

Achtung!

Klicken Sie bei Verwendung eines WR100EW NIE auf "WLAN Aufbau", da dadurch die Adressen und die Zuordnungen der Kameras/des WR100EW geändert werden!

WLAN-Repeater / Access Point im wetterfesten Gehäuse

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 Bedienungsanleitungen der WLAN-Kamera WR100B/WR100D und des Systems, 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 WR100EW ist ein Zubehör passend zur WLAN-Kamera WR100B/D des Systems WR100.

Bis zu insgesamt vier Kameras können an einen WR100EW angemeldet werden.

Der WR100EW 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 WR100EW als Access Point zwingend 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 WR100EW 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 WR100EW ist nicht möglich.

Die Einbindung der Kameras am WR100EW 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 Stromversorgung des WR100EW erfolgt über das eingebaute 12 V Netzgerät, angeschlossen am Netzstrom 230 V ~ AC, 50 Hz. Bei einer Verwendung als Access Point kann die Stromversorgung mit Hilfe des mitgelieferten Adapters und Steckernetzgerätes über das Netzkabel erfolgen.

Der WR100EW ist zur Nutzung im Außenbereich geeignet. Er kann an einer Wand oder an einem Mast montiert werden.

Der WR100EW ist 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.

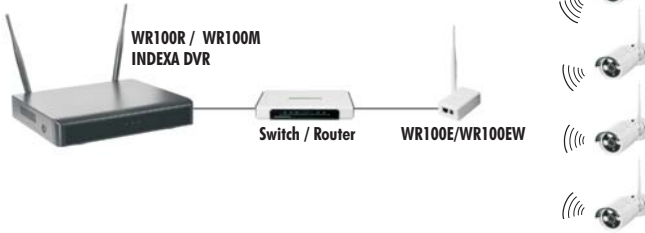
3. Lieferumfang

- WR100EW
- Netzgerät (bereits eingebaut)

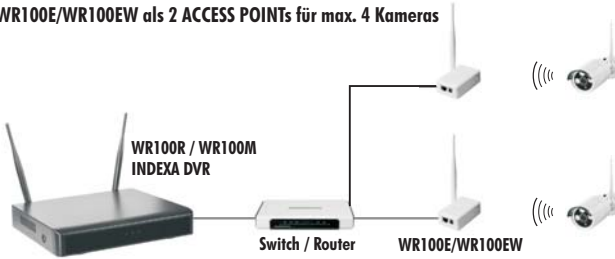
Anwendungsmöglichkeiten

* Achtung: max. 3 Geräte mit IP-Adresse in Reihe (hier: WR100E/WR100EW / WR100B / WR100B)

WR100E/WR100EW als ACCESS POINT für max. 4 Kameras

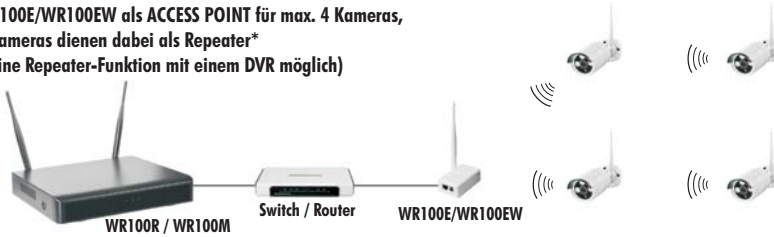


2x WR100E/WR100EW als 2 ACCESS POINTS für max. 4 Kameras



WR100E/WR100EW als ACCESS POINT für max. 4 Kameras, 2 Kameras dienen dabei als Repeater*

(keine Repeater-Funktion mit einem DVR möglich)

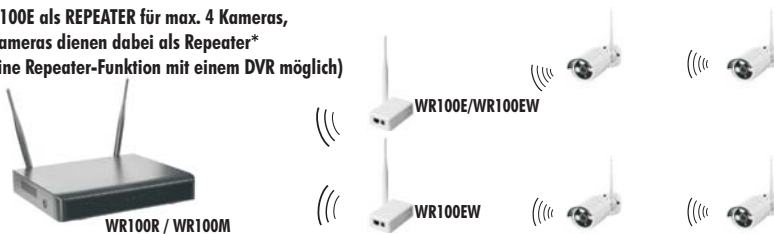


WR100E als REPEATER für max. 4 Kameras (keine Repeater-Funktion mit einem DVR möglich)



WR100E als REPEATER für max. 4 Kameras, 2 Kameras dienen dabei als Repeater*

(keine Repeater-Funktion mit einem DVR möglich)



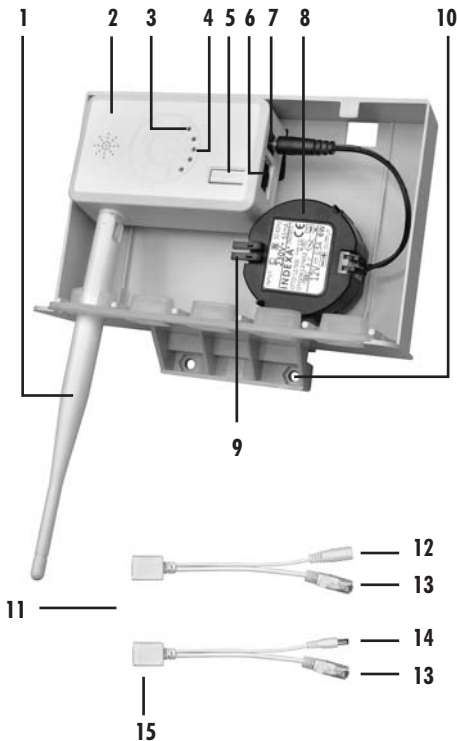
- Stromeinspeisungs-Adapterset SE01 und Steckernetzgerät (bei Verwendung als Access Point)
- Befestigungsmaterial
- Bedienungsanleitung
- Schnellanleitung

4. Technische Daten

WR100EW

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)	178 x 134 x 70
Betriebstemperatur	$\pm 0^\circ\text{C}$ bis $+ 40^\circ\text{C}$
Netzgerät	
Betriebsspannung	230 V \sim 50 Hz
Ausgangsspannung	12 V \equiv DC, 500 mA

5. Ausstattung



- 1 Antenne
- 2 WLAN-Repeater / Access Point WR100E
- 3 LED-Verbindungsanzeige "NVR" (leuchtet bei Betrieb, dabei heller bei Netzwerkverbindung)
- 4 LED-Anzeige "IPCAM 1/2/3/4" (leuchtet bei angemeldeter Netzwerkkamera)
- 5 Taste "Reset/ Sync" zum Anmelden der Kamera / zum Resetten
- 6 RJ45-LAN-Anschluss zum Netzwerk
- 7 Anschluss für Netzgerät
- 8 Einbaunetzgerät
- 9 Hebelklemmen 230 V
- 10 Montagelöcher
- 11 Stromeinspeisungs-Adapterset SE01
- 12 DC-Buchse
- 13 RJ45-Stecker
- 14 DC-Stecker
- 15 RJ45-Buchse

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, undquetschen oder klemmen Sie sie nicht anderweitig ein. Andernfalls drohen Lebens- und Verletzungsgefahr!
- Um Verletzungen vorzubeugen, befestigen Sie den WR100EW 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 Spannungsanschluss des Netzgerätes, dass die Spannung vorschriftsmäßig mit 230 V \sim AC, 50 Hz und mit einer vorschriftsmäßigen Sicherung ausgestattet 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!
- Ziehen Sie bei längerem Nichtbenutzen des Gerätes immer das Netzgerät aus der Steckdose.
- Schließen Sie kein beschädigtes Gerät (z.B. Transportschaden) an. Fragen Sie im Zweifelsfall Ihren Kundendienst. Reparaturen und Eingriffe an den Geräten dürfen nur von Fachkräften durchgeführt werden. Trennen Sie bei Beschädigungen sofort die Netzstromversorgung! Ziehen Sie das Netzgerät aus der Netzsteckdose. Andernfalls droht Lebensgefahr durch Stromschlag und Brand!

7. Platzierung

Achtung: Montieren Sie die Kamera und den WR100EW immer erst nachdem Sie die WLAN-Verbindung zwischen den Komponenten aufgebaut haben.

Bevor Sie den WR100EW ggf. montieren, planen Sie zuerst die Montagestelle des WR100EW 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 WR100EW eine Steckdose befindet. Optional können Sie ein Verlängerungskabel verwenden (s. Kapitel "Optionales Zubehör").

8. Anschluss und Inbetriebnahme

8.1. Inbetriebnahme des WR100EW

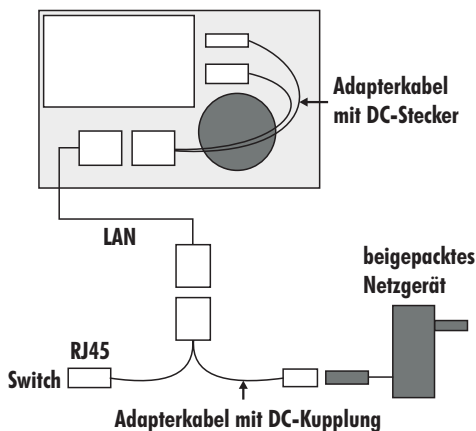
Anschluss als Repeater

- Schließen Sie das Netzgerät [8] über die Hebelklemmen [9] an 230 V ~ AC an, und warten Sie ca. 30 Sekunden, bis der WR100EW vollständig hochgefahren ist und die LED "NVR" leuchtet.

Anschluss als Access Point mit Stromspeisung über LAN-Kabel

- Stecken Sie den Stecker zum eingebauten Netzgerät [8] aus.
- Stecken Sie den DC-Stecker des Stromspeisungs-Adaptersets SE01 in den Anschluss für das Netzgerät [7] und den RJ45-Stecker des SE01 in den RJ45-LAN-Anschluss [6].
- Verbinden Sie das Gerät mit Hilfe des SE01 Adapterkabels über

CAT-Kabel mit dem Switch/Router und dem Steckernetzgerät.



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 Kameras/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



Verbinden Sie den WR100E bei Nutzung als Access Point per Netzwerk-Kabel mit einem Router/ Switch (gleiches Netzwerk wie Recorder WR100R/ Monitor WR100M)

• Repeater



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

- Klicken Sie im Kameramenü auf "Aktualisieren".
- In der oberen Liste erscheint der WR100E(EW (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 Netzwerkabel wieder entfernt werden.

8.3 Eine Kamera am WR100E anmelden

- Verbinden Sie den RJ45-LAN-Anschluss [5] des WR100E/EW über Netzwerkabel 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.

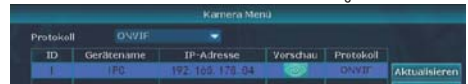
- Trennen Sie nun die Netzkabelverbindung zwischen WR100E und Kamera, die Kamera läuft nach ein paar Sekunden im WLAN-Betrieb weiter. Als Bestätigung leuchtet die entsprechende LED "IPCAM" 1/2/3 oder 4[2] auf (es leuchten immer so viele LEDs, wie Kameras angemeldet und eingeschaltet sind).
- Wiederholen 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/EW angemeldeten Kameras gefunden werden.

8.4 Kamera(s) 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 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 (WR100EW dient als WLAN-Access Point)

- Verbinden Sie den WR100EW per Netzwerkkabel mit demselben Router/Switch, mit dem auch Ihr DVR verbunden ist

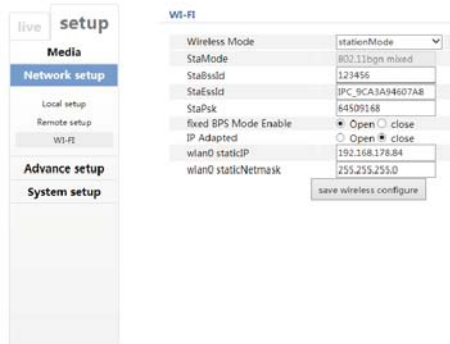


- Stellen Sie am DVR den Modus "XVR" ein.
- Stellen Sie, wenn nötig, AHD-Kanäle auf Netzwerkanäle um, entsprechend der Anzahl der hinzuzufügenden Kameras.

- 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 "WLAN 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 [5] am WR100EW für ca. 10 Sekunden wird der WR100EW zurückgesetzt und es ertönt "Restore factory settings".

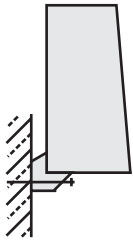
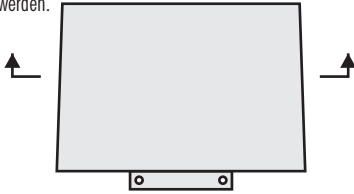
- Die Kamera-Anmeldungen bleiben bestehen.
- Im Kameramenü des Recorders WR100R / Monitors WR100M können über das Menü "Repeater" alle angemeldeten Kameras

am WR100E gelöscht werden, indem auf die entsprechenden Kameras geklickt wird. Direkt am WR100E ist es nur möglich, Kameras zu überschreiben.

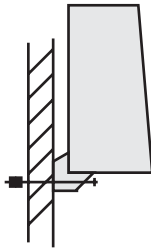
- Der WR100EW befindet sich nach dem Reset wieder im Access Point-Modus und muss bei Nutzung als Repeater wieder mit dem Recorder WR100R / Monitor WR100M per Netzkabel verbunden werden. Die WLAN-Verbindung muss dann erneut aufgebaut werden.

10. Montage

Der WR100EW kann an einer Wand oder an einem Mast montiert werden.



Wandmontage



Mastmontage

11. Wartung und Reinigung

- Das Modul WR100E 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. 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.

13. Vereinfachte EU-Konformitätserklärung



Hiermit erklärt INDEXA GmbH, dass der Funkanlagentyp WR100EW der Richtlinie 2014/53/EU entspricht. Der vollständige Text der EU-Konformitätserklärung ist unter der folgenden Internetadresse verfügbar: http://www.indexa.de/w2/f_CE.htm.

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Paul-Böhringer-Str. 3
74229 Oedheim
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