# WR200





# WR200 WIRELESS EXTENDER

BRUKSANVISNING
OWNERS MANUAL
MANUEL D'UTILISATION
BEDIENUNGSANLEITUNG
MANUAL DEL PROPIETARIO
KÄYTTÖOPAS
GEBRUIKERSHANDLEIDING





SOUND OF SCANDINAVIA

# **audio** pro

#### SOUND OF SCANDINAVIA

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#### **WIRELESS EXTENDER WR200**

This device contains:

Unit 1: FCC ID: XCO-HSD81D82UT1, IC: 7756A-HSD81D82UT1 Unit 2: FCC ID: XCO-HSD81D82UT2, IC: 7756A-HSD81D82UT2

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful 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:

- Reorient or relocate the receiving antenna.
- -Increase the separation between the equipment and receiver.
- -Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -Consult the dealer or an experienced radio/TV technician for help.

To satisfy FCC RF exposure requirements, a separation distance of 20 cm or more should be maintained between this device and persons during device operation. To ensure compliance, operations at closer than this distance is not recommended. The antenna used for this transmitter must not be co-located in conjunction with any other antenna or transmitter.

This device complies with Part 15 of the FCC Rules. 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.

Pour satisfaire aux exigences de la FCC d'exposition aux radiofréquences, une distance de séparation de 20 cm ou plus doit être maintenue entre cet appareil et des personnes lors de fonctionnement du dispositif. Pour assurer la conformité des opérations au plus près que cette distance n'est pas recommandée. L'antenne utilisée pour ce transmetteur ne doit pas être co-localisés en conjonction avec toute autre antenne ou transmetteur.

Cet appareil est conforme à la Partie 15 des règlements de la FCC. L'opération est soumise aux deux conditions suivantes: (1) cet appareil ne peut causer d'interférences nuisibles, et (2) cet appareil doit accepter toute interférence reçue, y compris les interférences qui peuvent provoquer un fonctionnement indésirable.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

# **IMPORTANT SAFETY INSTRUCTIONS**

- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with a damp cloth.
- 7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9. Do not defeat the safety purpose of the polarized-type plug.

A polarized plug has two blades with one wider than the other. The wide blade is provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

- 10. Protect the power cord from being walked on or pinched particularly at plug, convenience receptacles, and the point where they exit from the apparatus.
- 11. Only use attachments/accessories specified by the manyfacturer.
- 12. Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with apparatus. When cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 13. Unplug this apparatus during lighting storms or when unused for long periods of time.
- 14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 15. To reduce the risk of fire or electronic shock, do not expose this apparatus to rain or moisture.
- 16. The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

# **ENGLISH**

#### **FEATURES**

- Extended room to room: up to 20m
- Extended range same room: up to 50m
- Extended range in line of sight: up to 100m
- Wireless range between unit 1 & 2: 10-30m
- Wireless full CD quality sound
- Sample rate: 48 KHz
- Dedicated proprietary protocol
- Master/zone volume relay

### **SPECIFICATIONS**

Type:

Wireless extender for Audio Pro network

Transmitting/receiving:

Unit 1:

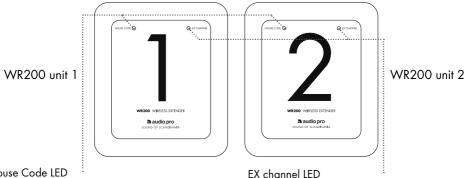
2.4GHz receiver + 5.8GHz transmitter

Unit 2:

5.8GHz receiver + 2.4GHz transmitter

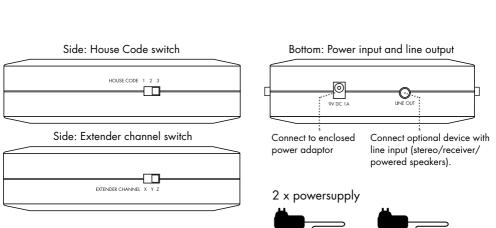
Size WxHxD: 95x110x30mm

## **OVERVIEW & CONTENTS**



House Code LED : Indicates wireless status for 2.4GHz. Solid blue for connection, flashing blue for lost connection. Red for no wireless connection or no transmission.

Indicates wireless status for 5.8GHz. Solid blue for connection, flashing blue for lost connection. Red for no wireless connection or no transmission.



# FUNCTIONALITY AND PERFORMANCE

## **HOW WR200 WORKS**

The WR200 system consists of two units, 1 and 2. Unit 1 is the first unit and receives a signal (2.4GHz) from the TX100 transmitter and then relays the signal on a different band (5.8GHz) to unit 2. Unit 2 then transmits the signal on the 2.4GHz band to all speakers.

Because the 5.8GHz band is stronger but shorter in range than the 2.4GHz band, WR200 will work around any difficult conditions in a house that the wifi signal encounters. We also use the 5.8Ghz band to avoid 2.4GHz audio signal conflict.







UNIT 2 Receives 5.8GHz Transmits 2 4GHz

#### AVOIDING SIGNAL CONFLICTS BY USING HOUSE CODES

On each unit there are House Code and Extender channel switches. When using WR200, it is important that unit 2 is set to a different House Code than that used by the TX100 transmitter. This is because, if set to the same House Code, unit 1 will receive signals from both TX100 and unit 2 and will not know which signal to use. This would result in a conflict in signals and the WR200 would not function correctly.

#### **EXTENDER CHANNEL**

The WR200 has 3 different settings for the internal 5.8GHz channels.

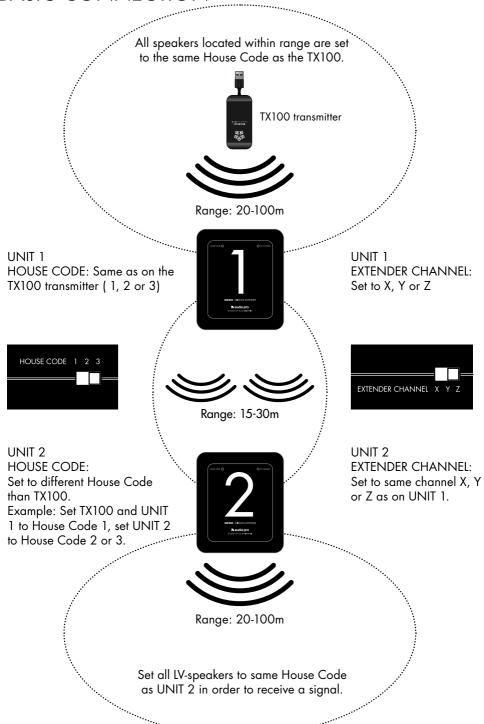
This feature makes it possible to use up to three WR200 systems in series in order to extend network even further. Or if your home has several wifi problems that need to be handled and circumvented. Each pair of WR200s must be set to the same extender channel X,Y or Z.

#### WHEN PLACING WR200

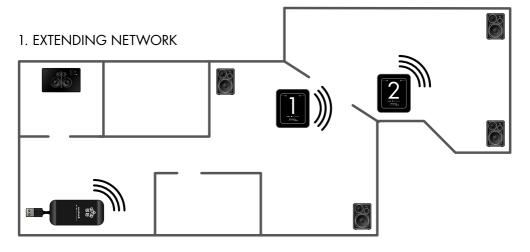
When you position units 1 and 2, you can use the LED indicators as a guide. They show a continuous blue light to indicate that a connection has been established between transmitter and receiver. When correctly placed, all LED's on both units 1 and 2 will show a continuous blue light. Try different placements to achieve the best signal. The TX100 transmitter must be connected to a sound source and have a continuous blue light showing.

The WR200 can be hung on a wall using the hole in the rear.

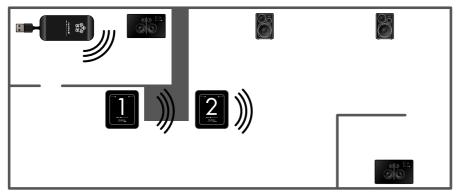
# **BASIC CONNECTION**



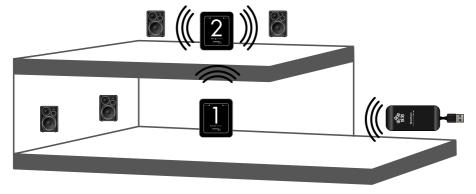
# **EXAMPLE CONNECTIONS**

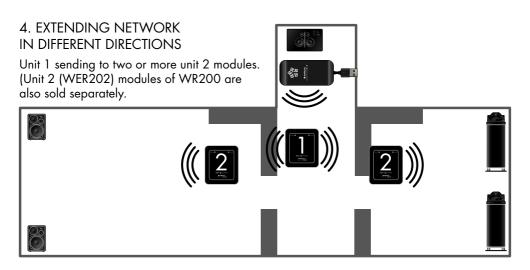


## 2. BYPASS DIFFICULT WALL CONDITIONS

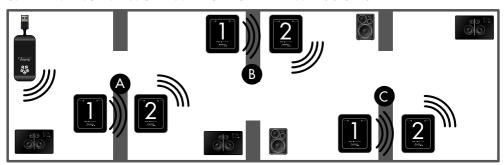


## 3. BYPASS DIFFICULT FLOOR CONDITIONS





#### 5. EXTENDING NETWORK WITH UP TO THREE WR200 SETS



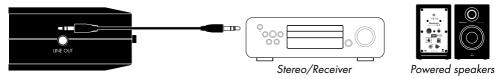
If using more than one WR200 set, use different extender channels (X, Z and Y) for all sets.

Change the house code accordingly;

Set A: receive house code 1, send house code 2. Set B: receive house code 2, send house code 3.

Set C: receive house code 3, send house code 1.

## CONNECT DEVICE DIRECTLY BY CABLE TO WR200



There is a line output on both unit 1 and 2. With this feature you can connect a stereo/ receiver or powered speakers directly to the WR200 via a cable. The devices will then play wireless audio at the same time as your wireless Living speakers.

Note: You can connect any device with line input.









The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

#### **WARNING:**

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.

#### **CAUTION:**

TO REDUCE THE RISK OF ELECTRIC SHOCK. DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

#### IMPORTANT SAFETY INSTRUCTIONS

- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- Do not use this apparatus near water.
- 6. Clean only with dry cloth.
- 7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8. Do not install near any heat sources such as radiators. heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 10. Only use attachments/accessories specified by the manufacturer.
- 11. Unplug this apparatus during lightning storms or when unused for long periods of time.
- 12. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 13. Damage Requiring Service

Unplug the apparatus from the wall outlet and refer servicing to qualified service personnel under thee following

- A. When the power-supply cord or plug is damaged, B. If liquid has been spilled, or objects have fallen into the apparatus,
- C. If the apparatus has been exposed to rain or water,

- D. If the apparatus does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the apparatus to its normal operation,
- E. If the apparatus has been dropped or damaged in any way, and
- F. When the apparatus exhibits a distinct change in performance this indicates a need for service.

#### 14. Object and Liquid Entry

Never push objects of any kind into the apparatus through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. The apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases shall be placed on the apparatus. Don't put candles or other burning objects on top of this unit.

#### 15. Batteries

Always consider the environmental issues and follow local regulations when disposing of batteries.

- 16. If you install the apparatus in a built-in installation, such as a bookcase or rack, ensure that there is adequate ventilation. Leave 20 cm (8") of free space at the top and sides and 10 cm (4") at the rear. The rear edge of the shelf or board above the apparatus shall be set 10 cm (4") away from the rear panel or wall, creating a flue-like gap for warm air to escape.
- 17. The power supply and power cord for this apparatus is intended for indoor use only.
- 18. Only use the enclosed AC adaptor.