

WREX Wi-Fi Repeater Extender – Quick Installation Guide

For Online Support visit: <http://www.security.honeywell.com/hsc/resources/MyWebTech/>

General information

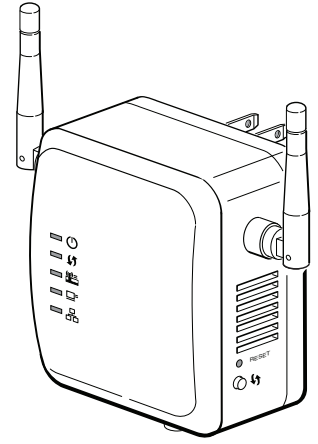
This guide provides information on installing and configuring Honeywell's WREX Wi-Fi Repeater Extender (referred to as the Repeater). The repeater enables extending the wireless range of your Honeywell IP cameras when used with Honeywell's WAP-PLUS Wireless Access Point. Some major features:

- Functions as a wireless repeater that communicates with Honeywell's WAP-PLUS to greatly extend the range of IP cameras or the ACU Wireless Analog Converter Unit (ACU).
- Wireless communications utilizes the 802.11b/g/n protocol with WPS security. WPS (Wi-Fi Protected Setup) is a standard for easy setup of a secure wireless network.

IMPORTANT: This repeater is for indoor use only. DO NOT mount this within 4 feet (1.2m) of any wireless device.

To utilize this repeater, you must have:

- An AlarmNet account for a GSM or Internet communicator, or a "Video Services Only" account.
- Total Connect account. (If an account does not exist, the dealer should use the AlarmNet Direct website to set up a Total Connect account for the customer.)
- Internet access with a wireless router capable of DHCP hosting. The router must also support one button WPS data encryption. If this is not available, order the Honeywell WAP-PLUS Wireless Access Point for connection to your router.



Component identification

POWER indicator

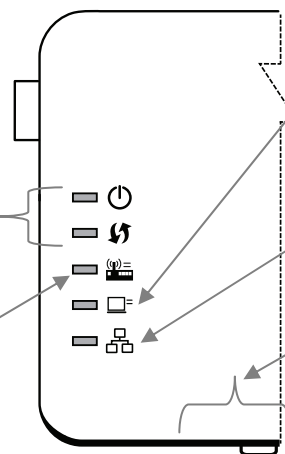
- Green – Power on.
- Blinking – Will blink for up to 40 seconds during the initial start up.
- Amber – System failure.

WPS indicator

- Green – Lights for about 2 minutes when the WPS button is pushed.
- Green Slow Blinking – WPS is activating.
- Green Fast Blinking – WPS failure.

WAP-PLUS Uplink signal strength indicator

- Green – Signal strength is good.
- Amber – Signal strength is normal.



Wi-Fi Client connected indicator

One or more client devices are present. Blinks when data is being transferred.

- Green – Signal strength is good.
- Amber – Signal strength is normal.

Wired Client connected indicator

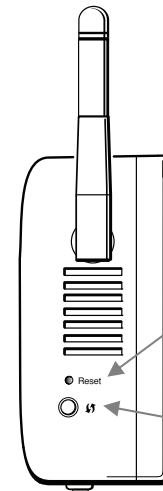
Green – Wired client is present.

Wired Client connector (Ethernet)

Underside (not shown) – Can be connected to an IP camera or ACU device for wired connectivity up to 300ft.

POWER button

Depress to power the repeater.



Connect to an outlet that is always on.

RESET button

Resets repeater to the factory default settings. (Use a paper clip to depress and hold for 12 seconds, then RELEASE.)

WPS button

Used during setup to configure wireless encrypted connectivity.

Planning the repeater installation

The installation of repeater, cameras, and WAP-PLUS can be as simple as installing one camera, or up to six cameras per Total Connect account. In large installations it may include a mix of wireless, and wired cameras.

The installer should work closely with the customer to achieve a satisfactory installation.

Layout Considerations:

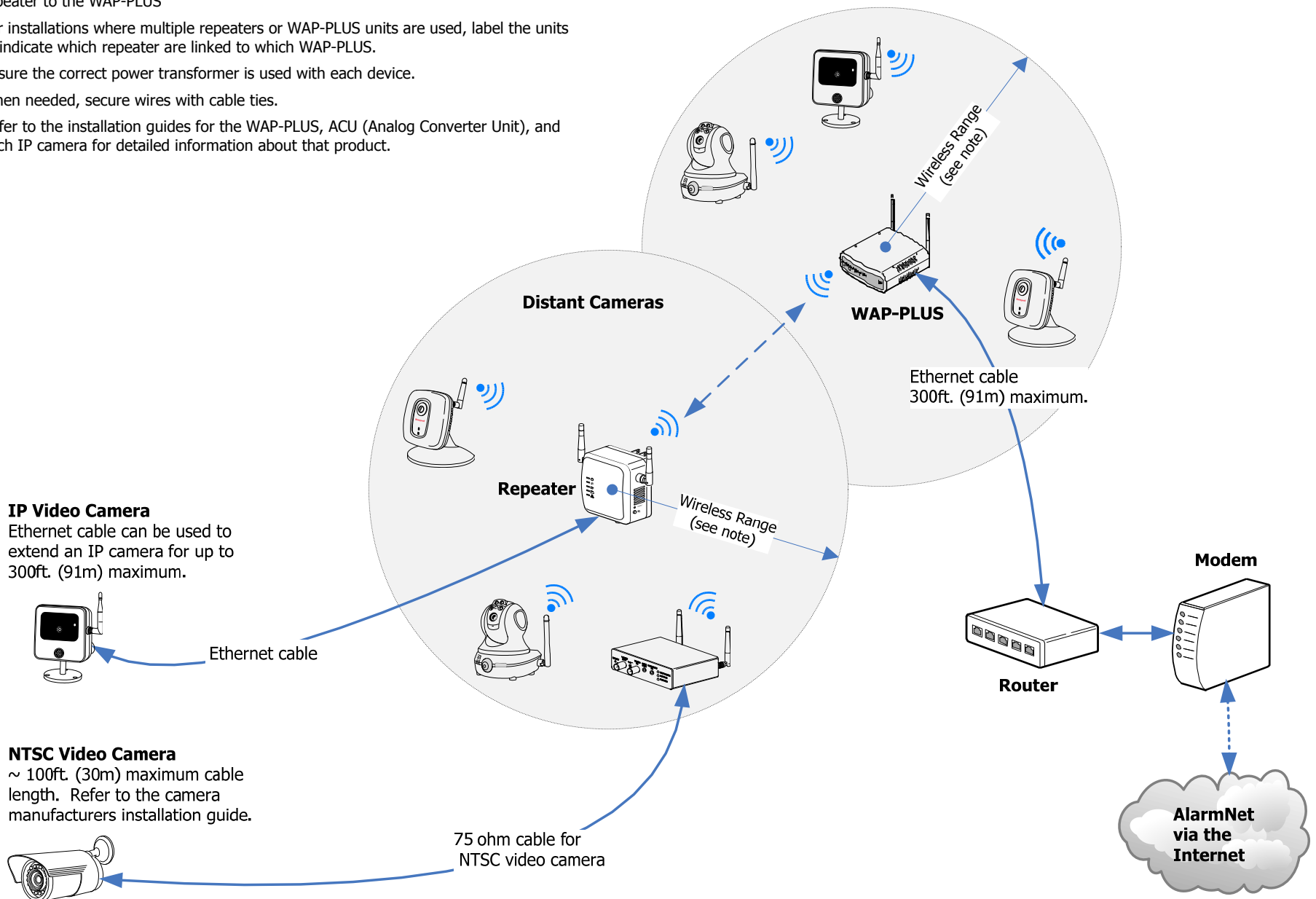
- Depending on layout and distances, one or more Repeaters or WAP-PLUS units may be needed. Only one Repeater per WAP-PLUS can be used.
- Wireless distance may be reduced by thick walls, wire lath, and large metal objects. For installations where wireless connectivity is poor, see if the WAP-PLUS has the newer WAP-ANT5dB antennas. They are approximately 6 inches (15cm) long. If not, they can be ordered to retrofit the WAP-PLUS.
- Each close IP camera or ACU will communicate directly to the WAP-PLUS.
- Each distance IP camera or ACU (Analog Converter Unit) will communicate through the repeater to the WAP-PLUS
- For installations where multiple repeaters or WAP-PLUS units are used, label the units to indicate which repeater are linked to which WAP-PLUS.
- Ensure the correct power transformer is used with each device.
- When needed, secure wires with cable ties.
- Refer to the installation guides for the WAP-PLUS, ACU (Analog Converter Unit), and each IP camera for detailed information about that product.

Wireless Range:

The wireless range and bandwidth (data rate) are dependent on the wireless technology used; as determined by the 802.11b/g/n specifications. This determines the range and data transfer rate. For instance under ideal conditions, 802.11 g provides up to 125ft (38m) range, and 54Mbps/s data rate, and 802.11 n provides up to 230ft (70m) range, and 150Mbps/s data rate.

Other factors that reduce the range are thick walls, wire lath, large metal objects, and the number of cameras sending data.

Because of the many variables, the best way to determine if the installation is successful, is to test the finished installation by logging into the Total Connect website and checking each camera.



1. Installing the repeater

1. Refer to the previous topic to plan the installation.
2. For all cameras that are in range of the WAP-PLUS and DO NOT need the extended range of the Repeater, these cameras must be installed first. Refer to the camera's installation guide for directions. (Note, for existing systems this may have already been done.)
3. For all cameras that are out of range of the WAP-PLUS continue to the next step.
4. Select a power outlet for the WREX that is powered on all the time and not tied to a switch. Further, an outlet that is higher is preferable.
5. On the Repeater, depress the POWER button and allow time for the POWER indicator to stop blinking and remain steady (approximately 40 seconds).
6. Apply power to each camera that is to be associated with the Repeater.
7. Configure wireless security for the Repeater as described to the right.

NOTES:

- Refer to the installation guides for the WAP-PLUS, ACU (Analog Converter Unit), and each camera for detailed information about that product.
- If using more than one wireless camera, each must be configured for wireless security. Configure one camera at a time.
- When setting up a wireless configuration in very large buildings or buildings with dense walls, wireless communications may be marginal. It is best to first configure the system in the same room. Then upon successful configuration, place each camera in the desired location. Verify that all cameras exhibit good communications as indicated by a STEADY GREEN Power LED and a Network LED that occasionally BLINKS GREEN.

2. Configure wireless security

Linking the Repeater to the WAP-PLUS

1. Ensure the WAP-PLUS is on and fully booted (allow 2 minutes for the boot process to complete).
2. Ensure the Repeater is on and fully booted (approximately 40 seconds).
3. At the WAP-PLUS, press and hold the WPS button for **3 seconds**, then RELEASE. Verify the WAP-PLUS Security light starts blinking (other wireless access points may be different).
4. At the Repeater, within 1 minute, press and hold the WPS button for **5 seconds**, then RELEASE.
5. Verify the repeater's WPS indicator blinks slowly at first then the WAP-PLUS Uplink signal strength indicator lights steady green. (This process may take 5 minutes so be patient.) If the WPS indicator switches to a fast blink that indicates a WPS failure. Repeat the above steps.

Linking the Repeater to its associated cameras

1. Ensure the cameras are powered up and fully booted (allow 2 minutes for the boot process to complete).
2. At the Repeater, depress the WPS button, then RELEASE.
3. At the camera, within **1 minute**, click and RELEASE the WPS button on the camera.
4. Allow up to 45 seconds for the WPS process to complete. Then at the camera, verify successful wireless security as indicated by a STEADY GREEN Power LED and a Network LED that occasionally BLINKS GREEN. If these indicators are present you are done.
5. Repeat the above steps for each camera.

NOTES:

- If the WREX is power cycled, a camera may need 10-15 minutes to re-establish connectivity to the WREX repeater.
- If the camera is being used in a wireless mode, and the Reset button was used to restore factory defaults; you must delete that camera from the AlarmNet Direct account, and enroll it back into the account. Then reconfigure wireless security for that camera.

3. Enroll or edit the camera(s) in AlarmNet Direct

Dealers can enroll the camera and set up a Total Connect account for their customers by visiting the AlarmNet Direct website:

<https://services.alarmnet.com/AlarmNetDirect/>

→ Go to the online help and;

- For customers with no AlarmNet accounts – follow the procedure for "Creating a Video Services Only Account."
- For customers with an existing "Video Only" account – just add the new camera.
- For customers with an existing AlarmNet GSM or Internet communicator account – ensure the account number is green (registered) and the Has Remote Service Capabilities icon is present. Then just add the new camera.

When the Repeater and its associated cameras are set up and the customer's Total Connect account is established, they can view their video by visiting:

<http://www.mytotalconnect.com/>

The cameras are now ready for customer use.

- Have the customer log into their Total Connect account to view the video.
- If their PC does not have QuickTime® and Flash® player, you will be prompted to install or update these applications.
- If any of the cameras were mounted upside down, there is a setting to upright the image.
- At this time the location of each camera can be adjusted for the desired view.
- When adding, editing, or deleting a camera, the customer will receive email notification.
- For detailed camera operation refer to the Total Connect online help guide.

FEDERAL COMMUNICATIONS COMMISSION STATEMENTS

The user shall not make any changes or modifications to the equipment unless authorized by the Installation Instructions or User's Manual. Unauthorized changes or modifications could void the user's authority to operate the equipment.

CLASS B DIGITAL DEVICE STATEMENT

This equipment has been tested to FCC requirements and has been found acceptable for use. The FCC requires the following statement for your information:

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause 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:

- If using an indoor antenna, have a quality outdoor antenna installed.
- Reorient the receiving antenna until interference is reduced or eliminated.
- Move the radio or television receiver away from the receiver/control.
- Move the antenna leads away from any wire runs to the receiver/control.
- Plug the receiver/control into a different outlet so that it and the radio or television receiver are on different branch circuits.
- Consult the dealer or an experienced radio/TV technician for help.

INDUSTRY CANADA CLASS B STATEMENT

This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

FCC / IC STATEMENT

This device complies with Part 15 of the FCC Rules, and RSS210 of Industry Canada. 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 & de RSS 210 des Industries Canada. Son fonctionnement est soumis aux conditions suivantes: (1) Cet appareil ne doit pas causer d'interférences nuisibles. (2) Cet appareil doit accepter toute interférence reçue y compris les interférences causant une réception indésirable.

DECLARACIÓN COFETEL

La operación de este equipo está sujeta a las siguientes dos condiciones.

1. Es posible que este equipo o dispositivo no cause interferencia perjudicial y.
2. Este equipo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

DECLARACIÓN ANATEL

Este equipamento opera em caráter secundário, isto é, não tem direito a proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário.

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