

Wireless LAN
JRL-710AP3R
Manual



Global Communications

<http://www.jrc.co.jp>

JRC *Japan Radio Co., Ltd.*

Please read a user's manual about the command for setting change, display, and examination of this equipment.

CAUTION

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Compliance statement and notification

<FCC / IC>

Declaration of Conformity

Product Name: Wireless Lan

Model Number: JRL-710AP3R

This device complies with Part 15 of FCC Rules and RSS- Gen of IC 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, including interference that may cause undesired operation of this device.

RF exposure compliance:

This equipment complies with FCC/IC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines in Supplement C to OET65 and RSS- 102 of the IC radio frequency (RF) Exposure rules. This equipment has very low levels of RF energy that it deemed to comply without maximum permissive exposure evaluation (MPE) . But it is desirable that it should be installed and operated keeping the radiator at least 20cm or more away from person's body (excluding extremities: hands, wrists, feet and ankles) .

< FCC >

NOTE: 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 AC outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

In accordance with 47 CFR Part 15.407 (e) U-NII devices operating in 5.15-5.25GHz frequency bands are restricted to indoor operations only.

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

< IC >

Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause Undesired operation of the device.

Canada, avis d'Industry Canada (IC)

Cet appareil numérique de classe B est conforme aux normes canadiennes ICES-003 et RSS-210.

Son fonctionnement est soumis aux deux conditions suivantes : (1) cet appareil ne doit pas causer d'interférence et (2) cet appareil doit accepter toute interférence, notamment les interférences qui peuvent affecter son fonctionnement.

Informations concernant l'exposition aux fréquences radio (RF)

La puissance de sortie émise par l'appareil de sans fil est inférieure à la limite d'exposition aux fréquences radio d'Industry Canada (IC). Utilisez l'appareil de sans fil de façon à minimiser les contacts humains lors du fonctionnement normal.

Ce périphérique a également été évalué et démontré conforme aux limites d'exposition aux RF d'IC dans des conditions d'exposition à des appareils mobiles (les antennes se situent à moins de 20 cm du corps d'une personne).

<R&TTE>

CE Marking:

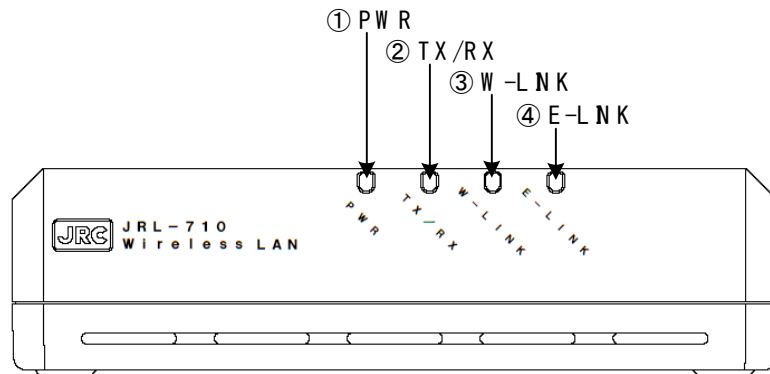


Please describe the following sentences to the label or the user manual of the product in each language in the sales country:

Hereby, *Japan Radio CO., Ltd.* declares that this JRL- 710AP3R is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

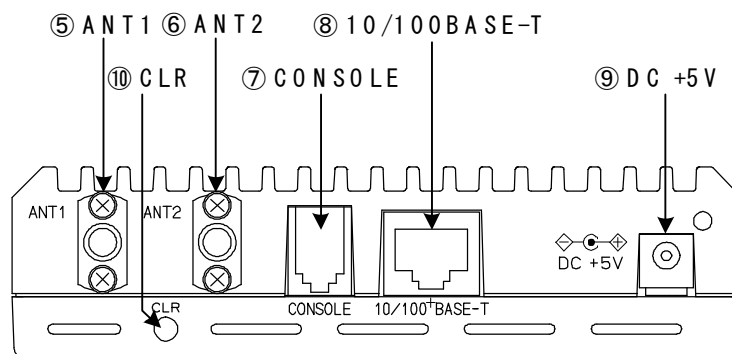
1. The name of each part

● Front side



Name	Remarks
① PWR	If a power supply is supplied to this equipment, the light will be switched on in "green."
② TX/RX	"Orange": Switch on the light during transmission. "Green": Switch on the light during reception. In STA, lighting "green" and "orange" is periodically repeated during AP search.
③ W- LINK	The light is switched on while STA connects with AP. The light is switched on during STA connection by "orange":AP setup. The light is switched on during AP connection by "green":STA setup.
④ E- LINK	The light is switched on when EtherNet links. "Orange" : The light is switched on in LINK as 10BASE- T. "Green" : The light is switched on in LINK as 100BASE- TX.

● Back side



Name	Remarks
⑤ ANT1	It is a connector which connects an antenna. (Main)
⑥ ANT2	It is a connector which connects an antenna. (Sub)
⑦ CONSOLE	It is a connector which connects maintenance PC.
⑧ 10/100BASE- T	It is a connector which connects Ethernet.
⑨ DC +5V	A power supply is connected and a power supply is supplied to equipment. This connection is unnecessary when supplying a power supply by PoE.
⑩ CLR	It is a switch which initializes a setup. The power supply of this equipment is switched on pushing the "CLR" button. If it is continuing pushing the "CLR" button, the "PWR" lamp will change from "green" to "orange" for 1 second. Then, equipment returns to initial setting.

2. Login

The IP address initial value of wireless LAN is set as "192.168.1.1/24."
Here, the login method in case the IP address of this equipment is "192.168.1.1/24" is shown.

Please read a user's manual about the command for setting change, a display, and an examination of this equipment.

① Login

PC which logs in to this equipment is prepared.

The IP address of PC is changed into "192.168.1. x/24" so that PC can communicate with this equipment. However, the value of "x" is 2 to 254.

② PC If a setup of PC is completed, this equipment will be connected with PC by cable. If it connects with PC normally, the "E-LINK" lamp will light up.

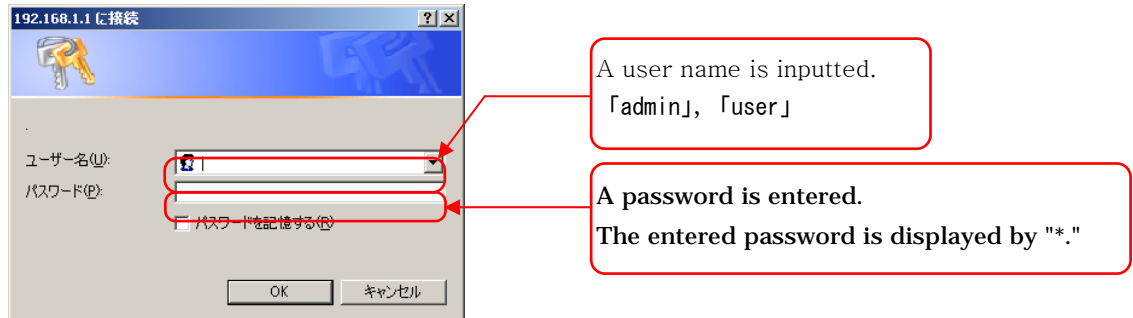
(1) User account

The following user names and passwords are set up in the initial state. Please change a password at the time of the first login for security protection.

User name	Password	Authority
admin	admin	Setting change / setting display
user	user	Setting change (only password) / setting display

(2) Login

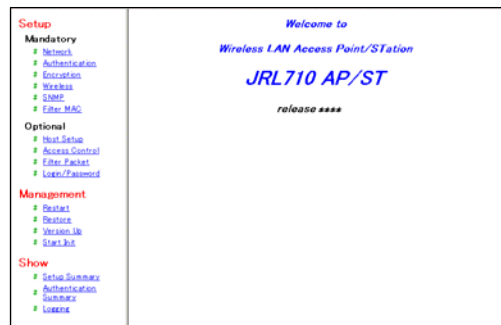
It logs in to this equipment using a WEB browser. If "http://192.168.1.1" is inputted into the address of a WEB browser, it will connect with this equipment and will display the following login windows.



Login windows

A top screen will be displayed if it succeeds in login. Now, login to this equipment is completion.

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Top screen

[Specification]

1. General

- 1) Input Power : DC IN; DC 5V+/- 5%
IEEE802.3af; DC48V (36 to 57V)
- 2) Frequency Range : 2.4GHz ISM band (2412 to 24*2MHz)
5GHz band(W52) (5150 to 5250MHz)
- 3) Radio Communication Standard: IEEE802.11a/b/g
- 4) Operating Temperature : - 30 to +65 degree C
- 5) Power Consumption : Less than 5W

2. Electrical Specification

- 1) Output Power : 8mW/MHz +20%, - 80%(2.4GHz band)
3mW/MHz +20%, - 80%(5GHz band(W52))
- 2) Number of Channel :
2.4GHz band; 13- channels
CH1: 2412MHz, CH2: 2417MHz, CH3: 2422MHz, CH4: 2427MHz,
CH5: 2432MHz, CH6: 2437MHz, CH7: 2442MHz, CH8: 2447MHz,
CH9: 2452MHz, CH10: 2457MHz, CH11: 2462MHz

5GHz band; 4- channels
CH36:5180MHz, CH40:5200MHz, CH44:5220MHz, CH48:5240MHz,
- 3) Channel Separation : 5MHz (2.4GHz band)
20MHz (5GHz band(W52))
- 4) Modulation : DSSS/OFDM
- 5) Access Method : Carrier Sense Multiple Access (CSMA)
- 6) Variable method of Transmission rate
 - i) IEEE802.11b mode : Automatic : 1,2,5.5,11Mbps
: Fixed : 1,2,5.5 or 11Mbps
 - i) IEEE802.11ag mode : Automatic :
6,9,12,18,24,36,48,54Mbps
: Fixed : 6,9,12,18,24,36,48, or 54Mbps

- 7) Band Width : Less than 26MHz (2.4GHz band)
Less than 19MHz (5GHz band(W52))
- 8) Wire connection interface : IEEE802.3 (CSMA/CD), 10/100Base- T
- 9) Antenna Impedance : 50ohms
- 10) Number of Terminal Capacity
 - a. Wireless Terminal : 127 terminals
 - b. Wired Terminal : 1024 terminals

3. Mechanical Specification

- 1) Antenna Connector : SMA- RP
- 2) 10/100Base- T Connector : RJ- 45
- 3) Antenna Connection Port : Two (2) port (One is for Diversity)
- 4) LED Indicator : a) Main power indicator
b) Tx/Rx indicator
c) Wireless LAN link indicator
d) Wired LAN link indicator
- 5) Clear Key (Reset) Switch : Factory default mode
- 6) Dimension : 121(W) x 32.8(H) x 100.5(D) mm
- 7) Weight : Approx. 400g

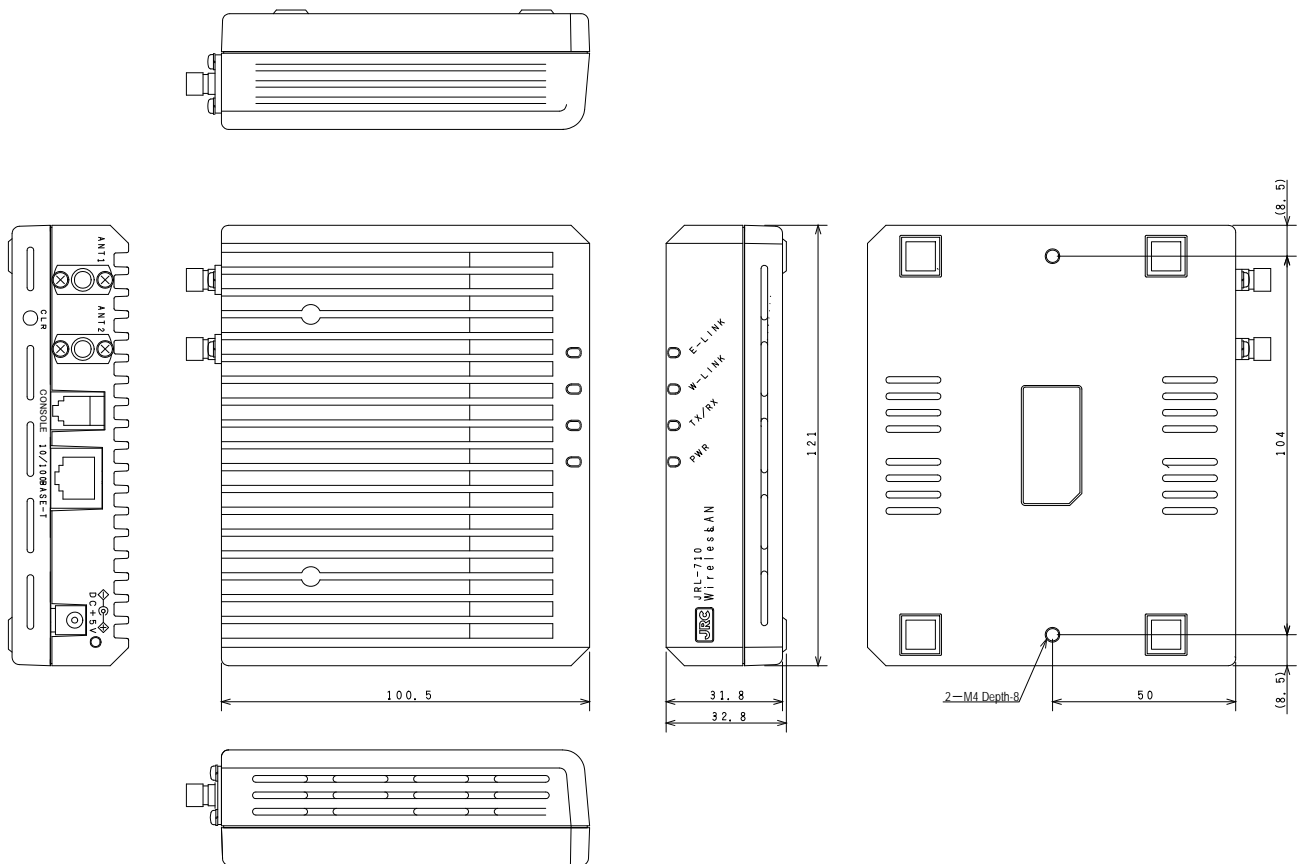
4. Support Function

- 1) Wireless Bridge
- 2) Roaming
- 3) SNMP (Simple Network Management Protocol)
- 4) Remote Monitoring
- 5) WEB Log In
- 6) Telnet Log In
- 7) Diagnostic Command

5. Security

- 1) 32 Characters ESSID (Extended Service Set ID)
- 2) Any ID Cancellation
- 3) SSID Stealth (Mask in Beacon)
- 4) MAC Address Filtering
- 5) Access Filter
- 6) WEP (Wired Equivalent Privacy) RC4 Algorithm (40/104/128bits)
- 7) WPA (Wi-Fi Protected Access)- PSK
 - i) TKIP
 - ii) AES
- 8) Packet Filter
- 9) IEEE802.11i

6. Outline Drawing



2.4 GHz/5.2GHz band wireless LAN module
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Do not copy

February 1, 2013

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