RadioRA One-Way Transmitter Frequency Changing Procedures

When would this be needed?

When using two main repeaters in a RadioRA 2 system, or two processors in a RadioRA 3 system, the system will use different wireless channels on each repeater/processor to avoid communication issues.

Many wireless devices receive programming from the system wirelessly, including RF channel settings, and will automatically change their RF channels to match system settings. Some devices in the RadioRA product family, however, are One-Way Transmitters (OWTs), and will require manual channel configuration. Examples of OWTs include Radio Powr Savr wireless occupancy sensors and Pico wireless controls.

Whenever adding OWTs to a second main repeater in a RadioRA 2 system, or second processor in a RadioRA 3 system, the following procedures will be required for each OWT activated to the second repeater/processor, as well as for any OWTs being added to both main repeaters. The first main repeater or processor to be activated, will retain the default channel frequency, and channel adjustment will not be required for devices activated on the first repeater/processor.

All of the following procedures must always be completed with the system in device Activation mode.

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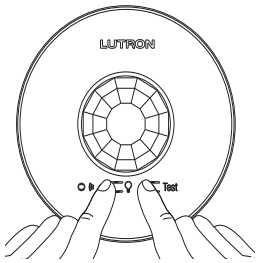
Third Generation Ceiling-Mount Sensors

LRF2-xCR2B

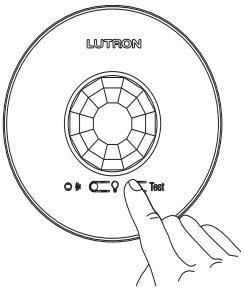
x= O for Occupancy, V for Vacancy



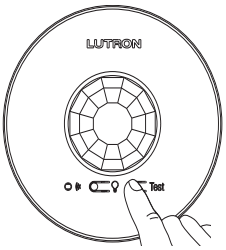
1. Remove the battery from the sensor.

2. Hold in the "💡" button, "Test" button, and one of the three buttons on the back of the sensor.

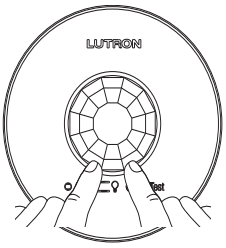
3. Continue to hold all three buttons while pushing the battery back into place. After inserting the battery, continue holding the three buttons for 6 seconds until the dome LED flashes rapidly.



4. The device is now in channel selection mode.
   - For RadioRA 2 systems: Cycle through the channels until you hear a beep from the repeater.
   - For RadioRA 3 systems: Cycle through the channels until the popup is shown in Lutron Designer.



5. Once the beep is heard from the repeater in a RadioRA 2 system, or the software popup is received in a RadioRA 3 system, the sensor is now on the correct channel.



6. Hold in the "💡"button and "Test" button for 6 seconds until the dome LED stops rapid flashing.

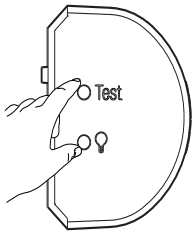
Now that the frequency has been matched up to the system, proceed with device activation as specified in the programming guide.

Wall-Mount Sensors (2-button style)

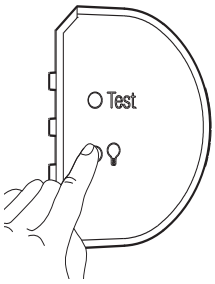
LRF2-xyLB

x= O for Occupancy, V for Vacancy; y= K for Corner, H for Hallway, W for flat Wall

1. Remove the battery from the sensor and hold in the "Test" button, the "💡" button, and one of the gray buttons on back.

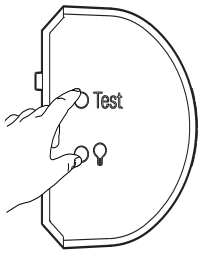


2. Continue to hold all three buttons while pressing the battery back into place. After inserting the battery, continue holding all three buttons for about 6 seconds until the LED flashes rapidly.



3. The device is now in channel selection mode. Press the "💡" button to cycle through the 15 channels.
   - For RadioRA 2 systems: Cycle through the channels until you hear a beep from the repeater.
   - For RadioRA 3 systems: Cycle through the channels until the popup is shown in Lutron Designer.

4. Once the beep is heard from the repeater in a RadioRA 2 system, or the software popup is received in a RadioRA 3 system, the sensor is now on the correct channel.



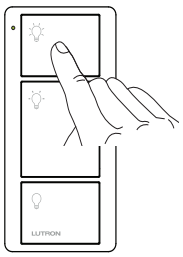
5. Press and hold the "Test" button and the "💡" button for about 6 seconds until the dome stops flashing. This will save the new channel and exit channel selection mode.

Now that the frequency has been matched up to the system, proceed with device activation as specified in the programming guide.

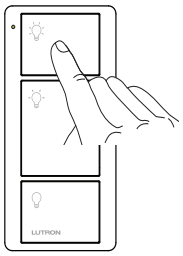
Second Generation Pico Wireless Controls

PJ-xB, PJ-xBRL, PJ2-xB, PJ2-xBRL, PJN-xB, and PJN-xBRL

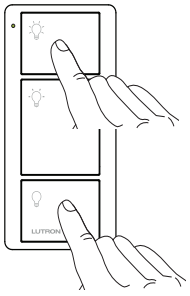
x= 2 for two button, 3 for three button



1. Triple tap and hold the "On/Open" (top) button of the Pico wireless control. Hold the button for at least 15 seconds. When the Pico wireless control is in Frequency Changing Mode, the following can be observed:
   - In a RadioRA 2 system, the main and/or auxiliary repeaters will beep.
   - In a RadioRA 3 system, a software popup will appear.



2. Press the "On/Open" (top) or "Off/Close" (bottom) buttons to cycle through the 15 RF frequencies.
   - For RadioRA 2 systems: Cycle through the channels until you hear a beep from the repeater.
   - For RadioRA 3 systems: Cycle through the channels until the popup is shown in Lutron Designer.



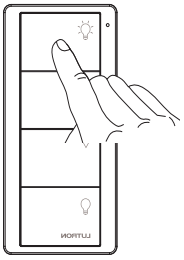
3. Once the beep is heard from the repeater in a RadioRA 2 system, or the software popup is received in a RadioRA 3 system, the Pico wireless control is now on the correct channel. Do not change the RF channel again.

4. Press and hold the "On/Open" (top) and "Off/Close" (bottom) buttons for at least 3 seconds to exit Frequency Changing Mode. Once the Pico wireless control successfully exits Frequency Changing Mode, the following can be observed:
   - In a RadioRA 2 system, the main and/or auxiliary repeaters will beep.
   - In a RadioRA 3 system, a software popup will be shown in Lutron Designer.

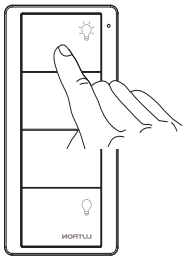
Now that the frequency has been matched up to the system, proceed with device activation as specified in the programming guide.

4-Button Pico Wireless Controls

PJ2-4B

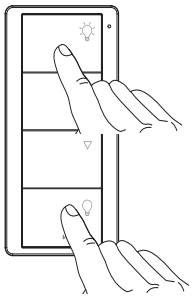


1. Triple tap and hold the top button of the Pico wireless control. Hold the button for at least 15 seconds. The Pico wireless control status LED will blink once per second to let you know that the Pico wireless control is now in Frequency Changing Mode.



2. Press the top or bottom buttons to cycle through the 15 RF frequencies.
   – For RadioRA 2 systems: Cycle through the channels until you hear a beep from the repeater.
   – For RadioRA 3 systems: Cycle through the channels until the popup is shown in Lutron Designer.

3. Once the beep is heard from the repeater in a RadioRA 2 system, or the software popup is received in a RadioRA 3 system, the Pico wireless control is now on the correct channel. Do not change the RF channel again.



4. Press and hold the top and bottom buttons for at least 3 seconds to exit Frequency Changing Mode. Once the Pico wireless control successfully exits Frequency Changing Mode, the following can be observed:
   – In a RadioRA 2 system, the repeater will beep.
   – In a RadioRA 3 system, a software popup will be shown in Lutron Designer.

Now that the frequency has been matched up to the system, proceed with device activation as specified in the programming guide.

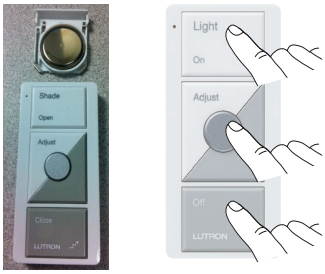
Legacy Devices

First Generation Pico Wireless Controls

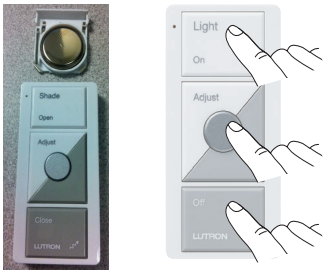
RRD-P3BRL-x (ONLY available with RadioRA 2 systems)

Note: For current 3BRL Pico wireless controls, see the "Second Generation Pico Wireless Controls" section.

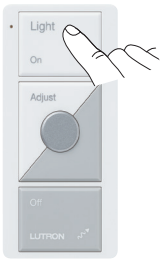
x= L for Lights, S for Shades



1. Remove the battery from the Pico wireless control, then press and hold the "Open/On", "Preset", and "Close/Off" buttons.

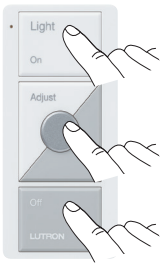


2. Continue to hold all three buttons while pressing the battery back into place. After inserting the battery, continue holding all three buttons for about 3 seconds until the LED flashes about once per second.



3. The device is now in channel selection mode. Cycle through the channels until you hear a beep from the repeater. Press the "Open/On" button to try the next RF channel (15 total), the "Close/Off" button to try the previous channel, or the preset button to retry the current channel.

4. Once the beep is heard from the repeater, the Pico wireless control is now on the correct channel. Do not change the RF channel again.



5. Hold in the "Open/On", "Preset", and "Close/Off" buttons for about 3 seconds until the LED stops flashing.

Now that the frequency has been matched up to the system, proceed with device activation as specified in the programming guide.

Legacy Devices *(continued)*

Wall-Mount Sensors (3-button style)

LRF2-xyLB (ONLY available with RadioRA 2 systems)

x= O for Occupancy, V for Vacancy; y= K for Corner, H for Hallway, W for flat Wall

1. Remove the battery from the sensor and hold in the “Sensor”, “Lights ON”, and “Lights OFF” buttons.

2. Continue to hold all three buttons while pressing the battery back into place. After inserting the battery, continue holding all three buttons for about 3 seconds until the LED flashes rapidly.

3. The device is now in channel selection mode. Cycle through the channels until you hear a beep from the repeater. Press the “Lights ON” button to try the next RF channel (15 total), the “Lights OFF” button to try the previous channel, or the Test button to retry the current channel.

4. Once the beep is heard from the repeater, the sensor is now on the correct channel. Do not change the sensor’s RF channel again.

5. Hold in the “Test”, “Lights ON”, and “Lights OFF” buttons for about 3 seconds until the dome LED stops flashing.

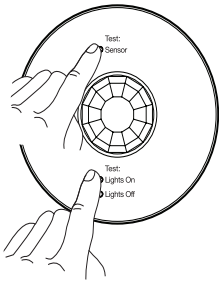
Now that the frequency has been matched up to the system, proceed with device activation as specified in the programming guide.

Legacy Devices *(continued)*

First and Second Generation Ceiling-Mount Sensors

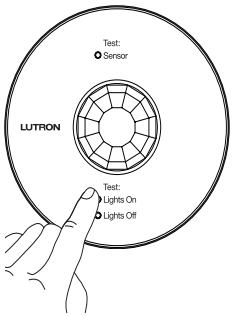
LRF2-xCRB (ONLY available with RadioRA 2 systems)

x= O for Occupancy, V for Vacancy



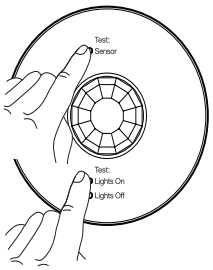
1. Remove the battery from the sensor by pulling on the small tab next to the battery compartment and hold in the “Test”, “Lights ON”, and “Lights OFF” buttons.

2. Continue to hold all three buttons while pushing the battery back into place. After inserting the battery, continue holding the three buttons for about 3 seconds until the dome LED flashes rapidly.



3. The device is now in channel selection mode. Cycle through the channels until you hear a beep from the repeater. Press the “Lights ON” button to try the next RF channel (15 total), the “Lights OFF” button to try the previous channel, or the Test button to retry the current channel.

4. Once the beep is heard from the repeater, the sensor is now on the correct channel. Do not change the sensor’s RF channel again.



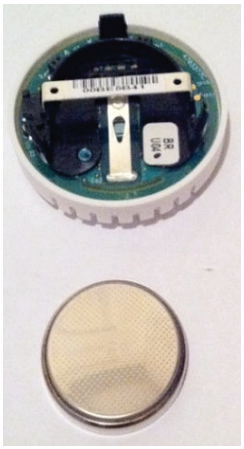
5. Hold in the “Test”, “Lights ON’”, and “Lights OFF” buttons for about 3 seconds until the dome LED stops flashing.

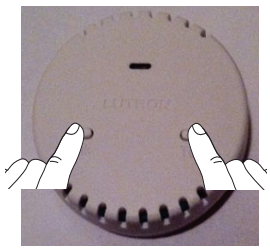
Now that the frequency has been matched up to the system, proceed with device activation as specified in the programming guide.

Legacy Devices *(continued)*

Temperature Sensors

LRF2-TWRB (ONLY available with RadioRA 2 systems)



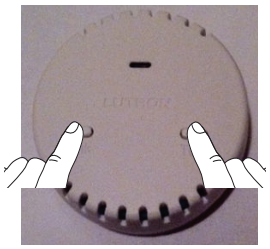


1. Remove the battery from the sensor and hold in the Test and Link buttons.

2. Continue to hold both buttons while sliding the battery back into place. After inserting the battery, continue holding both buttons for about 6 seconds until the LED flashes rapidly.

3. The device is now in channel selection mode. Cycle through the channels until you hear a beep from the repeater. Press the Test button to try the next RF channel (15 total), or the Link button to retry the current channel.

4. Once the beep is heard from the repeater, the sensor is now on the correct channel. Do not change the sensor's RF channel again.



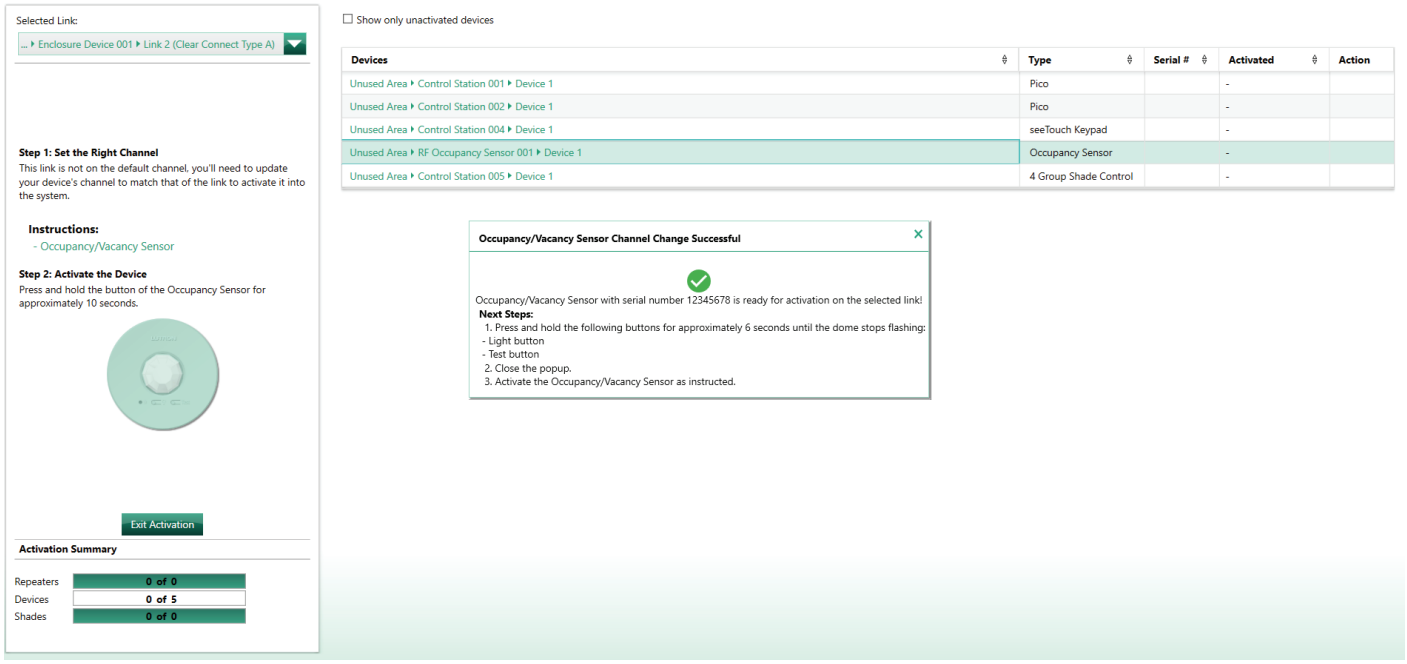
5. Hold in the Test and Link buttons for about 6 seconds until the LED stops flashing.

Now that the frequency has been matched up to the system, proceed with device activation as specified in the programming guide.

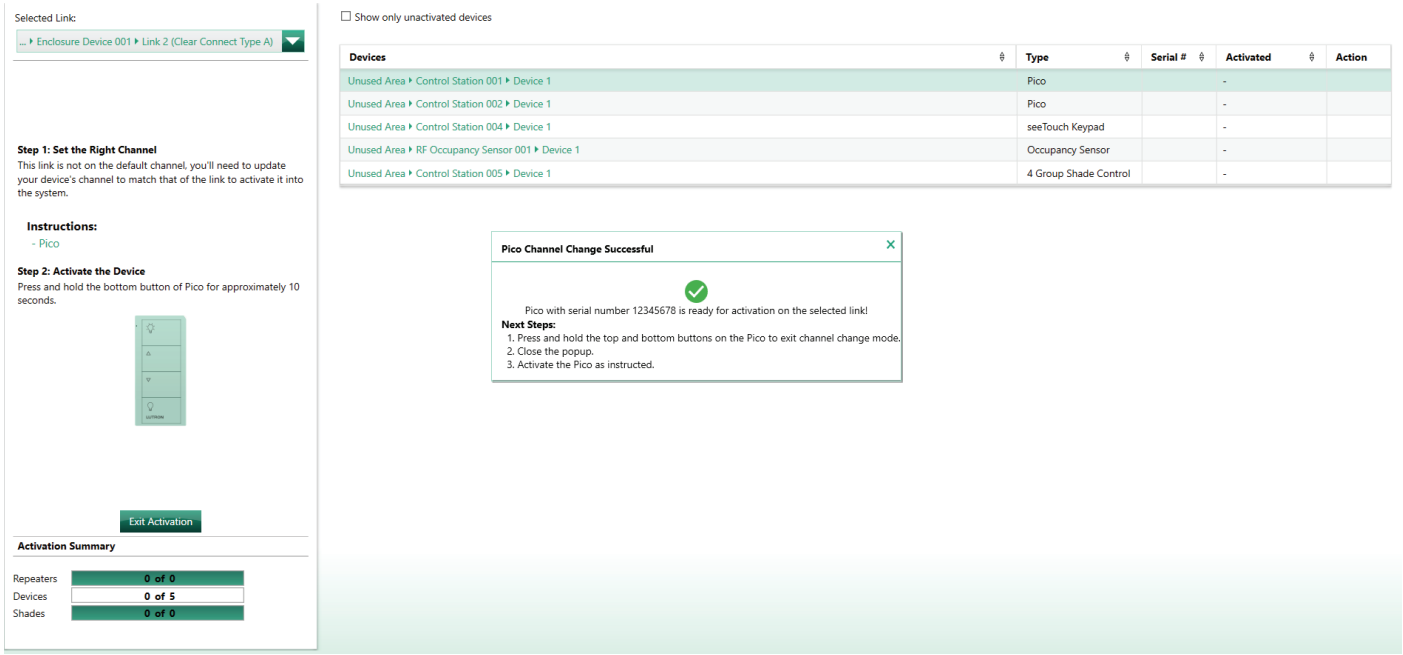
Appendix

Examples of Lutron Designer software popups for a RadioRA 3 system shown below.

Ceiling-Mount Sensor

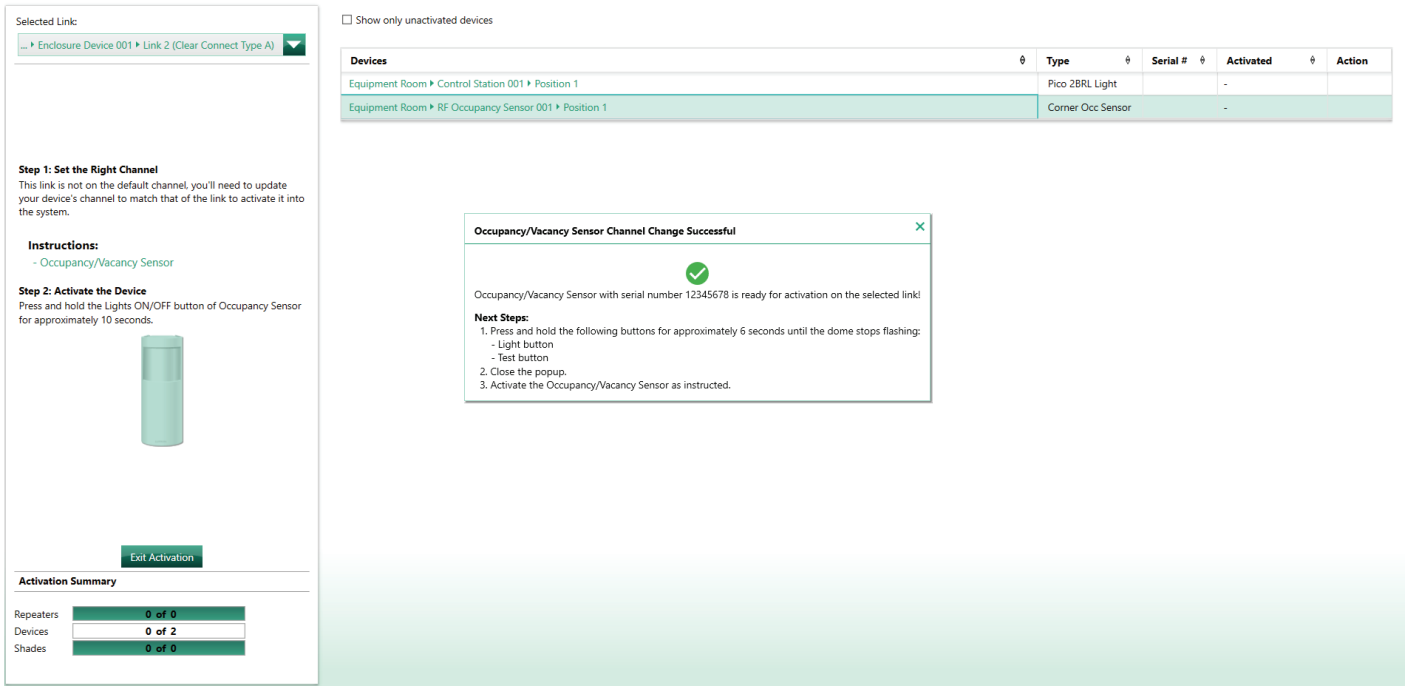


Pico Wireless Control



Appendix *(continued)*

Wall-Mount Sensor



Lutron Contact Numbers

WORLD HEADQUARTERS
USA
Lutron Electronics Co., Inc.
7200 Suter Road
Coopersburg, PA 18036-1299
TEL: +1.610.282.3800
FAX: +1.610.282.1243

support@lutron.com

www.lutron.com/support

North & South America
Customer Assistance
USA, Canada, Caribbean:
1.844.LUTRON1 (1.844.588.7661)
Mexico:
+1.888.235.2910
Central/South America:
+1.610.282.6701

UK AND EUROPE:
Lutron EA Limited
125 Finsbury Pavement
4th floor, London EC2A 1NQ
United Kingdom
TEL: +44.(0)20.7702.0657
FAX: +44.(0)20.7480.6899
FREEPHONE (UK): 0800.282.107
Technical Support: +44.(0)20.7680.4481

lutronlondon@lutron.com

ASIA:
Lutron GL Ltd.
390 Havelock Road
#07-04 King's Centre
Singapore 169662
TEL: +65.6220.4666
FAX: +65.6220.4333
Technical Support: 800.120.4491

lutronsea@lutron.com

Asia Technical Hotlines
Northern China: 10.800.712.1536
Southern China: 10.800.120.1536
Hong Kong: 800.901.849
Indonesia: 001.803.011.3994
Japan: +81.3.5575.8411
Macau: 0800.401
Taiwan: 00.801.137.737
Thailand: 001.800.120.665853
Other Countries: +65.6220.4666