

Achtung!
Klicken Sie bei Verwendung eines WR100E
NIE auf "WLAN Aufbau", da dadurch die Adressen
und die Zuordnung der Kameras/des WR100E
geändert werden!

WLAN-Repeater / Access Point

Bedienungsanleitung

1. Einleitung

Lesen Sie diese Bedienungsanleitung vollständig und sorgfältig durch. Die Bedienungsanleitung gehört zu diesem Produkt und enthält wichtige Hinweise zur Inbetriebnahme und Handhabung.

Lesen Sie auch die Bedienungsanleitung der WLAN-Kamera WR100B/WR100D und des Systems durch, mit dem die WLAN-Kamera betrieben wird.

Beachten Sie immer alle Sicherheitshinweise. Sollten Sie Fragen haben oder unsicher in Bezug auf die Handhabung der Geräte sein, dann holen Sie den Rat eines Fachmannes ein.

Bewahren Sie diese Anleitung sorgfältig auf und geben Sie sie ggf. an Dritte weiter.

2. Bestimmungsgemäße Verwendung

Der WLAN-Repeater/Access Point WR100E ist ein Zubehör passend zur WLAN-Kamera WR100B/D des Systems WR100.

Bis zu insgesamt vier Kameras können an einen WR100E angemeldet werden.

Der WR100E kann als Access Point zur Anbindung der WLAN-Kameras WR100B und WR100D im lokalen Netzwerk (LAN) über einen Router/Switch an den Recorder WR100R / Monitor WR100M verwendet werden. Um die Kameras mit einem INDEXA DVRx22 (ab Lieferung 2019) zu betreiben, ist der WR100E als Access Point zwingender erforderlich.

Wird der WR100E an einen Router/Switch angeschlossen, muss darauf geachtet werden, dass im Netzwerk befindliche Multicast-Geräte (z.B. Mediareceiver) auf demselben Protokoll (IGMP v.2) senden wie der WR100E.

Alternativ kann der WR100E als WLAN-Repeater zwischen den Kameras WR100B und WR100D und dem Recorder WR100R / Monitor WR100M dienen (mit einem DVR ist keine Repeaterfunktion möglich).

Eine Verkettung mehrerer WR100E ist nicht möglich.

Die Einbindung der Kameras am WR100E erfolgt dank Systemcodierung im Plug and Play-Verfahren.

Das WLAN-Protokoll ist **nicht** kompatibel mit anderen WLAN-Kameras oder Geräten.

Theoretisch können mehrere Geräte im Netzwerk betrieben werden. In der Praxis ist dies jedoch durch die gesamte WLAN-Belastung im Objekt

begrenzt. Die Kanäle werden nicht nur von WLAN-Kameras sondern auch von anderen aktiven WLAN-Geräten wie Smartphones oder Notebooks genutzt. In der Regel können bis zu acht WLAN- oder andere Funkgeräte in einem Objekt (im 2,4 GHz Bereich) betrieben werden. Mehr als vier WLAN-Kameras pro Objekt sind nicht zu empfehlen. Der Betrieb der Geräte muss deshalb vor der endgültigen Montage getestet werden.

Die Spannungsversorgung des WR100E erfolgt über das mitgelieferte Netzgerät, angeschlossen am 230V ~ AC, 50 Hz Netz.

Der WR100E ist zur Nutzung im Innenbereich geeignet und für den Betrieb in privaten Haushalten konzipiert.

Jede andere Verwendung oder Veränderung des Gerätes gilt als nicht bestimmungsgemäß und birgt erhebliche Unfallgefahren. Der Hersteller haftet nicht für Schäden, die durch nicht bestimmungsgemäßen Gebrauch oder falsche Bedienung verursacht werden.

Dieses Gerät ist nicht dafür bestimmt, durch Personen (einschließlich Kinder) mit eingeschränkten physischen, sensorischen oder geistigen Fähigkeiten oder mangels Erfahrung und/oder mangels Wissen benutzt zu werden, es sei denn, sie werden durch eine für ihre Sicherheit zuständige Person beaufsichtigt oder erhalten von ihr Anweisungen, wie das Gerät zu benutzen ist. Kinder müssen beaufsichtigt werden, um sicherzustellen, dass sie nicht mit dem Gerät spielen.

3. Lieferumfang

- WR100E
- Netzgerät mit 2,9 m Anschlusskabel
- Befestigungsmaterial
- Bedienungsanleitung
- Schnellanleitung

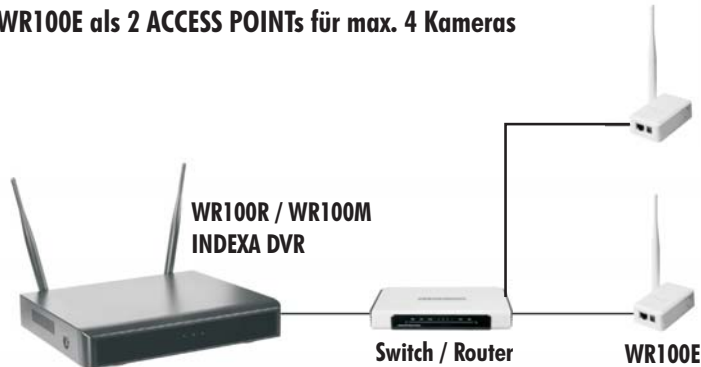
Anwendungsmöglichkeiten

* Achtung: max. 3 Geräte mit IP-Adresse in Reihe (hier: WR100E / WR100B / WR100B)

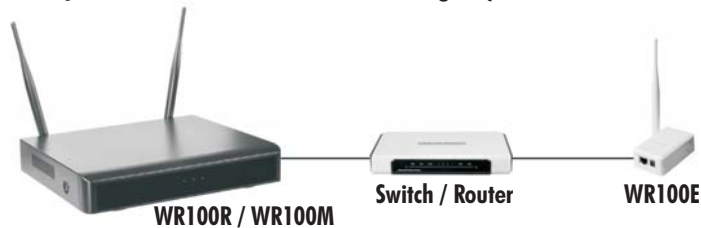
WR100E als ACCESS POINT für max. 4 Kameras



2x WR100E als 2 ACCESS POINTs für max. 4 Kameras



WR100E als ACCESS POINT für max. 4 Kameras, 1 Kamera kann als Repeater* dienen (keine Repeater-Funktion mit einem DVR möglich)



WR100E als REPEATER für max. 4 Kameras (keine Repeater-Funktion mit einem DVR möglich)



WR100E als REPEATER für max. 4 Kameras, 2 Kameras dienen dabei als Repeater* (keine Repeater-Funktion mit einem DVR möglich)



4. Technische Daten

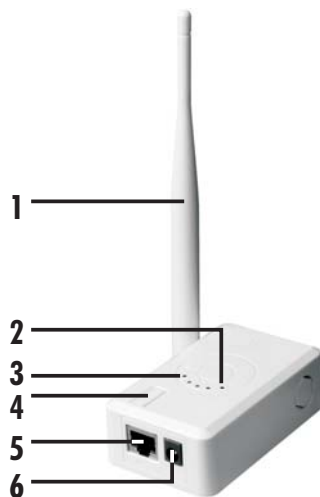
WR100E

Betriebsspannung	12 V \equiv DC (Netzgerät)
Stromaufnahme	max. 500 mA
WLAN	2,4 GHz, 802.11 b/g/n (nur mit WLAN-Kameras des WR100 Systems)
LAN	RJ45
Internet Group Management Protocol	IGMP v.2
ONVIF Standard	2.4 (LAN-Verbindung)
Gehäuseabmessungen (mm)	57 x 94 x 31
Betriebstemperatur	$\pm 0^\circ$ C bis $+ 40^\circ$ C

Netzgerät

Modellkennung	CS-1201000
Eingangsspannung	230 V
Eingangswechselstromfrequenz	50Hz
Ausgangsspannung	12,0V DC
Ausgangsstrom	1,0 A
Ausgangsleistung	12,0 W
Durchschnittliche Effizienz im Betrieb	83,6%
Effizienz bei geringer Last	79,8%
Leistungsaufnahme bei Nulllast	0,06 W

5. Ausstattung



- 1 Antenne
- 2 LED "NVR"
- 3 LED-Anzeige "IPCAM 1/2/3/4" (leuchtet bei angemeldeter
WR100 Kamera)
- 4 Taste "Reset/ Sync"
- 5 RJ45-LAN-Anschluss
- 6 Netzgerät-Anschluss

6. Sicherheitshinweise

Die folgenden Hinweise dienen Ihrer Sicherheit und Zufriedenheit beim Betrieb des Gerätes. Beachten Sie, dass die Nichtbeachtung dieser Sicherheitshinweise zu erheblichen Unfallgefahren führen kann.

- ⚠ Gefahr!** Bei Nichtbeachtung dieses Hinweises werden Leben, Gesundheit und Sachwerte gefährdet.
- Lassen Sie Kleinkinder nicht unbeaufsichtigt mit dem Gerät, Verpackungsmaterial oder Kleinteilen! Andernfalls droht Lebensgefahr durch Erstickten!
- Beschädigen Sie bei Bohrarbeiten und beim Befestigen keine Leitungen für Gas, Strom, Wasser oder Telekommunikation! Andernfalls droht Lebens-, Verletzungsgefahr!
- Behandeln Sie die Zuleitungen vorsichtig! Verlegen Sie diese so, dass sie nicht beschädigt werden können und keine Stolpergefahr darstellen. Ziehen Sie die Kabel nicht über scharfe Kanten, und quetschen oder klemmen Sie sie nicht anderweitig ein. Andernfalls drohen Lebens- und Verletzungsgefahr!
- Um Verletzungen vorzubeugen, befestigen Sie den WR100E zuverlässig gemäß den Montageanweisungen.
- Verhindern Sie, dass das Netzgerät mit Feuchtigkeit in Berührung kommt und tauchen Sie die Geräte nicht ins Wasser ein! Andernfalls droht Lebensgefahr!
- Betreiben Sie das Gerät ausschließlich mit dem vom Hersteller empfohlenen Netzgerät. Vergewissern Sie sich vor dem Anschluss des Netzgerätes, dass die Spannung 230 V \sim AC, 50 Hz beträgt und mit einem Leistungsschutzschalter abgesichert ist.
- Dieses System erzeugt und verwendet WLAN-Signale. Dies kann eine Störung anderer Geräte zur Folge haben, bzw. das System kann durch andere Geräte gestört werden. Versuchen Sie solche Störungen zu vermeiden, indem Sie die Position der Geräte verändern.
- Setzen Sie das Gerät und das Netzgerät nicht der Nähe von Feuer, Hitze oder lang andauernder hoher Temperatureinwirkung aus!
- Schützen Sie das Gerät vor starken mechanischen Beanspruchungen und Erschütterungen!
- Schützen Sie das Gerät vor starken magnetischen oder elektrischen Feldern!
- Verwenden Sie das Gerät nur mit den gelieferten Originalteilen oder Originalzubehör!
- Überprüfen Sie vor dem Zusammenbau und der Inbetriebnahme die Lieferung auf Beschädigungen und Vollständigkeit!
- Trennen Sie bei längerem Nichtbenutzen des Gerätes immer das Netzgerät von der Netzsteckdose.
- Schließen Sie kein beschädigtes Gerät (z.B. Transportschaden) an. Trennen Sie bei Beschädigungen inklusive der Verkabelung sofort die Netzspannung. Lassen Sie Schäden sofort durch einen Fachmann beheben. Ziehen Sie das Netzgerät aus der Netzsteckdose. Andernfalls droht Lebensgefahr durch Stromschlag und Brand!

7. Platzierung

Achtung: Montieren Sie die Kamera(s) und den WR100E immer erst nachdem Sie die WLAN-Verbindung zwischen den Komponenten aufgebaut haben.

Bevor Sie den WR100E ggf. montieren, planen Sie zuerst die Montagestelle des WR100E und der Kamera(s). Überprüfen Sie von dort aus vor der Montage die Funktion der Geräte und die WLAN-Übertragung.

- Achten Sie darauf, dass sich in der Nähe des WR100E eine Steckdose befindet. Optional können Sie ein Verlängerungskabel verwenden (s. Kapitel "Optionales Zubehör").

8. Anschluss und Inbetriebnahme

8.1. Inbetriebnahme des WR100E

- Drehen Sie die Antenne [1] des WR100E so, dass sie möglichst senkrecht steht.
- Verbinden Sie den Kleinspannungsstecker des Netzgerätes mit dem Netzgerät-Anschluss [6] des WR100E.
- Stecken Sie das Netzgerät des WR100E in eine geeignete Steckdose, und warten Sie ca. 30 Sekunden, bis der WR100E vollständig hochgefahren ist und die LED "NVR" [2] leuchtet.

8.2 WR100E am Recorder/Monitor anmelden

Hinweis: Klicken Sie bei Verwendung eines WR100E **NIE** auf "WLAN Aufbau", da dadurch die Adressen und die Zuordnung der Kamera/des WR100E geändert werden. Falls doch nötig (weil eine weitere WLAN-Kamera am Recorder WR100R / Monitor WR100M angemeldet werden oder eine Kamera auf WLAN umgestellt werden soll), machen Sie den WR100E vorher spannungsfrei.

- **Access Point: keine Anmeldung nötig**



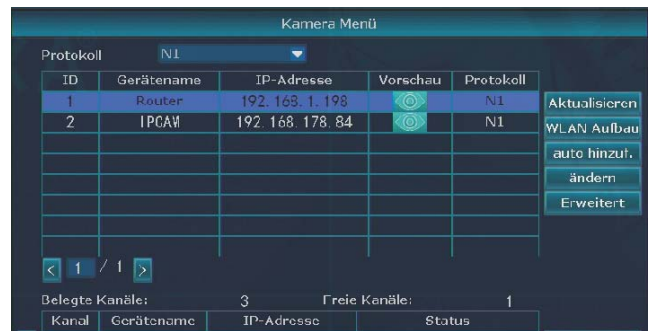
Verbinden Sie den WR100E bei Nutzung als Access Point **nach der Anmeldung der Kamera(s) (8.3)** per Netzwerkkabel mit einem Router/ Switch (gleiches Netzwerk wie Recorder WR100R/ Monitor WR100M)

- **Repeater**



Verbinden Sie den WR100E bei Nutzung als Repeater per Netzwerkkabel direkt mit dem Recorder WR100R/ Monitor WR100M.

- Klicken Sie im Kameramenü auf "Aktualisieren".
- In der oberen Liste erscheint der WR100E (als "Router").



- Durch Doppelklick auf "Router" öffnet sich das Menü des WR100E. Der Status "WLAN konnte nicht zugeordnet werden" erscheint in roter Schrift.



- Klicken Sie auf "Zuordnung". Der Status ändert sich zu "WLAN wurde angepasst" in grüner Schrift.
- Klicken Sie auf "OK". Danach kann das Netzwerkkabel wieder entfernt werden.

8.3 Eine Kamera am WR100E anmelden

- Verbinden Sie den RJ45-LAN-Anschluss [5] des WR100E über Netzwerkkabel mit der Kamera. Die LED am Kamera-Netzwerk-Anschlusskabel blinkt grün.



- Halten Sie die Taste [4] für ca. 3 Sekunden gedrückt. Es ertönt "WiFi match code is running. Please wait."
- Warten Sie einige Minuten, bis "WiFi matching succeed" ertönt. Ertönt "Wifi matching failed", überprüfen Sie, ob die grüne LED

am Netzwerk-Anschlusskabel der Kamera blinkt, ob eine LAN-Verbindung zwischen WR100E und der Kamera besteht und ob die Kamera mit Spannung versorgt wird.

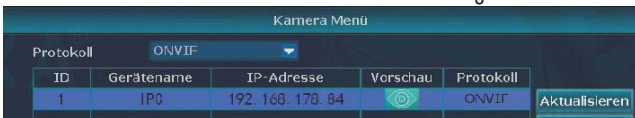
- Trennen Sie nun die Netzkabelverbindung zwischen WR100E und Kamera, die Kamera läuft nach ein paar Sekunden im WLAN-Betrieb weiter. Als Bestätigung leuchtet die entsprechende LED "IPCAM" 1/2/3 oder 4[2] auf (es leuchten immer so viele LEDs, wie Kameras angemeldet und eingeschaltet sind).
- Wiederholen Sie bei Bedarf den Anmeldevorgang für die weiteren Kameras. Es können bis zu insgesamt vier Kameras an einem WR100E angemeldet werden.

Hinweise:

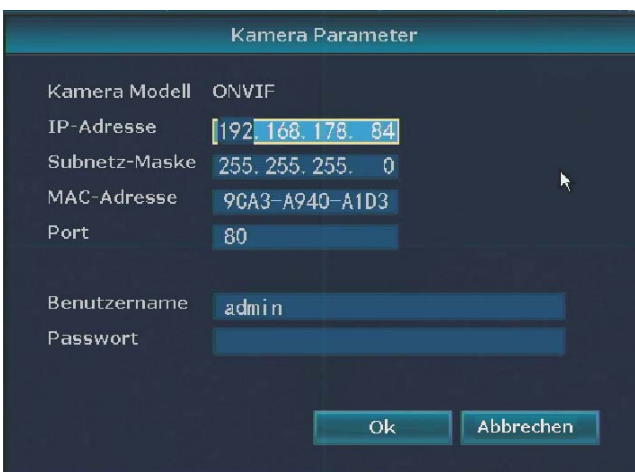
- Die Kamera-Anmeldungen können nicht einzelnen LEDs zugeordnet werden.
- Im Kameramenü des Recorders WR100R / des Monitors WR100M kann es 1-2 Minuten dauern, bis die neu am WR100E angemeldeten Kameras gefunden werden.

8.4 Kamera(s) über das Menü hinzufügen

- Falls die Kameras bereits am Recorder WR100R / Monitor WR100M angemeldet war, löschen Sie diese aus der unteren Liste des Kameramenüs, indem Sie die Kamera markieren und dann auf "Kanal löschen" klicken.
- Wählen Sie als Protokoll "ONVIF" aus und klicken Sie auf "Aktualisieren". Die Kamera wird nun als "IPC" gefunden.



- Vergleichen Sie die IP-Adresse der Kamera mit der Gateway-Adresse Ihres Recorders/ Monitors unter [Hauptmenü - Netzwerk] neben "Gateway" (Bsp.: Wenn die Gateway-Adresse 192.168.178.1 lautet, muss die Kamera IP-Adresse 192.168.178.xx sein).
- Wenn die IP-Adresse der Kamera nicht automatisch an das Netzwerk angepasst wurde, markieren Sie die Kamera in der oberen Liste des Kameramenüs, klicken rechts auf "ändern", passen die IP-Adresse an das Recorder-/Monitor- Netzwerk an und bestätigen mit "OK".



- Wählen Sie wieder das Protokoll "N1" aus und bestätigen Sie mit "Aktualisieren".
- Die Kamera wird nun mit der unter ONVIF geänderten IP-Adresse gefunden.
- Fügen Sie die Kamera nun mit der angepassten IP-Adresse durch Doppelklick hinzu.

Hinweise:

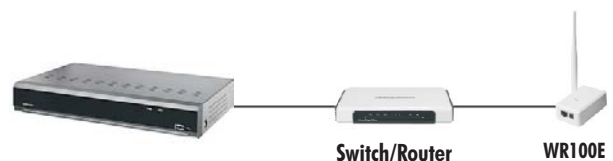
- Sollte nach Hinzufügen die Fehlermeldung "abweichendes Netzwerk" erscheinen, wurde die IP-Adresse der Kamera über das Protokoll "ONVIF" nicht angepasst. Passen Sie die Adresse entsprechend manuell an. (Die Kamera muss jedoch über das Protokoll "N1" hinzugefügt werden).
- Durch Doppelklick auf "Router" in der oberen Liste des Kameramenüs sehen Sie unter "Verbindungsinformationen" die Zuordnung der angemeldeten Kameras zu den Kanälen des Recorders/Monitors, nachdem diese der unteren Liste hinzugefügt wurden.
- Durch Klicken auf "Repeater" unten rechts im Kameramenü, öffnet sich ein Schaubild, welches die Recorder-/Monitor-, Repeater- und Kameraverbindungen anzeigt. Die Verbindungsinformationen rechts zeigen die Signalstärke der Kameras an, diese sollte mindestens 30 sein.



gestrichelte grüne Linie: WLAN-Verbindung
 durchgezogene grüne Linie: LAN-Verbindung
 gestrichelte rote Linie: keine Verbindung (WLAN)
 durchgezogene rote Linie: keine Verbindung (LAN)

INDEXA DVR (WR100E dient als WLAN-Access Point)


- Verbinden Sie den WR100E per Netzkabel mit demselben Router/Switch, mit dem auch Ihr DVR verbunden ist.

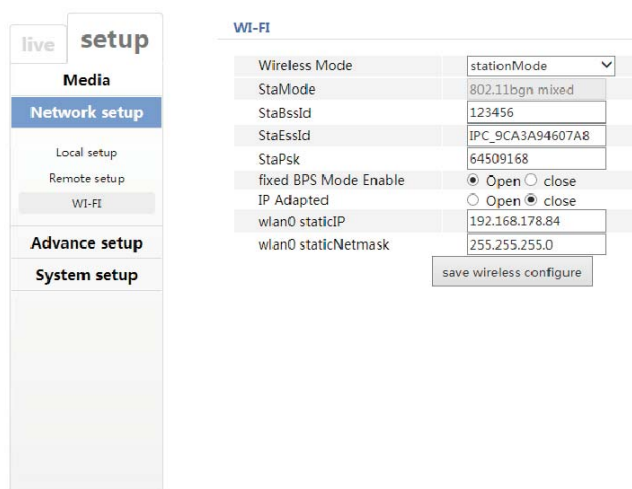


- Machen Sie den WR100E für ca. 30 Sekunden spannungslos und schließen das Netzgerät danach wieder an.
- Stellen Sie am DVR den Modus "XVR" ein.
- Stellen Sie, wenn nötig, AHD-Kanäle auf Netzkabelkanäle um,

- entsprechend der Anzahl der zu hinzuzufügenden Kameras.
- Öffnen Sie das Kameramenü des DVR, und wählen Sie in der Hinzufügen-Maske das Protokoll "ONVIF" aus.
- Fügen Sie die gewünschte Kamera als "IP Kamera" dem DVR hinzu, Benutzername der Kamera ist "admin", sie hat kein Passwort.

Hinweise:

- Sollte bei mehreren Kameras nur eine IP-Adresse gefunden werden, auf der das Kamerabild wechselt, liegt ein IP-Konflikt vor. Klicken Sie in diesem Fall im Menü "IP-Kanäle" in der Zeile der entsprechenden Kamera auf  (Bearbeiten), ändern Sie die IP-Adresse und speichern Sie. Nach ein paar Minuten sollte das Kamerabild wieder erscheinen und die anderen Kameras sollten unter der alten IP-Adresse zu finden sein. Sollte dies nicht funktionieren, gehen Sie folgendermaßen vor:
 - Öffnen Sie die IP-Adresse über einen Browser an einem PC, der mit dem gleichen Netzwerk wie der DVR verbunden ist.
 - Geben Sie den Benutzernamen "admin" ein, lassen das Passwort leer und klicken auf "Login".
 - Öffnen Sie den Reiter "Setup".
 - Klicken Sie auf [Network Setup - WIFI].
 - Ändern Sie die IP-Adresse neben "Wlan0 Static IP", sodass sich der letzte Ziffernteil von der alten IP-Adresse unterscheidet.
 - Klicken Sie auf "save wireless configure".



- Suchen Sie über den DVR nun die neue IP-Adresse und fügen Sie diese als "IP Kamera" hinzu.
- Um im Menü die Einstellungen zur Bewegungserkennung vornehmen zu können, ist es wichtig, die Kanäle "IP CH 1/2/3/4" zu verwenden.

9. Reset

Durch Gedrückthalten der Taste [4] am WR100E für ca. 10 Sekunden wird der WR100E zurückgesetzt und es ertönt "Restore factory settings".

- Die Kamera-Anmeldungen bleiben bestehen (es sei denn die Kamera wird auf Werkseinstellungen zurückgesetzt).

- Im Kameramenü des Recorders WR100R / Monitors WR100M können über das Menü "Repeater" alle angemeldeten Kameras am WR100E gelöscht werden, indem auf die entsprechenden Kameras geklickt wird. Direkt am WR100E ist es nur möglich, Kameras zu überschreiben.
- Der WR100E befindet sich nach dem Reset wieder im Access Point-Modus und muss bei Nutzung als Repeater wieder mit dem Recorder WR100R / Monitor WR100M per Netzwerkkabel verbunden werden. Die WLAN-Verbindung muss dann erneut aufgebaut werden.

10. Wandmontage

Der WR100E kann aufgestellt bzw. an der Wand montiert werden.

- Bei Wandmontage: Befestigen Sie die mitgelieferten Schrauben und ggf. Dübel an einer geeigneten Stelle (horizontaler Abstand der Löcher ca. 32 mm). Beachten Sie dabei, dass die Schrauben nicht vollständig in die Wand geschraubt werden: das Gewinde muss noch ca. 2 mm aus der Wand herauschauen, damit der WR100E auf die Schrauben aufgesetzt werden kann.

11. Wartung und Reinigung

- Das Gerät ist wartungsfrei: Öffnen Sie es deshalb niemals.
- Überprüfen Sie regelmäßig die technische Sicherheit und die Funktion.
- Ziehen Sie vor der Reinigung das Netzgerät aus der Steckdose.
- Äußerlich darf das Gerät nur mit einem weichen, nebelfeuchten Tuch oder Pinsel gereinigt werden.

12. Optionales Zubehör

- DC-Verlängerungskabel DC10, schwarz (DC-Stecker auf DC-Kupplung), Länge 10 m. Art. Nr. 32118

13. Vereinfachte EU-Konformitätserklärung



Hiermit erklärt INDEXA GmbH, dass der Funkanlagentyp WR100E der Richtlinie 2014/53/EU entspricht. Der vollständige Text der EU-Konformitätserklärung ist unter der folgenden Internetadresse verfügbar: <http://www.indexa.de/ce.htm>.

14. Entsorgung



Sie dürfen Verpackungsmaterial und Geräte nicht im Hausmüll entsorgen, führen Sie sie der Wiederverwertung zu. Den zuständigen Recyclinghof bzw. die nächste Sammelstelle erfragen Sie bei Ihrer Gemeinde.

Indexa GmbH Paul-Böhringer-Str. 3 74229 Oedheim, Deutschland
www.indexa.de Änderungen vorbehalten 2021/07/12

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