WATER-I.D.®

WATER TESTING EQUIPMENT

PoolLAB 2.0®

PHOTOMETER

- User Manual
- Руководство пользователя
- Εγχειρίδιο χρήσης
- Kullanıcı Kılavuzu
- מדריך למשתמש

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V21

QUALITY REAGENTS
MADE IN GERMANY

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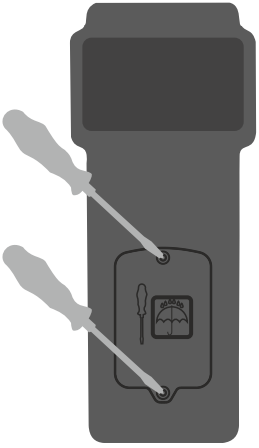
3 x Crushing | Stirring Rods (white, blue, red)
1 x 10ml syringe
1 x Printed User Manual
1 x Collecting Bag (Nylon)
20 x Phenol Red Photometer tablets
20 x DPD N° 1 Photometer tablets
10 x DPD N° 3 Photometer tablets
10 x CYA–Test Photometer tablets
10 x Alkalinity–M Photometer tablets

Poison Center Munich (24/7):
+49 (0) 89 – 19240 (German and English)

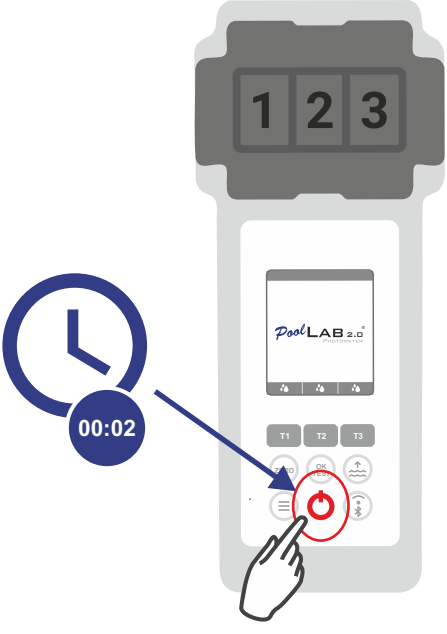
	Reagents for water analysis only! Do not eat! Keep out of reach of children! Store cool and dry!
	Реагенты только для анализа воды! Не употреблять в пищу! Хранить в недоступном для детей месте! Хранить в прохладном и сухом месте!
	Αντιδραστήρια μόνο για ανάλυση νερού! Μην τρώτε! Να φυλάσσεται μακ ριά από παιδιά! Φυλάσσεται δροσερά και στεγνά!
	Reaktifler sadece su analizi içindir! Sakın yemeyin! Çocukların ulaşamayacağı yerde saklayın! Serin ve kuru saklayın!
	ריאגנטים לניתוח מים בלבד! אל תאכל! לשמור מחוץ להישג ידם של הילדים!אחסן קריר ויבש!

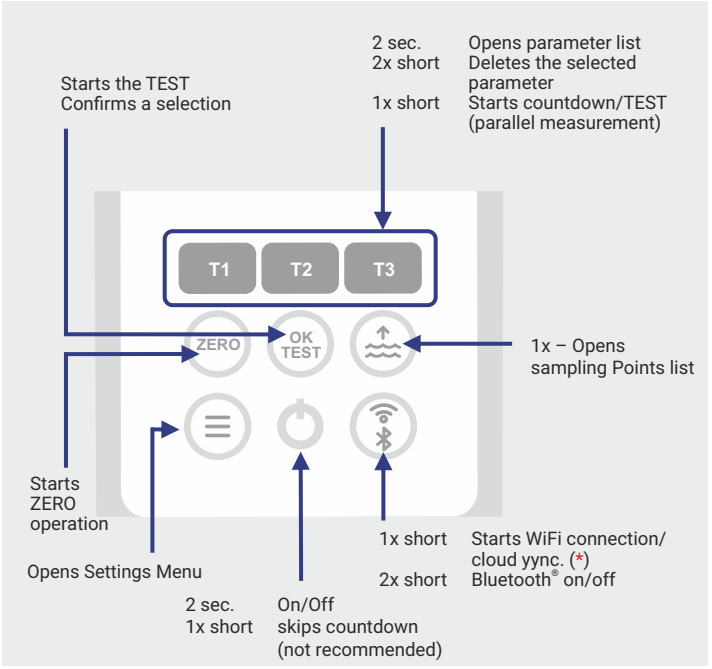
	Change
	Изменить
	Αλλαγή
	Değişim
	שינוי



3 x AA

	Do not use rechargeable batteries!
	Не используйте аккумуляторные батареи!
	Μην χρησιμοποιείτε επαναφορτιζόμ ενες μπαταρίες!
	Şarj edilebilir pil kullanmayın!
	אין להשתמש בסוללות נטענות!

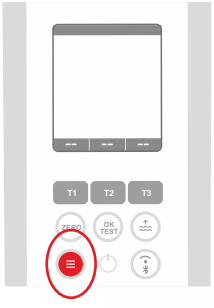

1 2 3
PoolLAB 2.0
T1
T2
T3
00:02



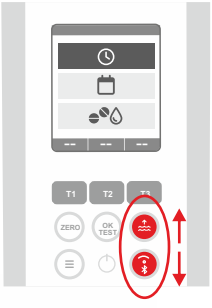
(*) requires that a WiFi-connection has been set up by using the LabCOM® App whilst the PoolLab 2.0® is connected to the App via Bluetooth®.
To synchronize with a cloud-account, a cloud account needs to be set up by using the LabCOM® App whilst the PoolLab 2.0® is connected to the App via Bluetooth®.

Device settings
Настройки устройства
Ρυθμίσεις συσκευής
Cihaz ayarları
הגדרות מכשיר

1

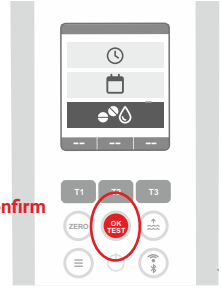


2



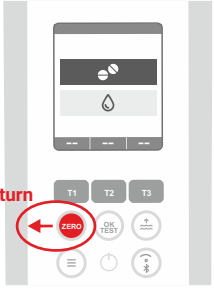
3

Confirm



4

Return



Cloud | облако | Moln | ענן

	This is only an information menu! If cloud synchronisation is set up for your PoolLab 2.0® (to be set up via the LabCOM® app while the PoolLab 2.0® is connected to the app via Bluetooth®), the cloud account with which synchronisation is taking place is displayed here.
	Это только информационное меню! Если облачная синхронизация настроена для вашего PoolLab 2.0® (настраивается через приложение LabCOM®, когда PoolLab 2.0® подключен к приложению через Bluetooth®), облачная учетная запись, с которой происходит синхронизация, отображается здесь отображается облачный аккаунт, с которым происходит синхронизация.
	Αυτό είναι μόνο ένα ενημερωτικό μενού! Εάν ο συγχρονισμός μέσω cloud έχει ρυθμιστεί για το PoolLab 2.0® (θα ρυθμιστεί μέσω της εφαρμογής LabCOM® ενώ το PoolLab 2.0® είναι συνδεδεμένο με την εφαρμογή μέσω Bluetooth®), ο λογαριασμός cloud με τον οποίο πραγματοποιείται ο συγχρονισμός εμφανίζεται εδώ.
	Bu sadece bir bilgi menüsüdür! Bulut senkronizasyonu sizin için ayarlanmışsa PoolLab 2.0® (PoolLab 2.0® açıkken LabCOM® uygulaması aracılığıyla ayarlanmalıdır) Bluetooth® aracılığıyla uygulamaya bağlanan), bulut hesabı senkronizasyonun gerçekleşmekte olduğu burada görüntülenir.
	זה רק תפריט מידע! אם סנכרון ענן מוגדר עבורך PoolLab 2.0® (להגדיר באמצעות אפליקציית LabCOM® בזמן ש- PoolLab 2.0® מחובר לאפליקציה באמצעות Bluetooth®), חשבון הענן שאיתוהסנכרון מתרחש מוצג כאן.

WiFi | ווי - פיי

	This is only an information menu! If a WiFi connection is set up for the PoolLab 2.0® (set up via the LabCOM® app whilst the PoolLab 2.0® is connected to the app via Bluetooth®), the WiFi network which is used for the synchronisation is displayed here.
	Это только информационное меню! Если WiFi соединение настроено для PoolLab 2.0® (настроено через приложение LabCOM®, в то время как PoolLab 2.0® подключен к приложению через Bluetooth®), здесь отображается сеть WiFi, которая используется длясинхронизации, отображается здесь.
	Αυτό είναι μόνο ένα ενημερωτικό μενού! Εάν έχει ρυθμιστεί σύνδεση WiFi για το PoolLab 2.0® (η ρύθμιση γίνεται μέσω της εφαρμογής LabCOM® ενώ το PoolLab 2.0® είναι συνδεδεμένο στην εφαρμογή μέσω Bluetooth®), το δίκτυο WiFi που χρησιμοποιείται για τηνγια το συγχρονισμό εμφανίζεται εδώ.
	Bu sadece bir bilgi menüsüdür! için bir WiFi bağlantısı kurulmuşsa PoolLab 2.0® (PoolLab 2.0® açıkken LabCOM® uygulaması aracılığıyla ayarlanır) Bluetooth® ile uygulamaya bağlanan) için kullanılan WiFi ağısenkronizasyon burada görüntülenir.
	זה רק תפריט מידע! אם הוגדר חיבור עבורWiFi PoolLab 2.0® הוא בזמן שה-PoolLab 2.0®מוגדר באמצעות אפליקציית (LabCOM® המשמשת עבורה WiFiרשת ה-), Bluetooth®מחובר לאפליקציה באמצעות הסנכרון מוצג כאן

Time | Время | Χρόνος | Zaman | זמן

The date and time are automatically corrected when the PoolLab 2.0® is connected (Bluetooth®) to the LabCOM® app. In this menu you can choose between the 12h format (e.g. 02:00 PM) or the 24h format (e.g. 14:00).

Дата и время автоматически корректируются при подключении PoolLab 2.0® (Bluetooth®) к приложению LabCOM®. В этом меню можно выбрать формат 12 часов (например, 02:00 PM) или 24 часа (например, 14:00).

Η ημερομηνία και η ώρα διορθώνονται αυτόματα όταν το PoolLab 2.0® είναι συνδεδεμένο (Bluetooth®) με την εφαρμογή LabCOM®. Σε αυτό το μενού μπορείτε να επιλέξετε μεταξύ της μορφής 12h (π.χ. 02:00 μ.μ.) ή της μορφής 24h (π.χ. 14:00).

PoolLab 2.0® LabCOM® uygulamasına bağlandığında (Bluetooth®) tarih ve saat otomatik olarak düzeltilir. Bu menüde 12 saat formatı (örn. 02:00 PM) veya 24 saat formatı (örn. 14:00) arasında seçim yapabilirsiniz.

התאריך והשעה מתוקנים אוטומטית כאשר ה-PoolLab 2.0® מחובר (Bluetooth®) לאפליקציית LabCOM®. בתפריט זה תוכלו לבחור בין פורמט 12 שעות (למשל 14:00) או פורמט 24 שעות (למשל 14:00).

Date | Дата| Ημερομηνία | Tarih | תַאֲרִיך

The date and time are automatically corrected when the PoolLab 2.0® is connected (Bluetooth®) to the LabCOM® app. In this menu you can choose between option 1 (MM/DD/YYYY - example 09/27/2023) and option 2 (DD/MM/YYYY - example 27/09/2023).

Дата и время автоматически корректируются при подключении PoolLab 2.0® (Bluetooth®) к приложению LabCOM®. В этом меню можно выбрать вариант 1 (ММ/ДД/ГГГГ - пример 09/27/2023) и вариант 2 (ДД/ММ/ГГГГ - пример 27/09/2023).

Η ημερομηνία και η ώρα διορθώνονται αυτόματα όταν το PoolLab 2.0® είναι συνδεδεμένο (Bluetooth®) με την εφαρμογή LabCOM®. Σε αυτό το μενού μπορείτε να επιλέξετε μεταξύ της επιλογής 1 (MM/DD/YYYY - παράδειγμα 09/27/2023) και της επιλογής 2 (DD/MM/YYYY - παράδειγμα 27/09/2023).

PoolLab 2.0® LabCOM® uygulamasına bağlandığında (Bluetooth®) tarih ve saat otomatik olarak düzeltilir. Bu menüde seçenek 1 (MM/DD/YYYY - örnek 09/27/2023) ve seçenek 2 (DD/MM/YYYY - örnek 27/09/2023) arasında seçim yapabilirsiniz.

התאריך והשעה מתוקנים אוטומטית כאשר ה-PoolLab 2.0® מחובר (Bluetooth®) לאפליקציית LabCOM®. בתפריט זה ניתן לבחור בין אפשרות 1 (MM/DD/YYYY - דוגמה) לבין אפשרות 2 (27/09/2023 DD/MM/YYYY - דוגמה (27/09/2023(DD/MM/YYYYYY - exempel 27/09/2023).

pH | fCl_2 | tCl_2 | cCl_2 | Br_2 | ClO_2 | O_3

Tablet– and liquid mode | Планшетный и жидкостный режим | Λειτουργία σε δισκία και υγρά | Tablet ve sıvı modu | מצב טאבלט ונוזל

Some parameters (see listed above) can be measured on the PoolLab 2.0® with both tablet reagents and liquid reagents. Select between tablet and liquid mode in the menu. The liquid reagents may only be used in liquid mode, otherwise incorrect results will be measured! The selected mode is indicated by a symbol in the status bar (top of the screen).

Некоторые параметры (см. список выше) можно измерять на PoolLab 2.0® как с таблетированными, так и с жидкими реагентами. Выберите в меню планшетный или жидкий режим. Жидкие реагенты можно использовать только в жидком режиме, иначе будут получены неправильные результаты! Выбранный режим отображается символом в строке состояния (в верхней части экрана).

Ορισμένες παράμετροι (βλέπε παραπάνω) μπορούν να μετρηθούν στο PoolLab 2.0® τόσο με αντιδραστήρια σε μορφή δισκίων όσο και με υγρά αντιδραστήρια. Επιλέξτε μεταξύ της λειτουργίας με δισκία και της λειτουργίας με υγρό στο μενού. Τα υγρά αντιδραστήρια μπορούν να χρησιμοποιηθούν μόνο σε υγρή λειτουργία, διαφορετικά θα μετρηθούν λανθασμένα αποτελέσματα! Η επιλεγμένη λειτουργία υποδεικνύεται από ένα σύμβολο στη γραμμή κατάστασης (στο επάνω μέρος της οθόνης).

Bazı parametreler (yukarıda listelenmiştir) PoolLab 2.0® cihazında hem tablet reaktifler hem de sıvı reaktifler ile ölçülebilir. Menüden tablet ve sıvı modu arasında seçim yapın. Sıvı reaktifler sadece sıvı modunda kullanılabilir, aksi takdirde yanlış sonuçlar ölçülür! Seçilen mod, durum çubuğunda (ekranın üst kısmında) bir sembol ile gösterilir.

עם ריאגנטים לטבליות וגם PoolLab 2.0® ניתן למדוד כמה פרמטרים (ראה המפורטים לעיל) ב-עם ריאגנטים נוזליים. בחר בין מצב טאבלט לנוזל בתפריט. ניתן להשתמש בריאגנטים הנוזליים רק במצב נוזלי, אחרת יימדדו תוצאות שגויות! המצב שנבחר מסומן באמצעות סמל בשורת המצב (החלק העליון של המסך).

Sampling points | Точки отбора проб | Σημεία δειγματοληψίας
Örnekleme noktaları | נקודות דגימה

In the LabCOM® app you can create sampling points (e.g. "Pool 1", "Pool 2") and then transfer them to the PoolLab 2.0® with an existing Bluetooth® connection. In this menu you can select the sampling point under which the following measurements are to be saved. The name of the selected sampling point is also displayed on the top left of the start screen.

В приложении LabCOM® можно создавать точки отбора проб (например, "Бассейн 1", "Бассейн 2") и затем передавать их в PoolLab 2.0® с помощью существующего соединения Bluetooth®. В этом меню можно выбрать точку отбора проб, под которой будут сохранены следующие измерения. Название выбранной точки отбора проб также отображается в верхней левой части начального экрана.

Στην εφαρμογή LabCOM® μπορείτε να δημιουργήσετε σημεία δειγματοληψίας (π.χ. "Pool 1", "Pool 2") και στη συνέχεια να τα μεταφέρετε στο PoolLab 2.0® με μια υπάρχουσα σύνδεση Bluetooth®. Σε αυτό το μενού μπορείτε να επιλέξετε το σημείο δειγματοληψίας στο οποίο θα αποθηκευτούν οι ακόλουθες μετρήσεις. Το όνομα του επιλεγμένου σημείου δειγματοληψίας εμφανίζεται επίσης επάνω αριστερά στην αρχική οθόνη.

LabCOM® uygulamasında örnekleme noktaları oluşturabilir (örn. "Havuz 1", "Havuz 2") ve ardından bunları mevcut bir Bluetooth® bağlantısı ile PoolLab 2.0® cihazına aktarabilirsiniz. Bu menüde, aşağıdaki ölçümlerin kaydedileceği örnekleme noktasını seçebilirsiniz. Seçilen örnekleme noktasının adı da başlangıç ekranının sol üst köşesinde görüntülenir.

תוכל ליצור נקודות דגימה (למשל "בריכה 1", "בריכה 2") ולאחר LabCOM®באפליקציית קיים. בתפריט זה ניתן לבחור Bluetooth®עם חיבור PoolLab 2.0®מכן להעביר אותן ל- את נקודת הדגימה שמתחתיה יש לשמור את המדידות הבאות. השם של נקודת הדגימה שנבחרה מוצג גם בפינה השמאלית העליונה של מסך ההתחלה.

Display brightness | Яркость дисплея | Φωτεινότητα οθόνης
Ekran parlaklığı | בהירות תצוגה

	Here you can set the brightness of the PoolLab 2.0® display. The brighter the display is set, the higher the power consumption of the PoolLab 2.0®.
	Здесь можно настроить яркость дисплея PoolLab 2.0®. Чем ярче установлен дисплей, тем выше энергопотребление PoolLab 2.0®.
	Εδώ μπορείτε να ρυθμίσετε τη φωτεινότητα της οθόνης του PoolLab 2.0®. Όσο πιο φωτεινή είναι η οθόνη, τόσο μεγαλύτερη είναι η κατανάλωση ενέργειας του PoolLab 2.0®.
	Burada PoolLab 2.0® ekranının parlaklığını ayarlayabilirsiniz. Ekran ne kadar parlak ayarlanırsa, PoolLab 2.0®'ın güç tüketimi o kadar yüksek olur.
	כאן תוכל להגדיר את הבהירות של תצוגת PoolLab 2.0®. ככל שהתצוגה מוגדרת בהירה יותר, כך צריכת החשמל של ה-PoolLab 2.0® גבוהה יותר.

Calibration | Калибровка | Βαθμονόμηση | Kalibrasyon | כיול

If the measurement results obtained do not correspond to the expected results you can, and if the cuvette is changed you MUST, carry out a calibration. Please follow the steps indicated on the following pages.

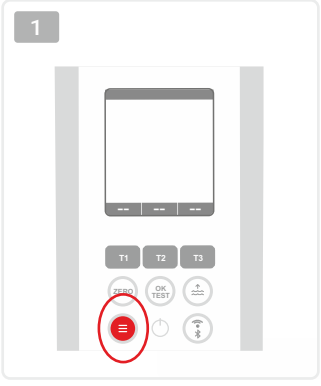
Если полученные результаты измерений не соответствуют ожидаемым, вы можете, а при замене кюветы ОБЯЗАНЫ, провести калибровку. Пожалуйста, следуйте шагам, указанным на следующих страницах.

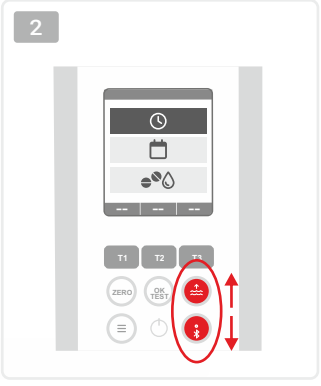
Εάν τα αποτελέσματα των μετρήσεων που λαμβάνονται δεν ανταποκρίνονται στα αναμενόμενα αποτελέσματα, μπορείτε, και εάν αλλάξετε την κυψελίδα, ΠΡΕΠΕΙ να προβείτε σε βαθμονόμηση. Ακολουθήστε τα βήματα που αναφέρονται στις επόμενες σελίδες.

Elde edilen ölçüm sonuçları beklenen sonuçlarla uyuşmuyorsa bir kalibrasyon gerçekleştirebilirsiniz ve küvet değiştirilirse MUTLAKA gerçekleştirmelisiniz. Lütfen sonraki sayfalarda belirtilen adımları izleyin.

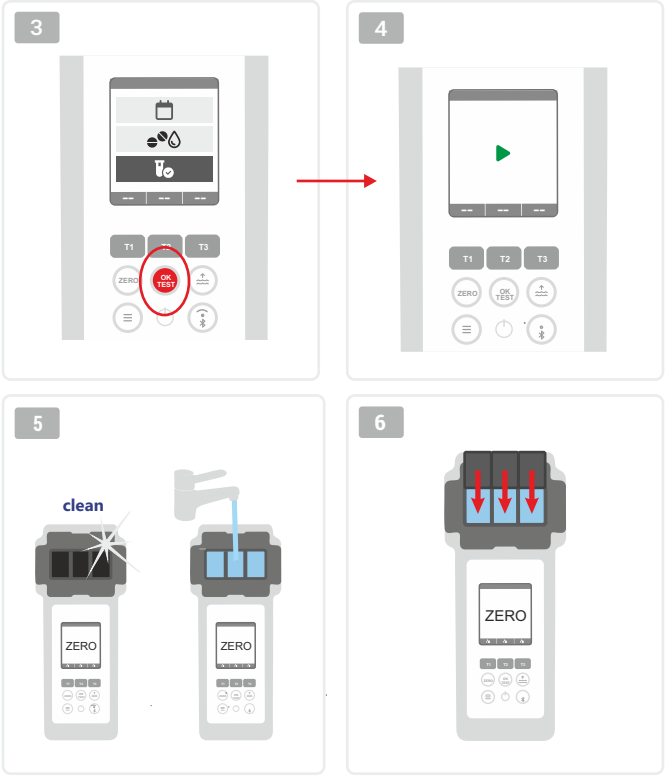
אם תוצאות המדידה שהתקבלו אינן תואמות את התוצאות הצפויות שתוכלו, ואם החליפו את הקובטה עליכם לבצע כיול. אנא בצע את השלבים המצוינים בעמודים הבאים.

Calibration | Калибровка | Βαθμονόμηση | Kalibrasyon | כִּיוּל





Calibration | Калибровка | Βαθμονόμηση | Kalibrasyon | כיול



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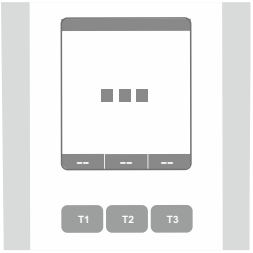


9

Advices
Советы
Συμβουλές
Tavsiyeler
עצות

ONLY SINGLE

	The parameter to be measured may only be measured stand-alone (so NOT in parallel with other parameters).
	Измеряемый параметр может измеряться только отдельно (то есть НЕ параллельно с другими параметрами).
	Η προς μέτρηση παράμετρος μπορεί να μετρηθεί μόνο μεμονωμένα (δηλαδή ΟΧΙ παράλληλα με άλλες παραμέτρους).
	Ölçülecek parametre sadece tek başına ölçülebilir (yani diğer parametrelerle paralel DEĞİL).
	ניתן למדוד את הפרמטר שיש למדוד רק עצמאי (לכן לא במקביל לפרמטרים אחרים).

ONLY CHAMBER 2

	The parameter to be measured may only be measured in the middle measuring chamber (2).
	Измеряемый параметр может быть измерен только в средней измерительной камере (2).
	Η προς μέτρηση παράμετρος μπορεί να μετρηθεί μόνο στον μεσαίο θάλαμο μέτρησης (2).
	Ölçülecek parametre sadece orta ölçüm bölmesinde (2) ölçülebilir.
	ניתן למדוד את הפרמטר שיש למדוד רק בתא המדידה האמצעי (2).

To prevent cross-contamination, your PoolLab 2.0® comes with 3 different coloured stirring rods. It is recommended to not use the same stirring rod (e.g. just the white one) when performing parallel measurements, but to use a different one for each chamber.

Для предотвращения перекрестного загрязнения в комплект поставки PoolLab 2.0® входят 3 стержня для перемешивания разного цвета. Рекомендуется не использовать одну и ту же палочку для перемешивания (например, только белую) при проведении параллельных измерений, а использовать для каждой камеры свою.

Για να αποφύγετε τη διασταυρούμενη μόλυνση, το PoolLab 2.0® σας συνοδεύεται από 3 ράβδους ανάδευσης διαφορετικού χρώματος. Συνιστάται να μην χρησιμοποιείτε την ίδια ράβδο ανάδευσης (π.χ. μόνο τη λευκή) όταν εκτελείτε παράλληλες μετρήσεις, αλλά να χρησιμοποιείτε διαφορετική για κάθε θάλαμο.

Çapraz kontaminasyonu önlemek için PoolLab 2.0® cihazınız 3 farklı renkte karıştırma çubuğu ile birlikte gelir. Paralel ölçümler yaparken aynı karıştırma çubuğunu (örneğin sadece beyaz olanı) kullanmamanız, her hazne için farklı bir tane kullanmanız önerilir.

שלך מגיע עם 3 מוטות ערבוב בצבעים שונים. PoolLab 2.0® כדי למנוע זיהום צולב, ה-מומלץ לא להשתמש באותו מוט ערבוב (למשל רק הלבן) בעת ביצוע מדידות מקבילות, אלא להשתמש במוט אחר לכל תא.

PHOTOMETER

RAPID

	Always use PHOTOMETER grade tablets! Never use RAPID grade tablets! RAPID tablets lead to incorrect measurement results! Do not touch reagent tablets!
	Всегда используйте таблетки класса PHOTOMETER! Никогда не используйте планшеты класса RAPID! Таблетки RAPID приводят к неправильным результатам измерений! Не прикасайтесь к таблеткам реактивов!
	Χρησιμοποιείτε πάντα δισκία ποιότητας PHOTOMETER! Ποτέ μην χρησιμοποιείτε δισκία ποιότητας RAPID! Τα δισκία RAPID οδηγούν σε λανθασμένα αποτελέσματα μέτρησης! Μην αγγίζετε τα δισκία αντιδραστηρίων!
	Her zaman FOTOMETRE sınıfı tabletler kullanın! Asla RAPID sınıfı tabletler kullanmayın! RAPID tabletler yanlış ölçüm sonuçlarına yol açar! Reaktif tabletlerine dokunmayın!
	השתמש תמיד בטאבלטים בדרגת PHOTOMETER! לעולם אל תשתמש בטאבלטים בדרגת RAPID! טבליות RAPID מובילות לתוצאות מדידה שגויות! אל תיגע בטבליות מגיב!

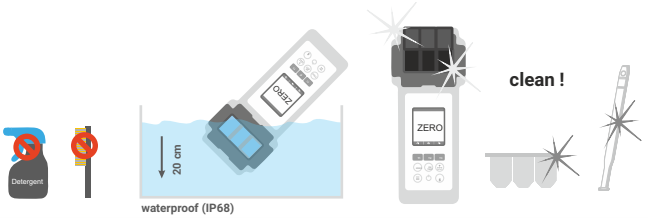
1) The date of your PoolLab 2.0® is preset when delivered, but may differ from your time zone. The date and time can be changed via the free LabCOM® app (Bluetooth® connection). If the battery change takes longer than 2 minutes or batteries are inserted incorrectly, the date will be deleted. **2)** Ideal values: Please contact the supplier of your pool chemistry to ask for ideal values for your pool. **3)** Scratched cuvette: As long as the cuvette is not scratched in the upper half but only in the bottom area, it does not need to be changed. **4)** Please crush tablets vigorously with the stirring rod. The cuvette will not break **5)** Total chlorine may well be displayed lower than the free chlorine within the tolerances shown in these instructions. **6)** Humidity in the display: Can occur if the residual humidity in the housing condenses due to the cold water during immersion.

1) Дата вашего PoolLab 2.0® предварительно устанавливается при поставке, но может отличаться от времени вашего часового пояса. Дату и время можно изменить с помощью бесплатного приложения LabCOM® (соединение Bluetooth®). Если замена батарей занимает более 2 минут или батареи вставлены неправильно, дата будет удалена. **2)** Идеальные значения: Пожалуйста, свяжитесь с поставщиком химии для вашего бассейна, чтобы узнать идеальные значения для вашего бассейна. **3)** Поцарапанная кювета: Если кювета поцарапана не в верхней части, а только в нижней, ее не нужно менять. **4)** Пожалуйста, энергично раздавите таблетки с помощью палочки для перемешивания. Кювета не разобьется **5)** Общий хлор может отображаться ниже, чем свободный хлор, в пределах допусков, указанных в данной инструкции. **6)** Влажность на дисплее: Может возникнуть, если остаточная влажность в корпусе конденсируется под воздействием холодной воды во время погружения.

1) Η ημερομηνία του PoolLab 2.0® σας είναι προκαθορισμένη κατά την παράδοση, αλλά ενδέχεται να διαφέρει από τη ζώνη ώρας σας. Η ημερομηνία και η ώρα μπορούν να αλλάξουν μέσω της δωρεάν εφαρμογής LabCOM® (σύνδεση Bluetooth®). Εάν η αλλαγή της μπαταρίας διαρκέσει περισσότερο από 2 λεπτά ή εάν οι μπαταρίες τοποθετηθούν λανθασμένα, η ημερομηνία θα διαγραφεί. **2)** Ιδανικές τιμές: Επικοινωνήστε με τον προμηθευτή του χημικού της πισίνας σας για να ζητήσετε τις ιδανικές τιμές για την πισίνα σας. **3)** Γρατσουνισμένη κυψέλη: Εφόσον η κυβέτα δεν είναι γρατζουνισμένη στο πάνω μισό αλλά μόνο στην κάτω περιοχή, δεν χρειάζεται να την αλλάξετε. **4)** Παρακαλούμε συνθλίψτε τα δισκία δυνατά με τη ράβδο ανάδευσης. Η κυβέτα δεν θα σπάσει. **5)** Το ολικό χλώριο μπορεί κάλλιστα να εμφανίζεται χαμηλότερο από το ελεύθερο χλώριο εντός των ανοχών που αναφέρονται στις παρούσες οδηγίες. **6)** Η υγρασία στην οθόνη: Μπορεί να εμφανιστεί εάν η υπολειπόμενη υγρασία στο περίβλημα συμπυκνωθεί λόγω του κρύου νερού κατά την εμβάπτιση.

1) PoolLab 2.0® cihazınızın tarihi teslim edildiğinde önceden ayarlanmıştır, ancak saat diliminizden farklı olabilir. Tarih ve saat, ücretsiz LabCOM® uygulaması (Bluetooth® bağlantısı) aracılığıyla değiştirilebilir. Pil değişimi 2 dakikadan uzun sürerse veya piller yanlış yerleştirilirse, tarih silinecektir. **2)** İdeal değerler: Havuzunuz için ideal değerleri sormak için lütfen havuz kimyasalı tedarikçinizle iletişime geçin. **3)** Çizilmiş küvet: Küvetin üst yarısında çizik olmadığı, sadece alt kısmında çizik olduğu sürece değiştirilmesine gerek yoktur. **4)** Lütfen tabletleri karıştırma çubuğu ile kuvvetlice ezin. Küvet kırılmayacaktır. **5)** Toplam klor, bu talimatlarda gösterilen toleranslar dahilinde serbest klordan daha düşük görüntülenebilir. **6)** Ekrandaki nem: Daldırma sırasında soğuk su nedeniyle muhafazadaki artık nem yoğunlaşırsa oluşabilir.

1) שלך מוגדר מראש בעת המסירה, אך עשוי להיות שונה PoolLab 2.0® התאריך של ה-LabCOM® מאזור הזמן שלך. ניתן לשנות את התאריך והשעה באמצעות אפליקציית החינמית Bluetooth® חיבור (Bluetooth). אם החלפת הסוללה נמשכת יותר מ-2 דקות או שהסוללות הוכנסו בצורה לא נכונה, התאריך יימחק. **2)** ערכים אידיאליים: אנא צור קשר עם הספק של כימיית הבריכה שלך כדי לבקש ערכים אידיאליים עבור הבריכה שלך. **3)** קובטה שרוטה: כל עוד הקובטה לא נשרטת בחצי העליון אלא רק באזור התחתון, אין צורך לשנות אותה. **4)** נא לרסק טבליות במרץ עם מוט הבחישה. הקובטה לא תישבר **5)** ייתכן שהכלור הכולל יוצג נמוך יותר מהכלור החופשי בתוך הסבולות המוצגות בהוראות אלה. **6)** לחות בתצוגה: יכולה להתרחש אם הלחות השיורית בדיור מתעבה עקב המים הקרים במהלך הטבילה.



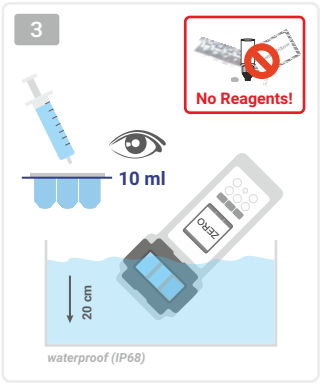
	It is important to clean the device after each measurement to get rid of any reagent residues! Please ensure that the cuvette has been cleaned before each measurement (e.g. under clear water/or simply rinsing the cuvette in the pool is sufficient as long as no residues remain). Do NOT use any cleaning agents!
	Важно очищать прибор после каждого измерения, чтобы избавиться от остатков реагентов! Пожалуйста, убедитесь, что кювета была очищена перед каждым измерением (например, под чистой водой и/или достаточно просто ополоснуть кювету в бассейне, если не осталось никаких остатков). НЕ используйте никаких чистящих средств!
	Είναι σημαντικό να καθαρίζετε τη συσκευή μετά από κάθε μέτρηση για να απομακρύνετε τυχόν υπολείμματα αντιδραστηρίων! Βεβαιωθείτε ότι η κυψελίδα έχει καθαριστεί πριν από κάθε μέτρηση (π.χ. κάτω από καθαρό νερό ή/και αρκεί ένα απλό ξέπλυμα της κυψελίδας στην πισίνα, εφόσον δεν παραμένουν υπολείμματα). ΜΗΝ χρησιμοποιείτε καθαριστικά μέσα!
	Reaktif kalıntılarından kurtulmak için her ölçümden sonra cihazın temizlenmesi önemlidir! Lütfen her ölçümden önce küvetin temizlendiğinden emin olun (örn. duru su altında ve/veya kalıntı kalmadığı sürece küvetin havuzda durulanması yeterlidir). Herhangi bir temizlik maddesi KULLANMAYIN!
	חשוב לנקות את המכשיר לאחר כל מדידה כדי להיפטר משאריות מגיב! נא לוודא שהקובטה נוקתה לפני כל מדידה (למשל תחת מים צלולים/או שטיפת הקובטה בבריכה מספיקה כל עוד לא נשארו שאריות). אין להשתמש בחומרי ניקוי כלשהם!

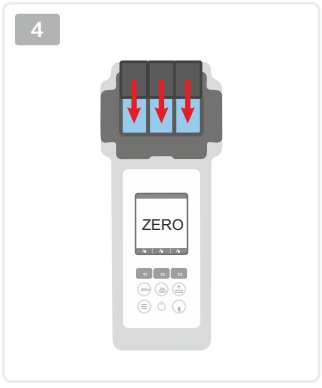
	Do not leave the device in the sun!
	Не оставляйте устройство на солнце!
	Μην αφήνετε τη συσκευή στον ήλιο!
	Cihazı güneş altında bırakmayın!
	אין להשאיר את המכשיר בשמש!

	The PoolLab 2.0® is also suitable for saltwater pools/salt electrolysis pools!
	PoolLab 2.0® также подходит для бассейнов с морской водой/ бассейнов с электролизом соли!
	Το PoolLab 2.0® είναι επίσης κατάλληλο για πισίνες αλμυρού νερού/ πισίνες ηλεκτρόλυσης αλατιού!
	PoolLab 2.0® tuzlu su havuzları/tuz elektroliz havuzları için de uygundur!
	מתאים גם לבריכות מי מלח/בריכות אלקטרוליזה מלח! PoolLab 2.0®-ה

SINGLE PARAMETER

Single parameter quick start guide
Краткое руководство по запуску с одним параметром
Οδηγός γρήγορης εκκίνησης μίας παραμέτρου
Tek parametreli hızlı başlangıç kılavuzu
מדריך להתחלה מהירה של פרמטר בודד


3
No Reagents!
10 ml
ZERO
20 cm
waterproof (IP68)

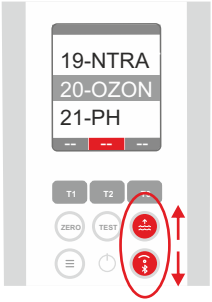

4
ZERO

5
1 2 3
ZERO

6
1 2 3
TEST

7

8



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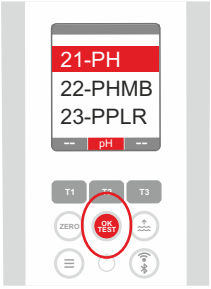
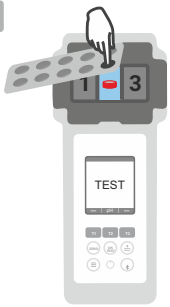


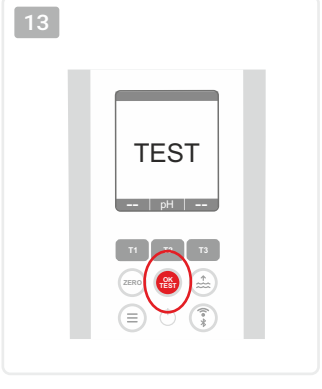
10

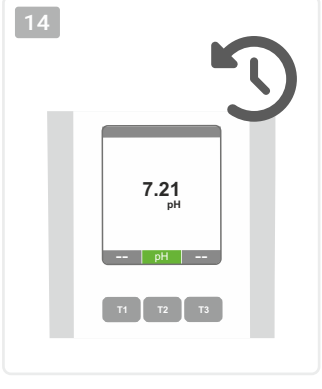


Reagents for your test
(refer to chapter in manual)

11
1
3
TEST
Completely Dissolved
NO Residue

12
1
3
TEST


13
TEST
pH
T1
T2
T3
ZERO
OK TEST


14
7.21
pH
pH
T1
T2
T3

1)The countdown can be skipped by pressing the "on/off" button (not recommended)
2) Pressing the "TEST-OK" button again triggers a repeat measurement.

1) Обратный отсчет можно пропустить, нажав кнопку "Вкл/Выкл" (не рекомендуется).2) Повторное нажатие кнопки "TEST-OK" вызывает повторное измерение.

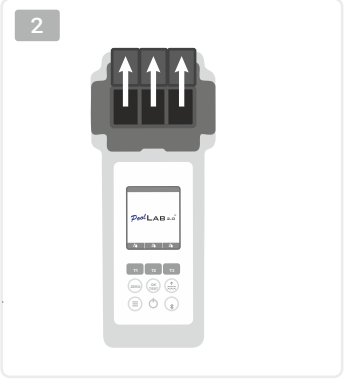
1) Η αντίστροφη μέτρηση μπορεί να παραλειφθεί πατώντας το κουμπί "on/off" (δεν συνιστάται).2) Πατώντας ξανά το κουμπί "TEST-OK" ενεργοποιείται μια επανάληψη της μέτρησης.

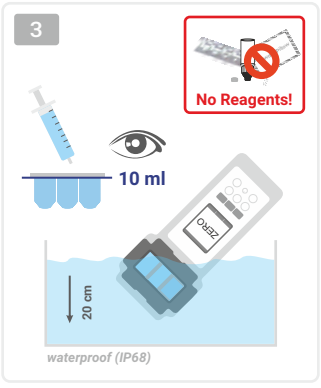
1) Geri sayım "on/off" düğmesine basılarak atlanabilir (tavsiye edilmez)2) "TEST-TAMAM" düğmesine tekrar basılması ölçümün tekrarlanmasını tetikler.

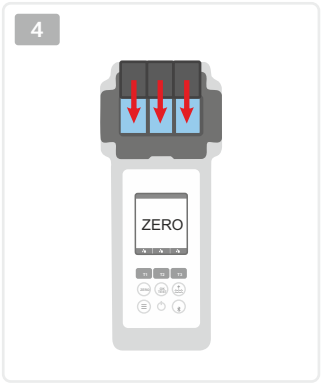
1) ניתן לדלג על הספירה לאחור על ידי לחיצה על כפתור "הפעלה/כיבוי" (לא מומלץ)
2) לחיצה נוספת על כפתור "TEST-OK" מפעילה מדידה חוזרת.

MULTIPLE PARAMETER

Multiple parameter quick start guide
Краткое руководство по запуску с несколькими параметрами
Οδηγός γρήγορης εκκίνησης πολλαπλών παραμέτρων
Çok parametreli hızlı başlangıç kılavuzu
מדריך להתחלה מהירה של מספר פרמטרים



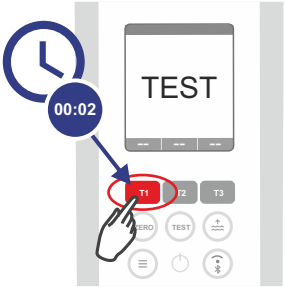

3
No Reagents!
10 ml
ZERO
20 cm
waterproof (IP68)


4
ZERO

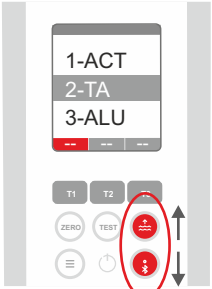
5
1 2 3
ZERO

6
1 2 3
TEST

7


00:02
TEST
T1
T2
T3
ZERO
TEST

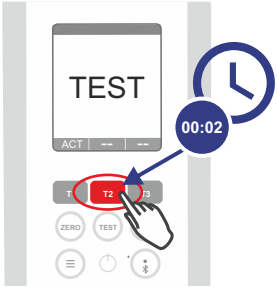
8


1-ACT
2-TA
3-ALU
T1
T2
ZERO
TEST

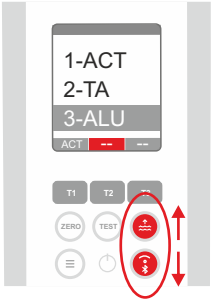
9

1-ACT
2-TA
3-ALU
T1
T2
T3
ZERO
OK
TEST

10


TEST
ACT
00:02
T2
ZERO
TEST

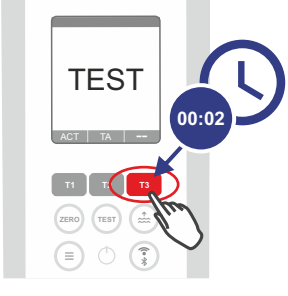
11


1-ACT
2-TA
3-ALU
ACT
--
--
T1
T2
ZERO
TEST

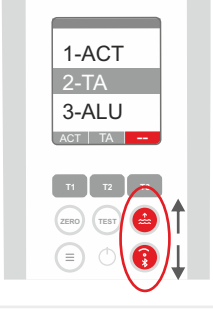
12

1-ACT
2-TA
3-ALU
ACT
--
--
T1
T3
ZERO
OK
TEST

13

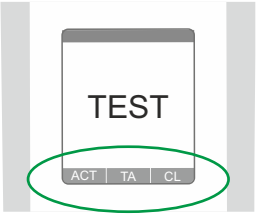

TEST
ACT
TA
--
00:02
T1
T3
ZERO
TEST

14

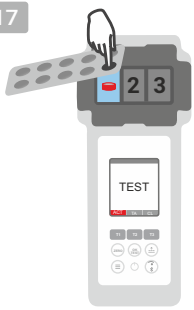

1-ACT
2-TA
3-ALU
ACT
TA
--
T1
T2
ZERO
TEST

15

16

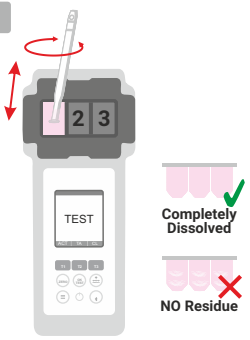


17



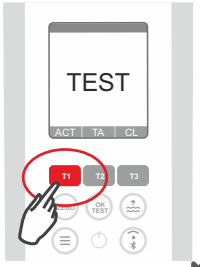
Reagents for your test
(Refer to chapter in manual)

18



19

20



Starts Countdown

21

Reagents for your test
(Refer to chapter in manual)

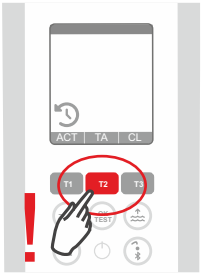
22

Completely Dissolved

NO Residue

23

24



Starts Countdown !

25

Reagents for your test
(Refer to chapter in manual)

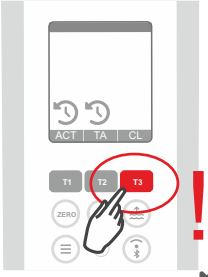
26

Completely Dissolved

NO Residue

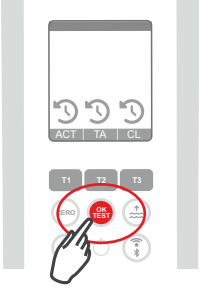
27

28



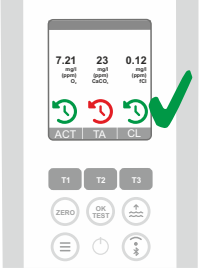
Starts Countdown !

29



Starts Testing !

30



As long you press the TEST button before the end of the recommended countdown, the countdown/clock will be displayed in green.

If you need a little longer than the recommended time, the colour of the countdown changes to red. In this case, higher tolerances have to be expected in the measurement result.

Пока вы нажимаете кнопку TEST до окончания рекомендованного обратного отсчета, обратный отсчет/часы будут отображаться зеленым цветом.Если вам потребуется немного больше времени, чем рекомендовано, цвет обратного отсчета изменится на красный. В этом случае следует ожидать более высоких допусков в результатах измерения.

Εφόσον πατήσετε το κουμπί TEST πριν από το τέλος της συνιστώμενης αντίστροφης μέτρησης, η αντίστροφη μέτρηση/το ρολόι θα εμφανίζεται με πράσινο χρώμα.Εάν χρειάζεστε λίγο περισσότερο χρόνο από τον συνιστώμενο, το χρώμα της αντίστροφης μέτρησης αλλάζει σε κόκκινο. Σε αυτή την περίπτωση, πρέπει να αναμένονται μεγαλύτερες ανοχές στο αποτέλεσμα της μέτρησης.

Önerilen geri sayımın bitiminden önce TEST düğmesine basarsanız, geri sayım/saat yeşil renkte görüntülenecektir.Önerilen süreden biraz daha fazla zamana ihtiyacınız varsa, geri sayım rengi kırmızıya dönüşecektir. Bu durumda, ölçüm sonucunda daha büyük toleranslar beklenmelidir.

לפני סיום הספירה לאחור המומלצת, הספירה TESTכל עוד תלחץ על כפתור ה- לאחור/השעון יוצגו בירוק.
אם אתה צריך קצת יותר מהזמן המומלץ, צבע הספירה לאחור משתנה לאדום. במקרה זה, יש לצפות לסובלנות גבוהה יותר בתוצאת המדידה.

1) The countdown(s) can be skipped by pressing the "on/off" key after confirming the last measurement chamber (not recommended). **2)** The "back" (ZERO) key can be used to cancel an accidental confirmation that the reagent has been added ("T" key). **3)** Pressing the "TEST-OK" key again triggers a repeat measurement.

1) Обратный отсчет можно пропустить, нажав клавишу "вкл/выкл" после подтверждения последней измерительной камеры (не рекомендуется). **2)** Клавишу "назад" (ZERO) можно использовать для отмены случайного подтверждения добавления реагента (клавиша "T"). **3)** Повторное нажатие клавиши "TEST-OK" вызывает повторное измерение.

1) Η αντίστροφη μέτρηση (οι αντίστροφοι) μπορεί να παραλειφθεί πατώντας το πλήκτρο "on/off" μετά την επιβεβαίωση του τελευταίου θαλάμου μέτρησης (δεν συνιστάται). **2)** Το πλήκτρο "πίσω" (ZERO) μπορεί να χρησιμοποιηθεί για την ακύρωση μιας τυχαίας επιβεβαίωσης ότι το αντιδραστήριο έχει προστεθεί ("T"). **3)** Το εκ νέου πάτημα του πλήκτρου "TEST-OK" ενεργοποιεί μια επαναληπτική μέτρηση.

1) Son ölçüm haznesi onaylandıktan sonra "açma/kapama" tuşuna basılarak geri sayım(lar) atlanabilir (tavsiye edilmez). **2)** "Geri" (SIFIR) tuşu, reaktifin eklendiğine dair yanlışlıkla yapılan bir onayı ("T" tuşu) iptal etmek için kullanılabilir. **3)** "TEST-TAMAM" tuşuna tekrar basılması ölçümün tekrarlanmasını tetikler.

1) ניתן לדלג על הספירה לאחור על ידי לחיצה על מקש "הדלקה/כיבוי" לאחר אישור תא המדידה האחרון (לא מומלץ). **2)** ניתן להשתמש במקש ה"חזרה" (0) כדי לבטל אישור מקרי לכך שהריאגנט נוסף (מקש "T"). **3)** לחיצה נוספת על מקש "TEST-OK" מפעילה מדידה חוזרת.

ZERO

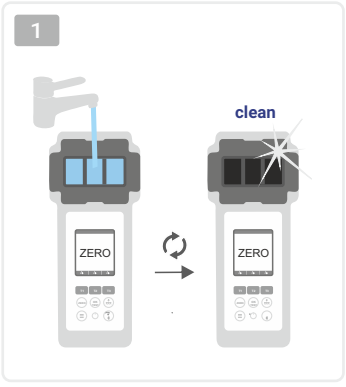
The ZERO step must only be carried out once after switching on and not necessarily before each following measurement.

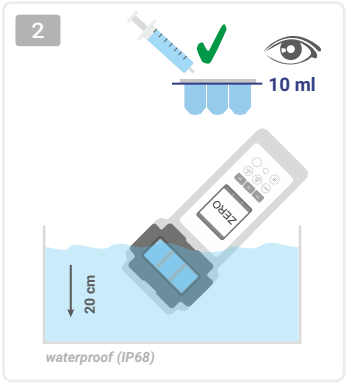
Шаг ZERO должен выполняться только один раз после включения, и необязательно обязательно перед каждым последующим измерением

Το βήμα ZERO πρέπει να εκτελείται μόνο μία φορά μετά την ενεργοποίηση και όχι απαραίτητα πριν από άθε επόμενη μέτρηση.

ZERO adımı, açıldıktan sonra yalnızca bir kez gerçekleştirilmelidir ve mutlaka sonraki her ölçümden önce.

יש לבצע את שלב האפס רק פעם אחת לאחר ההפעלה ולא בהכרח לפני כל מדידה הבאה.



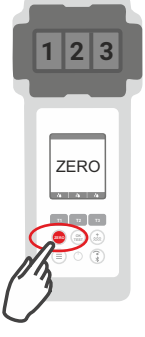


3

No Reagents!
Никаких реагентов!
Χωρίς αντιδραστήρια!
Reaktif yok!
ללא ריאגנטים!

4

5



6

Only one time per test batch

The "ZERO" step is only necessary once after switching on. Make sure that the water to be measured does not (!) contain any tablet/reagent in the cuvette and that the light protection cover is in place. Please always perform ZERO with the pool water to be measured. You can also perform another ZERO before each new measurement (display shows "TEST") (fill cuvettes with pool water, put on lid, press ZERO key).

Только один раз для каждой тестовой партии

Шаг "ZERO" необходим только один раз после включения. Убедитесь, что измеряемая вода не содержит (!) таблеток/реагентов в кювете и что светозащитная крышка находится на месте. Пожалуйста, всегда выполняйте ZERO с измеряемой водой из бассейна. Перед каждым новым измерением (на дисплее отображается "TEST") можно выполнить еще один ZERO (заполнить кюветы водой из бассейна, надеть крышку, нажать кнопку ZERO).

Μόνο μία φορά ανά παρτίδα δοκιμών

Το βήμα "ZERO" είναι απαραίτητο μόνο μία φορά μετά την ενεργοποίηση. Βεβαιωθείτε ότι το νερό που πρόκειται να μετρηθεί δεν περιέχει (!) δισκία/αντιδραστήριο στην κυβέτα και ότι το κάλυμμα προστασίας από το φως είναι στη θέση του. Παρακαλούμε να εκτελείτε πάντα το ZERO με το νερό της πισίνας που πρόκειται να μετρηθεί. Μπορείτε επίσης να εκτελέσετε ένα ακόμη ZERO πριν από κάθε νέα μέτρηση (στην οθόνη εμφανίζεται η ένδειξη "TEST") (γεμίστε τις κυβιέττες με νερό πισίνας, τοποθετήστε το καπάκι, πατήστε το πλήκτρο ZERO).

Test grubu başına yalnızca bir kez

"SIFIRLA" adımı, açıldıktan sonra yalnızca bir kez gereklidir. Ölçüm yapılacak suyun küvet içinde herhangi bir tablet/reaktif içermediğinden (!) ve ışık koruma kapağının yerinde olduğundan emin olun. Lütfen her zaman ölçüm yapılacak havuz suyu ile SIFIRLAMA yapın. Ayrıca her yeni ölçümden önce (ekranda "TEST" görünür) bir ZERO daha yapabilirsiniz (küvetleri havuz suyu ile doldurun, kapağı takın, ZERO tuşuna basın).

פעם אחת בלבד לכל קבוצת בדיקה

שלב "אפס" נחוץ רק פעם אחת לאחר ההפעלה. ודאו שהמים המיועדים למדידה אינם מכילים (!) טבליה/ריאגנט כלשהו בקובטה ושכיסוי ההגנה מפני האור נמצא במקומו. אנא בצע תמיד אפס עם מי הבריכה שיש למדוד. ניתן גם לבצע אפס נוסף לפני כל מדידה חדשה ("התצוגה מציגה "TEST") (מלא קובטות במי בריכה, שים מכסה, לחץ על מקש אפס).

OR

20.0

10.0

0.0

Active Oxygen (MPS)
Активный кислород (MPS)
Ενεργό οξυγόνο (MPS)
Aktif Oksijen (MPS)
חמצן פעיל (MPS)

1–ACT

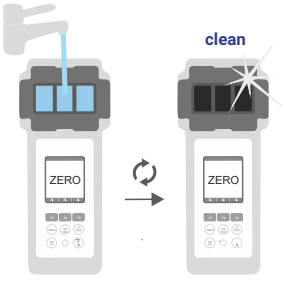
0.00 – 20.00 ppm (mg/l) O_2

DPD N°4 Photometer*

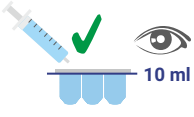
*not part of standard equipment

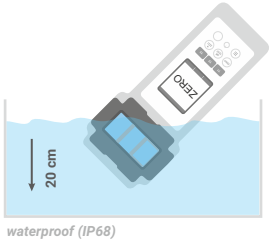
1

1...4 → Page 46



2



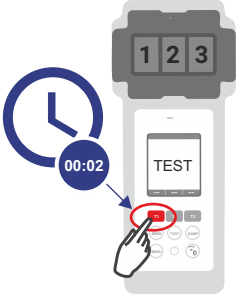


waterproof (IP68)

3

4

5

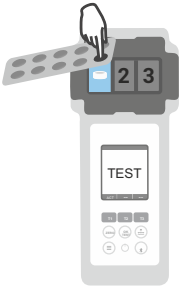


6

7

8

1 x DPD N°4 Photometer



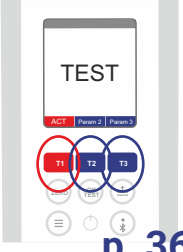
9

10

11

If single parameter:

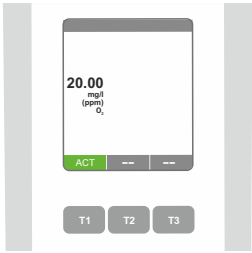
If multiple parameters:
See page 36



... p. 36

12

13



ppm = mg/l

OR

200

75

0

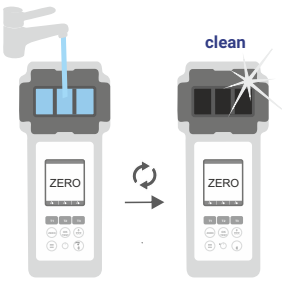
Alkalinity
Щелочность
Αλκαλικότητα
Alkalinite
אלקליניות

2–TA

0 – 200 ppm (mg/l) $CaCO_3$

Alkalinity–M Photometer

1 1...4 → Page 46



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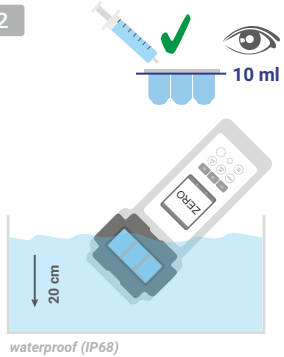
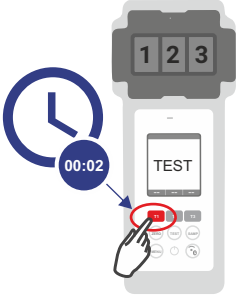


waterproof (IP68)

3

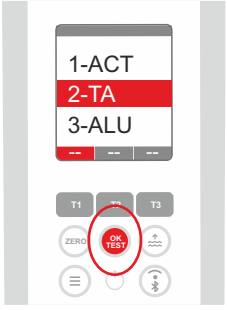
4

5



6

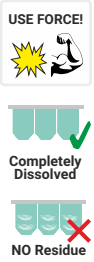
7



8

1 x Alkalinity-M
Photometer

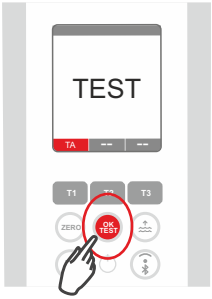
9



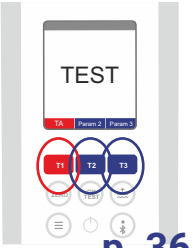
10

11

If single parameter:



If multiple parameters:
See page 36



... p. 36

12

13

ppm = mg/l

OR

0.30

0.15

0.00

Aluminium
Алюминий
Αλουμίνιο
Alüminyum
אֲלוּמִינְיוּם

1 2 3

ONLY SINGLE

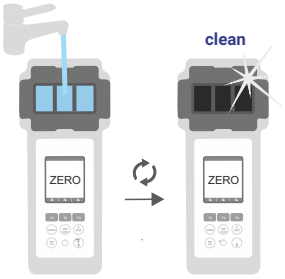
3–ALU

0.00 – 0.30 ppm (mg/l) Al^{3+}

Aluminium N°1 Photometer*
Aluminium N°2 Photometer*

*not part of standard equipment

1 1...4 → Page 46



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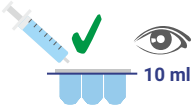
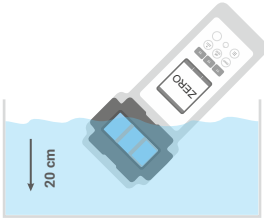


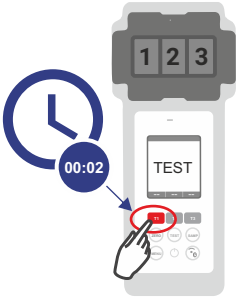


waterproof (IP68)

3

4

5



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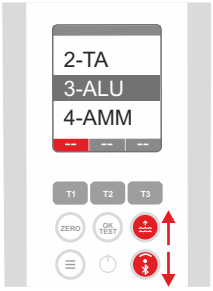
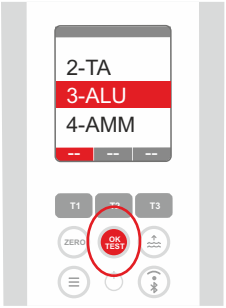
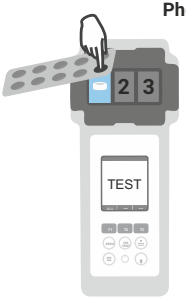


7



8

1 x Aluminium N°1
Photometer



9

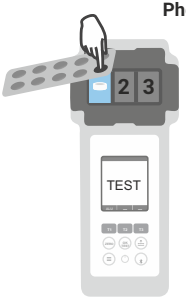
USE FORCE!

Completely
Dissolved

NO Residue

10

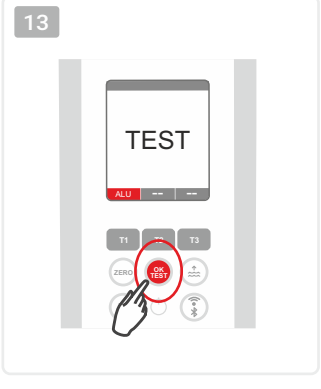
1 x Aluminium N°2
Photometer



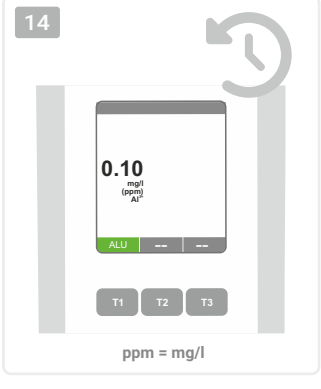
11

12

13



14



ppm = mg/l

OR

1.20

0.60

0.00

Ammonia
Аммиак
Αμμωνία
Amonyak
אַמוֹנִיָה

1 2 3

ONLY SINGLE

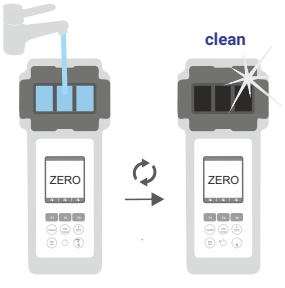
4–AMM

0.00 – 1.20 ppm (mg/l) NH_3

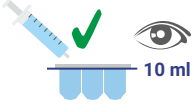
Ammonia N°1 Powder Pillow*
Ammonia N°2 Powder Pillow*

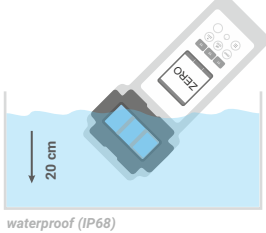
*not part of standard equipment

1 1...4 → Page 46



2





waterproof (IP68)

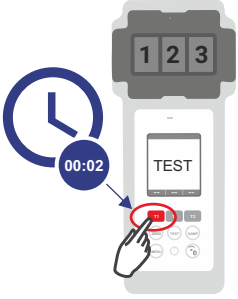
3

ZERO

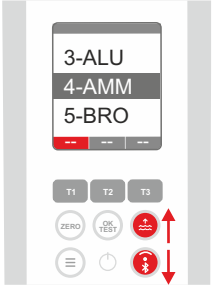
4

1 2 3
ZERO

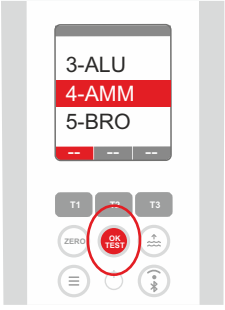
5


1 2 3
00:02
TEST

6


3-ALU
4-AMM
5-BRO
T1
T2
T3
ZERO
OK
TEST

7



8

1 x Ammonia N°1
Photometer

9

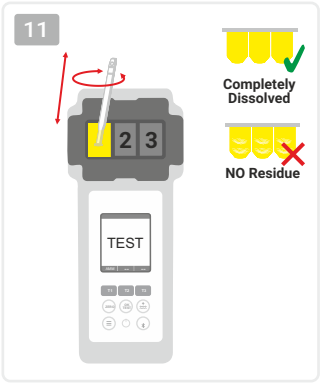
Completely
Dissolved

NO Residue

10

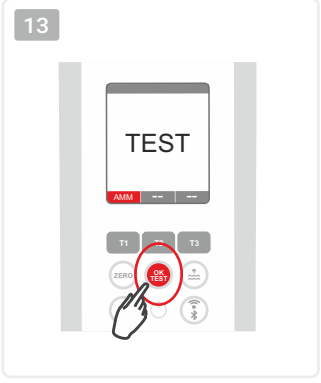
1 x Ammonia N°2
Photometer

11

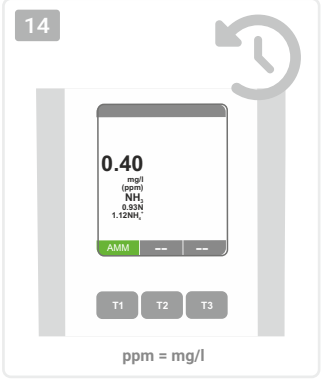


12

13



14



ppm = mg/l

OR

13.00

6.50

0.00

Bromine
Бром
Βρώμιο
Brom
בְּרוֹם

5–BRO

OR

9.00

4.50

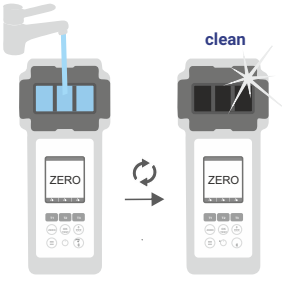
0.00

Tablet Mode:
0.00 – 13.00 ppm (mg/l) Br_2
DPD N°1 Photometer Tablet
Glycine*

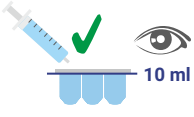
Liquid Mode:
0.00 – 9.00 ppm (mg/l) Br_2
DPD 1A + DPD 1B Liquid*
Glycine*

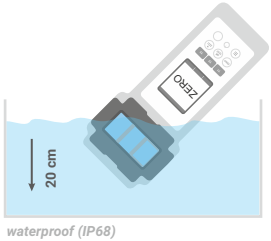
1

1...4 → Page 46



2



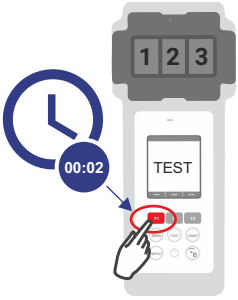


waterproof (IP68)

3

4

5



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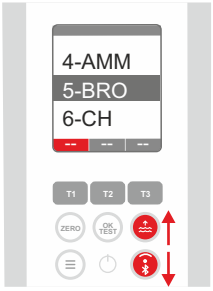
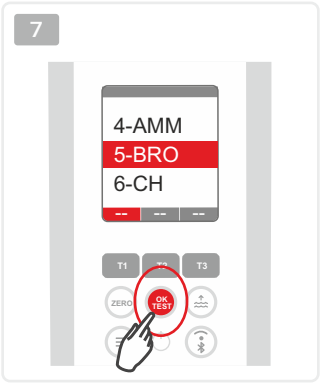




Only if your water sample does contain Chlorine next to Bromine (both disinfectants used), the following procedure "A" needs to be followed and Glycine* reagent needs to be used. Otherwise (only Bromine present), please follow procedure "B".

Только если в образце воды наряду с бромом содержится хлор (используются оба дезинфицирующих средства), необходимо выполнить процедуру "A" и использовать реактив Глицин*. В противном случае (присутствует только бром), пожалуйста, следуйте процедуре "B".

Μόνο εάν το δείγμα νερού περιέχει χλώριο δίπλα στο βρώμιο (και τα δύο χρησιμοποιούμενα απολυμαντικά), πρέπει να ακολουθηθεί η ακόλουθη διαδικασία "A" και να χρησιμοποιηθεί αντιδραστήριο γλυκίνης*. Διαφορετικά (υπάρχει μόνο βρώμιο), ακολουθήστε τη διαδικασία "B".

Yalnızca su numuneniz Brom'un yanında Klor içeriyorsa (her iki dezenfektan da kullanılmışsa), aşağıdaki "A" prosedürünün izlenmesi ve Glisin* reaktifinin kullanılması gerekir. Aksi takdirde (sadece Brom mevcutsa), lütfen "B" prosedürünü izleyin.

רק אם דגימת המים שלך מכילה כלור לצד ברום (שניהם נעשה שימוש בחומרי חיטוי), יש לבצע את ההליך "A"הבא ולהשתמש בריאגנט Glycine*. אחרת (רק ברום קיים), אנא עקוב אחר נוהל "ב".

A With Chlorine | С хлором | Με χλώριο | Klor ile | עם כלור

1–ACT
2–TA
3–ALU
4–AMM
5–BRO
6–CH
7–CLA
8–CL
9–CLHR
10–CLO2
11–CU
12–CYA
13–HYDL
14–HYDH
15–IRON
16–NTRA
17–NITRI
18–OZON
19–PH
20–PHMB
21–PPLR
22–PPHR
23–POT
24–SULF
25–TH
26–UREA
27–ZINC

8A

1 x Glycine

9A

10A

Tablet or Liquid? (p.16)

1 x DPD N°1 Photometer

3 x DPD 1A + 3 x DPD 1B

11A

B without Chlorine | без хлора | χωρίς χλώριο | Klor olmadan | ללא כלור

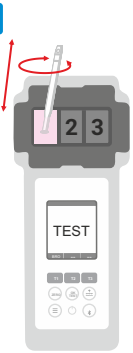
8B

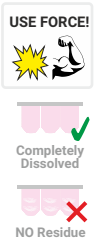
Tablet or Liquid? (p.16)

1 x DPD N°1 Photometer

3 x DPD 1A + 3 x DPD 1B

9B

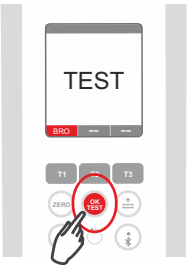




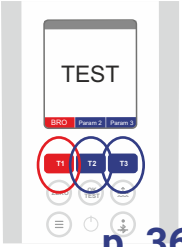
12A 10B

13A 11B

If single parameter:



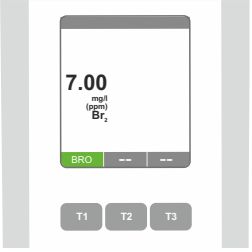
If multiple parameters:
See page 36



... p. 36

14A 12B

15A 13B



ppm = mg/l

OR

500

250

0

Calcium Hardness
Твердость кальция
Σκληρότητα ασβεστίου
Kalsiyum Sertliği
קשיות סידן

1 2 3

ONLY SINGLE
ONLY CHAMBER 2

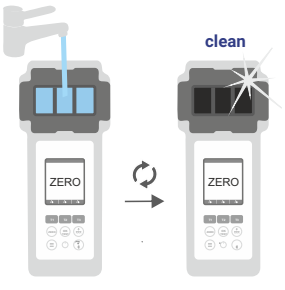
6–CH

0 – 500 ppm (mg/l) $CaCO_3$

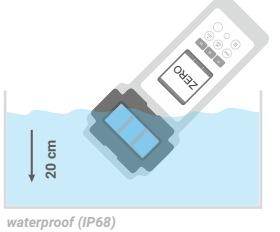
- Calcium Hardness N°1*
- Calcium Hardness N°2*

*not part of standard equipment

1 1...4 → Page 46



2



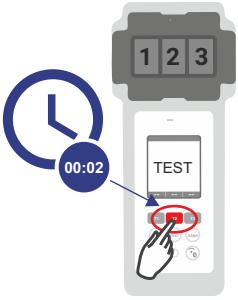
waterproof (IP68)

3

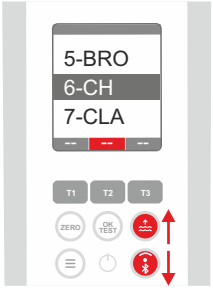
4

5

CHAMBER 2!

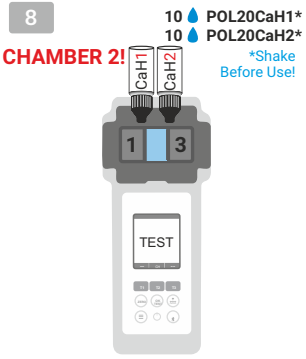


6



7

8



9

10

10:00 min

11

12

13

14

ppm = mg/l

OR

6.00

3.00

0.00

Chloramine
Хлорамин
Χλωραμίνη
Kloramin
כלורמין

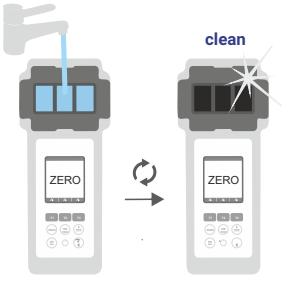
7–CLA

0.00 – 6.00 ppm (mg/l) $NH_2Cl/NHCl_2$

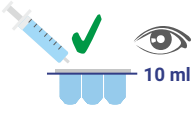
DPD N°1 Photometer
DPD N°2 Photometer*
DPD N°3 Photometer

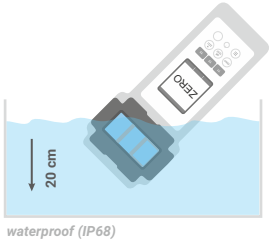
*not part of standard equipment

1 1...4 → Page 46



2



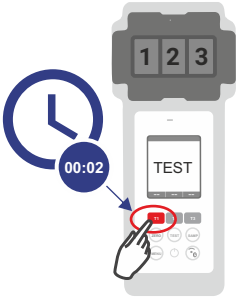


waterproof (IP68)

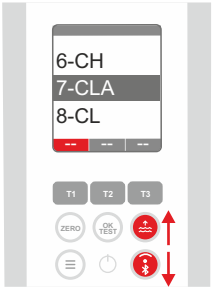
3

4

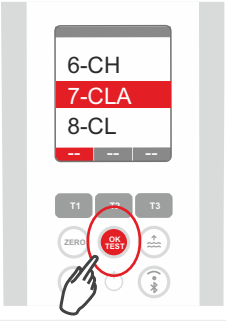
5



6

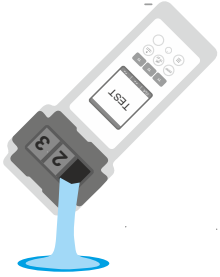


7



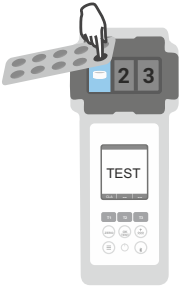
8

9

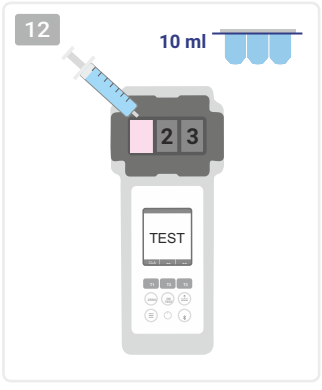


10

1 x DPD N°1 Photometer



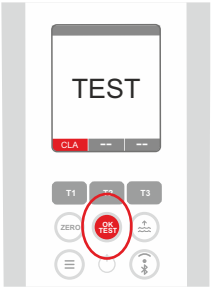
11
USE FORCE!
Completely Dissolved
NO Residue
2 3
TEST


12
10 ml
2 3
TEST

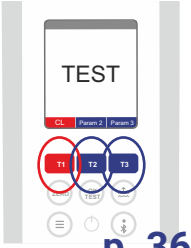
13
2 3
TEST

14
2 3
TEST

15



If multiple parameters:
See page 36



... p. 36

16

17

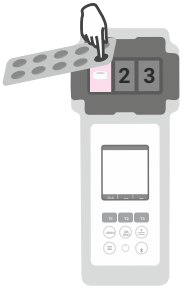
Mono-Chloramine

ppm = mg/l Free Chlorine

18

19

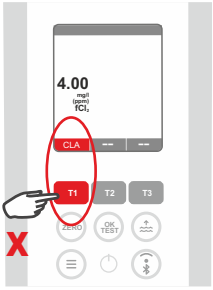
1 x DPD N°2 Photometer



20

21

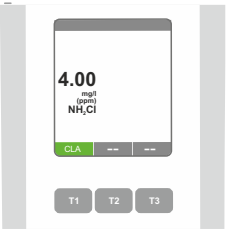
22



23

24

Di-Chloramine

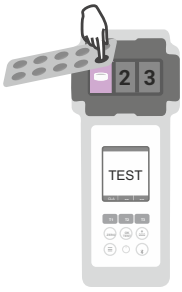


ppm = mg/l Mono-Chloramine

25

26

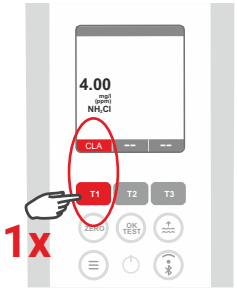
1 x DPD N°3 Photometer



27

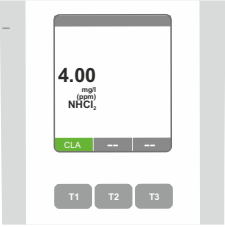
28

29



30

31



ppm = mg/l Di-Chloramine

OR ⬆

6.00

3.00

0.00

Chlorine (fCl/cCl/tCl)
Хлор (fCl/cCl/tCl)
Χλώριο (fCl/cCl/tCl)
Klor (fCl/cCl/tCl)
כְּלוֹר(fCl/cCl/tCl)

8–CL

OR ⬆

4.00

2.00

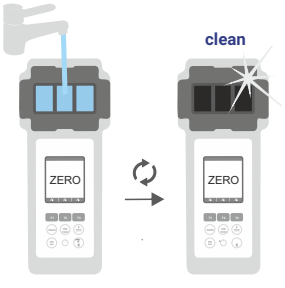
0.00

Tablet Mode:
0.00 – 6.00 ppm (mg/l) Cl_2
DPD N°1 Photometer
DPD N°3 Photometer

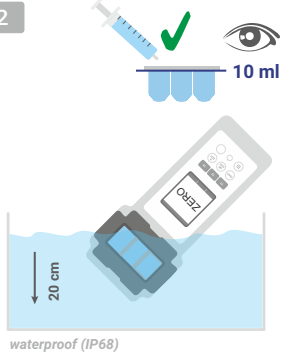
Liquid Mode:
0.00 – 4.00 ppm (mg/l) fCl_2
DPD 1A* + DPD 1B* +
DPD 3C* Liquid

*not part of standard equipment

1 1...4 ⟶ Page 46



2



waterproof (IP68)

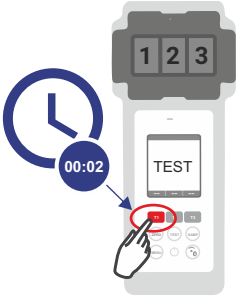
3

ZERO

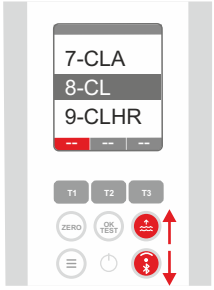
4

1 2 3
ZERO

5


1 2 3
00:02
TEST

6


7-CLA
8-CL
9-CLHR
T1
T2
T3
ZERO
OK
TEST

7

8

Tablet or Liquid? (p.16)

1 x DPD N°1 Photometer

3 x DPD 1A + 3 x DPD 1B

9

USE FORCE!

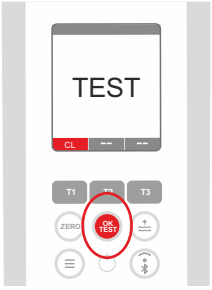
Completely Dissolved

NO Residue

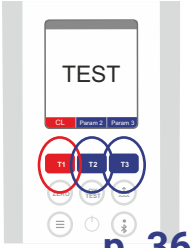
10

11

If single parameter:



If multiple parameters:
See page 36



... p. 36

12

13

Total Chlorine

ppm = mg/l Free Chlorine

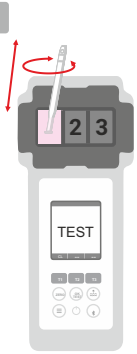
14

Tablet or Liquid? (p.16)

1 x DPD N°3 Photometer

3 x DPD 3C

15



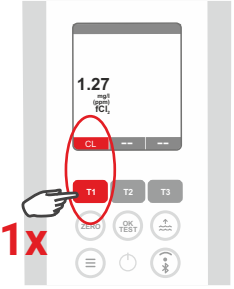
USE FORCE!

Completely Dissolved

NO Residue

16

17

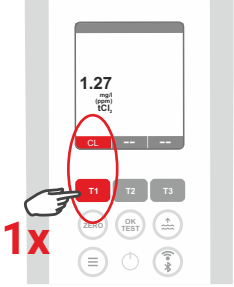


18

19

ppm = mg/l Total Chlorine

20



21

ppm = mg/l Combined Chlorine

OR ⬆
200
100
5

Chlorine HR (KI)
Хлор HR (KI)
Χλώριο HR (KI)
Klor HR (KI)
כְּלוֹרHR (KI)

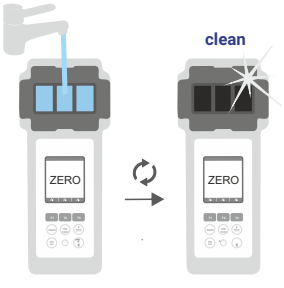
9–CLHR

5 – 200 ppm (mg/l) Cl_2

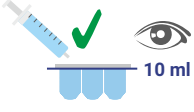
Chlorine HR (KI)*
Acidifying GP Powder Pillow*

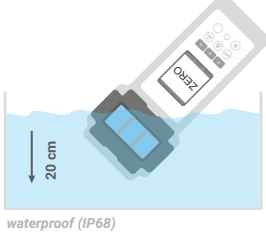
*not part of standard equipment

1 1...4 → Page 46



2





waterproof (IP68)

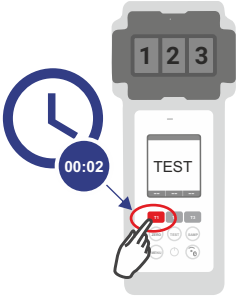
3

ZERO

4

1 2 3
ZERO

5


1 2 3
00:02
TEST

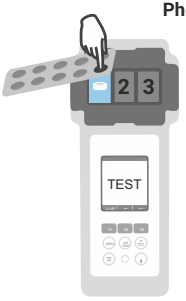
6

8-CL
9-CLHR
10-CLO2
T1
T2
T3
ZERO
OK
TEST

7

8

1 x Chlorine HR (KI) Photometer



9

USE FORCE!

Completely Dissolved

NO Residue

10

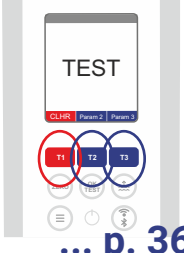
1 x Acidifying GP

11

12

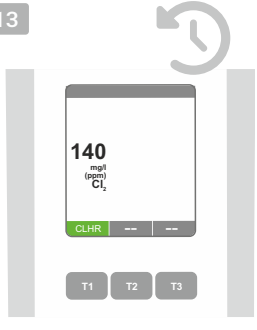
If single parameter:

If multiple parameters:
See page 36



... p. 36

13



ppm = mg/l

OR
11.00
5.50
0.00

Chlorine Dioxide
Диоксид хлора
Διοξείδιο του χλωρίου
Klor Dioksit
דו תחמוצת כלור

10–CLO2

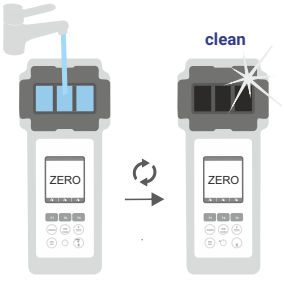
OR
7.50
3.00
0.00

Tablet Mode:
0.00 – 11.00 ppm (mg/l) ClO_2
DPD N°1 Photometer
Glycine*

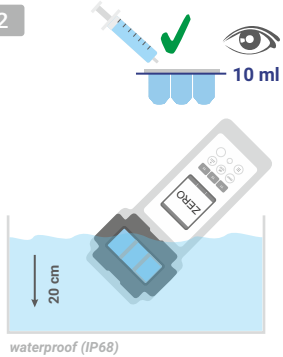
Liquid Mode:
0.00 – 7.50 ppm (mg/l) ClO_2
DPD 1A* + DPD 1B* Liquid
Glycine*

*not part of standard equipment

1 1...4 → Page 46



2



waterproof (IP68)

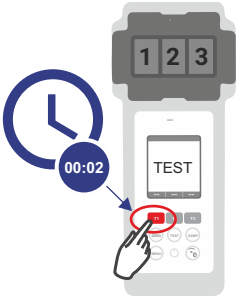
3

ZERO

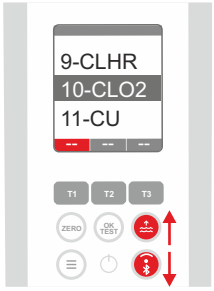
4

1 2 3
ZERO

5


1 2 3
00:02
TEST

6


9-CLHR
10-CLO2
11-CU
T1
T2
T3
ZERO
OK
TEST

	Only if your water sample does contain Chlorine next to Chlorine Dioxide (both disinfectants used), the following procedure "A" needs to be followed and Glycine* reagent needs to be used. Otherwise (only Chlorine Dioxide present), please follow procedure "B".
	Только если в вашей пробе воды наряду с диоксидом хлора присутствует хлор (используются оба дезинфицирующих средства), необходимо выполнить следующую процедуру "А" и использовать реактив Глицин*. В противном случае (присутствует только диоксид хлора), пожалуйста, следуйте процедуре "Б".
	Μόνο εάν το δείγμα νερού περιέχει χλώριο δίπλα στο διοξείδιο του χλωρίου (και τα δύο χρησιμοποιούμενα απολυμαντικά), πρέπει να ακολουθηθεί η ακόλουθη διαδικασία "A" και να χρησιμοποιηθεί το αντιδραστήριο γλυκίνη*. Διαφορετικά (υπάρχει μόνο διοξείδιο του χλωρίου), ακολουθήστε τη διαδικασία "B".
	Yalnızca su numuneniz Klor Dioksitin yanında Klor içeriyorsa (her iki dezenfektan da kullanılmışsa), aşağıdaki "A" prosedürünün izlenmesi ve Glisin* reaktifinin kullanılması gerekir. Aksi takdirde (sadece Klor Dioksit mevcutsa), lütfen "B" prosedürünü izleyin.
	רק אם דגימת המים שלך מכילה כלור לצד כלור דו-חמצני (שניהם נעשה שימוש בחומרי חיטוי), יש לבצע את ההליך הבא "A" ולהשתמש בריאגנט Glycine*., אחרת (רק כלור דו-חמצני קיים), אנא פעל לפי נוהל "ב".

A With Chlorine | С хлором | Με χλώριο | Klor ile | עם כלור

8A

1 x Glycine

9A

10A

Tablet or Liquid? (p.16)

1 x DPD N°1 Photometer

3 x DPD 1A + 3 x DPD 1B

11A

B without Chlorine | без хлора | χωρίς χλώριο | Klor olmadan | ללא כלור

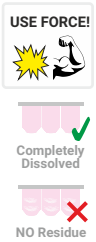
8B

Tablet or Liquid? (p.16)

1 x DPD N°1 Photometer

3 x DPD 1A + 3 x DPD 1B

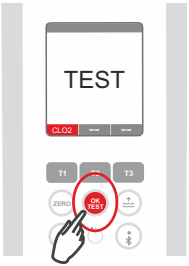
9B



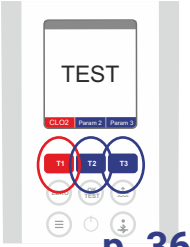
12A 10B

13A 11B

If single parameter:



If multiple parameters:
See page 36



... p. 36

14A 12B

15A 13B

ppm = mg/l

1–ACT
2–TA
3–ALU
4–AMM
5–BRO
6–CH
7–CLA
8–CL
9–CLHR
10–CLO2
11–CU
12–CYA
13–HYDL
14–HYDH
15–IRON
16–NTRA
17–NITRI
18–OZON
19–PH
20–PHMB
21–PPLR
22–PPHR
23–POT
24–SULF
25–TH
26–UREA
27–ZINC

OR

5.00

2.50

0.00

Copper
Медь
Χαλκός
Bakır
נְחוֹשֶׁת

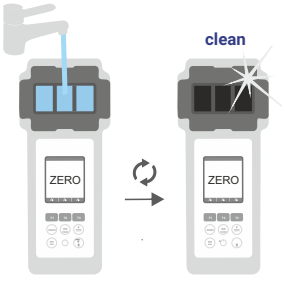
11–CU

0.00 – 5.00 ppm (mg/l) Cu^{2+}

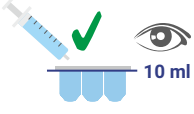
Copper N°1 Photometer*
Copper N°2 Photometer*

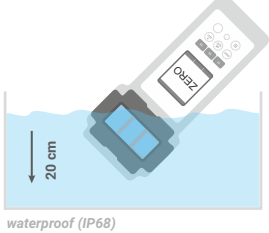
*not part of standard equipment

1 1...4 → Page 46



2





waterproof (IP68)

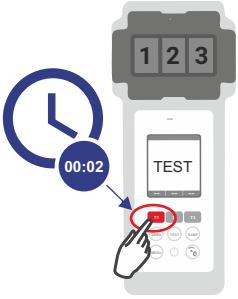
3

ZERO

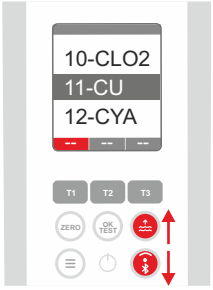
4

1 2 3
ZERO

5


1 2 3
00:02
TEST

6


10-CLO2
11-CU
12-CYA
T1
T2
T3
ZERO
OK
TEST

7

8

1 x Copper N°1 Photometer

9

Completely Dissolved

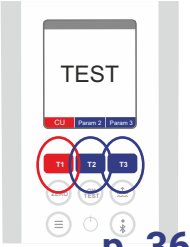
NO Residue

10

11

If single parameter:

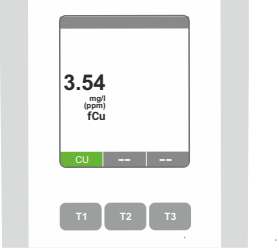
If multiple parameters:
See page 36



... p. 36

12

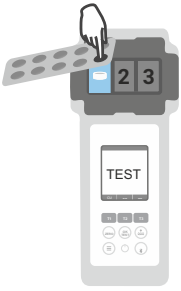
Total Copper



ppm = mg/l Free Copper

13

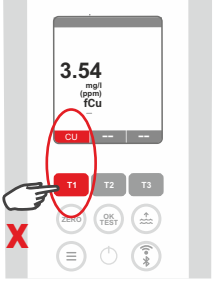
1 x Copper N°2 Photometer



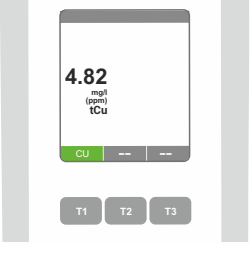
14

15

16

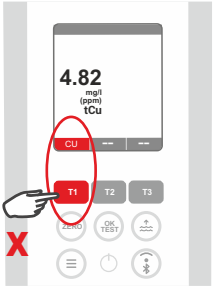


17



ppm = mg/l Total Copper

18



19

ppm = mg/l Combined Copper

OR

100

50

0

Cyanuric acid
Циануровая кислота
Κυανουρικό οξύ
Siyanürik asit
חומצה ציאנורית

0 – 100 ppm (mg/l) CYA

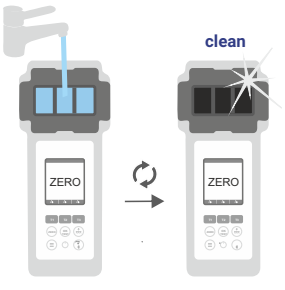
CYA Test Photometer

1 2 3

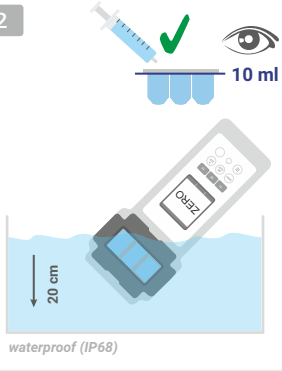
ONLY CHAMBER 2

12–CYA

1 1...4 → Page 46



2



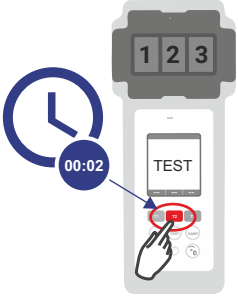
waterproof (IP68)

3

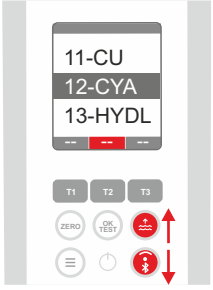
4

5

CHAMBER 2!



6

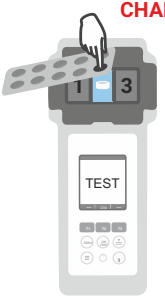


7

8

1 x CYA–Test Photometer

CHAMBER 2!



9

USE FORCE!

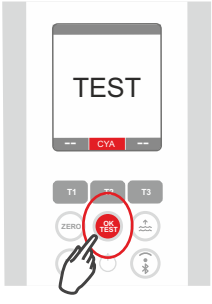
Completely Dissolved

NO Residue

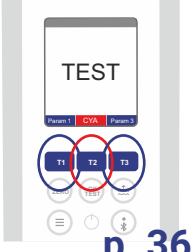
10

11

If single parameter:



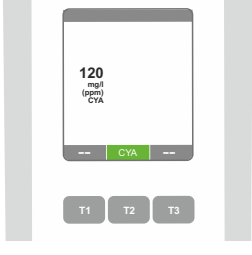
If multiple parameters:
See page 36



... p. 36

12

13



ppm = mg/l

OR

2.40

1.20

0.00

Hydrogen Peroxide (LR)
Перекись водорода (LR)
Υπεροξείδιο του υδρογόνου (LR)
Hidrojen Peroksit (LR)
מי חמצן (LR)

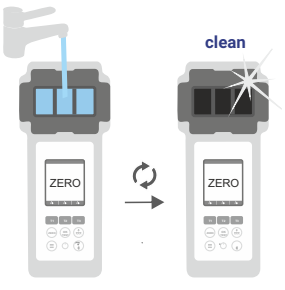
13–HYDL

0.00 – 2.40 ppm (mg/l) H_2O_2

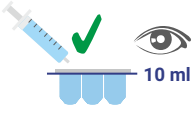
Hydr. Peroxide LR Photometer*

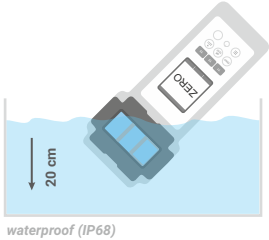
*not part of standard equipment

1 1...4 ⟶ Page 46



2





waterproof (IP68)

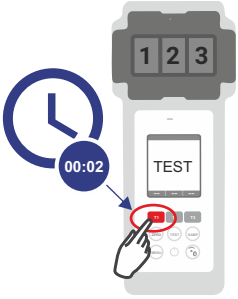
3

ZERO

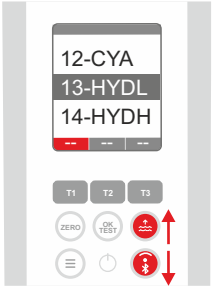
4

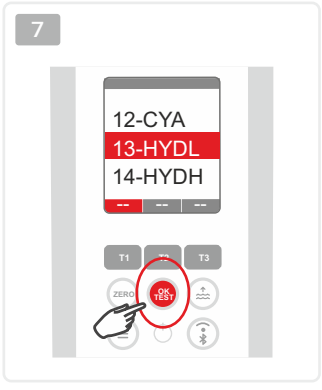
1 2 3
ZERO

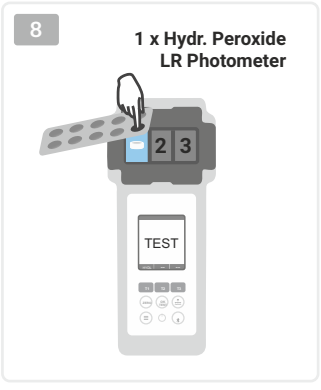
5

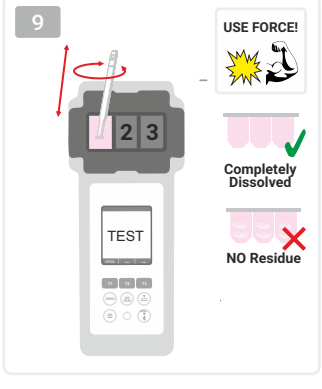

1 2 3
00:02
TEST

6


12-CYA
13-HYDL
14-HYDH
T1
T2
T3
ZERO
OK
TEST


7
12-CYA
13-HYDL
14-HYDH
T1
T2
T3
ZERO
OK
TEST

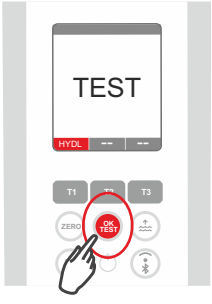

8
1 x Hydr. Peroxide
LR Photometer
2 3
TEST


9
2 3
TEST
USE FORCE!
Completely
Dissolved
NO Residue

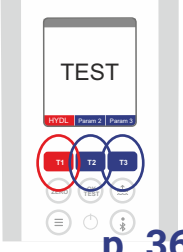
10
2 3
TEST

11

If single parameter:

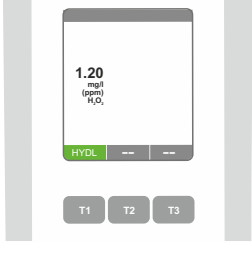


If multiple parameters:
See page 36



12

13



ppm = mg/l

OR ⬆

180

60

0

Hydrogen Peroxide (HR)
Перекись водорода (HR)
Υπεροξείδιο του υδρογόνου (HR)
Hidrojen Peroksit (HR)
מי חמצן (HR)

14–HYDH

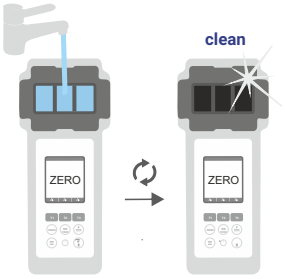
0 – 180 ppm (mg/l) H_2O_2

Hyd. Peroxide HR Photometer*

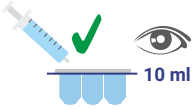
Acidifying PT*

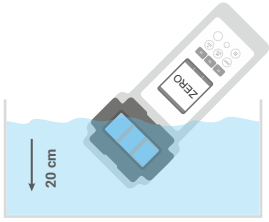
*not part of standard equipment

1 1...4 → Page 46



2





waterproof (IP68)

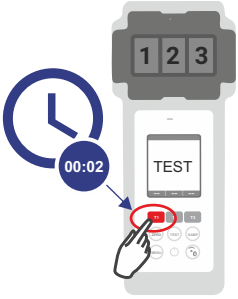
3

ZERO

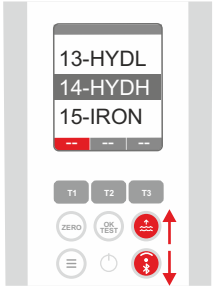
4

1 2 3
ZERO

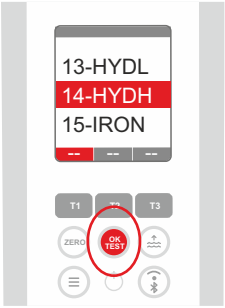
5


1 2 3
00:02
TEST

6


13-HYDL
14-HYDH
15-IRON
T1
T2
T3
ZERO
OK
TEST

7



8

1 x Acidifying PT

9

Completely Dissolved

NO Residue

10

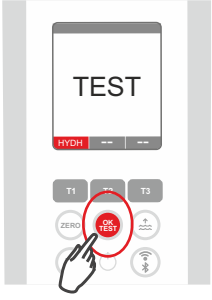
1 x Hydr. Peroxide HR Photometer

11

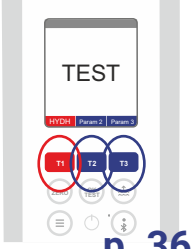
12

13

If single parameter:

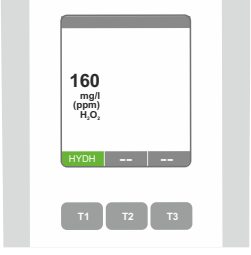


If multiple parameters:
See page 36



... p. 36

14



ppm = mg/l

OR

1.00

0.50

0.00

Iron (LR)
Железо (LR)
Σίδηρος (LR)
Demir (LR)
בַּרְזֶל (LR)

1 2 3

ONLY SINGLE

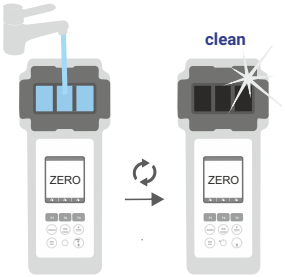
15–IRON

0.00 – 1.00 ppm (mg/l) Fe^{2+}/Fe^{3+}

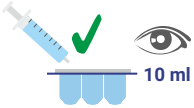
Iron LR Photometer*

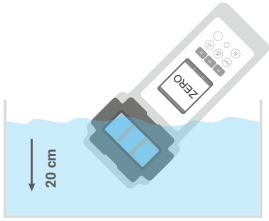
*not part of standard equipment

1 1...4 → Page 46



2





waterproof (IP68)

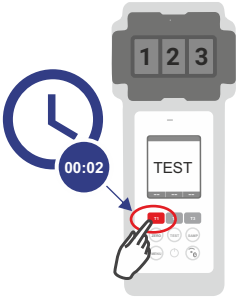
3

ZERO

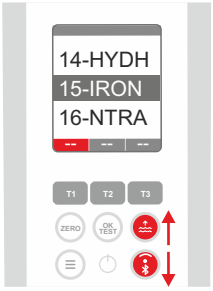
4

1 2 3
ZERO

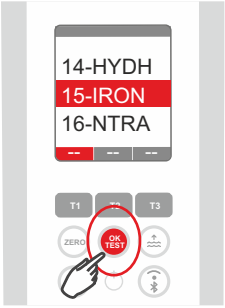
5


1 2 3
00:02
TEST

6


14-HYDH
15-IRON
16-NTRA
T1
T2
T3
ZERO
OK
TEST

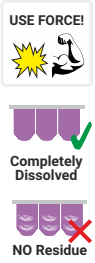
7



8

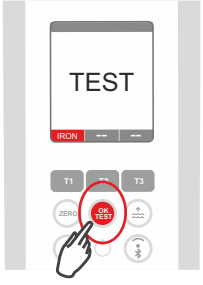
1 x Iron LR Photometer

9

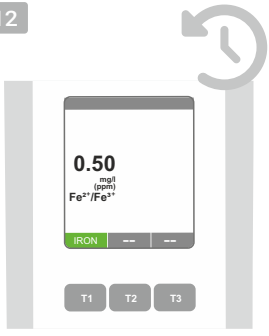


10

11



12



ppm = mg/l

OR

50

25

0

Nitrate
Нитрат
Νιτρικά
Nitrat
ניטראט

1 2 3

ONLY SINGLE

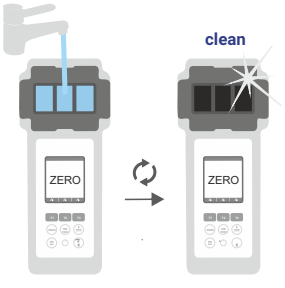
16–NTRA

1 – 50 ppm (mg/l) NO_3^-

Nitrate N°1 Photometer Powder Pillow*
Nitrate N°2 Photometer Powder Pillow*

*not part of standard equipment

1 1...4 → Page 46



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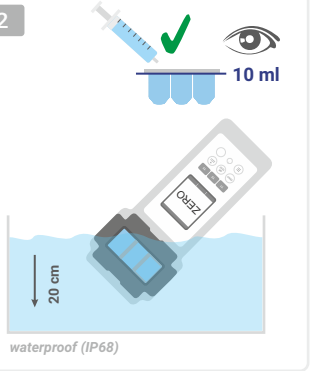
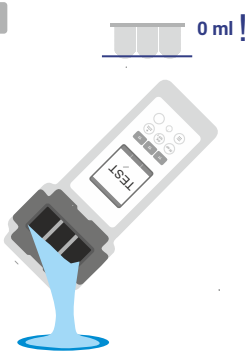


waterproof (IP68)

3

4

5



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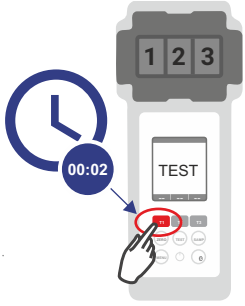
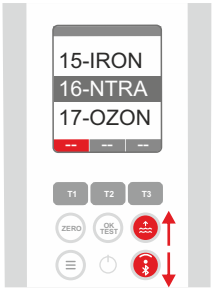
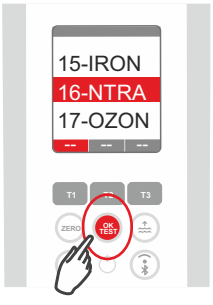


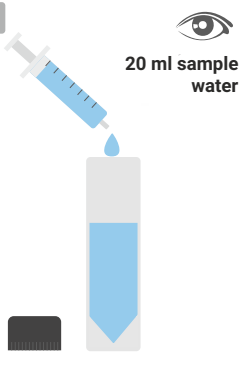
7


15-IRON
16-NTRA
17-OZON
T1
T2
T3
ZERO
OK
TEST

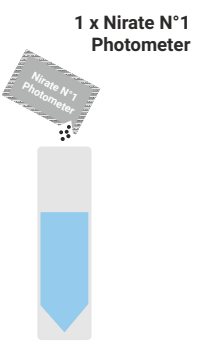
8


15-IRON
16-NTRA
17-OZON
T1
T3
ZERO
OK
TEST

9

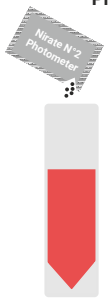

20 ml sample
water

10

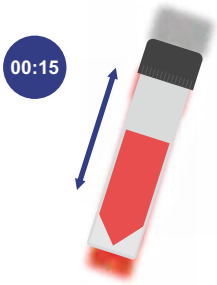

1 x Nirate N°1
Photometer
Nirate N°1
Photometer

11

1 x Nirate N°2 Photometer



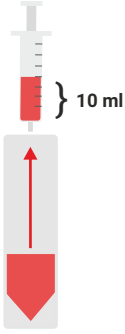
12



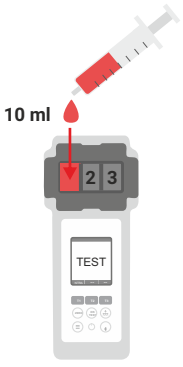
13

10:00 min

14

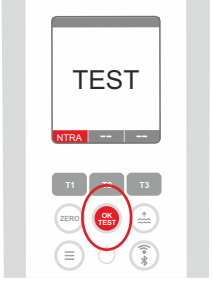


15

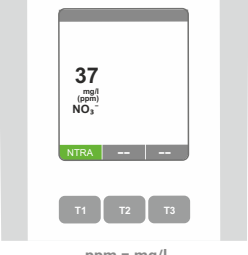


16

17



18



ppm = mg/l

OR

1.50

0.75

Nitrite
Нитрит
Νιτρώδη
Nitrit
ניטריט

1 2 3

ONLY SINGLE

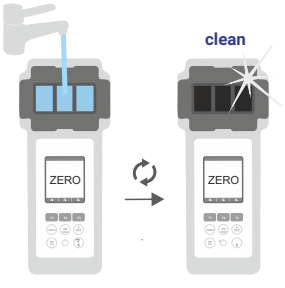
17–NITRI

0.00 – 1.50 ppm (mg/l) NO_2^-

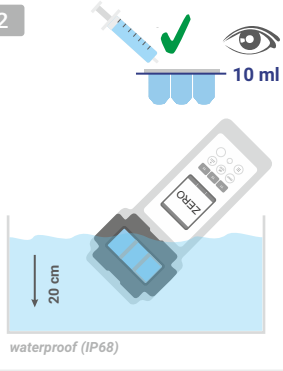
Nitrite LR Photometer Powder Pillows*

*not part of standard equipment

1 1...4 → Page 46



2



waterproof (IP68)

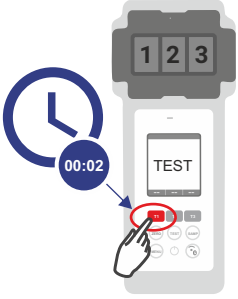
3

ZERO

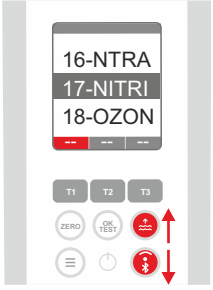
4

1 2 3
ZERO

5


1 2 3
00:02
TEST

6


16-NTRA
17-NITRI
18-OZON
T1
T2
T3
ZERO
OK
TEST

7

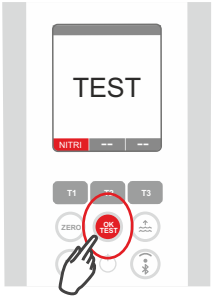
8

1 x Nitrite LR Photometer

9

10

11



12

13

ppm = mg/l

OR ⬆ 4.00 2.00 0.00

Ozone
Озон
Όζον
Ozon
אוזון

18–OZON

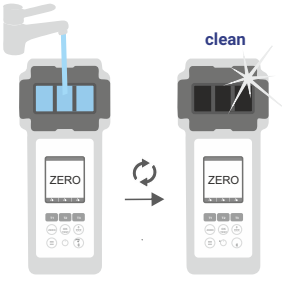
OR ⬆ 2.70 1.30 0.00

Tablet Mode:
0.00 – 4.00 ppm (mg/l) O_3
DPD N°1 Photometer
DPD N°3 Photometer
Glycine*

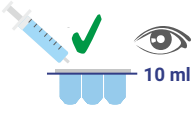
Liquid Mode:
0.00 – 2.70 ppm (mg/l) O_3
DPD 1A* + DPD 1B* +
DPD 3C* Liquid
Glycine*

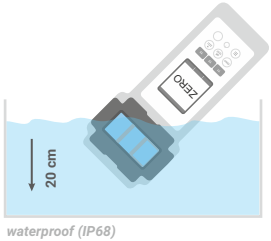
*not part of standard equipment

1 1...4 → Page 46



2





waterproof (IP68)

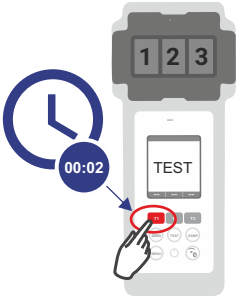
3

ZERO

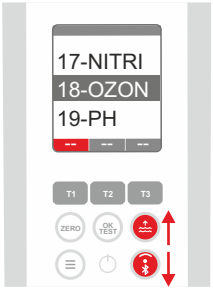
4

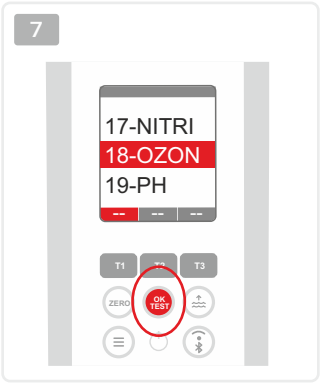
1 2 3
ZERO

5


1 2 3
00:02
TEST

6


17-NITRI
18-OZON
19-PH
T1
T2
T3
ZERO
OK
TEST



	If the water sample also contains chlorine, an incorrect measurement result (ozone+chlorine) is displayed.
	Если в образце воды также содержится хлор, отображается неправильный результат измерения (озон+хлор).
	Εάν το δείγμα νερού περιέχει επίσης χλώριο, εμφανίζεται λανθασμένο αποτέλεσμα μέτρησης (όζον+χλώριο).
	Su numunesi klor da içeriyorsa, yanlış bir ölçüm sonucu (ozon+klor) görüntülenir.
	.אם דגימת המים מכילה גם כלור, מוצגת תוצאת מדידה שגויה (אוזון+כלור)

8

Tablet or Liquid? (p.16)

1 x DPD N°1 Photometer + 1 x DPD N°3 Photometer

3 x DPD 1A + 3 x DPD 1B + 3 x DPD 3C Liquid

9

USE FORCE!

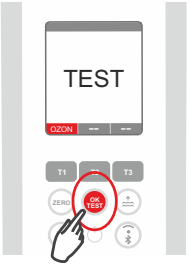
Completely Dissolved

NO Residue

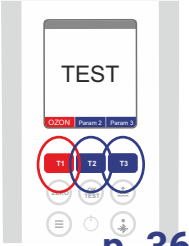
10

11

If single parameter:



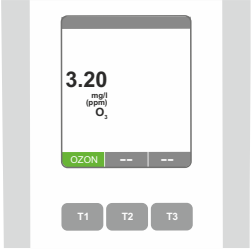
If multiple parameters:
See page 36



... p. 36

12

13



ppm = mg/l

OR

8.40

7.30

6.50

pH

19–PH

Tablet Mode:
6.50 – 8.40 pH
Phenol Red Photometer

Liquid Mode:
6.50 – 8.40 pH
Phenol Red Liquid*

OR

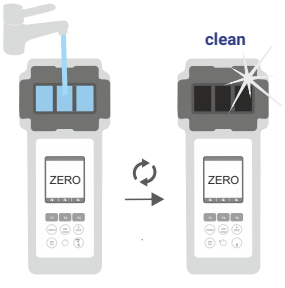
8.40

7.30

6.50

*not part of standard equipment

1 1...4 → Page 46



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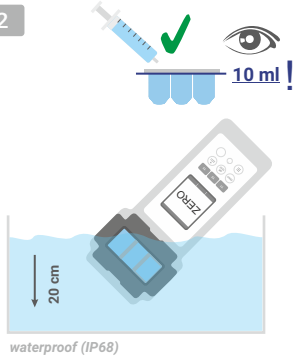


waterproof (IP68)

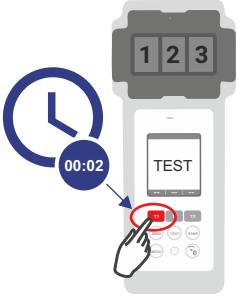
3

ZERO

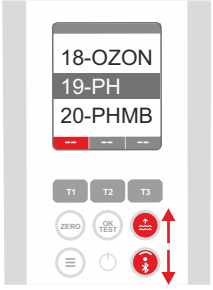
4

1 2 3
ZERO

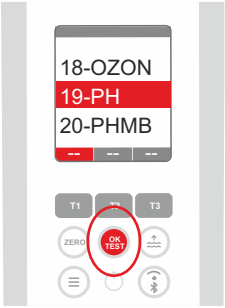
5


1 2 3
00:02
TEST

6


18-OZON
19-PH
20-PHMB
T1
T2
T3
ZERO
OK
TEST

7

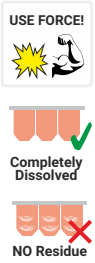


8

Tablet or Liquid? (p.16)

1 x Phenol Red Photometer	
6 x Phenol Red	

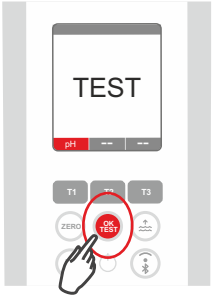
9



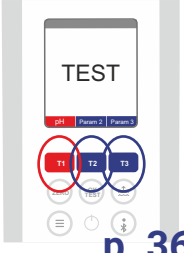
10

11

If single parameter:



If multiple parameters:
See page 36



... p. 36

12

13

ppm = mg/l

	The alkalinity value must be at least 50 mg/l to perform a correct pH measurement.
	Для правильного измерения pH значение щелочности должно быть не менее 50 мг/л.
	Η τιμή της αλκαλικότητας πρέπει να είναι τουλάχιστον 50 mg/l για τη σωστή μέτρηση του pH.
	Doğru bir pH ölçümü yapmak için alkalinite değeri en az 50 mg/l olmalıdır.
	נכונה. pHערך הבסיסיות חייב להיות לפחות 50 מ"ג/ליטר כדי לבצע מדידת

OR
60
35
5
UR

PHMB

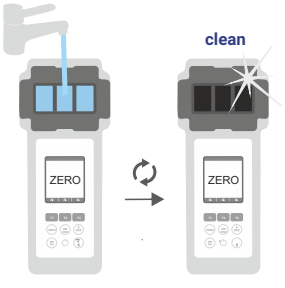
20–PHMB

5 – 60 ppm (mg/l) PHMB

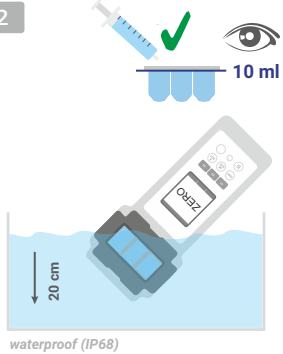
PHMB Photometer*

*not part of standard equipment

1 1...4 → Page 46



2



waterproof (IP68)

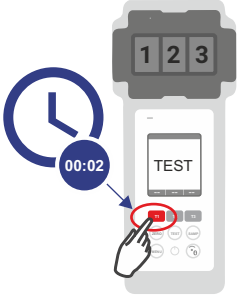
3

ZERO

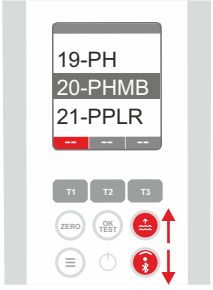
4

1 2 3
ZERO

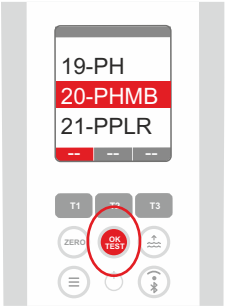
5


1 2 3
00:02
TEST

6


19-PH
20-PHMB
21-PPLR
T1
T2
T3
ZERO
OK
TEST

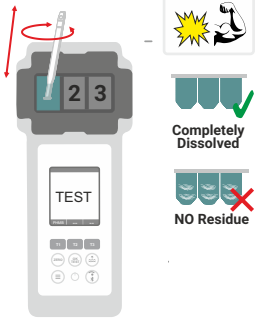
7



8

1 x PHMB Photometer

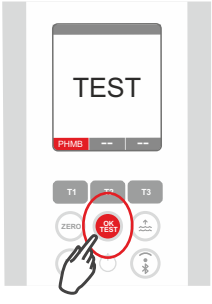
9



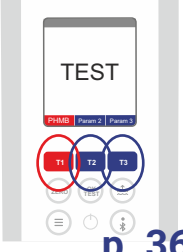
10

11

If single parameter:



If multiple parameters:
See page 36



... p. 36

12

13

ppm = mg/l

Be sure to clean all objects that have come into contact with the reagent thoroughly with a brush, water and then distilled water, otherwise the measuring equipment may turn blue over time. This method is calibrated for alkalinity values (M) =120 mg/l and calcium hardness values =200 mg/l. Deviating alkalinity values / calcium hardness values can lead to measurement deviations.

Обязательно тщательно очистите все предметы, контактировавшие с реагентом, щеткой, водой, а затем дистиллированной водой, иначе измерительное оборудование может со временем посинеть. Данный метод откалиброван для значений щелочности (M) =120 мг/л и жесткости кальция =200 мг/л. Отклонение значений щелочности / жесткости кальция может привести к отклонениям в измерениях.

Φροντίστε να καθαρίζετε καλά όλα τα αντικείμενα που έχουν έρθει σε επαφή με το αντιδραστήριο με βούρτσα, νερό και στη συνέχεια απόσταγμένο νερό, διαφορετικά ο εξοπλισμός μέτρησης μπορεί να γίνει μπλε με την πάροδο του χρόνου. Αυτή η μέθοδος είναι βαθμονομημένη για τιμές αλκαλικότητας (M) =120 mg/l και τιμές σκληρότητας ασβεστίου =200 mg/l. Αποκλίνουσες τιμές αλκαλικότητας / τιμές σκληρότητας ασβεστίου μπορεί να οδηγήσουν σε αποκλίσεις μέτρησης.

Reaktif ile temas eden tüm nesneleri bir fırça, su ve ardından damıtılmış su ile iyice temizlediğinizden emin olun, aksi takdirde ölçüm ekipmanı zamanla maviye dönebilir. Bu yöntem alkalinite değerleri (M) =120 mg/l ve kalsiyum sertliği değerleri =200 mg/l için kalibre edilmiştir. Farklı alkalinite değerleri / kalsiyum sertliği değerleri ölçüm sapmalarına yol açabilir.

הקפד לנקות את כל החפצים שבאו במגע עם המגיב ביסודיות עם מברשת, מים ולאחר מכן מים מזוקקים, אחרת ציוד המדידה עלול להפוך לכחול עם הזמן. שיטה זו מכוילת עבור ערכי (M בסיסיות) =120 מ"ג/ליטר וערכי קשיות סידן =200 מ"ג/ליטר. ערכי בסיסיות חריגה / ערכי קשיות סידן עלולים להוביל לסטיות מדידה.

OR

4.00

2.00

0.00

1 2 3

ONLY SINGLE

Phosphate (LR)
Фосфат (LR)
Φωσφορικά (LR)
Fosfat (LR)
פוֹסְפָט (LR)

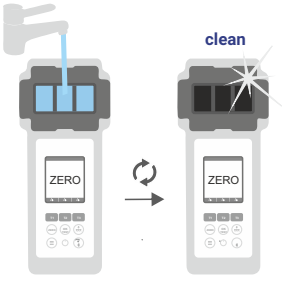
21–PPLR

0.00 – 4.00 ppm (mg/l) PO_4^{3-}

Phosphate LR N°1 Powder Pillow*
Phosphate LR N°2 Photometer*

*not part of standard equipment

1 1...4 → Page 46



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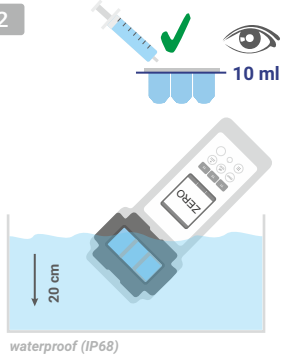


waterproof (IP68)

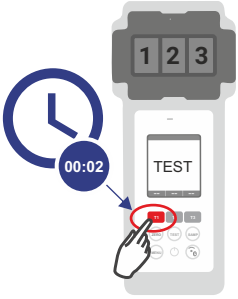
3

ZERO

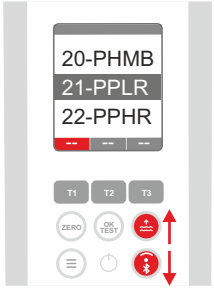
4

1 2 3
ZERO

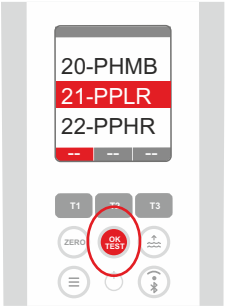
5


1 2 3
00:02
TEST

6

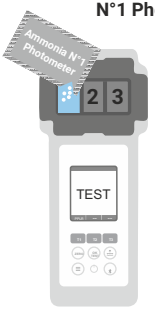

20-PHMB
21-PPLR
22-PPHR
T1
T2
T3
ZERO
OK
TEST

7



8

1 x Phosphate LR
N°1 Photometer



9

Completely
Dissolved

NO Residue

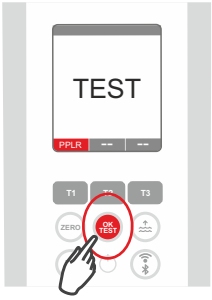
10

1 x Phosphate LR
N°2 Photometer

11

12

13



14

ppm = mg/l

OR

80

40

0

Phosphate (HR)
Фосфат (HR)
Φωσφορικά (HR)
Fosfat (HR)
פוספט (HR)

1 2 3

ONLY CHAMBER 2
ONLY SINGLE

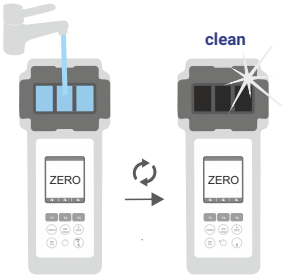
22–PPHR

0 – 80 ppm (mg/l) PO_4^{3-}

Phosphate HR N°1 Photometer Powder Pillow*
Phosphate HR N°2 Photometer*

*not part of standard equipment

1 1...10 → Page 46



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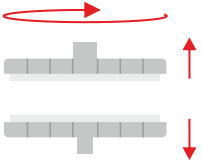

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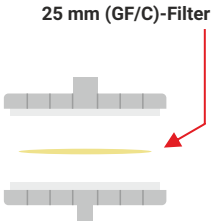

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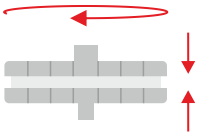

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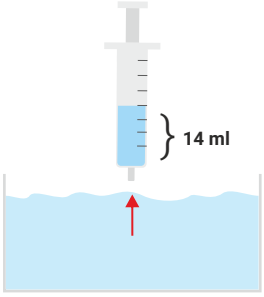

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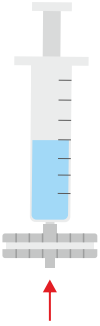
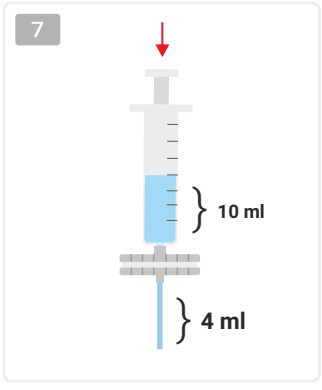
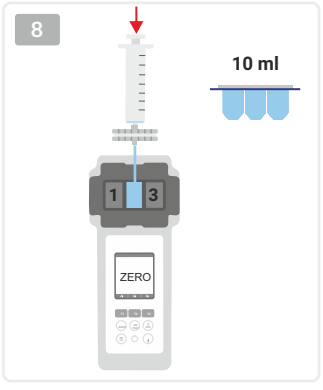
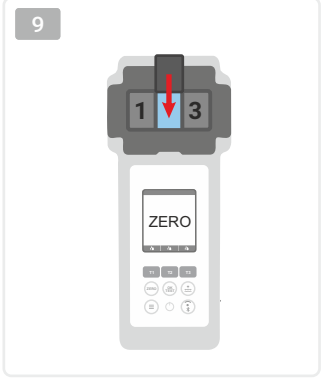



7
10 ml
4 ml

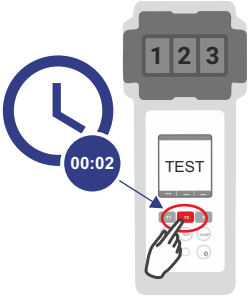

8
10 ml
1
3
ZERO


9
1
3
ZERO

10
1
2
3
ZERO

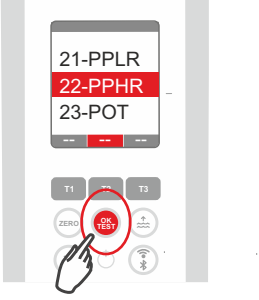
11

CHAMBER 2!



12

13



14

CHAMBER 2!

1 x Phosphate HR
N°1 Photometer

15

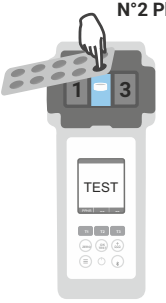
Completely Dissolved

NO Residue

16

CHAMBER 2!

1 x Phosphate HR N°2 Photometer



17

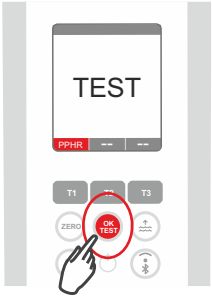
USE FORCE!

Completely Dissolved

NO Residue

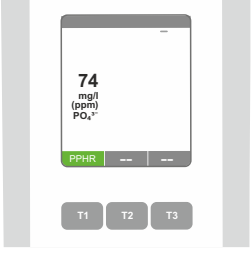
18

19



20

21



ppm = mg/l

OR

12.0

6.0

0.7

Potassium
Калий
Κάλιο
Potasyum
אֶשְלֶגֶן

1 2 3

ONLY CHAMBER 2

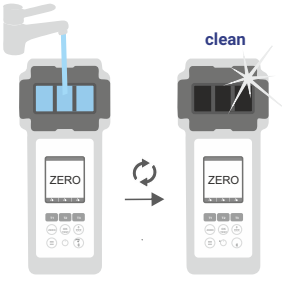
23–POT

0.7 – 12.0 ppm (mg/l) K^+

Potassium Photometer*

*not part of standard equipment

1 1...4 → Page 46



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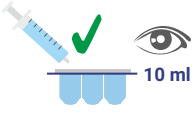
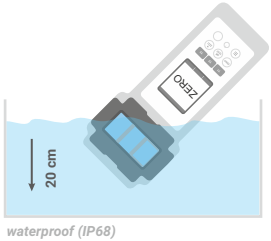




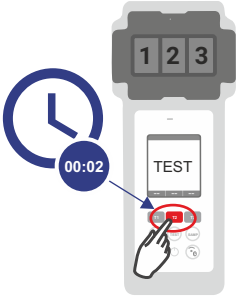
waterproof (IP68)

3

4

5

CHAMBER 2!



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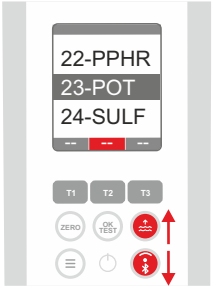

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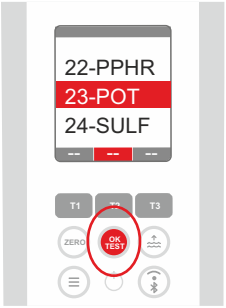
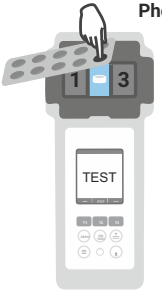


8

CHAMBER 2!
1 x Potassium Photometer

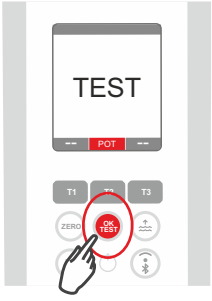


9

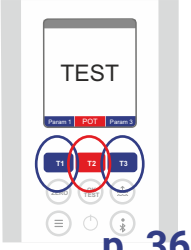
10

11

If single parameter:



If multiple parameters:
See page 36



... p. 36

12

ppm = mg/l

1–ACT
2–TA
3–ALU
4–AMM
5–BRO
6–CH
7–CLA
8–CL
9–CLHR
10–CLO2
11–CU
12–CYA
13–HYDL
14–HYDH
15–IRON
16–NTRA
17–NITRI
18–OZON
19–PH
20–PHMB
21–PPLR
22–PPHR
23–POT
24–SULF
25–TH
26–UREA
27–ZINC

OR

100

50

5

Sulphate
Сульфат
Θειικό άλας
Sülfat
סולפט

ONLY CHAMBER 2

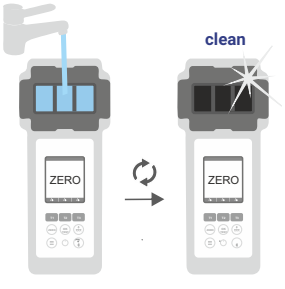
24–SULF

5 – 100 ppm (mg/l) SO_4^{2-}

Sulphate Photometer Powder Pillow*

*not part of standard equipment

1 1...4 → Page 46



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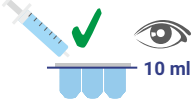
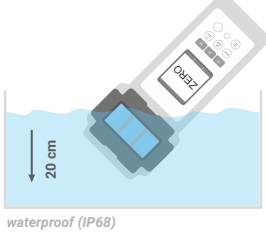




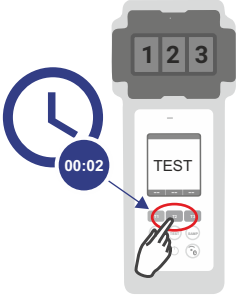
waterproof (IP68)

3

4

5

CHAMBER 2!



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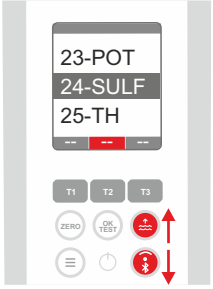

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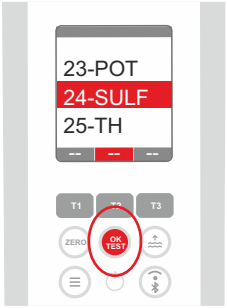


8

1 x Sulphate Photometer

CHAMBER 2!

9

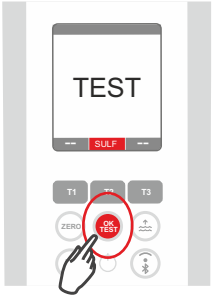
Completely Dissolved

NO Residue

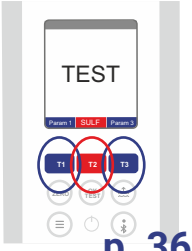
10

11

If single parameter:



If multiple parameters:
See page 36



... p. 36

12

ppm = mg/l

1–ACT
2–TA
3–ALU
4–AMM
5–BRO
6–CH
7–CLA
8–CL
9–CLHR
10–CLO2
11–CU
12–CYA
13–HYDL
14–HYDH
15–IRON
16–NTRA
17–NITRI
18–OZON
19–PH
20–PHMB
21–PPLR
22–PPHR
23–POT
24–SULF
25–TH
26–UREA
27–ZINC

OR

500

200

0

Total Hardness
Общая жесткость
Ολική σκληρότητα
Toplam Sertlik
קשיות מוחלטת

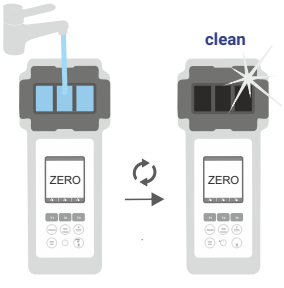
25–TH

0 – 500 ppm (mg/l) $CaCO_3$

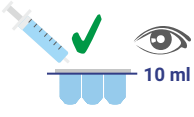
- Total Hardness N°1*
- Total Hardness N°2*

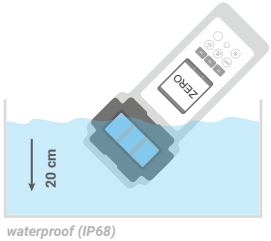
*not part of standard equipment

1 1...4 → Page 46



2





waterproof (IP68)

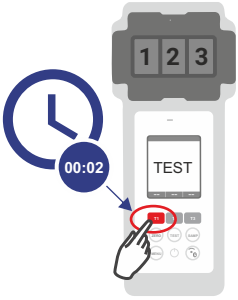
3

ZERO

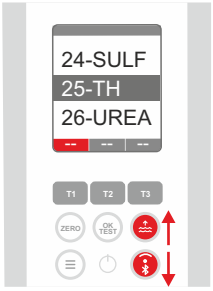
4

1 2 3
ZERO

5


1 2 3
00:02
TEST

6


24-SULF
25-TH
26-UREA
T1
T2
T3
ZERO
OK
TEST

7

8

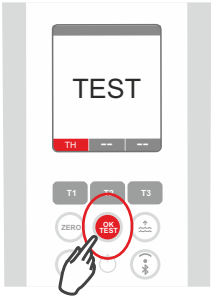
10 POL20TH1*
4 POL20TH2*
*Shake
Before Use!

9

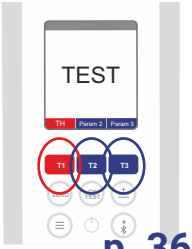
10

11

If single parameter:



If multiple parameters:
See page 36



... p. 36

12

13

ppm = mg/l

OR
2.50
1.20
0.10
UR

Urea
Мочевина
Ουρία
Üre
אוריאה

1 2 3
ONLY SINGLE

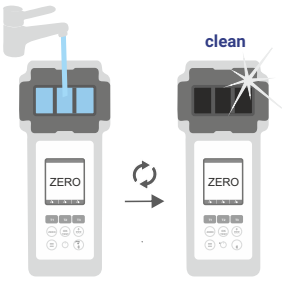
26–UREA

0.10 – 2.50 ppm (mg/l) $(NH_2)_2CO$

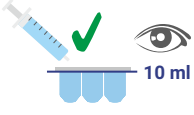
Dechlor*
PL Urea N°1*
PL Urea N°2*
Ammonia N°1 Photometer Powder Pillow*
Ammonia N° 2 Photometer Powder Pillow*

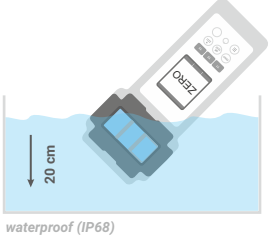
*not part of standard equipment

1 1...4 → Page 46



2





waterproof (IP68)

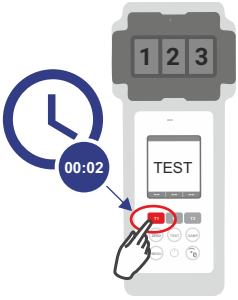
3

ZERO

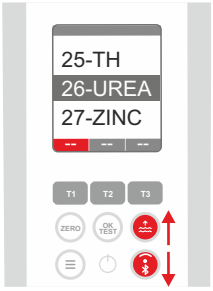
4

1 2 3
ZERO

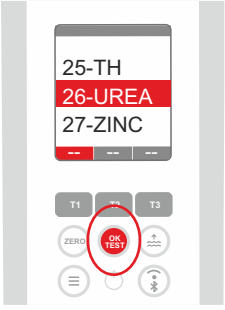
5


1 2 3
00:02
TEST

6


25-TH
26-UREA
27-ZINC
T1
T2
T3
ZERO
OK
TEST

7



8

2 PL Urea 1*
*Shake
Before Use!

9

10

1 PL Urea 2*
*Shake
Before Use!

11

12

13

5:00 min

14

1 x Ammonia N°1 Photometer

15

Completely Dissolved

NO Residue

16

1 x Ammonia N°2 Photometer

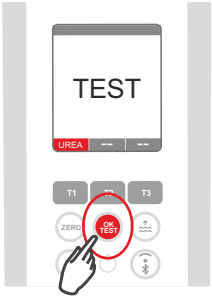
17

Completely Dissolved

NO Residue

18

19



20

21

ppm = mg/l

	If chlorine is present, a DECHLOR tablet must be added beforehand.
	При наличии хлора необходимо предварительно добавить таблетку DECHLOR.
	Εάν υπάρχει χλώριο, πρέπει να προστεθεί προηγουμένως ένα δισκίο DECHLOR.
	Klor mevcutsa, önceden bir DECHLOR tablet eklenmelidir.
	אם קיים כלור, יש להוסיף טבלית DECHLOR לפני כן.

OR

1.00

0.50

0.00

Zinc (with chlorine)
Цинк (с хлором)
Ψευδάργυρος (με χλώριο)
Çinko (klor ile)
אבץ (עם כלור)

1 2 3

ONLY SINGLE

27–ZINC

0.00 – 1.00 ppm (mg/l) Zn^{2+}

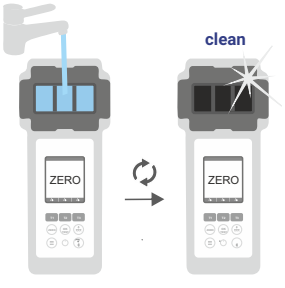
Dechlor*

Copper/Zinc LR Photometer*

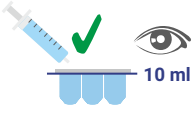
EDTA*

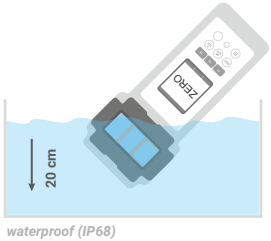
*not part of standard equipment

1 1...4 → Page 46



2





waterproof (IP68)

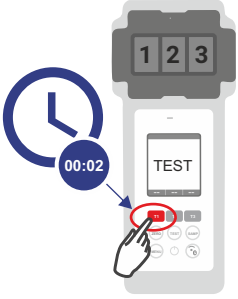
3

ZERO

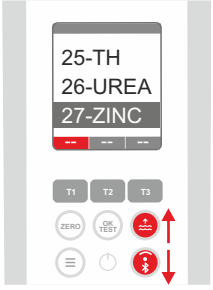
4

1 2 3
ZERO

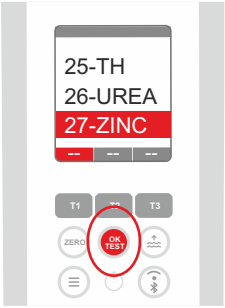
5


1 2 3
00:02
TEST

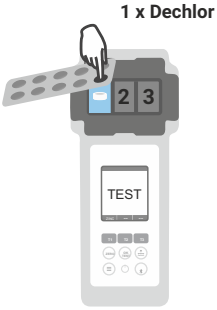
6


25-TH
26-UREA
27-ZINC
T1
T2
T3
ZERO
OK
TEST

7


25-TH
26-UREA
27-ZINC
T1
T2
T3
ZERO
OK
TEST

8


1 x Dechlor
2 3
TEST

9

2 3
TEST
USE FORCE!
Completely
Dissolved
NO Residue

10

2 3
TEST

11

00:15 min

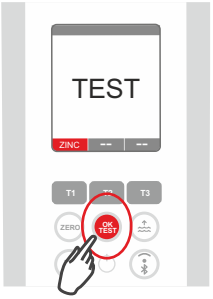
12

1 x Copper/Zinc LR

13

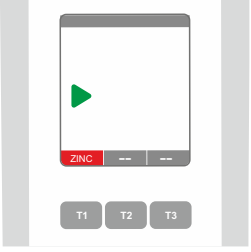
14

15



16

17



ppm = mg/l

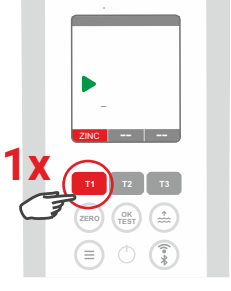
18

1 x EDTA

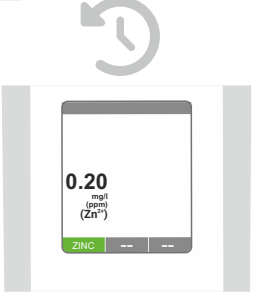
19

20

21



22



ppm = mg/l

	$CaCO_3$ mg/l	$K_{S\,4,3}$ mmol/l	°dH (KH)	°e (CH)	°f (DC)	mval
1 mg/l $CaCO_3$	1	0.01	0.056	0.07	0.1	0.02
1 mmol/l $K_{S\,4,3}$	100	1	5.6	7.0	10.0	2

OR = Overrange / UR = Underrange.
Test result is outside the range of the method. OR results can be brought into measurement range by dilution. Use syringe to take only 5ml (or 1ml) sample water plus 5ml (9ml) distilled water. Test again and multiply results times 2 (times 10). Dilution does not work with „pH“ measurement.

OR = Превышение нормы / UR = Недостаточная норма
Результат теста находится за пределами диапазона метода. Результаты ИЛИ могут быть введены в диапазон измерений путем разбавления. С помощью шприца наберите 5 мл (или 1 мл) воды для пробы плюс 5 мл (9 мл) дистиллированной воды. Проведите повторное тестирование и умножьте результаты на 2 (на 10). Разбавление не работает при измерении "pH".

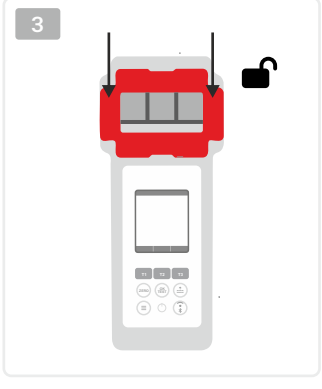
OR = Overrange / UR = Underrange.
Το αποτέλεσμα της δοκιμής είναι εκτός του εύρους της μεθόδου. Τα αποτελέσματά Ή μπορούν να εισαχθούν στο εύρος μέτρησης με αραίωση. Χρησιμοποιήστε σύριγγα για να πάρετε μόνο 5ml (ή 1ml) νερού δείγματος συν 5ml (9ml) απεσταγμένου νερού. Δοκιμάστε ξανά και πολλαπλασιάστε τα αποτελέσματα επί 2 (επί 10). Η αραίωση δεν λειτουργεί με τη μέτρηση "pH".

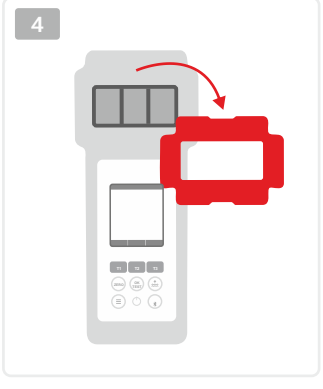
OR = Aşırı Aralık / UR = Düşük Aralık.
Testresultatet er utenfor metodens måleområde. OR-resultater kan bringes inn i måleområdet ved fortynning. Bruk sprøyte til å ta bare 5 ml (eller 1 ml) prøvevann pluss 5 ml (9 ml) destillert vann. Test igjen og multipliser resultatene med 2 (ganger 10). Fortynning fungerer ikke med "pH"-måling.

OR = יתר / UR = טווח
תוצאת הבדיקה היא מחוץ לטווח השיטה. ניתן להביא תוצאות OR לטווח מדידה על ידי דילול. השתמש במזרק כדי לקחת רק 5 מ"ל (או 1 מ"ל) מים לדוגמא בתוספת 5 מ"ל (9 מ"ל) מים מזוקקים. בדוק שוב והכפיל את התוצאות כפול 2 (כפול 10). דילול לא עובד עם מדידת "pH".

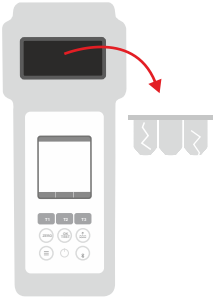
1
Dry!

2
1 2 3

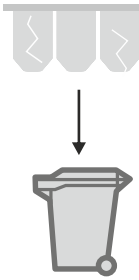

3


4

5

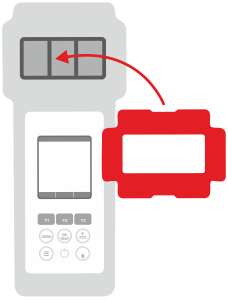


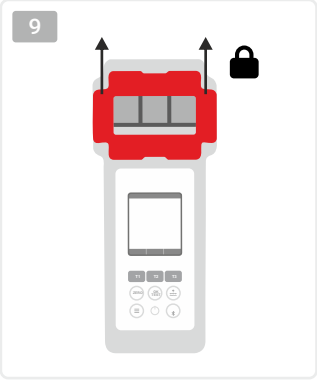
6

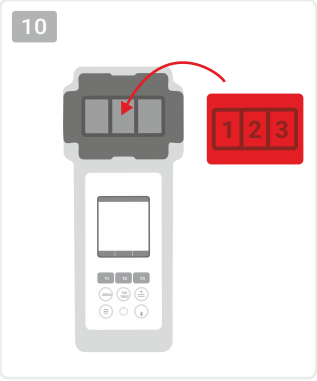


7

8







	Once the cuvette got changed,a calibration MUST be carried out. Please follow the steps indicated on page 19.
	После замены кюветы необходимо провести калибровку.Пожалуйста, выполните действия, указанные на странице 19.
	Μόλις αλλάξει η κυβέτα, ΠΡΕΠΕΙ να πραγματοποιηθεί βαθμονόμηση. Ακολουθήστε τα βήματα που αναφέρονται στη σελίδα 19.
	Küvet değiştirildikten sonra, bir kalibrasyon yapılmalıdır. 19. sayfada belirtilen adımları takip edin.
	לאחר החלפת הקובטה, יש לבצע כיול. אנא בצע את השלבים המצוינים בעמוד 19.

C!D	Change batteries
	Замените батарейки
	Αλλαγή μπαταριών
	Pilleri değiştirin
	החלף סוללות

E300	Calibration required
	Требуется калибровка
	Απαιτείται βαθμονόμηση
	Kalibrasyon gerekli
	נדרש כיול

E800	Sensor defect
	Дефект датчика
	Ελάττωμα αισθητήρα
	Sensör arızası
	פגם בחיישן

E701	Hardware error (LED)
	Аппаратная ошибка (светодиод)
	Σφάλμα υλικού (LED)
	Donanım hatası (LED)
	שגיאת חומרה (LED)

E702	Hardware error (memory)
	Аппаратная ошибка (память)
	Σφάλμα υλικού (μνήμη)
	Donanım hatası (bellek)
	שגיאת חומרה (זיכרון)

E501	Bluetooth/WiFi error
	Ошибка Bluetooth/WiFi
	Σφάλμα Bluetooth/WiFi
	Bluetooth/WiFi hatası
	שגיאתBluetooth/WiFi

E502	Hardware error (other)
	Аппаратная ошибка (другое)
	Σφάλμα υλικού (άλλο)
	Donanım hatası (diğer)
	שגיאת חומרה (אחר)

E401	WiFi not found/ login data incorrect
	WiFi не найден/ данные для входа неверны
	Δεν βρέθηκε WiFi/ λανθασμένα δεδομένα σύνδεσης
	WiFi bulunamadı/ giriş verileri hatalı
	WiFi לא נמצא/נתוני כניסה שגויים

E402	Update server not available
	Сервер обновления недоступен
	Ο διακομιστής ενημέρωσης δεν είναι διαθέσιμος
	Güncelleme sunucusu mevcut değil
	שרת העדכונים אינו זמין

E403	Error in the update log
	Ошибка в журнале обновлений
	Σφάλμα στο αρχείο καταγραφής ενημερώσεων
	Güncelleme günlüğünde hata
	שגיאה ביומן העדכונים

E404	Cloud server connection error
	Ошибка подключения к облачному серверу
	Σφάλμα σύνδεσης διακομιστή Cloud
	Bulut sunucusu bağlantı hatası
	שגיאת חיבור לשרת ענן

E405	Protocol Error (perform a firmware update)
	Ошибка протокола (выполните обновление микропрограммы)
	Σφάλμα πρωτοκόλλου (εκτελέστε ενημέρωση υλικολογισμικού)
	Protokol Hatası (ürün yazılımı güncellemesi gerçekleştirin)
	שגיאת פרוטוקול (בצע עדכון קושחה)

E406	Cloud server login error (wrong password)
	Ошибка входа в облачный сервер (неправильный пароль)
	Σφάλμα σύνδεσης στο διακομιστή Cloud (λάθος κωδικός πρόσβασης)
	Bulut sunucusu oturum açma hatası (yanlış şifre)
	שגיאת התחברות לשרת ענן (סיסמה שגויה)

Reagents | Реагенты | Αντιδραστήρια | Reaktifler | ריאגנטים

POL-Ref	Mix-Refill Pack with 70 tablets (20 each of DPD 1, Phenol Red, 10 each of Alka-M, CYA-Test and DPD 3)
TbsPD450	50 tablets DPD N°4 Photometer
TbsPTA50	50 tablets Alka-M Photometer
TbsHALM150	50 tablets Aluminium N°1 Photometer
TbsPALM250	50 tablets Aluminium N°2 Photometer
PPHAM150	50 powder pillows Ammonia N°1 Photometer
PPPAM250	50 powder pillows Ammonia N°2 Photometer
TbsPD150	50 tablets DPD N°1 Photometer
TbsPD250	50 tablets DPD N°2 Photometer
TbsPD350	50 tablets DPD N°3 Photometer
PL30DPD1A	30 ml DPD 1A Liquid
PL65DPD1A	65 ml DPD 1A Liquid
PL30DPD1B	30 ml DPD 1B Liquid
PL65DPD1B	65 ml DPD 1B Liquid
PL30DPD3C	30 ml DPD 3C Liquid
PL65DPD3C	65 ml DPD 3C Liquid
TbsHGC50	50 tablets Glycine Photometer
PPPCLHR50	50 powder pillows Chlorine HR KI Photometer
PPHAFG50	50 powder pillows Acidifying GP
TbsHCu150	50 tablets Copper N°1 Photometer
TbsPCu250	50 tablets Copper N°2 Photometer
TbsPCAT50	50 tablets CYA-Test Photometer
POL2020CH12	20/20 ml Calcium Hardness 1 and 2 (liquid)
POL2010TH12	20/10 ml Total Hardness 1 and 2 (liquid)
TbsPHP50	50 tablets Hyd. Peroxide LR Photometer
TbsHAFPP50	50 tablets Acidifying PT Photometer
PPPHPHR50	50 powder pillows Hyd. Peroxide HR Photometer
TbsPILR50	50 tablets Iron LR Photometer
PPHNitra150	50 powder pillows Nitrate N°1 Photometer
PPPNitra250	50 powder pillows Nitrate N°2 Photometer
PPPNILR50	50 powder pillows Nitrite LR Photometer
TbsPpH50	50 tablets Phenol Red Photometer
TbsPPB50	50 tablets PHMB Photometer
PPHPPLR150	50 powder pillows Phosphate LR N°1 Photometer
TbsPPPLR250	50 tablets Phosphate LR N°2 Photometer
PPHPPHR150	50 powder pillows Phosphate HR N°1 Photometer
TbsPPPHR250	50 tablets Phosphate HR N°2 Photometer
TbsPPTST50	50 tablets Potassium Photometer

PPPSULP50	50 powder pillows Sulphate Photometer
POL42Urea12	4/2 ml Urea 1 and 2 (liquid)
TbsPCZ50	50 tablets Copper/Zinc LR Photometer
TbsHED50	50 tablets EDTA
TbsHDC	50 tablets Dechlor

Spare parts | Запасные части | Ανταλλακτικά | Yedek parçalar | חלקי חילוף	
POL2Sp-kv	PoolLab® 2.0 Replacement cuvette
POL2Sp-refkit	Check-Standard kit (3 x POL2Sp-kv) with check standards for ZERO/Chlorine LR/ Chlorine HR/pH/TA/CYA/Total Hardness
POL2Sp-ls	Light shield for PoolLab® 2.0
POL2Sp-cuvhold	Cuvette holder for PoolLab® 2.0
POLSp-str	White 10.5 cm plastic stirring rod
POL2Sp-strB	Blue 10.5 cm plastic stirring rod
POL2Sp-strR	Red 10.5 cm plastic stirring rod
POL2Sp-bag	Nylon bag for PoolLab® 2.0
FW25-shaker	25ml shaker for Nitrate test
PLSp-InjFil-1	20ml luer lock syringe for filter-adapter
PLSp-Filtad	Adapter for filter papers
PLSp-FiltGFC	50 x 24mm GF/C filter papers

	Connect the PoolLab® 2.0 via Bluetooth® to the LabCOM® app to set the WiFi connection, the cloud, the date/time and the sampling points.
	Подключите PoolLab® 2.0 через Bluetooth® к приложению LabCOM®, чтобы установить WiFi соединение, облако, дату/время и точки отбора проб.
	Συνδέστε το PoolLab® 2.0 μέσω Bluetooth® στην εφαρμογή LabCOM® για να ρυθμίσετε τη σύνδεση WiFi, το σύννεφο, την ημερομηνία/ώρα και τα σημεία δειγματοληψίας.
	WiFi bağlantısını, bulutu, tarih/saati ve örnekleme noktalarını ayarlamak için PoolLab® 2.0'ı Bluetooth® üzerinden LabCOM® uygulamasına bağlayın.
	חבר את ה-PoolLab® 2.0 באמצעות Bluetooth® לאפליקציית LabCOM® כדי להגדיר את חיבור ה-WiFi, הענן, התאריך/שעה ונקודות הדגימה.

FAQ https://poollab.org

MSDS https://msds.water-id.com

Cloud https://labcom.cloud

Developed in Germany | Assembled in PRC

LED:	435 nm (only chamber 2) | 530 nm | 570 nm | 620 nm
	3 x AA (1.5 V, LR03) **Do not use rechargeable batteries!**
	300 sec.
	5 – 45°C
	IP 68 (1 h | 1.2 m)
MEMORY:	Max. 1,200 measurements
	Max. 20 sampling points

Under laboratory conditions, the instrument-/reagent- and user-related tolerances can be up to +/- 10 % of the actual value.
For the parameter "pH" a tolerance of up to +/- pH 0.10 applies.

В лабораторных условиях допуски прибора/реагента и пользователя могут составлять до +/- 10 % от фактического значения. Для параметра "pH" действует допуск до +/- pH 0,10.

Υπό εργαστηριακές συνθήκες, οι ανοχές που σχετίζονται με το όργανο/αντιπρόσωπο και τον χρήστη μπορεί να είναι έως +/- 10 % της πραγματικής τιμής. Για την παράμετρο "pH" ισχύει ανοχή έως +/- pH 0,10.

Laboratuvar koşulları altında, cihaz/reaktif ve kullanıcı ile ilgili toleranslar gerçek değerin +/- %10'una kadar olabilir. "pH" parametresi için +/- pH 0,10'a kadar bir tolerans geçerlidir.

בתנאי מעבדה, הסבולות הקשורות למכשיר/ריאגנט ולמשתמש יכולות להיות עד +/- 10% מהערך בפועל.
עבור הפרמטר "pH" סובלנות של עד +/- pH 0.10.

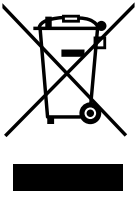
Disposal instructions according to
EU directive by the European Parliament and Council: 2002/96/EC
EU directive by the European Parliament and Council: 2006/66/EC

Environmental protection information
For the manufacture of your device, raw materials had to be produced and processed.
The product may there contain hazardous substances with a negative effect on the environment if the device is not disposed of properly.

Disposal of the device inclusive batteries
EU directive 2006/66/EC prohibits the disposal of batteries through normal household waste because batteries and accumulators may contain hazardous substance dangerous for the groundwater quality.
The device purchased by you contains replaceable AA-batteries (Alkaline).
We are obliged by law to notify you that the batteries contained in the device must be disposed of properly at special collection points or with the dealer where you have purchased the device.
The symbol of the crossed-out waste bin indicates that you are asked to dispose of the device properly.
To avoid that hazardous substances do enter the environment and to not contribute to a depletion of raw material resources, we kindly ask you to return the device by fully stamped mail (!) to the following address:

Water-i.d. GmbH
Daimlerstrasse 20
D-76344 Eggenstein-Leopoldshafen
Germany

PoolLab 2.0 battery certifications and shipping conformity statements are available upon request (support@water-id.com).



RoHS Declaration of Conformity

"Directive 2011/65/EU (the RoHS Directive) OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment" superseding "Directive 2002/95/EC (the RoHS Directive) OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 January 2003. The Certificate of Compliance includes Directive 2015/863 published in 2015 by the EU (often referred as RoHS 3) and Directive 2017/2102/EU published by the EU November 17, 2015.

Based on the information provided by our supply lines, and our certain knowledge pertaining to our own processes, products supplied by Water-i.d. GmbH are RoHS compliant for orders placed on or after the January 1, 2006. Products supplied on or after January 3, 2013 are also RoHS compliant according the Directive 2011/65/EU, Directive 2015/863 and Directive 2017/2102/EU from the moment the respected directive came into force.

The confirmation of compliance status by our supply lines is granted for products which do not contain any of the restricted substances referred to in Annex VI in the RoHS Directive 2011/65/EU & Directive 2015/863 with a higher than maximum concentration values tolerated by weight in homogeneous materials.

Water-i.d. GmbH has taken all reasonable steps to verify the supply line information regarding the absence of restricted substances.

Safety Instructions

This equipment is not suitable for use in areas where children may be present.

Cet équipment ne convient pas à une utilisation dans des lieux susceptibles d'accueillir des enfants.

CAUTION:

Battery abuse or mishandling can cause overheat, liquid leakage, or an explosion. To avoid possible injury, do the following:

• Install batteries according to the battery model and polarity information in the battery compartment.

• Do not disassemble, or service any battery.

• Do not crush or puncture the battery.

• Do not short-circuit the battery, or expose it to water or other liquids.

ATTENTION :

L'abus ou la mauvaise manipulation de la batterie peut provoquer une surchauffe, une fuite de liquide ou une explosion. Pour éviter tout risque de blessure, procédez comme suit :

- Installez les piles conformément au modèle de pile et aux informations sur la polarité figurant dans le compartiment à piles.

- Ne démontez pas et ne réparez pas les piles.

- N'écrasez pas et ne percez pas la batterie.

- Ne court-circuitez pas la batterie et ne l'exposez pas à l'eau ou à d'autres liquides.

According to directive 2014/53/EC of the European Parliament
and European Council of April 16, 2014.

CE

The contracted manufacturer Dongguan Welltime Technology Ltd.
No.3, Dongyuan 3rd Road, Lianhu 2nd Industrial Zone
CN-523702 Tangxia Town, Dongguan City
Peoples Republic of China

herewith declares as follows:

The product "PoolLab 2.0"
complies with the requirements of the following standards for:

• BT 4.2 (BLE)
• 802.11 b/g/n

Electro-Magnetic-Compatibility (EMC) standards for radio equipment and services:
EN 301 489-1 V2.2.3
EN 301 489-17 V3.2.4

Radio standards:	**Frequency:**	**Power:**
ETSI EN 300 328 V2.2.2	2.400 - 2.4835 GHz	<100mW

Safety standard:
EN IEC 62368-1:2020+A11:2020

SAR testing standard:
EN 50566:2017
EN 62479:2010
EN 50663:2017
IEC/IEEE 62209-1528:2020

Frequency bands and power:
Maximum radio frequency power transmitted in the frequency bands in which the radio equipment operates: The maximum power for all bands is less than the highest limit value specified in the related Harmonized Standard.
The frequency bands and transmitting power (radiated and/or conducted) nominal limits applicable to this radio equipment are as follows: Wi-Fi 2.4G: 20 dBm, Bluetooth 2.4G: 20 dBm.

Hereby, Water-i.d. GmbH, Daimlerstr. 20, D-76344 Eggenstein-Leopoldshafen, Germany, declares that this device is in compliance with essential requirements and other relevant provisions of Directive 2014/53/EU and the Radio Equipment Regulations 2017 (S.I. 2017/1206).
A copy of the Declaration of conformity can be downloaded from www.poollab.org

The contracted manufacturer Dongguan Welltime Technology Ltd.
No.3, Dongyuan 3rd Road, Lianhu 2nd Industrial Zone
CN-523702 Tangxia Town, Dongguan City
Peoples Republic of China

herewith declares as follows:

Body worn operation
The device complies with RF specifications when used at a distance of 0 mm from your body. Ensure that the device accessories, such as a device case and device holster, are not composed of metal components. Keep the device away from your body to meet the distance requirement.

Specific Absorption Rate (SAR) information:
This device meets the government's requirements for exposure to radio waves. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons regardless of age or health. ISED RF Exposure Information and Statement the SAR limit of Canada(ISED) is 1.6 W/kg averaged over one gram of tissue. PoolLab 2.0 Photometer has also been tested against this SAR limit. This device was tested for typical body-worn operations with the back of the device kept 0mm from the body. To maintain compliance with ISED RF exposure requirements, use accessories that maintain an 0mm separation distance between the user's body and the back of the device . The use of belt clips, holsters and similar accessories should not contain metallic components in its assembly. The use of accessories that do not satisfy these requirements may not comply with ISED RF exposure requirements, and should be avoided.

Informations sur le débit d'absorption spécifique (DAS):
Cette appareil répond aux exigences du gouvernement en matière d'exposition aux ondes radio. Les lignes directrices sont basées sur des normes élaborées par des organisations scientifiques indépendantes à travers une évaluation périodique et approfondie des études scientifiques. Les normes comprennent une marge de sécurité substantielle conçue pour assurer la sécurité de toutes les personnes, quel que soit leur âge ou leur état de santé. Information et déclaration d'ISDE sur l'exposition aux RF la limite DAS du Canada (ISDE) est de 1,6 W / kg en moyenne sur un gramme de tissu. La PoolLab 2.0 Photometer a également été testée par rapport à cette limite SAR. Cet appareil a été testé pour des opérations typiques portées sur le corps avec le dos de la appareil gardé à 0 mm du corps. Pour maintenir la conformité avec les exigences d'exposition RF d'ISDE, utilisez des accessoires qui maintiennent une distance de séparation de 0 mm entre le corps de l'utilisateur et l'arrière de la appareil. L'utilisation de clips de ceinture, d'étuis et d'accessoires similaires ne doit pas contenir de composants métalliques dans son assemblage. L'utilisation d'accessoires qui ne satisfont pas à ces exigences peut ne pas être conforme aux exigences d'exposition aux RF d'ISDE et doit être évitée.

This device complies with Part 15 of the FCC Rules and with Industry Canada licence-exempt RSS standard(s).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.
Cet appareil est conforme à la partie 15 des règles de la FCC et aux normes RSS exemptées de licence d'Industrie Canada. Le fonctionnement est soumis aux deux conditions suivantes :
(1)cet appareil ne doit pas causer d'interférences nuisibles, et
(2)cet appareil doit accepter toute interférence reçue, y compris les interferences pouvant entraîner un fonctionnement indés

Changes or modifications to this unit not expressly approved by the party responsible forcompliance could void the user's authority to operate the equipment.
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 in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, 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.

This device meets the exemption from the routine evaluation limits in section 2.5 of RSS 102 and compliance with RSS 102 RF exposure, users can obtain Canadian information on RF exposure and compliance.
cet appareil est conforme à l'exemption des limites d'évaluation courante dans la section 2.5 du cnr - 102 et conformité avec rss 102 de l'exposition aux rf, les utilisateurs peuvent obtenir des données canadiennes sur l'exposition aux champs rf et la conformité.

This equipment complies with Canada radiation exposure limits set forth for an uncontrolled environment.
Cet équipement est conforme aux limites d'exposition aux rayonnements du Canada établies pour un environnement non contrôlé.

Continued...

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter. Changes or modifications not expressly approved by Water-i.d. GmbH could void the user's authority to operate the equipment.

FCC ID: 2ALRR-POOLLABV2
IC: 22610-POOLLABV2
Model/HVIN: PoolLab 2.0

The SAR limit adopted by USA and Canada is 1.6 watts/kilogram (W/kg) averaged over one gram of tissue. The highest SAR value reported to the Federal Communications Commission (FCC) and the Industry Canada (IC) for this device type when it is properly worn on the body is 0.038 watts/kilogram (W/Kg).

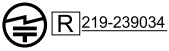
The device complies with the RF specifications when the device is used near your distance of 0 mm from your body. Ensure that the device accessories such as a device case and a device holster are not composed of metal components. Keep your device 0 mm away from your body to meet the requirement earlier mentioned.

This device was tested for typical body-worn operations. To comply with RF exposure requirements, a minimum separation distance of 0 mm must be maintained between the user's body and the handset, including the antenna. Third-party belt-clips, holsters, and similar accessories used by this device should not contain any metallic components. Body worn accessories that do not meet these requirements may not comply with RF exposure requirements and should be avoided. Use only the supplied or an approved antenna.

Tested standards:
- FCC part 15.247
- FCC part 2.1093
- ANSI/IEEE C95.1
- ANSI/IEEE C95.3
- FCC part 15B
- RSS-247
- ICES-003

We, Water-i.d. GmbH Germany, hereby declare that the product/model PoolLab 2.0 was certified for type certification pursuant to Article 2, paragraph 1, item 19.

Tests performed:
• J 55032



Type of radio wave, frequency and antenna power:
• BT 4.2 (BLE)
• 802.11 b/g/n

Type certification number: 219-239034

We, Water-i.d. GmbH Germany, hereby certify our responsibility, that the product PoolLab 2.0 Photometer is tested to and conforms with the essential test suites included in the following standards, which are in force within the EEA:

Standards	**Legislation Number**
BS EN IEC 61326-1:2021 BS EN IEC 61326-2-1:2021 ETSI EN 301 489-1 V2.2.3: 2019 ETSI EN 301 489-17 V3.2.4: 2020	Regulations 2016 (S.I. 2016/1091)
BS EN IEC 62368-1:2020+A11:2020	Regulations 2016 (S.I. 2016/1101)
ETSI EN 300 328 V2.2.2: 2019	

And therefore complies with the essential requirements of the following directives:

Legislation Name	**Legislation Number**	**Further identification**
Electromagnetic Compatibility (EMC) Compatibility Regulations	Regulations 2016 (S.I. 2016/1091)	Electromagnetic
Electrical Equipment (Safety) Regulations	Regulations 2016 (S.I. 2016/1101)	Safety
Radio Equipment Regulations (S.I. 2017/1206)	Regulations 2017	Radio Equipment
Restriction of the use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations	Regulations 2012 (S.I. 2012/3032)	RoHS

Continued...

The technical documentation as required by the conformity assessment procedure is kept at the following address for a period ending at least 10 years after the last product has been manufactured at the disposal of the relevant national authorities of any Member State for inspection:

Water-i.d. GmbH (Germany)
Daimlerstr. 20 • 76344 Eggenstein • Germany

The product is UKCA-marked in:

Certificate of Compliance

We hereby certify that the device

PoolLab 2.0®

With it's serial number as stated below,
has passed intensive visual and technical checks
as part of our QM documentation. We confirm
the device got factory-calibrated.

Water–i.d.® GmbH (Germany)

Andreas Hock, Managing Director
Water–i.d.® GmbH | Daimlerstr. 20
76344 Eggenstein | Germany

S/N
Manufacturing date

Water–i.d.® is certified according to ISO 9001:2015