



Instruction Manual *Manual de Instrucción* Instruction Manuel



WaterLink

SpinTouch[®]FX



For Codes/ Para los códigos / Pour les codes
3589/3589-EU

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. A USB connection to a Windows® PC is required:**
 1. Download and install WaterLink Connect 2 Application for Windows at softwarecenter.lamotte.com. Select WaterLink Connect 2 Software for Windows FREE Download.
 2. Plug meter into the computer with the provided USB cable and launch WaterLink Connect 2 Application from the Start Menu.
 3. A prompt will appear if firmware updates are available. Select Update. Testing and data transfer will not be possible until firmware has been updated.

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 or use the USB cable [included] with a car charger [not included] to charge the battery. [Anker PowerDrive 2, DC 12/24V, 5V = 4.8A, Part Number A2310 recommended.]
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. A USB connection to a Windows PC is required. To do so:

1. Visit softwarecenter.lamotte.com and download the WaterLink Connect 2 application for Windows.
2. Plug the Spin Touch into the computer using the included USB cable.
3. Open the WaterLink Connect 2 desktop application and wait for the update to complete. Once the update is complete, it is safe to close WaterLink Connect 2 and unplug the lab. After updating the firmware, it is recommended that the LED Calibration and Angle Calibration procedures 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 2, 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 2 application for Windows. This application is available for free at softwarecenter.lamotte.com. Via the WaterLink Connect 2 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 2 Windows application from 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 2 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 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 BLE Mobile Printer [5-0067]. Other Bluetooth printers are not supported. 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.

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 on iTunes® (iOS® devices) and Google Play (for Android™ devices). Learn more about LaMotte software products at softwarecenter.lamotte.com.

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

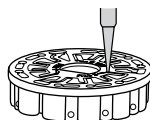
1. Log into the LaMotte software product mobile app.
2. Search for a customer or Site record. You may need to create one before you can begin testing.
3. Start a Water Test in the mobile app.
4. Perform a water test from the Spin Touch onboard touchscreen normally. The Spin Touch and the Bluetooth enabled 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 BLE Mobile Printer [5-0067]. The  button will be highlighted when connected and dim when not connected.

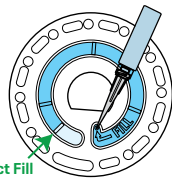
The Spin Touch cannot connect to both mobile device and the printer at one time. (See Save, Print and Send Test Results)

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 sample water to adequately fill the disk. The syringe is held vertically and the tip is inserted into the fill hole on the disk. The plunger is pressed slowly and smoothly to fill the disk.

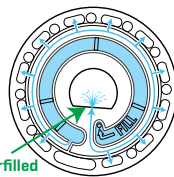


1. Fill the disk using slow, even pressure. The sample water will fill the spaces between the baffles in a counterclockwise order. Each space will fill from the bottom to the top. Sample water should be added until the sample water in the fourth chamber fills **to the top** of the chamber slightly past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



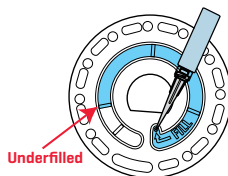
Correct Fill
[Fill line]

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.



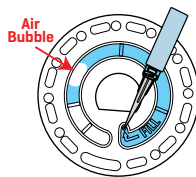
Overfilled
[Dry SpinDisk before placing in meter]

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.

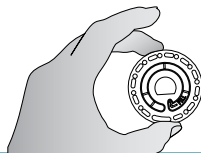


Underfilled

- 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.



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




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



For filling and troubleshooting tips go to: lamotte.com/spin_support

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.

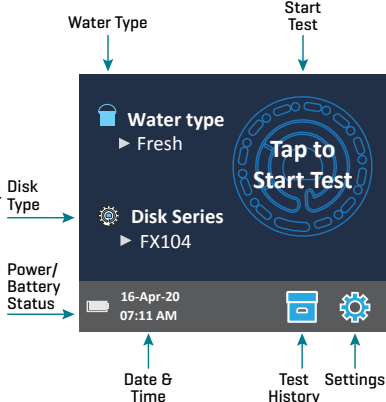
- Gently wipe smudges from the screen with the Cloth Wipe [3580-WIPE].
- Do not touch the screen with a sharp object.
- Do not place objects on the screen that will scratch or damage it.
- Avoid touching the screen with wet fingers.






TESTING

- Press  and hold until the meter turns on.
- Tap . Select a Water type. Tap  to confirm.
- Tap . Select a disk series [found on disk packaging]. Tap  to confirm.


NOTE: Disk Series are limited by Water type selection.

- Remove a disk from the packaging.
- Use the syringe [1189] to fill the disk with the water sample.
- Insert the disk. Cover the disk with the Universal Disk Cover [1719]. Close the lid.
- Tap  to start test. Tap  to cancel the test. If the test is cancelled discard the disk.
- 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 highlighted  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. REMOVE THE DISK FROM THE CHAMBER. DISPOSE OF THE DISK. Disks left in the chamber can leak and damage the device. Do not store the disk cover on the hub.

11. Press and hold  for 2 seconds to turn the meter off.
For the most accurate results samples should be 50 – 104 °F [10 – 40 °C].

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 0.1 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.

SALTWATER SAMPLE DILUTION Test results that are out of range of a reagent system will be **RED**. If results for Nitrate, Nitrite, Ammonia or Phosphate are out of range, the water sample must be diluted with saltwater to obtain accurate results. The salinity concentration of the sample must be maintained for the reagent system to function properly. The water sample cannot be diluted with tap water or water that does not contain salt.

Preparation of the Saltwater

1. Prepare 1 liter of synthetic seawater in distilled or deionized water according to the manufacturer’s instructions.
2. Test the prepared seawater with a saltwater Spin disk. Compare the results to the manufacturer’s specifications for Alkalinity, Calcium, Magnesium, and pH. The results should meet the manufacturer’s specifications. The results for Nitrate, Nitrite, Ammonia and Phosphate should be 0 ppm.

Dilution Procedure If a test result for Nitrate, Nitrite, Ammonia or Phosphate is **RED**, the result is out of the range of the reagent system and must be diluted and retested to obtain a reading which is in the concentration range for the test.

The sample water and saltwater can be measured with any accurate measuring device [graduated cylinder, pipet, or measuring spoon] if the ratio of sample water to salt water is maintained. For example, mix 1 mL of sample water and 9 mL of saltwater or mix 1 teaspoon of sample water and 9 teaspoons of saltwater.

1. Add 1 mL of sample water to a container.
 2. Add 9 mL of saltwater to the container.
 3. Mix by swirling or stirring with a clean stirrer.
 4. Test the diluted sample.
 5. Multiply the results on the screen for Nitrite, Nitrate, Ammonia, and Phosphate by 10. Results for Calcium, Magnesium and pH are not valid for the diluted sample.
- For a smaller dilution, mix 1 mL of sample water with 1 mL of saltwater. Multiply the test result by 2.
 - For a larger dilution, mix 1 mL of sample water with 19 mL of saltwater. Multiply the test result by 20.
 - Ranges Enabled must be ON for the out of range test results to be displayed in **RED**.

BRACKISH WATER Visit softwarecenter.lamotte.com and download the WaterLink Connect 2 application for Windows to update firmware. See FIRMWARE UPDATES in the manual.

Water samples with 10 ppt to 20 ppt salinity must be treated before testing with a Saltwater Disk. For the most accurate results:

0 – 10 ppt salinity	Test with a Freshwater Disk
10 – 20 ppt salinity	Test with a Saltwater Disk with Brackish Water Type selected. Follow the procedure below.
> 20-45 ppt salinity	Test with a Saltwater Disk

1. Fill the tube [0755] to the 5 mL line with the water sample.
2. Add one BT Tablet [3865].
3. Use the Tablet Crusher [0175] to THOROUGHLY crush the tablet. Use the Tablet Crusher to mix the water sample until the tablet has completely disintegrated.
4. Use the treated water sample with the Saltwater Disk and Brackish water type selected to follow the Filling and Testing procedures.

SAVE, PRINT, AND SEND TEST RESULTS Test results can be saved, transferred to the WaterLink Connect 2 mobile app via Bluetooth, and sent to the BLE Mobile Printer [5-0067].

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.

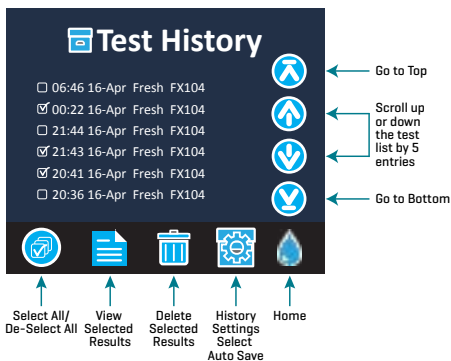
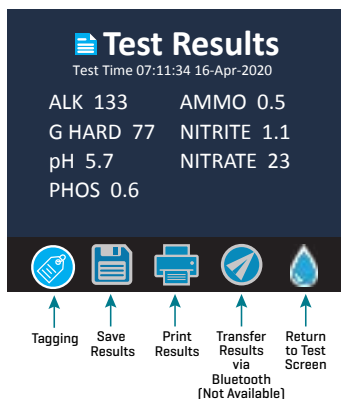
A user defined identification tag can be assigned to an individual sample result. To enable tagging, tap on the Test Screen. Tap . Select Enable tags. Tap and to return to the test screen. The tag can be up to 4 hexadecimal characters. It cannot begin with a zero. To tag a test result, tap on the bottom 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 or Send Results to a Bluetooth Phone or Tablet The WaterLink Spin Touch can print to the Mobile Bluetooth Printer or send test results to a Bluetooth-enabled device such as a phone or a tablet. The highlighted or will show which function is active. The Spin Touch cannot connect to the printer and connect to a phone or tablet at the same time.

There are two modes of operation for connecting to the printer and a phone or tablet – 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. It will also connect to a phone or tablet but priority is given to the printer connection. The printer will start printing immediately when is tapped. The will dim in intensity while the printer is printing. Fast Printer Connect should be **ON** if results will be printed more frequently than results will be sent to a phone or tablet. It can remain selected if results will only be sent to a phone or tablet. If Fast Print Connect is **ON**, and the printer is on, the printer will have to be turned off before results can be sent to a phone or tablet.



If Fast Printer Connect is **OFF**, the meter has the opportunity to connect to a phone or tablet at all times other than when the printer is actually printing a test. 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. After printing, the meter will automatically reconnect to the phone or tablet. Fast Printer Connect should be **OFF** if results will be sent to a phone or tablet most frequently and printed less often.



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. Replace the syringes when the tips become worn, or the plungers don't move smoothly. See Accessories and Replacement Parts.



REAGENT DISK The WaterLink Spin Touch uses a SpinDisk[®] 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. For the most accurate results, store and use disks at room temperature (65-80 °F/18-27 °C).



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. Do not store the disk cover on the hub.

METER CHECK DISK The Meter Check Disk (Code 1705/1705-EU) is used to evaluate the meter calibration and calibrate the meter if the calibration check fails.

IMPORTANT!! Do not attempt to separate the components of the Meter Check Disk (Code 1705/1705-EU). 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 in the Meter Check Disk.

For use of the Meter Check Disk see TROUBLESHOOTING WITH THE METER CHECK DISK.

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 6 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
















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. After changing a setting press  confirm the change. 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	Units allows the selection of units for the alkalinity results to be reported as ppm or dKH and the hardness results to be reported as ppm or dGH 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.

RANGES

LaMotte aquarium disks are designed to function over a range of 0 to 40ppt salinity. Brackish samples, [10ppt to 20ppt] must be treated before testing with a Saltwater Disk.

For the most accurate results:

0 -10 ppt salinity - Test with a Freshwater Disk selecting Fresh Water type.

10 - 20 ppt salinity - Test with a Saltwater Disk selecting Brackish Water type.

> 20 - 45 ppt salinity - Test with a Saltwater Disk selecting Salt Water type.

Procedure for treating a brackish sample for testing

1. Brackish water samples, 10 ppt to 20 ppt salinity must be treated using the BT tablet [3865] before testing with a Saltwater Disk.
2. Fill the tube [0755] to the 5 mL line with the water sample.
3. Add one BT tablet [3865]
4. Use the tablet crusher [0175] to thoroughly crush the tablet. Use the tablet crusher to mix the water sample until the tablet has completely disintegrated.
5. Use the treated water sample with the Saltwater Disk and Brackish water type selected to follow the filling and testing procedures in the Spin Touch manual.

Freshwater test 0 to 10ppt salinity, Freshwater disk

Spin Disk Result	Range of Test	Accuracy	Color w/ Increasing Concentration	Known Interferences	Alternate Unit Conversions	Apply this equation to Spin result
Total Alkalinity, CaCO ₃	015-250 ppm/ 0.8-14.0 dKH	±15%	Yellow to Green to Blue	Quats and Polyquats above 5ppm	Degrees of carbonate hardness (dKh)	Spin result multiplied by 0.056
Total Ammonia, (NH ₃ +NH ₄)	0.2-3.0 ppm	< 2.0 ppm: ±0.2 ppm	Yellow to Green to Blue	Nitrite above 5ppm, High levels of reducing agents	Ammonia nitrogen ppm (NH ₃ -N)	Spin result multiplied by 0.822
		Total Ammonia Nitrogen ppm [TAN]			Spin result divided by 0.775	
Total Hardness as Carbonate, CO ₃ ²⁻ +HCO ₃ ⁻¹	20-500 ppm/ 1.1-28.0 dGH	±15%	Colorless to Purple	None	Degrees of general Hardness (dGH)	Spin result multiplied by 0.056
Nitrate, NO ₃ ⁻¹	05-300 ppm	±30% up to 125 ppm	Colorless to Pink to Bright Pink	Sodium Thiosulfate, Nitrite above 4ppm, Copper above 10ppm	Nitrate Nitrogen ppm [NO ₃ -N]	Spin result divided by 4.43
Nitrite, NO ₂ ⁻¹	0.01-2.0 ppm	±0.2 ppm	Colorless to Pink to Bright Pink	Copper above 10ppm	Nitrite Nitrogen ppm [NO ₂ -N]	Spin result divided by 3.3
pH	4.5-10.0	±0.2	Yellow to Red to Pink	Turbidity		
Phosphate, PO ₄ ⁻³	0.2-2.0 ppm	±0.2 ppm	Colorless to Green to Blue	Iron above 5ppm, Ammonia above 5ppm		

Brackish water test 10 to 20 ppt salinity, Saltwater disk w/treated sample

Spin Disk Result	Range of Test	Accuracy	Color w/ Increasing Concentration	Known Interferences	Alternate Unit Conversions	Apply this equation to Spin result
Total Alkalinity, CaCO ₃	015-300 ppm/ 0.8-17.0 dKH	±15%	Pale Green to Lavender Blue	Quats and Polyquats above 5ppm	Degrees of carbonate hardness (dKh)	Spin result multiplied by 0.056
Total Ammonia, (NH ₃ +NH ₄)	0.2-3.0 ppm	< 1.0 ppm: ±0.2 ppm	Yellow to Green to Blue	Nitrite above 5ppm, High levels of reducing agents, Magnesium levels below 500ppm	Ammonia nitrogen ppm (NH ₃ -N)	Spin result multiplied by 0.822
		> 1.0 ppm: ±0.4 ppm			Total Ammonia Nitrogen ppm [TAN]	Spin result divided by 0.775
Calcium, Ca ⁺²	200-800 ppm	±15%	Light Orange to Bright Orange	Magnesium levels below 500ppm		
Nitrate, NO ₃ ⁻¹	05-60 ppm	±25%	Colorless to Pink to Bright Pink	Sodium Thiosulfate, Nitrite above 4ppm, Copper above 10ppm	Nitrate Nitrogen ppm [NO ₃ -N]	Spin result divided by 4.43
Nitrite, NO ₂ ⁻¹	0.01-2.0 ppm	±0.2 ppm	Colorless to Pink to Bright Pink	Copper above 10ppm	Nitrite Nitrogen ppm [NO ₂ -N]	Spin result divided by 3.3
pH	6.5-10.0	±0.2	Yellow to Red to Pink	Turbidity		
Phosphate, PO ₄ ⁻³	0.2-2.0 ppm	±0.2 ppm	Colorless to Green to Blue	Iron above 5ppm, Ammonia above 5ppm		

Saltwater test 20 to 40 ppt salinity, Saltwater disk

Spin Disk Result	Range of Test	Accuracy	Color w/ Increasing Concentration	Known Interferences	Alternate Unit Conversions	Apply this equation to Spin result
Total Alkalinity, CaCO ₃	15-300 ppm/ 0.8-17.0 dKH	±15%	Pale Green to Lavender Blue	Quats and Polyquats above 5ppm	Degrees of carbonate hardness [dKh]	Spin result multiplied by 0.056
Total Ammonia, (NH ₃ +NH ₄)	0.2-3.0 ppm	< 1.0 ppm: ±0.2 ppm	Yellow to Green to Blue	Nitrite above 5ppm, High levels of reducing agents, Magnesium levels below 500ppm	Ammonia nitrogen ppm (NH ₃ -N)	Spin result multiplied by 0.822
		Total Ammonia Nitrogen ppm [TAN]			Spin result divided by 0.775	
Calcium, Ca ⁺²	200-800 ppm	±15%	Light Orange to Bright Orange	Magnesium levels below 500ppm		
Magnesium, Mg ⁺²	500-2200 ppm	±15%	Bright Blue to Dark Blue	Borate above 200ppm, pH below 7 or above 9		
Nitrate, NO ₃ ⁻¹	05-60 ppm	±25%	Colorless to Pink to Bright Pink	Sodium Thiosulfate, Nitrite above 4ppm, Copper above 10ppm	Nitrate Nitrogen ppm (NO ₃ -N)	Spin result divided by 4.43
Nitrite, NO ₂ ⁻¹	0.01-2.0 ppm	±0.2 ppm	Colorless to Pink to Bright Pink	Copper above 10ppm	Nitrite Nitrogen ppm (NO ₂ -N)	Spin result divided by 3.3
pH	6.5-10.0	±0.2	Yellow to Red to Pink	Turbidity		
Phosphate, PO ₄ ⁻³	0.2-2.0 ppm	±0.2 ppm	Colorless to Green to Blue	Iron above 5ppm, Ammonia above 5ppm		

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

Go to SETTINGS>Other settings to select Alkalinity and Hardness units.

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 of Calcium or Magnesium is out of the range listed above, the accuracy of the results for Ammonia and Alkalinity will be affected. Nitrite levels greater than the range above will affect the Nitrate results. Calcium and Ammonia results will be affected if salinity is not within 17 – 45 ppt.

METHODS AND INTERFERENCES

Test Factor	Method	Interferences
Alkalinity	Buffered indicator reagent	Alkalinity < 20 ppm, Quats and polyquats in high concentrations
Ammonia	Salicylate	Nitrite above 5 ppm, High concentrations of reducing agents
Calcium	Buffered indicator reagent	Calcium > 800 ppm, Magnesium > 2000 ppm
Hardness	Buffered indicator reagent	None
Magnesium	Buffered indicator reagent	pH <7, pH >9, Borates > 200 ppm
Nitrate	Zinc reduction, Diazotization	Chlorine neutralizer containing sodium thiosulfate
Nitrite	Diazotization	Copper > 10 ppm
pH	Mixed indicators	Turbidity
Phosphate	Phosphomolybdate, Stannous chloride/ascorbic acid reduction	Iron > 5 ppm, Ammonia >5 ppm

CONVERSIONS

Ammonia (NH₃) Ammonia in water occurs in two forms: toxic unionized ammonia (NH₃) and the relatively non-toxic ionized form, ammonium ion (NH₄⁺). This test method measures both forms as ammonia (NH₃) to give the total ammonia concentration in water. The actual proportion of each compound depends on temperature, salinity, and pH. A greater concentration of unionized ammonia is present when the pH value and salinity increase.

1. Consult the table to find the percentage that corresponds to the temperature, pH, and salinity of the sample.
2. To express the test result as ppm Unionized Ammonia (NH₃), multiply the Total Ammonia test result by the percentage from the table.
3. To express the test result as ppm Ionized Ammonia (NH₄⁺), subtract the Unionized Ammonia determined in step 2 from the Total Ammonia.

pH	5°C		10°C		15°C		20°C		25°C	
	0 ‰	35 ‰	0 ‰	35 ‰	0 ‰	35 ‰	0 ‰	35 ‰	0 ‰	35 ‰
7.0	0.12	0.10	0.18	0.15	0.26	0.22	0.39	0.32	0.58	0.47
7.1	0.15	0.12	0.22	0.18	0.33	0.27	0.49	0.40	0.72	0.59
7.2	0.19	0.16	0.28	0.23	0.42	0.34	0.62	0.51	0.91	0.75
7.3	0.24	0.20	0.36	0.29	0.53	0.43	0.78	0.64	1.14	0.94
7.4	0.30	0.25	0.45	0.37	0.66	0.54	0.97	0.80	1.43	1.18
7.5	0.38	0.31	0.56	0.46	0.83	0.68	1.22	1.00	1.80	1.48
7.6	0.48	0.39	0.71	0.58	1.04	0.85	1.54	1.26	2.26	1.85
7.7	0.60	0.49	0.89	0.73	1.31	1.07	1.93	1.58	2.82	2.32
7.8	0.76	0.62	1.12	0.92	1.64	1.35	2.41	1.98	3.53	2.90
7.9	0.95	0.78	1.40	1.15	2.06	1.69	3.02	2.48	4.40	3.63
8.0	1.20	0.98	1.76	1.44	2.58	2.12	3.77	3.10	5.48	4.52
8.1	1.50	1.23	2.21	1.81	3.23	2.65	4.70	3.88	6.80	5.63
8.2	1.88	1.54	2.76	2.27	4.03	3.32	5.85	4.83	8.41	6.98
8.3	2.36	1.94	3.45	2.84	5.02	4.14	7.25	6.01	10.37	8.64
8.4	2.95	2.43	4.31	3.55	6.24	5.16	8.96	7.45	12.71	10.64
8.5	3.69	3.04	5.36	4.43	7.73	6.41	11.02	9.20	15.49	13.03

¹ Consult online ammonia conversion calculators for conversion factors for additional pH, salinity, and temperature conditions.

FOR EXAMPLE: A fresh water sample at 20°C has a pH of 8.5 and the test result is 1.0 ppm as Total Ammonia.

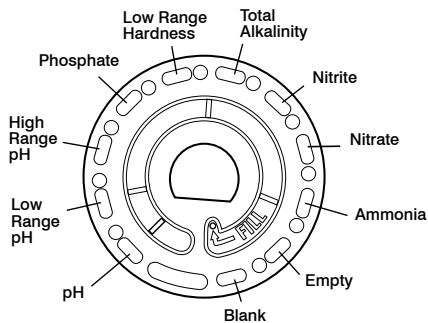
1. The percentage from the table is 11.02 % [or 0.1102].
2. 1 ppm Total Ammonia x 0.1102 = 0.1102 ppm Unionized Ammonia
3.

Total Ammonia		1.0000 ppm
Unionized Ammonia	-	0.1102 ppm
<hr style="width: 100%;"/>		
Ionized Ammonia	=	0.8898 ppm

DISK DESCRIPTIONS

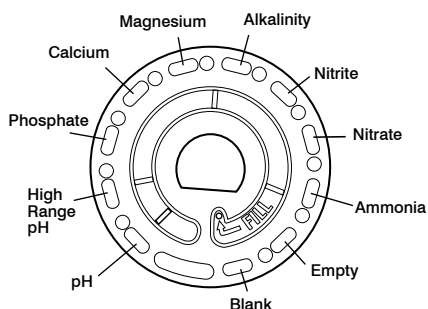
Aquaculture/Aquarium Freshwater Disk (Code 4353)

Alkalinity	Nitrate
Ammonia	pH
Hardness	Phosphate
Nitrite	



Aquaculture/Aquarium Saltwater Disk (Code 4354)

Alkalinity	pH
Ammonia	Phosphate
Calcium	Nitrite
Magnesium	Nitrate



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

NOTE: For the most accurate results, store and use disks at room temperature [65-80 °F/18-27°C].


ACCESSORIES AND REPLACEMENT PARTS

Description	Code
BT Tablets	3865-H
Tablet Crusher	0175
BT Tablet Accessory Package	3865-PKG
Brackish Disk Package	4361-H
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 [Europe]	1705-EU
Universal Disk Cover	1719
USB Cable	1712
Universal Adapter	7-2200
Cloth Wipe	3580-WIPE
BLE Mobile Printer	5-0067
WaterLink Spin Touch Counter Mat	3580-MAT
WaterLink Spin Touch FX Manual	3589-MN
WaterLink Spin Touch FX Quick Guide	3589-QG

For available reagent disks, see Disk Descriptions.


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

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.]. Requires a USB connection to Windows PC		
Software	WaterLink Solutions [Web, Android, iOS], DataMate Web [Web, Android, iOS], WaterLink Connect 2 [Windows]		
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	6 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): KC (Korea):	005-101007 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
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 Results and Test History screens	Problem with default blank due to under filled disk or air bubble. Test results are questionable.	Fill disk correctly [see FILLING]. On Test Results screen tap ! for details.
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 Brackish Water	Gently clean disk cover apertures with pipe cleaner or lint free cloth. For samples with 10 - 20 ppt salinity, follow Brackish Water procedure.
Disk type is not an option in Disk Series	Software or meter firmware is out of date.	Update WaterLink Connect 2 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 0.1 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 BLE Mobile Printer [5-0067]	Turn printer on Connect to BLE Mobile Printer [5-0067]

TROUBLESHOOTING WITH THE METER CHECK DISK


IMPORTANT!! Do not attempt to separate the components of the Meter Check Disk [Code 1705/1705-EU]. 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 in the Meter Check Disk.

CALIBRATION OPERATIONS The Meter Check Disk (MCD) is used to perform two calibration operations – Check Calibration and Start Calibration. The Start Calibration procedure should only be performed if the meter fails the Check Calibration procedure.



Check Calibration Meters are calibrated at the time of manufacture. However, it is possible for the calibration settings to be lost due to power anomalies or other circumstances. The Meter Check Disk is used in the Check Calibration procedure to determine whether the alignment of the hub and disk are correct. For some meters, it also evaluates the brightness of the individual LEDs.

1. Follow the CLEANING procedure to clean the light chamber and optic lenses.
2. From the main test page, tap  to select Settings.
3. Tap **Calibration**.
4. Tap **Check Calibration**.
5. Remove the Meter Check Disk [Code 1705/1705-EU] from the foil pouch. DO NOT remove the black cover from the disk. Insert the Meter Check Disk [MCD] into the meter and close the lid.
6. Tap **Start**.
7. The meter will briefly spin. When it is complete, six channel values will be displayed. Compare the displayed channel values to those printed on the MCD pouch. If the displayed channel values are within the ranges provided on the Meter Check Disk pouch, the meter is calibrated and performing normally. If the displayed channel values are not within the ranges provided on the Meter Check Disk pouch, perform the Start Calibration procedure.

NOTE: 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.

8. Tap  to return to the test screen.
9. Remove the MCD from the meter and return to the foil pouch for storage.

Start Calibration The Start Calibration procedure calibrates the alignment of the hub and disk for all meters and sets the brightness of the individual LEDs for compatible meters. Before performing this calibration procedure, run the Check Calibration procedure to determine whether the meter is calibrated and operating normally. The Start Calibration procedure should only be completed if the meter fails the Check Calibration procedure.

1. Follow the CLEANING procedure to clean the light chamber and optic lenses.
2. From the main test screen, tap  to select Settings.
3. Tap **Calibration**.
4. Tap **Start Calibration**.
5. Remove the Meter Check Disk [Code 1705/1705-EU] from the foil pouch. DO NOT remove the black cover from the disk. Insert the Meter Check Disk. Close the lid.
6. Tap **Start**.
7. When the calibration is complete the message "Angle Calibration Successful" will appear. Meters that can also perform an LED calibration will display "LED Calibration Successful".
8. Tap  to return to the test screen.
9. Angle Calibration checks the alignment of the hub and disk. The LED Calibration sets the brightness of the individual LEDs. The results are reported as pass or fail. If the measurements pass, the settings will be saved, and the meter is calibrated. If the analysis fails, contact Support.

softwaresupport@lamotte.com | phone: 800-344-3100 option 3 | Mon-Fri 9am-5pm EST

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.
- 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.
- Hold syringe vertically when filling disks
- Store disks at 65°-80°F/18°-27°C.

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 streak-free 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.

RETURNS Should it be necessary to return the meter, 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.

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, 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 softwaresupport@lamotte.com. Attach a letter with the authorization number to the shipping carton which describes the kind of trouble experienced.

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 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 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.

WARRANTY LaMotte Company warrants this instrument to be free of defects in parts and workmanship for 2 years from the date of shipment. Keep the proof of purchase for warranty verification. If it should become necessary to return the instrument during or the warranty period, contact our Technical Service Department at 1-800-344-3100 or 1-410-778-3100, ext. 3 or softwaresupport@lamotte.com for a return authorization number or visit lamotte.com for troubleshooting help. The sender is responsible for shipping charges, freight, insurance, and proper packaging to prevent damage in transit. This warranty does not apply to defects resulting from action of the user such as misuse, improper wiring, operation outside of specification, improper maintenance or repair, or unauthorized modification. LaMotte Company specifically disclaims any implied warranties or merchantability or fitness for a specific purpose and will not be liable for any direct, indirect, incidental, or consequential damages. LaMotte Company's total liability is limited to repair or replacement of the product with a new or refurbished meter as determined by LaMotte Company. The warranty set forth above is inclusive and no other warranty, whether written or oral, is expressed or implied.

CONFIGURACIÓN

ANTES DEL PRIMER USO

- Cargue completamente la batería utilizando el cable USB y el adaptador en la toma de corriente AC.
- Asegúrese de que su Spin Touch es la última edición. Se requiere una conexión USB a una PC con Windows®:
 1. Descargue e instale la Aplicación WaterLink Connect 2 Application para Windows en softwarecenter.lamotte.com. Seleccione la descarga GRATUITA del software WaterLink Connect 2 para Windows.
 2. Conecte el fotómetro al ordenador con el cable USB incluido y lance la aplicación de escritorio WaterLink Connect 2 Application desde el Menú de Inicio.
 3. Aparecerá un mensaje si hay actualizaciones de firmware disponibles. Seleccione Actualizar. Las pruebas y la transferencia de datos no serán posibles hasta que se haya actualizado el firmware.

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

Patente US del disco n.º 8.734.734
Patente US del FCI n.º 8.987.000
Patente UE del FCI n.º EP2784503 A1
Patente US del TCI n.º 8.993.337

Brevet de disque USA n° 8 734 734
Brevet FCI USA n° 8 987 000
Brevet FCI UE n° EP2784503 A1
Brevet TCI USA n° 8 993 337



Water Testing Leader Since 1919

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www.waterlinkspintouch.com

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