present for length



and for specimen



If not, go to step ii.

ii. Click to Select an App, and scroll down and select the LengthApp from the list. Do the same for Advanced and Pro tabs, where horizontal, vertical, and forward shakes can be set with the LengthApp.

Tap top left of screen



2. Sensor sensitivity (Second from top)

a. Set to 15 by moving the circle to the center



Tap top left of screen



3. Service state –ON

a. to turn on/off, tap grey square



4. Start at phone startup- CHECKED

a. to check/uncheck, tap grey square

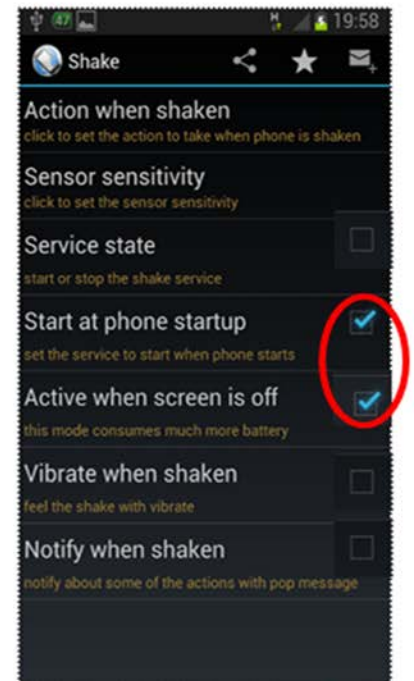
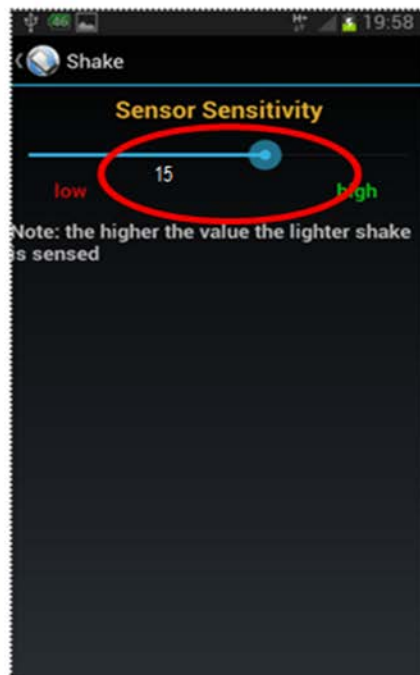
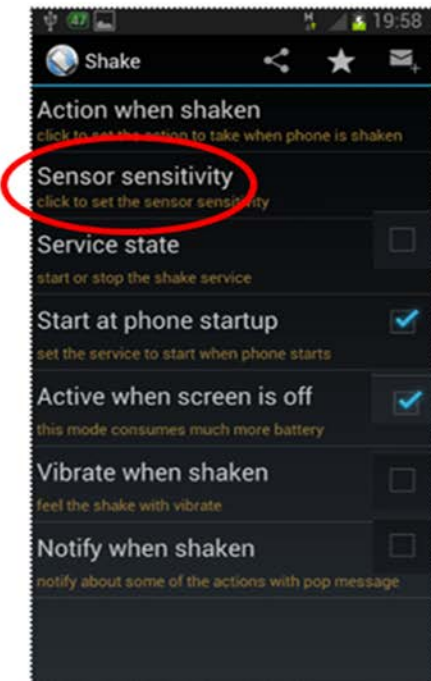
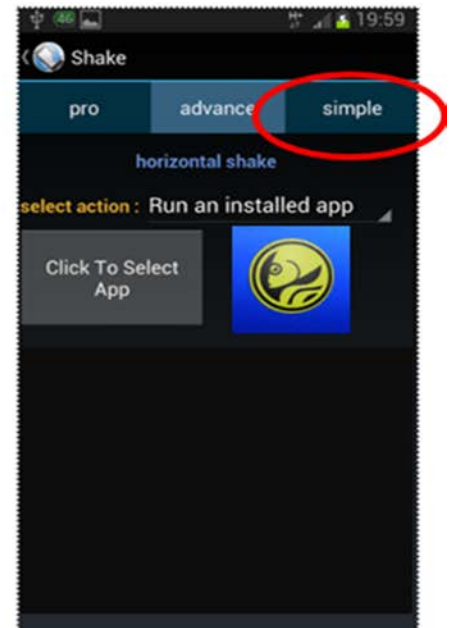
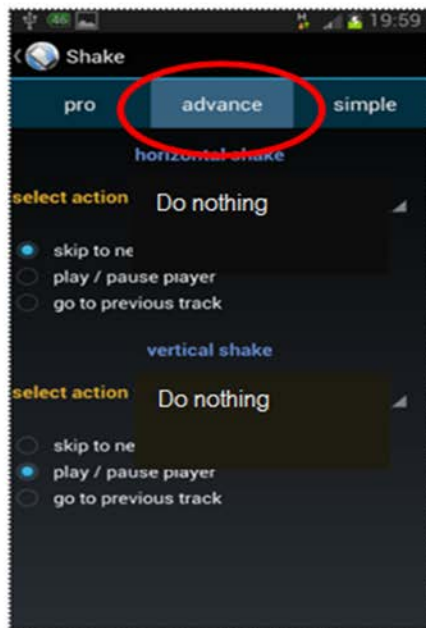
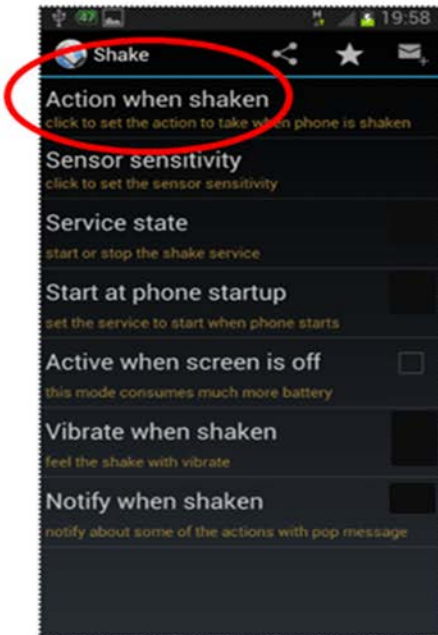


5. Active when screen is off- CHECKED

6. Last 3 boxes unchecked

SEE NEXT PAGE FOR SHAKE APP SCREEN SHOTS

Shake AppSetup



Tap HOME CIRCLE



PRE- HAUL checklist

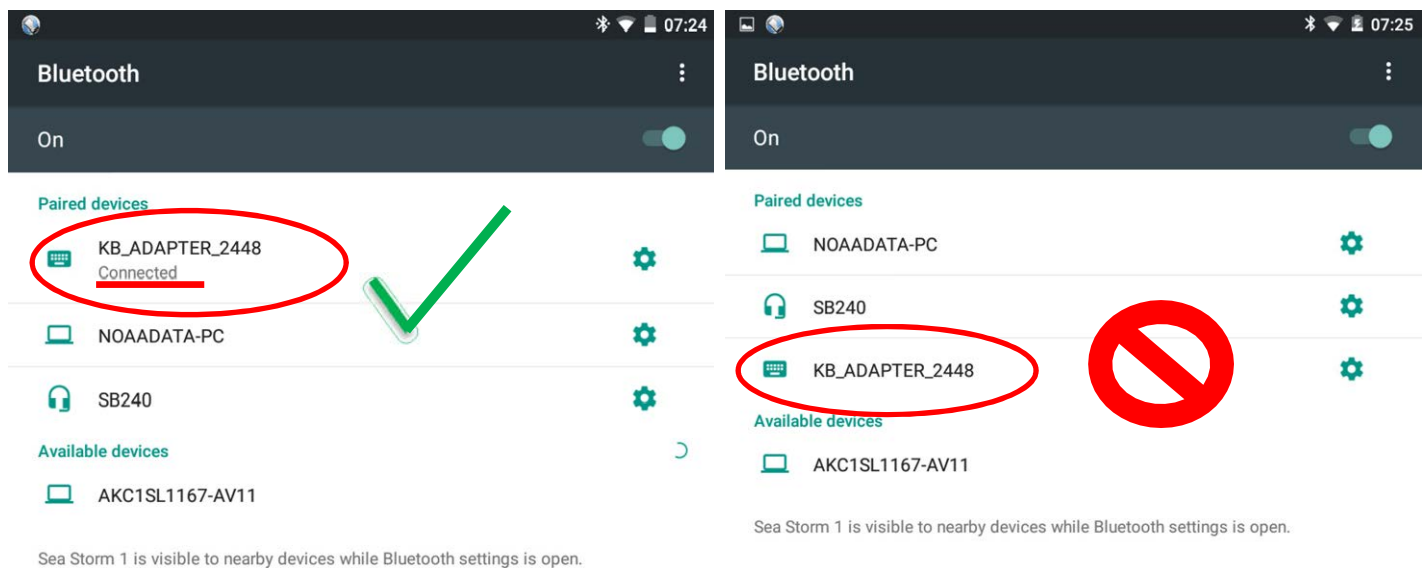
Set-up tablet before a haul

1. Select Collect Lengths
2. Select [H]AUL
3. Enter Haul number
4. Tap OK
5. PAIR or CONNECT Bluetooth devices
6. Put tablet in waterproof case and secure – Ready for the deck!

Pairing tablets to Bluetooth devices



Check and see if wand is already CONNECTED- swipe down TWICE from top of screen and underneath Bluetooth icon will say KB_ADAPTER_XXXX

PAIRED IS NOT THE SAME AS CONNECTED.
A WAND/HEADSET/NUMBER PAD CAN BE PAIRED BUT NOT CONNECTED.



If not paired/CONNECTED:

1. Turn on wand (power button is on top of wand, push down hard, will beep when powered on)
2. Swipe downward from the top of the screen
3. A grey box and white box should appear
4. Swipe down from grey box
5. Select the WORDS UNDER Bluetooth icon (not the icon!)
 - a. Words may be “Bluetooth”

- b. Words may be wand name i.e.) KB_ADAPTER_XXXX
 - c. Words may be the headset name and model
 - 6. Select MORE SETTINGS
 - 7. Make sure Bluetooth is ON
 - a. Upper right corner
- 
- 8. Tablet will be “searching” and may take a minute to find the device (wand)
 - a. If tablet cannot find wand see TROUBLESHOOTING SECTION
 - 9. Under Available Devices the wand is labeled KB_ADAPTER_XXXX
 - 10. Read all parts 10a-10e BEFORE starting part 10a
 - a. Have wand pairing barcodes available and then Select KB_ADAPTER_XXXX on tablet
 - b. **there will be 30 seconds to connect wand, if you run out of time, go back to step 10a
 - c. Follow instructions on barcode sheet
 - i. 1. SCAN “START” FIRST
 - ii. 2. SCAN YOUR NUMBERS
 - iii. 3. SCAN “ENTER”
 - iv. 4. SCAN “STOP”
 - d. IF THE BARCODES AREN'T SCANNING SEE TROUBLESHOOTING SECTION
 - e. DON'T FORGET to scan #4 “STOP” before continuing
 - 11. Mark your newly paired tablet and wand combination to avoid confusion (Example: “Wand A, Tablet A, etc.”)
 - 12. Tap HOME CIRCLE
 - Bottom center of screen
- 

Did you scan #4 “STOP” on the pairing/concatenation sheet after you paired the wand and tablet?

During set up, make sure wand is set to 500 ms scan speed:

- 2. With wand, swipe Interblock Delay barcode for 500 ms (available from WWR2900 Pen Scanner Manual in RACE Survey App>Manuals and Instructions>Bluetooth Devices> WWR2900 WandManual.pdf, also available as laminated sheet in deck materials folder)




Pairing headsets to Bluetooth devices

Due to variances in headset manufacturers, not all headsets pair using the same procedure. However, the concept is essentially the same.

***Tablet automatically tries to pair with the last headset paired to the tablet!!!!

- 1. Enter pairing mode on headset (see steps 1-6 in Pairing tablets to Bluetooth devices section)
- 2. Look for headset on tablet Bluetooth menu and pair with headset.
- 3. Consult the Race App “Manuals” section for specific pairing instructions for individual headsets. Mark your paired headset with your tablet and wand combination.

Unpairing Bluetooth devices

1. go to Settings  (icon located near bottom of tablet screen)
2. Bluetooth
3. Tap the  
4. Select FORGET (On Nexus) OR Unpair (on Samsung)

5.

Collecting LENGTH Data on DECK

1. Shake tablet to get back to Length App
2. Scan SPECIES on Navigation Card
3. Scan barcode number for corresponding species code on the length strip.
4. Set for Male/Female/Unsexed using Navigation Card
5. Scan Collect Lengths on the Navigation Card.
6. Length away!
7. To change species or sex at any time
 - a. Scan Species on Navigation Card
 - b. Set Sex: Male, Female, or Unsexed on Navigation card
8. Do not turn the wand off until all lengths are done and you are ready to return the tablet and wand to the data entry room. Failure to do this may result in personnel being cast into the fires of Mount Doom.
9. At the conclusion of the haul scan Exit/Cancel on Navigation Card.
10. Turn off wand and headphones after completing fish measuring on deck.
11. **WARNING:** if wand selected for pairing, DO NOT PRESS "Forget" because this will unpair the wand and it will have to be "re-paired"!

Post-haul checklist for LENGTH

Create LENGTH file to export from tablet to Catch computer

1. Shake tablet/case and the length app should open.
2. Select Create Length File
3. Select Select Haul
4. Select desired haul number
5. Select Extract Length Data
6. Repeat steps 1-5 for each haul you want to send to the catch computer
7. Select Exit

To send files to CATCH computer and DATA_ENT continue to section continue to TRANSFERRING DATA TO CATCH COMPUTER AND DATA_ENT section

Charging wands

1. Plug in PowerBot charging Puck
2. Place wand charging side down- written on wand
3. Look for SOLID red LED light on the left side of wand facing up- this indicates wand is charging
 - a. If red LED is blinking or there is no light- reposition wand on charging puck until red LED is solid
 - b. If wand is fully charged, red LED light may turn off
 - c. Wands may feel warm during/after charging. This is a normal property of wireless charging

How to concatenate lengths or species codes >120:

Any length measurement or species code over 120 (the maximum length that can be measured using the length board) use the “WAND PAIRING/CONCATENATION BARCODES” sheet to concatenate number.


TO ENTER LENGTH OVER 120:

1. After the length app is set to correct species and sex, use “WAND PAIRING/CONCATENATION BARCODE” (the full size barcode sheet, not the Navigation Card)
2. Scan “START”
3. Scan sequence of numbers that make up total length of fish
4. Scan “ENTER”
5. To continue collecting lengths with the length board, scan “STOP”


TO ENTER SPECIES CODE OVER 120:


1. Scan Species barcode on Navigation Card on length board
2. Scan “START”
3. Scan sequence of numbers that comprise species code
4. Scan “ENTER”
5. Scan “STOP”
6. Continue using length board Navigation Card to set sex of newly set species.


WAND PAIRING/CONCATENATION BARCODES


1. SCAN "START" FIRST → START 


2. SCAN YOUR NUMBERS


0 


1 


2 


3 

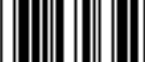
4 


5 


6 


7 

8 

9 



3. SCAN "ENTER" → ENTER 

4. SCAN "STOP" BEFORE → STOP 

PROCEEDING FURTHER

Specimen App

Set-up tablet before collecting data using TOUCH ONLY specimen tablet

*****If you have a wand paired to the tablet you are using, you have to scan the numbers you would like to input, you cannot use your finger on the touch screen to enter them manually (no digital keypad will appear on tablet screen).

1. Open specimen app and select Collect Specimen
2. Select SET RECORDER to select recorder (can also scan recorder code to select recorder).
 - a. To specify a new recorder manually click on the ADD PERSONNEL button, then type in Recorder's name. Press OK.
3. Select SET HAUL, scan or enter haul number. Press OK.
4. Select SET SPECIES, scan or enter species code. Press OK.
5. Select SET COLLECTION, scan or enter collection type. Press OK.

***** This field may automatically fill if a species has only one collection type.
6. Select SPECIMEN NUMBER, scan or enter starting specimen number. Press OK.
7. Select PROCEED
8. Pair or CONNECT wand/headset/numeric key pad
9. Put tablet in waterproof case and secure – Ready for the deck!

Pairing tablets to Bluetooth Blue Tiger Elite headsets

1. While Blue Tiger is off, press and hold power button (power button is silver button located where the microphone arm connects to the earpiece) for about 10 seconds, until the LED light begins to alternate between red and blue flashes. Headset is now in pairing mode.
1. On tablet, Swipe downward from the top of the screen
2. Select the Settings GEAR button from the upper right corner.
3. Select the Bluetooth category from the left column; it is the 2nd from the top.
4. Make sure tablet Bluetooth is ON
5. Select BT Elite headset from Available devices.
6. Due to variances in headset manufacturers, not all headsets pair using the same procedure. However, the concept is essentially the same. Enter pairing mode on headset, look for headset on tablet Bluetooth menu, and pair with headset. Consult the Race App "Manuals" section for specific pairing instructions for individual headsets. Mark your paired headset with your tablet and wand combination.
7. Turn off headphones after completing specimen collection on deck.

On deck

Collecting specimen data on deck using TOUCH ONLY specimen tablet

1. Press UNKNOWN button to select appropriate SEX
2. Scan or enter LENGTH

3. Scan or enter WEIGHT
4. Scan or select SAVE.
5. To clear current length and weight fields, scan or enter CLEAR.
6. To set new recorder, haul, species, collection type, or start specimen number, scan or enter DONE (EXIT/DONE) and repeat steps 1 through 7.

Best management practices:

- Look over lengths, weights, and all specimen data before leaving deck.

Post-haul checklist for Specimen

Charging headsets

1. Plug charging cord into outlet and headset
 - a. Don't charge for more than 3 hours!

Create specimen file to export from tablet to Catch computer

1. Open Specimen App.
2. Navigate to Main Menu Screen
3. Select Create Specimen File
4. Select Select Haul
5. Select desired haul number
6. Select Extract Specimen Data
7. Select Exit

Directories where you find exported data files:

Tablet directories where data is exported to:

- Catch Data: Output/CruiseCatch/Dataent
- Length Data: Output/Length/Dataent
- Specimen Data: Output/Specimen/Dataent

Catch Computer directory where all data is exported to:

- All Data Types: Documents/Bluetooth/Inbox

Length/Specimen Apps Troubleshooting

Tablet and Wand/Headset Bluetooth Pairing

Problem: Wand and Tablet are paired, but the haul/species barcodes don't work

Solution 1: Scan #4 "STOP" on the wand pairing/concatenation sheet

Solution 2: Is the wand connected? Pair and connected are different. See page 9 for screenshot of paired vs connected

Problem: The wand is on, but you can't see it on your tablet won't show up as a pairing option on the tablet

Solution:

1. The wand is probably still connected with another tablet. Find other tablet and disconnect wand by tapping on KB_ADAPTER_XXX and tapping OK when the message asks if to confirm DISCONNECT or FORGET. See bottom of page 10 for step by step.
2. Factory Reset Wand by holding power button for many seconds (~10-15 seconds) until

one two-toned beep followed by one single tone longer beep occur. Release power button, wand will be OFF. Turn wand back on by clicking power button once. Factory resetting wands will unpair and disconnect them from tablets. To turn wand off after normal use, simply push power button quickly (do not hold).

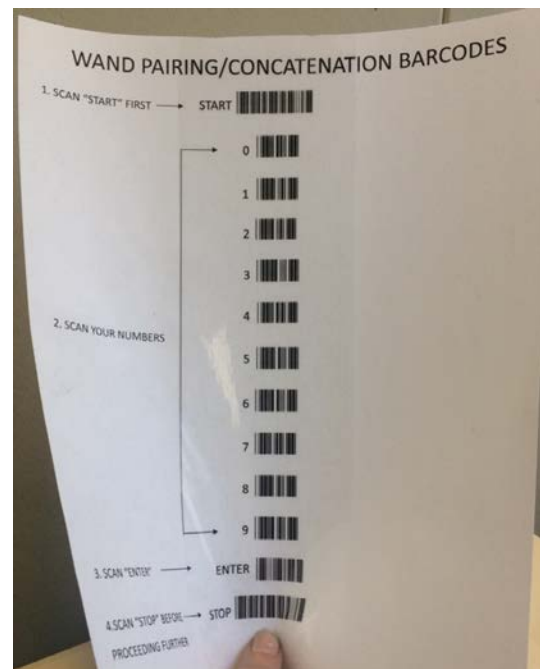
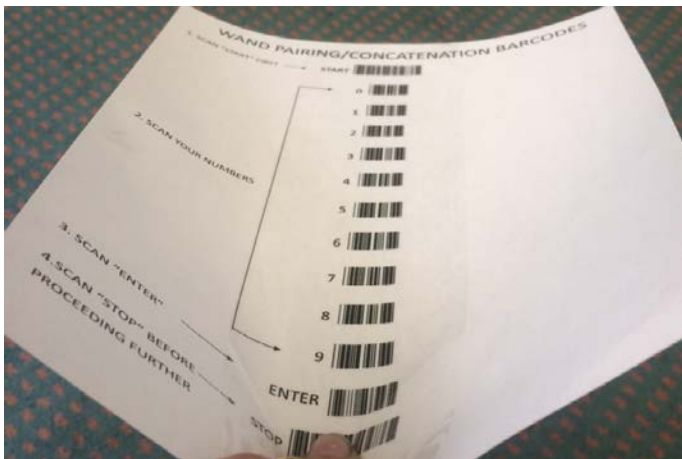
3. Clearing Cache: see Black Nexus Page 21 OR Silver Nexus pg. 18
 - a. To determine which set of instructions is needed look at edge of tablet or hold tablet laterally to see frame color



Problem: The barcodes won't scan and the pairing keeps timing out

Solutions:

1. Try curling the barcode sheet so it's slightly concave



Relax grip on wand and let it rest in the cradle between thumb and index finger. Hold concave barcode sheet in vertical position (watch for wind!)

2. Scan with confidence!! Speed up scan over barcode
3. Try another wand

4. Pass of wand to other unfortunate soul and watch in disbelief as it works the first time for them.

Tablet and Catch Computer Bluetooth Pairing TROUBLESHOOT

Problem: Trouble pairing/connecting tablet and CATCH computer.

Solution:

1. Be sure Bluetooth dongle is plugged into computer
2. Turn tablet's Bluetooth OFF and then back ON
3. On computer, in BlueSoleil program, under view menu, select Refresh Devices (or press F5).
4. Use computer to drive device pairing, not tablet. To this, on computer, in BlueSoleil program, right click on the tablet BlueSoleil's solar system that you are trying to pair to the computer to and select Pair Device.

Wand swipes barcode multiple times (i.e.: swipes same barcode twice) TROUBLESHOOTING

With wand, swipe Interblock Delay barcode for 500 ms (available from WWR2900 Pen Scanner Manual in RACE Survey App>Manuals and Instructions>Bluetooth Devices> WWR2900 WandManual.pdf, also available as laminated sheet in deck materials folder)

This increases the time between swipes/wand scans.

Crashing Length App

If your Length App keeps crashing, make sure that your wand is fully charged and ensure that wand remains ON while you are trying to use length app. Turning the wand off during length app use will cause the length app to crash.

If length app continues to crash, click on square shaped button (at the bottom of the screen) to view open apps. Then swipe length app to the right to close the application. Reopen length app by clicking icon on desktop.

If length app continues to crash, try restarting tablet.

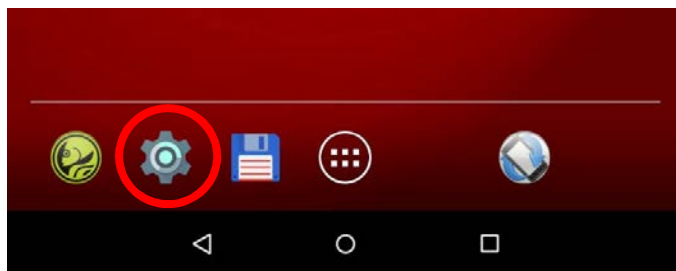
Clearing Bluetooth Cache:

In the event you have unpaired multiple Bluetooth devices on your Nexus 7 and now find it is difficult to connect with new devices, use this tutorial to clear the Bluetooth cache.

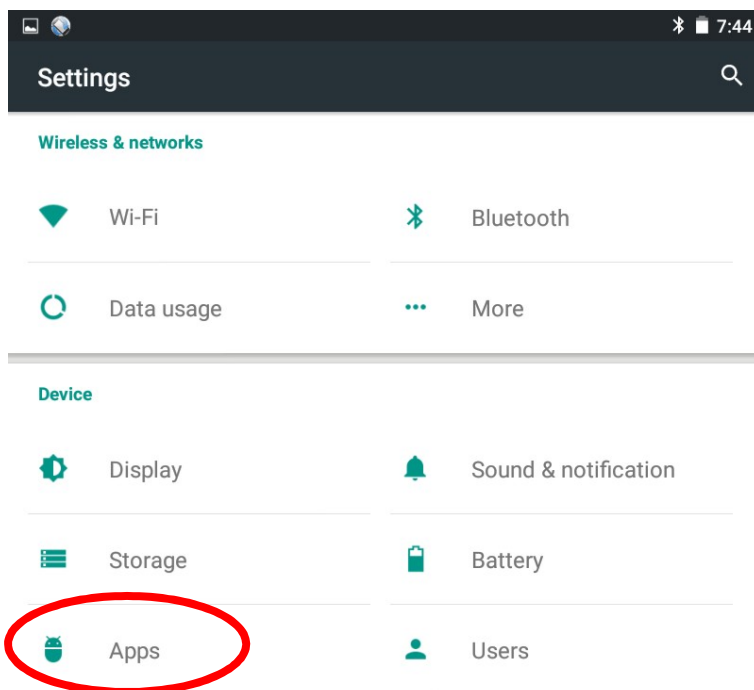
WHAT COLOR IS THE FRAME ON THE TABLET?

1. Silver frame, black back (look at tablet from lateral view if unsure)
 - a. Use first half of this tutorial under “Silver Nexus 7 cache reset”
2. All Black
 - a. Use second half of this tutorial under Black Nexus 7s cache reset”

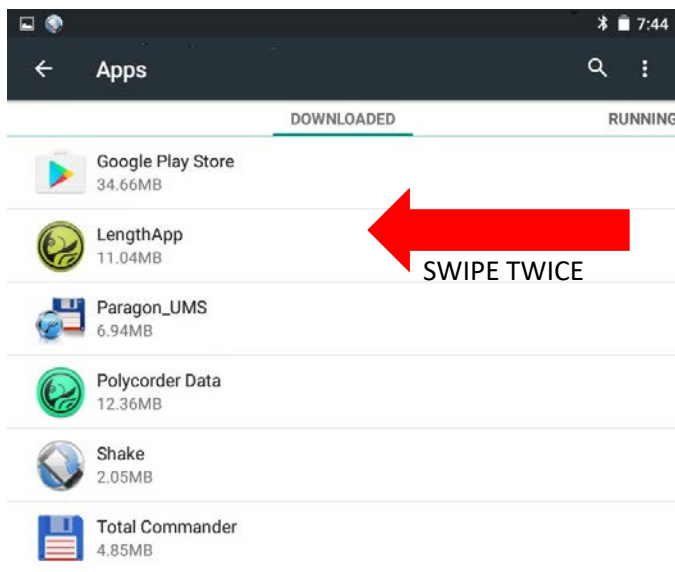
Silver Nexus 7 cache reset:



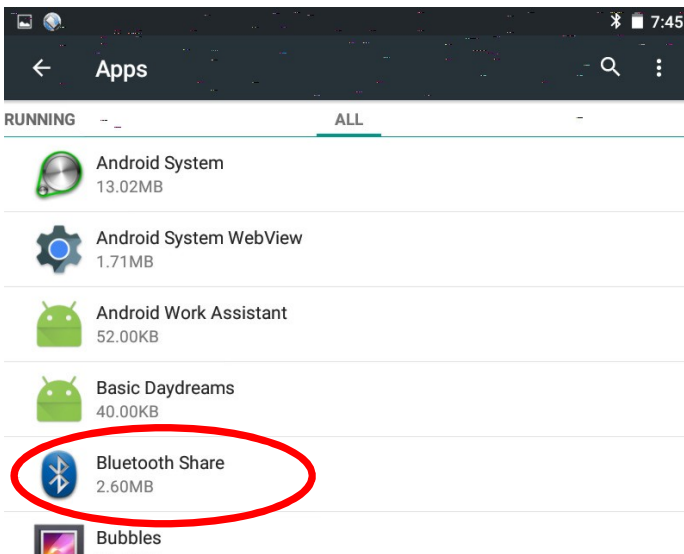
From the main menu, select the “Gear” icon at the bottom of the screen to bring up the Settings menu



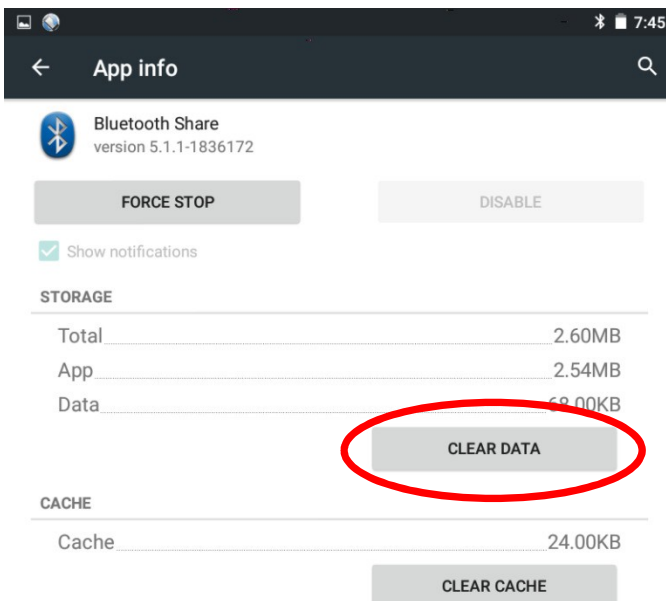
From the “Settings” menu, select “Apps”



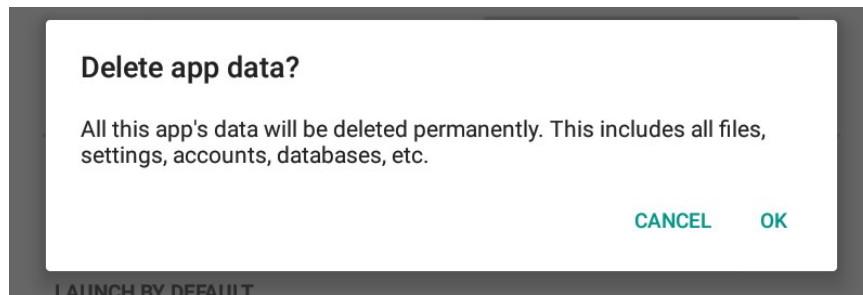
From the “Apps” menu, swipe on the screen twice to navigate to “All apps”



From the “All” menu, select “Bluetooth share”



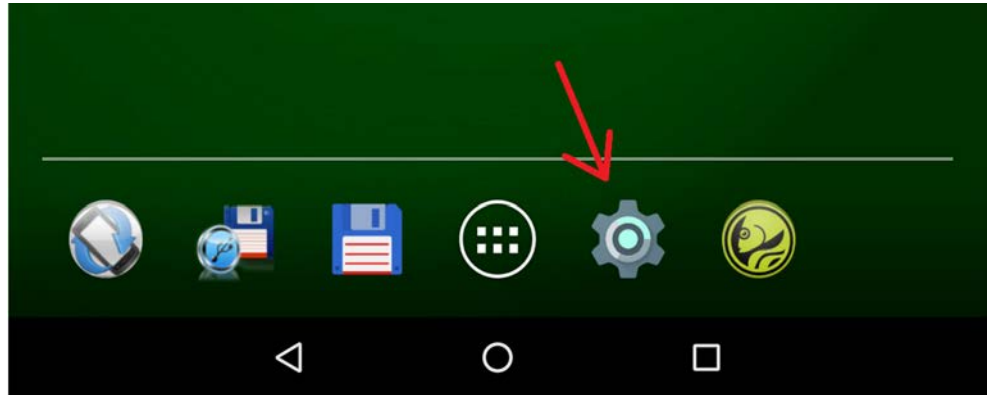
From “Bluetooth share”, select “Clear Data”



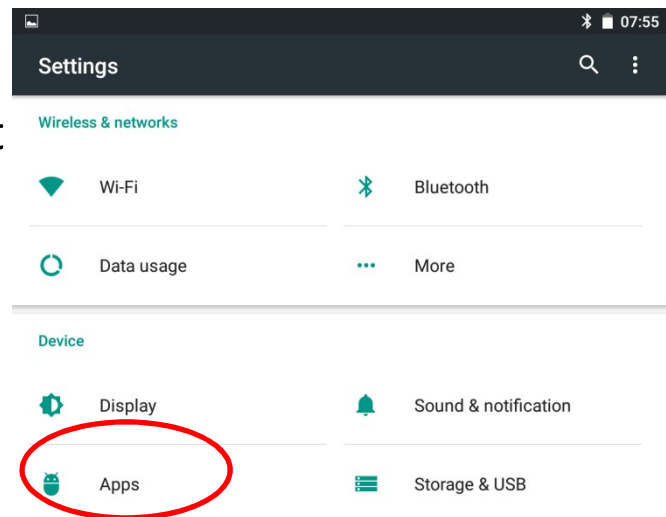
Select “OK”

Black Nexus 7s Bluetooth cache reset:

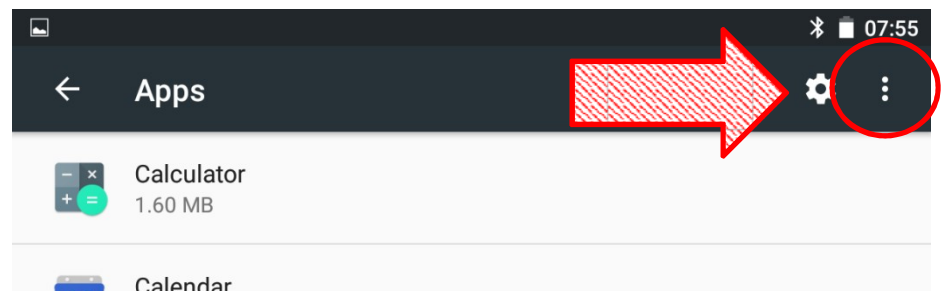
From main screen, press the “Gear” icon to bring up the settings menu



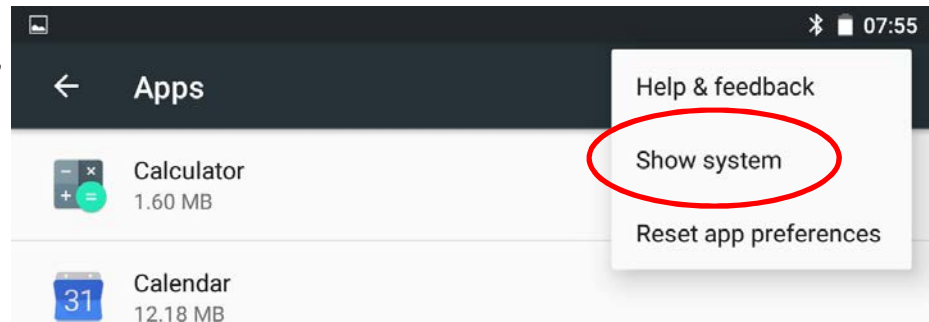
From settings menu, select



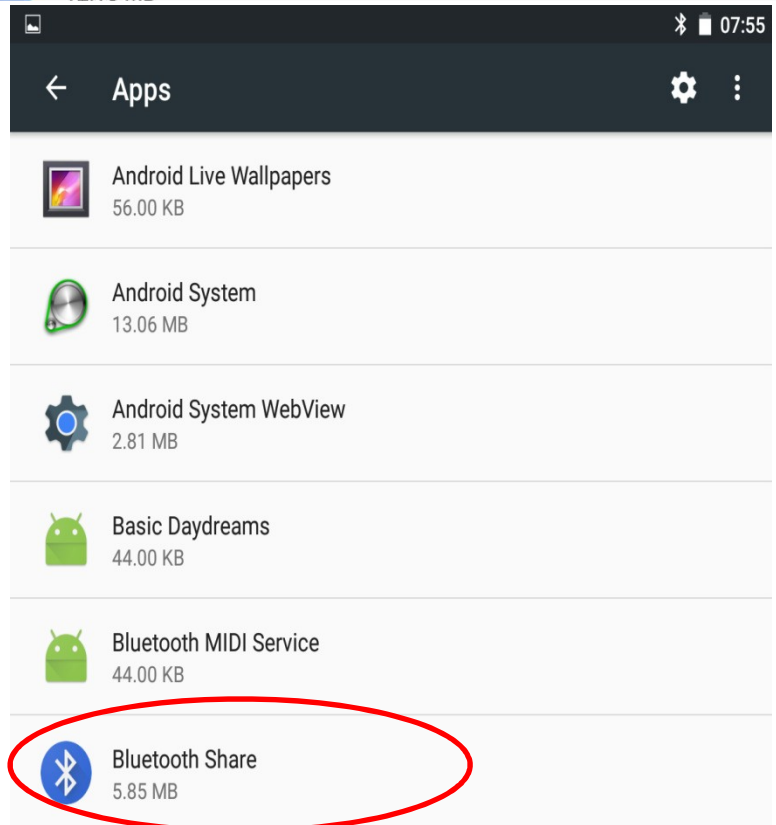
Press the 3 dots in the upper right hand corner of the screen



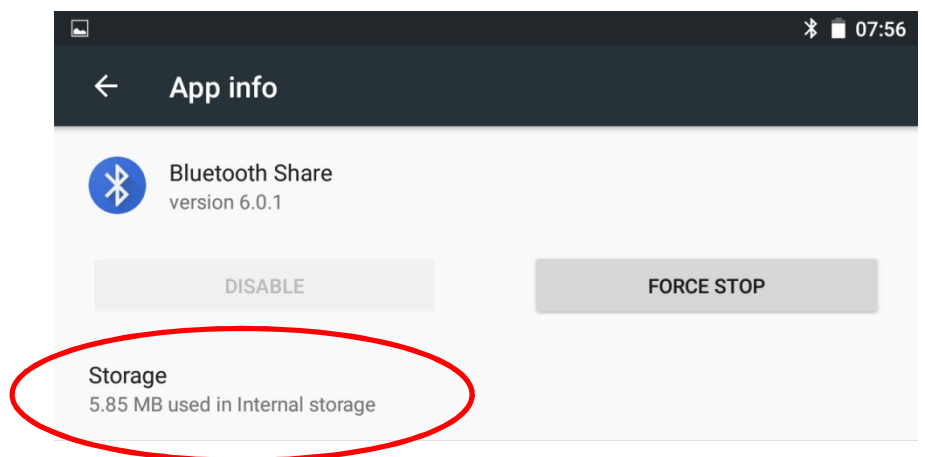
Select “show system”



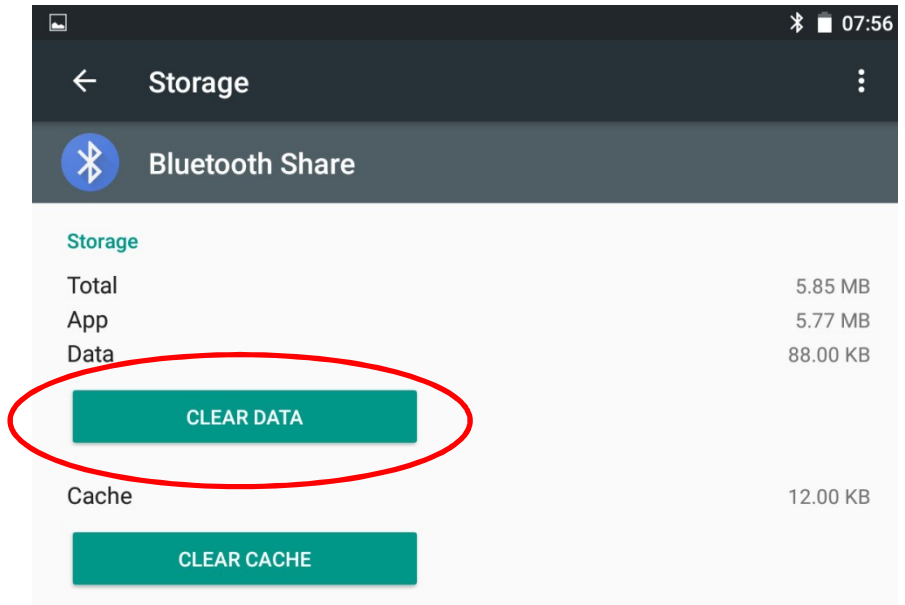
Select “Bluetooth share”



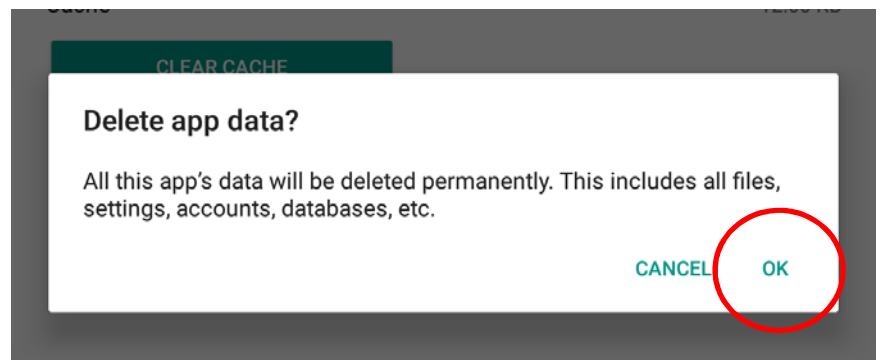
Select “Storage”



Select "Clear Data"






Select "OK"



Transferring Tablet Data to Catch Computer and Data_Ent Program

NEXUS TABLETS- Pairing tablets to Catch Computer using BlueSoleil Application

1. Turn Data Entry PC and tablet on (and ensure that Bluetooth dongle is plugged into PC).
2. Check tablet to see if Bluetooth is on. If you have completed tablet setup- Bluetooth will be on. If the Bluetooth is already turned on, the Bluetooth symbol  will be present on the upper bar (on the right side).
 - If Bluetooth is NOT turned on:
 - Swipe down from top of tablet screen and click on grey bar
 - Turn Bluetooth ON by tapping Bluetooth symbol  so it is highlighted in white
3. To Connect table to NOAADATA-PC:
 - On Computer, open the BlueSoleil application.
 - On tablet, tap small down arrow button (Bluetooth ) found directly below Bluetooth symbol.
 - Select the NOAADATA-PC option that corresponds with your data entry computer. If NOAADATA-PC is not visible in this screen, press MORE SETTINGS, and select NOAADATA-PC from following screen.
 - A pairing request should appear immediately after selecting NOAADATA-PC.
 - Type in ANY four digit numerical passkey and

press OK

- A window should now appear on your PC. Type in the same passkey into the computer that you just entered into the table and press OK. You have 30 seconds to type in passkeys on both devices. Now the devices are paired and connected!
 - How to tell if your tablet and computer are paired: On the PC, in the BlueSoleil solar system, a small, red check mark beside the icon corresponding with your tablet indicates that the tablet is paired to the NOAADATA-PC. On the tablet, the NOAADATA-PC is listed under “Paired Devices” in the tablet’s Bluetooth menu.
4. If an IP address such as 30:3T:4P:6C appears under the tablet icon in the BlueSoleil solar system, double-click on the IP address and the tablet_ID name should appear (e.g., BA01, YA01, RA01, etc.)

TROUBLESHOOTING:



1. If the NOAADATA-PC is not appearing under unpaired devices in the tablet’s Bluetooth menu, on the PC in the BlueSoleil application, select Refresh Devices (or press F5) under the View menu. An icon representing the tablet you are trying to connect should appear in the BlueSoleil solar system. Right click on the tablet icon and select “Pair Device”. Type in any four digit, numerical pass key and press OK. A pairing request should then immediately appear on your tablet. Type in the same passkey that you just entered into the computer and click OK. You have 30 seconds to type in passwords on both devices. The devices should now be paired.
2. If tablet is already paired and some amount of time has passed, the tablet will not be “searchable” and thus won’t be visible in the BlueSoleil solar system, but the tablet and computer will still be paired. If

experiencing connection problems, turn off tablet Bluetooth and try re-pairing.

3. SHORTCUT: To make Tablet_ID's reappear in the BlueSoleil solar system after rebooting the Catch computer, click on Tools>Add Device from History and choose the Tablet_ID's that you want to add from the list.

SAMSUNG TABLETS- Pairing tablets to Catch Computer using BlueSoleil Application



1. Turn Data Entry PC and tablet on (and ensure that Bluetooth dongle is plugged into PC).
2. Check tablet to see if Bluetooth is on. If you have completed tablet setup- Bluetooth will be on. If the Bluetooth is already turned on, the Bluetooth symbol  will be present on the upper bar (on the right side).
 - If Bluetooth is NOT turned on:
 - Swipe down from top of tablet screen and click on Bluetooth symbol  so it is highlighted in yellow
3. To Connect table to NOAADATA-PC:
 - On Computer, open the BlueSoleil application.
 - On tablet, tap bottom half of tablet screen (or swipe up) to get out of pull-down menu.
 - Tap Settings icon (cog in menu bar on bottom left side on screen).
 - Tap Bluetooth (left column).
 - Tap SCAN (top right corner).
 - Look for NOAADATA-PC under Available Devices.
 - Select NOAADATA-PC.
 - A Bluetooth pairing request window should immediately appear on tablet, type in any four digit, numerical PIN and press OK.
 - A window should now immediately appear on PC, type in the same four digit, numerical PIN/passkey that you just entered on the tablet and click OK. Now the devices are paired and


connected!

- How to tell if your tablet and computer are paired: On the PC, in the BlueSoleil solar system, a small, red check mark beside the icon corresponding with your tablet indicates that the tablet is paired to the NOAADATA-PC. On the tablet, the NOAADATA-PC is listed under “Paired Devices” in the tablet’s Bluetooth menu.
4. If an IP address such as 30:3T:4P:6C appears under the tablet icon in the BlueSoleil solar system, double-click on the IP address and the tablet_ID name should appear (e.g., BA01, YA01, RA01, etc.)

TROUBLESHOOTING:

1. If NOAADATA-PC is not appearing under available devices in the tablet’s Bluetooth menu, on the PC in the BlueSoleil application, select Refresh Devices (or press F5) under the View menu. An icon representing the tablet you are trying to connect should appear in the BlueSoleil solar system. Right click on the tablet icon and select “Pair Device”. Type in any four digit, numerical passkey and press OK. A pairing request should then immediately appear on your tablet. Type in same passkey that you just entered into the computer and click OK. You have 30 seconds to type in passwords on both devices. The devices should now be paired.
2. If tablet is already paired and some amount of time has passed, the tablet will not be “searchable” and thus won’t be visible in the BlueSoleil solar system, but the tablet and computer will still be paired. If experiencing connection problems, turn off tablet Bluetooth and try re-pairing.
3. SHORTCUT: To make Tablet_ID’s reappear in the BlueSoleil solar system after rebooting the Catch computer, click on Tools>Add Device from History and choose the Tablet_ID’s that you want to add from the list.

Sending length.CSV and specimen.CSV file from tablet to Catch computer via Bluetooth

1. Click on Total Commander icon (blue disc) on tablet 
For Length Files, from the main tablet directory, select SD-card, then Pictures, then DataEntMM (click on words, not icon – NOTE: After navigating to DataEntMM directory, Total Commander will generally default back to that directory) Specimen files are found by going to the main tablet directory, select SD-card, Specimens folder, then DataEnt folder.
2. If length or specimen file does not appear in directory after being created, it is because the screen in Total Commander needs to be refreshed. Screen can be refreshed by restarting tablet (will also require re-pairing of Computer and tablet).
3. Click on the CSV file disc ICON for desired haul to be transferred to set a check mark. Default file name format is: TABLETNAME_HAUL####.csv
4. Click on bottom icon, second from the left.
5. Click on “Send via Bluetooth”
6. Click on NOAADATA-PC (if there are 2 of these displayed, click on the bottom one), sends and displays tablet name on white message at bottom-right of computer screen. At this point, a message may pop up on the computer asking “Bluetooth device is attempting to access Bluetooth Object Push service....” Check the “Always allow this device to access this service box” and Click Yes.
7. Repeat with other tablets having length files
8. Imported length CSV files are written to the directory:
C:\Users\NOAADATA\Documents\Bluetooth\inbox

Uploading haul length and specimen file(s) into Data_Ent.mdb

1. Open Data_Ent.mdb program
2. Click on “Import Tablet Length Data” or “Import Tablet Specimen Data” button
3. Enter haul number in the dialogue box that appears and press enter (“OK”)
4. Window opens for choosing appropriate length files. The window that opened should default to this directory: C:\Users\NOAADATA\Bluetooth\inbox. Choose appropriate file(s). Multiple length files can be chosen at the same time (by holding Ctrl key while clicking multiple, individual files).
5. Default dialog box(es) appear(s) “file name selected is C:\Users\NOAADATA\Documents\Bluetooth\inbox\TABLETNAME_HAUL####.csv” showing the files that were selected. Press OK.
6. Voila! Length summary report will appear.

The data collected on the Length and Specimen android tablets must be uploaded to the Catch Entry computer and then imported into the data entry program (currently *dataent.mdb*). The data entry program anticipates (in fixed code) an unchanging and standardized directory path to the folder where the uploaded data reside (C:\Users\NOAADATA\Documents\Bluetooth\inbox). This folder and directory structure result from the Blue Soleil install. Therefore, establishing the proper infrastructure to support data uploads from the tablets and imports to the data entry program do not intervention when setting up the Catch Entry computers beyond installing Blue Soleil.

Editing raw data in Data_Ent Program

1. Open Data_Ent Program on PC.
2. After uploading length or specimen file into Data_Ent Program (see instruction for uploading file into Data_Ent Program)
3. Click the large Edit button
4. Select Edit Catch, Edit Length or Edit Specimen button
5. Dialog box with pull down box will appear, select haul that you would like to edit.
6. For Specimen data, a second dialog box with pull down box will appear, select species code that you would like to edit.
7. Edit away!
8. When finished editing, select Quit! Button

Best practices

1. Tablets

- a. Keep dry – do not remove from watertight box when on deck
- b. Capacitance screens need to be clean and dry for tablets to function properly
- c. Clean screen occasionally
- d. Check tablet settings occasionally to make sure they have not changed from above.
- e. Conserve tablet battery power so tablets last for the entire day:
 - i. Put to sleep before securing in water tight deck boxes
 - ii. Put to sleep when not being used on deck
 - iii. Charge between tows and overnight

2. Wands:

- a. Use bungee cord(s) or a rubber band to firmly hold wands in place on the “puck” charging station
- b. Clean scales and fish slime from wands before placing on charging pucks
- c. Charging
 - i. Make sure proper side of wand is facing down and that the inductive charging coil is in direct contact with charging puck
 - ii. A solid red light on the upward facing side of the wand indicates charging.
 - iii. laser pen flashing or “on” when wand is charging is OK

3. Headphones

- a. Secure rubber cover on charging port before using on deck
- b. Keep dry as possible while on deck

4. Connecting paired wands and headphones with tablet

- a. Only one each of a single color tablet, wand and headphone can be turned on at any one time.
- b. Turn on wand and headphones just prior to measuring and wait 10 seconds before scanning anything to allow the wand and headphones to make Bluetooth connection with the tablet.
- c. If having difficulty connecting wand, headphones, or both when on deck:
 - i. In dry environment, remove glove(s) and open water tight box
 - ii. Turn off wand and headphones, and close all programs on tablet
 - iii. Make sure Settings>Bluetooth is ON
 - iv. Turn on wand and headphones and wait 10 seconds
 - v. Check Settings>Bluetooth to make sure wand and headphones are connected to tablet
 - vi. SHAKE the tablet to start the Length App
 - vii. Should work

When trying to pair headphones to tablets, tablet looks for headphones that were last connected.
3M Peltor, Peltor ComTac, Kinivo or Soundbot

Change name of Bluetooth device:

Pair and connect Bluetooth headset with tablet. Once connected, press gear symbol next to Bluetooth headset, and enter new name in the name field.

Installing new length or specimen applications

1. First uninstall old applications: Settings→Apps→Select App (i.e.: length, polycorder, specimen) that you would like to uninstall→Press UNINSTALL button→OK
2. Plug tablet into computer with micro USB/USB cable. From top of tablet screen swipe down to get notifications to appear on screen, Click on the USB for charging button and select File transfers option.
 - a. If file transfer is not an option, try another micro USB/USB cable--not all cables are capable of file transfer.
3. On computer, open file directory and find tablet that you just plugged in (should be under the Computer Drives C:, D:, etc., and should be named Nexus 7). Open Nexus 7 directory and navigate to Picture Folder.
 - a. Delete old application .apk files.
 - b. Copy new length/specimen application(s) from computer and paste into the Nexus Pictures Folder.
4. After new application .apk files have finished uploading in tablet's Picture folder, eject tablet from computer.
5. On tablet, navigate using Total Commander to the Pictures File. Click on each application and complete the installation process.
6. Drag application icons from the application window to the tablet desktop.
7. Find polycorder app in application window.
 - a. open polycorder app
 - b. select CRUISES button- **DO NOT SELECT ANYTHING ON NEXT SCREEN**
 - c. a list of available cruises will populate the screen- **DO NOT SELECT ANY OF THEM**
 - d. select exit and exit app
 - i. the purpose of this is to load available cruises for the length and specimen app to "see"
8. Set up Shake App to open correct application when table is shaken. See pages 6 & 7 for Shake App instructions.

Peltor Headset/Bluetooth Cheat Sheet

In this kit you will find:

1. (7) Bluetooth dongles
2. (1) Bluetooth dongle manufacturer instructions
3. (1) section of heavy duty velcro
4. (4) long audio cables
5. (1) backup short audio cable

The Bluetooth dongles are used in conjunction with the Peltor/ComTac noise cancelling headphones. To set them up:

1. Plug 2 pronged side of the long audio cable into Peltor headset
2. Plug 1 pronged side of long audio cable into Bluetooth dongle
3. Adjust Bluetooth dongle into desired position, affix to side of the headphone with heavy duty velcro. One side on the back of the Bluetooth dongle, and one side on the side of the headphones
4. Ensure fresh batteries are installed in Peltor/ComTac headset

To pair Bluetooth dongle:

1. Turn on Bluetooth dongle by pressing the button next to the blue "Bluetooth" lettering until lights start flashing
 2. Hold button for one second after dongle turns on to enter pairing mode
 3. Open Bluetooth menu on tablet you wish to pair with (Full instructions on tablet Bluetooth operation located in RACE survey app)
 4. Dongle should show up on tablet menu as "BT Receiver" or "BT350"
 5. Select "BT receiver" or "BT350"
6. Your tablet should now be paired with the dongle. You can rename it whatever you like to differentiate it between other Bluetooth devices.

During operation:

1. Turn on headphones by pressing power button on side of headphones
2. Turn on Bluetooth dongle by holding button next to blue "Bluetooth" lettering until lights begin flashing
3. Adjust volume to desired level using buttons on side of headphones.
4. Length fish
5. Before storing, ensure headphones AND Bluetooth dongle are turned off to preserve battery life. You must turn them off individually. They are not connected to the same power source. Bluetooth dongle is charged via micro USB cable, same cable as the tablets.

Storing/Charging:

1. It is recommended that the Bluetooth dongle be plugged in to charge while still affixed to the headphones. This mitigates losing the small Bluetooth dongle and prevents the Velcro from wearing out too soon.

2. After use, headphones should be CAREFULLY removed from the wearer's head using freshly rinsed gloves. Dirty headphones should be wiped down with paper towels before storing. DO NOT SUBMERGE HEADSET OR BLUETOOTH DONGLE TO CLEAN!

NOTE! THESE ITEMS ARE TOUGH, BUT ARE NOT INDESTRUCTIBLE! THESE HAVE HIGHLY SENSITIVE ELECTRONIC COMPONENTS INSIDE! HANDLE WITH CARE!

Headsets and uses:

Length App Headsets



SoundBot



Kinivo



Peltor ComTac

both types of Peltor headsets need to have Bluetooth dongle plugged into them, and the dongle and headset turn on individually.



3M Peltor

Specimen Voice App Headset



Blue Tiger

Note: When trying to pair headphones to tablets, tablet looks for headphones that were last connected.