

USER'S GUIDE FOR BASIC INSTALLATION OF MRx18

1. IMPORTANT

The electrical installation must be performed in accordance with the safety regulations of the local authorities. The repeater must not be opened. The antennas of the repeater have to be installed in a way that meets regional and national RF exposure compliance requirements.

Attention: Observe that SMA connectors have a specified torque of max. 1.45 Nm.
Do not over-tighten the connectors or screws. The miniRepeater is only intended for indoor usage.

Download of Detailed User's Guides for MRx18:

Go to <https://www.andrew.com/> and type the product name in the search box on the top of the page.

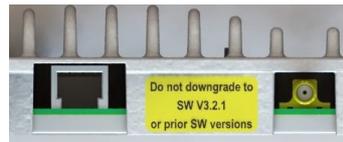
Enter the URL in your browser or scan the QR code with your mobile and scanner app.

By default, the MRx18 is delivered with $P_{out} = +18$ dBm (exception: for MR418 $P_{out} = +19$ dBm) and Autogain enabled.

Depending on application/network, the maximum output power stated in the datasheet must not be exceeded in order to meet the respective standards. The value for maximum output power can be changed via webpage.

Note 1: Local access to the settings for the repeater is optimized for **Chrome**.

Note 2: As the new PCBs of the MRx18 single band are only supported by SW V3.3.0 or later, a downgrade to a prior SW version must NOT be done (as indicated by the corresponding label on the unit) After a downgrade, the unit will no longer function properly and installing a SW version \geq V3.3.0 will be required.



Note 3: With **SW V3.5.0** or later (for **MR418** with **SW V1.3.0** or later), proceed as follows for login:

1. The Ethernet connector needs to be enabled before it can be used. To do so, press the "Reset and installation assistance" switch for at least 10 seconds until the ALC LED flashes 3-4 times.
2. Enter URL: <http://192.168.1.1>, Username: MRx18, Password: MRx18 (case-sensitive).

2. QUICK-START CHECKLIST

- Mount the repeater to a wall.
- Install antennas (donor and coverage antenna).
- Provide the repeater with power. Use only the power supply (PSU) delivered with the unit. Do not modify the PSU and cable. **Do not mount the PSU to the ceiling.**

Connect the DC connector of the power supply and provide mains to the power supply. For correct insertion, the DC connection provides a keyed DC connector (at the PSU cable) and a notched DC connector (at the repeater). For secure operation, the PSU DC connector provides a locking sleeve that has to be pulled for opening the connection.



- Use a laptop or PC to connect to the repeater via Ethernet (Ethernet connector next to coverage antenna SMA connector; use a straight CAT6 patch cable) and adjust amplified frequencies in tab Settings – Radio Frequency. For login details (e.g. the requirement to activate the Ethernet connector from certain SW versions onwards or URL) refer to **Note 3** in section 1.

To use the "Antenna assistant" installation help, proceed as follows:

- After (!)** the boot process (boot process: Red ALC LED is blinking for four seconds), press the "Reset and installation assistance" button (see next page) for at least **five** seconds (but not longer than 9 sec) until the ALC LED flashes for two times, and then release the button immediately. This will set the gain to max. value and disable Autogain for about four minutes. The status LED will be blinking red/green. Align the donor antenna towards the BTS/Node B tower to reach the RSSI level that enables optimized performance. Check the RSSI level at the display. After four minutes, the gain and Autogain are adjusted to the values prior to the activation of the antenna alignment.

- Align the coverage antenna.
- Check the LEDs of the repeater.
The Status LED should show green.

The ALC LED should be off.

Vary donor antenna alignment to adjust the RSSI in order not to reach ALC (i.e. ALC LED off).

Low input power ($P_{in} < \max. P_{out} - \text{Gain}$) might cause reduced output power.

Too high input power ($P_{in} > \max. P_{out} - \text{Gain}$) might lead to an ALC alarm.

Vary donor antenna alignment for optimal operation. If the input power is still too high, use external attenuators in the donor link.

If " < -80 " and no bars are shown in the display, the input level from the BTS/Node B is too low. Check the cable to the donor antenna, the donor antenna itself, and its alignment towards the BTS/Node B.

The display will be switched off automatically after 10 minutes. To switch it on again, press the Reset-and-installation-assistance button.

For a more detailed description and further information on how to customize the miniRepeater via Ethernet, **please read the manual for the MRx18 (see download link).**

Reset-and-installation-assistance switch



3. COMPLIANCE / KONFORMITÄT

Please observe the meanings of the following symbols used in our equipment! / Bitte die Bedeutung der folgenden auf unseren Geräten verwendeten Symbole beachten!

Symbol	Conformity / Konformität	Meaning / Bedeutung
CE	CE	To be sold exclusively to mobile operators or authorized installers – no harmonized frequency bands, operation requires license. Intended use: EU and EFTA countries / Zum ausschließlichen Verkauf an Mobilfunkbetreiber oder autorisierte Installateure – Betrieb bedarf einer Lizenz. Bestimmungsgemäßer Einsatz: EU und EFTA Staaten
		Indicates conformity with the RED directive 2014/53/EU and RoHS directive 2011/65/EU. / Zeigt Konformität mit der Richtlinie RED 2014/53/EU und RoHS 2011/65/EU
CE 0700	CE	Indicates conformity with the RED directive 2014/53/EU and RoHS directive 2011/65/EU certified by the notified body no. 0700. / Zeigt Konformität mit den Richtlinien RED 2014/53/EU und RoHS 2011/65/EU an, zertifiziert von der benannten Stelle Nr. 0700.

Hereby Andrew Wireless Systems declares that the radio equipment type Repeater is in compliance with Directive 2014/53/EU. / Hiermit erklärt Andrew Wireless Systems, dass der Funkanlagentyp Repeater der Richtlinie 2014/53/EU entspricht.

The full text of the EU declaration is available via the product catalog. To find the document (DoC), go to <https://www.andrew.com/> and type the product name in the search box on the top of the page. / Der vollständige Text der EU Konformitätserklärung ist im Produktkatalog auf der Internetseite <https://www.andrew.com/> hinterlegt. Geben Sie den Produktnamen in das Suchfeld oben auf der Seite ein, damit Sie zum Dokument (DoC) gelangen.

According to the DoC, our "CE"-marked equipment can be used in all member states of the European Union. / Unsere "CE"-gekennzeichneten Geräte können bestimmungsgemäß in allen Mitgliedsstaaten der Europäischen Union eingesetzt werden.

Specified normal operation / Bestimmungsgemäße Verwendung:

The repeater MRx18 is used for indoor mobile networks to enhance signals if weak signal transmissions occur within the coverage area. / Der Repeater MRx18 wird innerhalb von Mobilfunknetzen zur Verstärkung von Mobilfunksignalen in schlecht oder gar nicht versorgten Bereichen im Innenbereich verwendet.

Note / Hinweis: Only license holders for the respective frequency range are allowed to operate this unit. / Das Gerät darf nur von Lizenzinhabern für die jeweiligen Frequenzen betrieben werden.

For further compliance information, please read the manual. / Für weitere Informationen zur Konformität lesen Sie bitte das Handbuch.

4. LIST OF CHANGES

Version	Changes / Änderungen	Release Date
M0139AEU	-	03-September-2025
M0139AEV	- Modified layout and editorial updates - New link for download of manuals	29-October-2025

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