Instruction Manual

WaterLink® SpinTouchFF®

Code 3587

SETUP

BEFORE FIRST USE

- **Fully charge battery using the Spin Touch USB cable and adapter plug in AC outlet.**
- **Ensure your Spin Touch has latest firmware**
  1. Download and install WaterLink® Connect Application for Windows at **http://softwarecenter.lamotte.com/**. Select WaterLink® Connect Software for Windows FREE Download.
  2. Plug meter into the computer with the provided USB cable and launch WaterLink Connect Application from the Start Menu.
  3. Any firmware updates will automatically be applied to the meter.

METER

1. The meter can be powered from an AC outlet, a computer or the internal battery.
2. Use the USB cable and the adapter to plug the meter into an AC outlet.
3. Use the USB cable to connect the meter to the USB port of a computer.

CHARGE THE BATTERY

1. Use the USB cable and the adapter to plug the meter into an AC outlet to charge the battery.
2. The battery icon on the screen will show the battery status. Charge the battery until the battery indicator is full.

FIRMWARE UPDATES

Occasionally, the firmware in the Spin Touch will require updates. To do so:

1. Visit **http://softwarecenter.lamotte.com/** and download the WaterLink® Connect application for Windows.
2. Plug the Spin Touch into the computer using the included USB cable.
3. Open the WaterLink® Connect desktop application and wait for the update to complete.

Once the update is complete, it is safe to close WaterLink® Connect and unplug the lab. After updating firmware it is recommended that the Alignment Procedure on page 17 be performed.

NOTE: When a prompt to update the firmware is received, the options Update Now or Remind Me Later will be displayed. If Remind Me Later is chosen, the update prompt will be displayed again in 23 hours. Or, to update the firmware at any time, open WaterLink Connect, go to Settings>Service Settings>Get Updates.

PC CONNECTION

When the WaterLink® Spin Touch® is connected to a computer via USB, the onboard touchscreen becomes disabled and operation of the lab is performed using the WaterLink® Connect application for Windows®. This application is available for free at **http://softwarecenter.lamotte.com/**. Via the WaterLink® Connect desktop application, results from the Spin Touch can be transferred to a water analysis program such as WaterLink® Solutions™.

DEVICE CONNECTION

The WaterLink® Spin Touch® supports connections to a Windows® based PC (over USB) and to Android and iOS mobile devices (via Bluetooth).

CONNECTING VIA USB

Using the provided USB cable, the WaterLink® Spin Touch® can be connected to a Windows® based PC. Before connecting a meter via USB, download and install the free WaterLink® Connect Windows® application from **http://softwarecenter.lamotte.com**. When the WaterLink® Spin Touch® is connected to the PC via USB, the onboard touch screen controls will be disabled and operation of the meter is performed using the WaterLink® Connect application. LaMotte offers robust water analysis programs as well, such as WaterLink® Solutions™, to collect test results and offer detailed treatment recommendations. Learn more about LaMotte software products at **http://softwarecenter.lamotte.com**.

CONNECTING VIA BLUETOOTH

The WaterLink® Spin Touch® is capable of connecting to a Bluetooth enabled device, such as a phone or tablet. The Spin Touch is also compatible with a LaMotte Bluetooth Printer (Code 5-0066). Other Bluetooth printers are not supported.

Transferring results over Bluetooth to a mobile device requires that a mobile app is installed on the device and an active account for the associated software program. For example, with an active WaterLink® Solutions™ account and the WaterLink® Solutions™ mobile app on a phone or tablet, results can be transferred from the meter into the application. Mobile apps for LaMotte software products are available from iTunes (for iOS devices) and Google Play (for Android devices). Learn more about LaMotte software products at **http://softwarecenter.lamotte.com**.

To transfer results from the WaterLink® Spin Touch® to a LaMotte software product mobile app:

1. Log into the LaMotte software product mobile app.
2. Search for a customer or Site record. You may need to create one before you can begin testing.
3. Start a Water Test in the mobile app.
4. Perform a water test from the Spin Touch onboard touchscreen normally. The Spin Touch and the Bluetooth enabled mobile device will connect automatically.
5. When the connection is available the will light on the touch screen. When the is dim, the meter and device are not connected. Tap the to transfer results to the mobile app.

Whenever the appears on the touch screen the Spin Touch is capable of connecting to the Mobile Bluetooth Printer (Code 5-0066). The button will be highlighted when connected and dim when not connected.

The Spin Touch cannot connect to both mobile device and the printer at one time. (See the Save, Print and Send, page 7)

USING BLUETOOTH LOW ENERGY

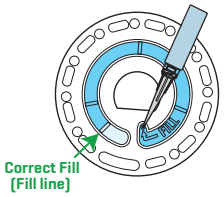
The WaterLink® Spin Touch® will automatically connect to the nearest Bluetooth enabled phone or tablet or printer. It is not necessary to pair the Spin Touch to the Bluetooth enabled device. Barriers to wireless signals can reduce the range of wireless devices. The WaterLink Spin Touch will work best if there are no walls between it and the receiving devices.

FILLING

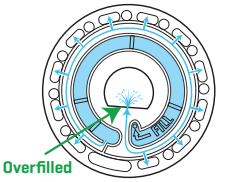
FILLING

When the syringe is placed in the water sample, and the plunger is pulled all the way up, the syringe will hold more than enough water sample to adequately fill the disk. Hold the syringe vertically and insert the tip into the fill hole in the disk. Press the plunger slowly and smoothly to fill the disk.

1. Fill the disk using slow, even pressure. The sample water will fill the spaces between the baffles in a counterclockwise order. Each space will fill from the bottom to the top. Sample water should be added until the sample water in the fourth chamber fills **to the top** of the chamber slightly past the embossed fill line. It is OK to fill slightly past the fill line.

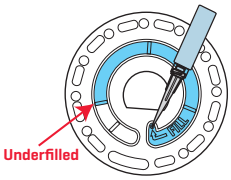


2. Do not overfill the disk. If the disk is overfilled, sample water will flow out of the overflow hole in the center of the disk. The disk is not leaking. Dry the disk and run the test.

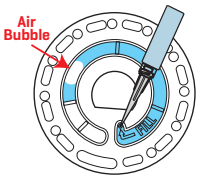


(Dry disk before placing in meter)

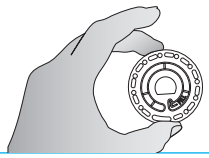
3. Do not under fill the disk. If the disk is under filled, the reagent chambers will not fill entirely and results will be inaccurate.



4. Do not introduce air bubbles into the disk. The reagent chambers will not fill entirely and results will be inaccurate. As soon as a bubble starts to form, pull back on the plunger to draw the bubble out of the disk. Begin the filling process again.



5. Wet disks should be dried thoroughly with a lint free wipe. The disk should be handled by the edges.



6. Disks should be filled and used within 10 minutes. They cannot be filled ahead of time.

GENERAL OPERATING PROCEDURES

METER

When a filled disk is placed in the chamber and the lid is closed, the meter spins at high speed to distribute the sample to the test wells. Next the meter slows to maximize the pumping action of the stainless steel mixing beads as the reagents mix with the sample water. Each reaction is then read at the proper time and wavelength for that reagent system.

The button located in the lower center of the top of the meter turns the instrument on and off.

The Blue indicator light of the on/off button indicates the status of the instrument.

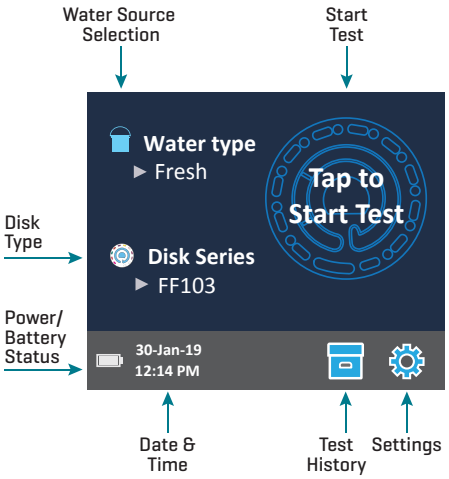
Steady blue light – the blue LED will remain steady to indicate that the meter is on and ready to run a test.

Blinking blue light (three blinks/second) – a test is in progress and the disk is spinning. Do not open the lid when the disk is spinning.

Care should be taken when closing the lid. Do not slam the lid. Wiring between the lid and the body of the photometer passes through the hinge. The meter will not run with the lid open.

TOUCHSCREEN DISPLAY

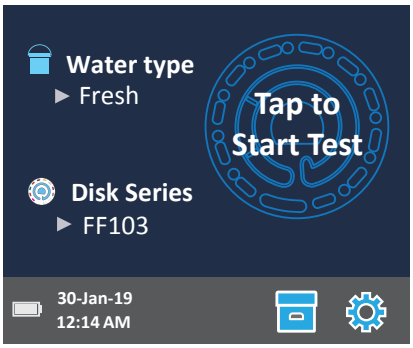
When the button is pressed to turn the meter on, the Test Screen will be displayed.



The display screen is touch-activated. To make a selection, tap the icon or word on the screen with a fingertip, fingernail, pencil eraser, or stylus.

- Gently wipe smudges from the screen with the Cloth Wipe (3580-WIPE).
- Do not touch the screen with a sharp object.
- Do not place objects on the screen that will scratch or damage it.
- Avoid touching the screen with wet fingers.

TESTING



1. Press and hold until the meter turns on.
2. Tap . Select a Water type. Tap to confirm.
3. Tap . Select a disk series (found on disk packaging). Tap to confirm.
   NOTE: Disk Series are limited by Water type selection.
4. Remove a disk from the packaging.
5. Use the syringe (1189) to fill the disk with the water sample.
6. Insert the disk. Cover the disk with the Universal Disk Cover (1719). Close the lid.
7. Tap to start test. Tap to cancel the test. If the test is cancelled discard the disk.
8. The results will be displayed.
9. Choose an option.
   - Tap to add a tag.
   - Tap the highlighted to save the test results to the test log if Auto Save is not enabled.
   - Tap the hightlighted to send the results to the enabled Mobile Bluetooth Printer.
   - Tap the highlighted to send the results to a Bluetooth enabled device.
   - Tap to return to the Test Screen.
10. Press and hold for 2 seconds to turn the meter off.

For the most accurate results samples should be at room temperature.

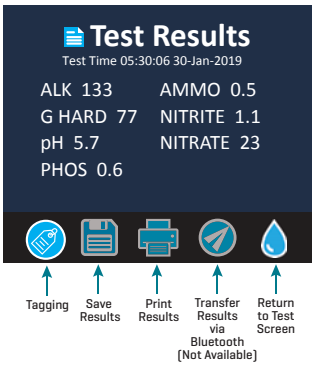
The blank well allows the readings to be corrected for small amounts of color and turbidity in the sample water. For the best results allow samples with a large amount of solids to settle before testing.

NOTE: For water samples over 100 °F (38 °C) subtract 0.3 from pH result or, for the most accurate result, wait until water sample is below 90 °F (32 °C) to test.

Remove salt residue daily. Salt will damage the meter and cause inaccurate results. See Cleaning, page 18.

SAVE AND PRINT TEST RESULTS

Test results can be saved, transferred to the WaterLink Connect mobile app via Bluetooth, and sent to the Mobile Bluetooth Printer (Code 5-0066).



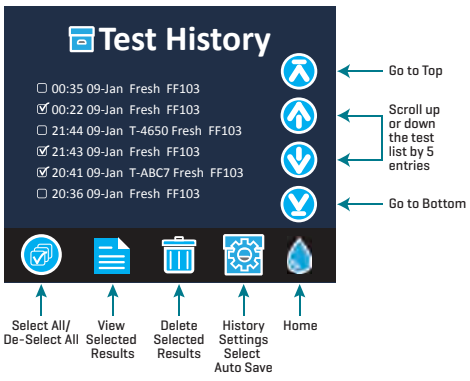
Test History Settings

The WaterLink® Spin Touch® can log test results for 250 water samples in the Test History. The results for the most recent sample will be located at the top of the list. All results can be logged automatically or results for an individual sample can be logged after the sample has been tested.

To turn on automatic logging, tap on the Test Screen. Tap . Select Auto-Save Tests. Tap and to return to the test screen. When Auto Save is selected will not be highlighted on the Test Results screen.

To manually log results for one sample at a time, Auto-Save Tests must be disabled. If Auto-Save Tests is disabled will be highlighted on the Test Results screen. After the test has been run, tap to save the results for that water sample to the Test History.

A user defined identification tag can be assigned to an individual sample result. The tag can be up to 4 hexadecimal characters. It cannot begin with a zero. To tag a test result, tap on the bottom of the Test Results screen and use the buttons to enter up to four characters. Tap to erase a character. Tap to save the tag and return to the Test Results screen. Tap to return to the Test Results screen without saving the tag. The tagged result will appear on the Test Results screen and the Test History screen. The tag will be preceded by "T-".



Logged results are viewed in Test History. Controls for viewing and managing single or multiple test records are located on the Test History screen. Tap the checkbox next to a test record to select it, then tap one of the buttons along the bottom to perform an action with the selected records.

Print Results

The WaterLink® Spin Touch® can print to the Mobile Bluetooth Printer. The highlighted will show when the printer function is active.

There are two modes of operation for connecting to the printer – Fast Printer Connect **ON** and Fast Printer Connect **OFF**. The default mode is Fast Printer Connect ON. Fast Printer Connect can be turned on or off from the Bluetooth Menu that is located in the Settings Menu.

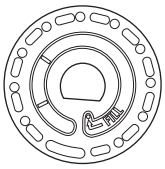
If Fast Printer Connect is **ON**, the meter will connect immediately to the printer upon recognizing it. The printer will start printing immediately when is tapped. The will dim in intensity while the printer is printing.

If Fast Printer Connect is **OFF**, the meter will connect to the printer only after has been tapped so printing will be delayed a few seconds while the connection to the printer is being established. The will dim in intensity while the printer is printing.

SYRINGE

A plastic 3 mL syringe (Code 1189) is used to fill the disks. A precision tip on the syringe fits into the fill hole on the disk. The syringe tip should not be removed from the syringe. Syringes should be cleaned between water samples. Pump air in and out of the syringe a few times to clear the previous sample or rinse the syringe with a small amount of the next water sample before filling it with the next sample.

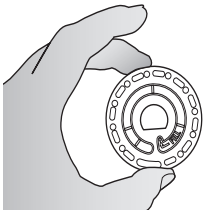
REAGENT DISK



The WaterLink® Spin Touch® uses a disk reagent system. The dried reagents are packaged in single test amounts in a sealed, polystyrene disk. Stainless steel mixing beads in the reaction chambers mix the sample water and the dried reagents. Tests for all factors in the series are performed at one time. It is not possible to isolate the well for a single factor and perform a test for one test factor only. Single-use disks contain reagents for a single series. Disks should not be filled in the meter chamber.

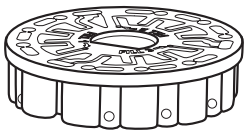
DISK HANDLING

The disk should be handled only by the edges. Avoid touching the top or bottom of the disk. The light passes through the non-frosted areas of the disk so these areas must be kept free of smudges and fingerprints. Wet disks should never be placed in the meter. Wet disks should be dried with a lint free cloth before placing them into the chamber.



The disk is positioned in the chamber by aligning the D-shaped hole in the center of the disk over the D-shaped hub in the photometer chamber. The disk should be placed gently on the hub. There is no need to firmly press the disk down onto the hub.

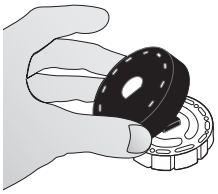
DISK STORAGE



Disks are sensitive to moisture. Avoid opening more packs than are needed. Disks have a limited shelf life and should not be exposed to the humidity in the air more than necessary.

Store disks at 70-80 °F/21-27 °C. Do not transport the meter with a disk in the chamber.

DISK COVER



The black disk cover is placed over the disk in the photometer chamber to reduce interference from stray light. The disk cover is positioned over the disk by aligning the D-shaped hole in the center of the disk over the D-shaped hub in the photometer chamber. The disk cover should be placed gently on the hub. There is no need to firmly press the disk cover down onto the hub. The test will be aborted if the disk cover is not used.

METER CHECK DISK

The Meter Check Disk (1705) serves two purposes:

- When the Meter Check Disk (MCD) is run as an option from the Disk Series menu, the values on the display are compared to the values on the chart on the Meter Check Disk package to determine whether the meter is reporting results in the expected ranges.
- If the Meter Check Disk is inserted in the meter and Rotary Calibration is chosen from the Settings Menu, the alignment of the hub and disk is evaluated. The results are analyzed and reported as Pass or Fail.

For use of the Meter Check Disk see page 16.

USB CABLE

A USB cable connects the WaterLink® Spin Touch® to a Windows®-based PC. When used with the AC Power Adapter, it connects the meter to an AC outlet.

WARNING: only use the USB cable and wall adapter that are supplied with the kit. Make no substitutions.

BATTERY

A fully charged battery will last for approximately 150 tests under average conditions. The battery life will vary based on usage patterns. The meter should be turned off after testing to prolong the battery life. The standard life cycle of a lithium ion battery is 500 cycles. The battery will fully charge in approximately 10-12 hours. The battery is designed to be charged overnight and should be charged indoors only. The battery is rated at 12 V and 8.1 AH capacity. Power the meter from the battery pack or from AC power. The USB cable and AC adapter are used to plug the meter into an AC outlet. WARNING: only use the AC adapter supplied with this equipment. Do not substitute.

The battery charge status is indicated by the battery icon on the display. The battery icon will indicate when the battery charge is full, partial, low, empty or charging. The empty battery icon will flash to indicate that meter should be connected to AC power source. If the meter continues to be used at low battery power without connecting it an AC power source, the meter will go into an auto-shutdown mode. In this mode the meter will be locked until meter is connected to an AC source and the battery is charged to a sufficient voltage. While charging, the charging battery icon will be displayed. The meter should remain plugged in

until the battery is fully charged. When the battery is completely charged, the charging icon will change to the full battery icon.

SETTINGS

Tap to enter the SETTINGS menu. Tap to return to the test screen at any time.

Brightness The brightness level of the display can be adjusted from 00 to 10. Tap and to adjust the brightness. Tap to exit to the Settings menu.

Date/Time The Year, Month, Day, Format, Hour, Minute, AM/PM can be set. Tap or to adjust the displayed value. Tap to move to the next value. After the last value has been chosen (minutes for 24 hour format, AM/PM for 12 hour format) tap to return to the Settings menu. Tap to exit to the Settings menu at any time.

Set Language There are ten language options – English, French, Spanish, German, Dutch, Swedish, Portuguese, Italian, Turkish, Chinese. Tap selection. Tap to exit to the Settings menu.

Calibration Tap to run an angle calibration to evaluate the alignment of the hub and disk. Tap to exit to the Settings menu.

Power Options There are three power options: Auto Dim Time, Auto Off Time, and Power. Tap the options then tap a selection. Tap selection. Tap to exit to the Settings menu.

Bluetooth There are two Bluetooth options: Bluetooth Enabled and Fast Printer Connect that are used to print test results. Tap to exit to the Settings menu.

Other Settings About... lists the Serial Number, Firmware Version, Bluetooth MAC address, Bluetooth Version and Test Count. The Test Count shows the number of complete tests that have been performed over the lifetime of the meter. Tap to return to the Settings menu.

Ranges Enabled allows the option of having test results that are out of the range of the reagent system displayed in red. The default setting is on.

Select Disk Detection to display an error message and abort the test when improper testing conditions, such as No Disk, No Disk Cover, Used Disk or Meter Check Disk, are present that would result in inaccurate or no test results. The default setting is OFF. Tap to return to the Settings menu.

RANGES

Fresh Water

Test Factor	Range	Display Abbreviation
Alkalinity	0-250 ppm	ALK
Ammonia	0-4.0 ppm	AMMO
Hardness	0-500 ppm	G HARD
Nitrate	0-300 ppm	NITRATE
Nitrite	0-2.0 ppm	NITRITE
pH	4.5-10.0	pH
Phosphate	0.0 - 2.0 ppm	PHOS

Salt Water

Test Factor	Range	Display Abbreviation
Alkalinity	0-300 ppm	ALK
Ammonia	0-4.0 ppm	AMMO
Calcium	200-800 ppm	Ca
Magnesium	500-2200 ppm	Mg
Nitrate	0-60 ppm	NITRATE
Nitrite	0-2.0 ppm	NITRITE
pH	6.5-10.0	pH
Phosphate	0.0 - 2.0 ppm	PHOS

Test results that are out of range of the reagent system wil be RED. RED test results may not be accurate. Go SETTINGS>Other Settings to turn the Ranges Enabled feature OFF.

Testing samples for Nitrate immediately after treatment with a chlorine neutralizer containing sodium thiosulfate will give low results. Retest in 2-3 days.

If the concentration for one test factor is significantly out of the range for the reagent system, the accuracy of the results for the other test factors may be affected.

To convert Nitrate (NO_3) to Nitrate-Nitrogen (NO_3-N) multiply by 0.226

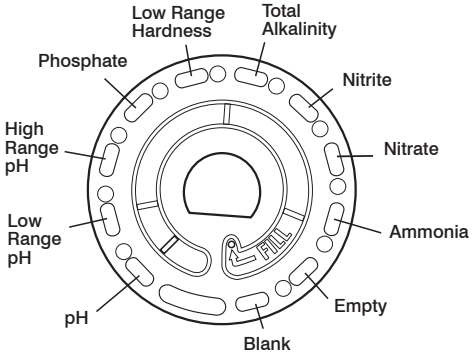
To convert Nitrite (NO_2) to Nitrite-Nitrogen (NO_2-N) multiply by 0.304

To convert Ammonia (NH_3) to Ammonia-Nitrogen (NH_3-N) multiply by 0.823

DISK DESCRIPTIONS

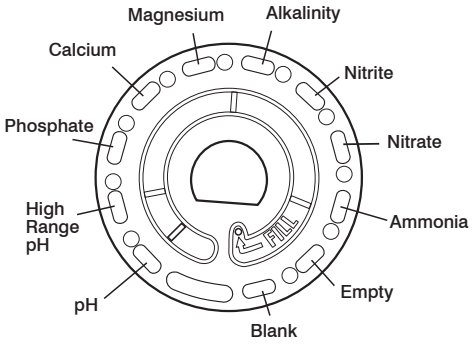
Fish Farming Fresh Water Disk FF104 (Code 4351)

pH	Nitrite
Phosphate	Nitrate
Hardness	Ammonia
Alkalinity	



Fish Farming Salt Water Disk FF203 (Code 4352)

pH	Alkalinity
Phosphate	Nitrite
Calcium	Nitrate
Magnesium	Ammonia



NOTE: Colored reagents may be visible in the disk before adding sample water.

ACCESSORIES AND REPLACEMENT PARTS

Description	Code
WaterLink® Spin Touch® FF Meter	
Water Sample Bottle (60 mL)	0688
Plastic Beaker, 50 mL	0944
Syringe with tips (3)	1189-3
Syringe tips (3)	1189-TIP
Cleaning Tissues	0669
Meter Check Disk	1705
Universal Disk Cover	1719
USB Cable	1712
AC Adapter (North America)	1713
Cloth Wipe	3580-WIPE
Mobile Bluetooth Printer	5-0066
WaterLink® Spin Touch® Counter Mat	3580-MAT
WaterLink® Spin Touch® FF Manual	3587-MN
WaterLink® Spin Touch® FF Quick Guide	3587-QG

For available WaterLink® Spin Touch® FF reagent disks, see page 12.

SPECIFICATIONS

Instrument Type	Centrifugal Fluidics Photometer
Wavelengths (interference filters)	390 nm, 428 nm, 470 nm, 525 nm, 568 nm, 635 nm
Display	Color Capacitive Touchscreen, 3.5 in, 320 x 240 pixel resolution
Wavelength Accuracy	±2 nm
Wavelength Bandwidth	10 typical
Photometric Range	-2 to 2 AU
Photometric Precision	±0.01 AU at 1.0 AU
Photometric Accuracy	±0.01 AU at 1.0 AU
Sample Chamber	Accepts prefilled disk
Light Source	6 LEDS
Detectors	6 silicon photodiodes
Pre-Programmed Tests	Yes, with automatic wavelength selection
Languages	English, French, Spanish, German, Dutch, Swedish, Portuguese, Italian, Chinese, Turkish
Temperature	Operation: 0-50 °C; storage – 40-60 °C

Operation Humidity Range	0- 90 % RH, non-condensing
Communication	USB-C, Bluetooth low energy technology (BLE)
Calibration	Factory set, field calibration via internet connection
Firmware	Internet updateable (New Test, New Test Calibrations, etc.)
Software	Android & iOS Apps, WaterLink® Solutions, WaterLink® Connect
Power Requirements	USB wall adapter, USB computer connection or internal lithium ion rechargeable battery
Battery Type	Lithium ion
Minimum Capacity	12 V/2.6 AH
Charge Life	Approximately 150 tests
Battery Life	Approximately 500 charges
Full Charge	10-12 hours
Water Resistance	Rubber over-molded base, rubber USB Port Plug, gasketed display and hinge.
Electrical Rating	Rated voltage (5V), Rated power of input current (1.6 A) at USB C
Auto Off	Yes, default 15 (only with battery power)
Power Save	Yes, default OFF
Data Logger	250 test results stored for download to PC or transfer by Bluetooth
Certifications	EZ-BLE™ PRoC™ Module, CYBLE-022001-00 RF Radio: — FCC (USA): FCC ID: WAP2001 Industry Canada (IC) Certification: License IC: 7922A-2001 CE (Europe): Complies with Directive 1999/5/EC MIC (Japan): 005-101007 KC (Korea): MSIP-CRM-Cyp-2001 EMC: EU: ETSI EN 301489-1 US: FCC PART 15 B CAN ICES-3 (B)/NMB-3(B) AS/NZS: CSPR 22 Safety: EU: EN61010-1:2010 AS/NZS: national differences
Dimensions	21,6 X 12,4 X 10,4 cm (L X W X H) 8,5 X 4,9 X 4,2 in
Weight	0,79 Kg, 1,74 lb

TROUBLESHOOTING

TROUBLESHOOTING GUIDE

Problem	Reason	Solution
"No Disk, Test Aborted"	No disk in chamber Empty chamber	Place filled disk in chamber. Cover with disk cover. Select OK. Start test. Insert filled disk. Cover with disk cover. Select OK. Start test.
"No Disk Cover, Test Aborted"	Disk cover was not used	Use disk cover. Select OK. Start test.
"Lid Open, Test Aborted"	Lid opened	Close lid. Select OK. Start test.
"Used Disk"	Reacted disk in chamber	Select "Continue" to go to Test Results screen. Select "Abort" to go to Testing screen and run test with new disk.
Meter Check Disk	Meter Check Disk in chamber instead of reagent disk	Select "Continue" to go to Test Results screen. Select "Abort" to go to Testing screen and run test with reagent disk.
⚠ on Test History screen	Meter is using the default blank due to under filled disk or air bubble.	Solution: Fill disk correctly (see FILLING)
Range Error	Raw data out of range	Contact Support
Output Error	Decreased light intensity. Possibly dirty lens	Clean lens (see CLEANING). Follow Range Check Procedure. If error message persists, contact Support.
Consistently unexpected high results for metals	Metals may actually be present	Repeat test with distilled water. If the results still show that metals are present, contact Support.
Alkalinity result of 0 ppm	Usually due to an underfilled disk.	Review the disk filling procedures and test again. If problem persists, contact Support.
Unexpected results	Dirty disk cover	Gently clean disk cover apertures with pipe cleaner or lint free cloth.
Disk type is not an option in Disk Series	Software or meter firmware is out of date.	Update WaterLink Connect at softwarecenter.lamotte.com
High pH results	Water sample temperature above 100 °F (38 °C) interferes with pH reagent	For water samples over 100 °F (38 °C) subtract 0.3 from pH result or, for the most accurate result, wait until water sample is below 90 °F (32 °C) to test

Disc not spinning	Lid open, meter not powered on, low battery, disk or disk cover pressed down too tightly on hub	Close lid, power on meter, charge the battery or plug meter into a stable power source, remove the disk/disk cover and place back in the meter more gently
	Fast electrical transients may disrupt operation of the Spin Touch™ meter	Restart the test to resume normal operation
Test result value on the display is red	Results are out of range of reagent system	Dilute sample. Retest for out of range test factor. (All factors except pH.)
Low Nitrate or Nitrate-N results	Recent treatment with chlorine neutralizer containing sodium thiosulfate interferes with test reaction	Retest in 2 – 3 days
Trouble connecting to Bluetooth device	Bluetooth not enabled Too many Bluetooth devices near the meter Printer power is ON and Fast Printer Connection is ON	Enable Bluetooth Have only one device near the meter Turn printer power OFF. Or turn Past Printer Connection OFF.
Trouble connecting to computer by USB	Broken connection	Press and hold power button for 1 second.
Results not printing	Printer not on The Spin Touch™ will only print to the Mobile Bluetooth Printer (Code 5-0066)	Turn printer on Connect to Mobile Bluetooth Printer (Code 5-0066)

TROUBLESHOOTING WITH THE METER CHECK DISK

Do not attempt to separate the components of the Meter Check Disk (Code 1705). The Meter Check Disk consists of a disk with a permanently attached cover.

Do not fill the Meter Check Disk with water. Water is not used during the meter check procedure.

Range Check Procedure

The Meter Check Disk is used to verify the performance of a meter. It is not used to recalibrate the meter. Meters are calibrated at the time of manufacture. The meter is performing satisfactorily if readings using the Meter Check Disk are within the ranges provided on the Meter Check Disk pouch. Range specifications are specific to the disk identified by the serial number on the pouch. The range specifications will vary from disk to disk. The exact readings from a specific disk may vary from meter to meter.

1. Follow the Cleaning procedure on page 18 to clean the light chamber and optic lenses.
2. Tap  select Disk Series.
3. Tap **MCD** to select Meter Check Disk.
4. Tap  to return to the test screen.
5. Remove the Meter Check Disk (1705) from the foil pouch. DO NOT remove the black cover from the disk.
6. Insert the Meter Check Disk. Close the lid.

7. Tap to start test.
8. Results will be displayed.
9. Compare the results on the display to the values on the chart shown on the pouch. If the results are not within the range shown on the pouch, contact Support.
10. Replace the Meter Check Disk in the foil pouch for storage.

Alignment Procedure

The Meter Check Disk is inserted in the meter and Calibration is chosen from the Settings Menu to perform an angle calibration which checks the alignment of the hub and disk. The results are analyzed and reported as Pass or Fail. If the measurements pass, the settings will be saved. If the analysis fails, contact Support.

1. Follow the Cleaning procedure on page 18 to clean the light chamber and optic lenses.
2. Tap to go to Settings.
3. Tap **Calibration**.
4. Remove the Meter Check Disk from the foil pouch. DO NOT remove the black cover from the disk.
5. Insert the Meter Check Disk. Close the lid.
6. Tap **Start** to begin the meter check procedure.
7. If the meter is performing satisfactorily, "Angle Calibration Successful" will be displayed and the settings will be saved. If the meter is not performing satisfactorily, "Angle Calibration Unsuccessful. Contact Tech Support." will be displayed.
8. Tap to return to the Testing Menu and resume testing.

HELPFUL HINTS

- Do not touch top or bottom of disk. Handle disk by the edge.
- Do not fill disk while in the meter. Fill disk on clean, dry surface.
- Fill the disk on a dark surface to more easily see the sample water.
- The disk should not contain any large air bubbles. Air bubbles will result in erroneous results.
- Always use the disk cover.
- Only the Universal Disk Cover [Code 1719] can be used with the WaterLink® Spin Touch®.
- Empty syringe of old sample before filling with next sample.
- Remove filled disk from meter after testing. Do not travel with filled disks in meter. They may leak.
- Keep the chamber clean and dry. Gently swab LED and photodiode lenses located around the hub with a cotton swab dampened with streak-free window cleaner. Do not use alcohol. It will leave a thin film over the lenses when dry.

MAINTENANCE

CLEANING

The optical system of the WaterLink® Spin Touch® must be kept clean and dry for optimal performance. Dry the disk with a lint-free wipe before placing it into the chamber to avoid introducing moisture. For best results, store the instrument in an area that is dry and free from aggressive chemical vapors. Clean the exterior housing with a damp, lint-free cloth. Do not allow water to enter the light chamber or any other parts of the meter. To clean the light chamber and optic lenses, point a can of compressed air into the light chamber and the lid and blow the pressurized air into the light chamber and lid. Focus the pressurized air around the LEDs which are the small round lenses positioned at 2:00, 4:00, 6:00, 8:00, 10:00 and 12:00 in the lid. The photodiodes are located on the bottom of the chamber around the hub. This area must be kept clean and dry. Use a cotton swab dampened with Windex® window cleaner to gently swab the LED and photodiode lenses. Do not use alcohol; it will leave a thin residue over the optics when dry.

Remove smudges due to routine use from the touchscreen with the Cloth Wipe (Code 3580-WIPE). Use a cloth dampened with alcohol for more thorough cleaning when necessary. Do not use Windex® window cleaner, or similar cleaners, on the touchscreen.

REPAIRS

Should it be necessary to return the meter for repair or servicing, pack the meter carefully in a suitable container with adequate packing material. A return authorization number must be obtained from LaMotte Company by calling 800- 344-3100, ext. 3 (US only) or 410-778-3100, ext. 3, faxing 410-778-6394, or emailing **softwaresupport@lamotte**.com. Often a problem can be resolved over the phone or by email. If a return of the meter is necessary, attach a letter with the return authorization number, meter serial number, a brief description of problem and contact information including phone and FAX numbers to the shipping carton. This information will enable the service department to make the required repairs more efficiently.

METER DISPOSAL

Waste Electrical and Electronic Equipment (WEEE)

Natural resources were used in the production of this equipment. This equipment may contain materials that are hazardous to health and the environment. To avoid harm to the environment and natural resources, the use of appropriate take-back systems is recommended. The crossed out wheeled bin symbol on the meter encourages the use of these systems when disposing of this equipment.

Take-back systems will allow the materials to be reused or recycled in a way that will not harm the environment. For more information on approved collection, reuse, and recycling systems contact local or regional waste administration or recycling services. Do not incinerate the equipment.

DISK DISPOSAL

The disks cannot be reused. Over time, the water in reacted disks will evaporate. Disks can be recycled. Warning: Recyclers should check with the local authorities. Some states may require that no chemical residue remains on the plastic or may not be able to accept plastic waste with stainless steel mixing beads. Used disks may be returned, at the customer's expense, to LaMotte for recycling.

GENERAL INFORMATION

PACKAGING AND RETURNS

Experienced packaging personnel at LaMotte Company assure adequate protection against normal hazards encountered in transportation of shipments. After the product leaves the manufacturer, all responsibility for its safe delivery is assured by the transportation company. Damage claims must be filed immediately with the transportation company to receive compensation for damaged goods. Should it be necessary to return the instrument for repair or servicing, pack the instrument carefully in a suitable container with adequate packing material. A return authorization number must be obtained from LaMotte Company by calling 1-800-344-3100 or 1-410-778-3100, ext. 3 or emailing tech@lamotte. com. Attach a letter with the authorization number to the shipping carton which describes the kind of trouble experienced. This valuable information will enable the service department to make the required repairs more efficiently.

GENERAL PRECAUTIONS

Read the instruction manual before attempting to set up or use the instrument. Failure to do so could result in personal injury or damage to the meter. The WaterLink® Spin Touch® should not be stored or used in a damp or excessively corrosive environment. Care should be taken to prevent water or reagents from entering the photometer chamber. Wet disks should never be put into the photometer chamber.

SAFETY PRECAUTIONS

Read the safety precautions on the labels of all reagent containers and packaging prior to use. Safety Data Sheets (SDS) can be found at **www.lamotte.com**. Additional emergency information for all LaMotte reagents is available 24 hours a day from the National Poison Control Center at 1-800-222-1222 or by contacting the 24 hour emergency line for ChemTel at 1-800-255-3924 (USA, Canada, Puerto Rico). For locations outside of the North American continent call 813-248-0585 collect.

Ensure that the protection provided by this equipment is not impaired. Do not install or use this equipment in a manner that is not indicated in this manual.

LIMITS OF LIABILITY

Under no circumstances shall LaMotte Company be liable for loss of life, property, profits, or other damages incurred through the use or misuse of its products.

CE MARK

The WaterLink® Spin Touch® meter has been independently tested and has earned the European CE Mark of compliance for electromagnetic compatibility and safety. To view certificates, go to the LaMotte website at www.lamotte.com.

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the

equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Serial Number _____

Compatible with iPhone 6 Plus, iPhone 6, iPhone 5s, iPhone 5c, iPhone 5, iPad Air 2, iPad Air, iPad mini 3, iPad mini 2, iPad mini, and iPad (4th generation).

Compatible with Android devices.

Disk US Patent No. 8,734,734
FCI US Patent No. 8,987,000
FCI EU Patent No. EP2784503 A1
TCI US Patent No. 8,993,337

LaMotte

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