ARL2300 ETHERNET CONTROLLER

Remote control your AR2300/AR5001D receiver!

The ARL2300 Ethernet Controller is an option for the AR2300 and AR5001D communication receivers, which allows remote control and remote listening through the network. It can be used for various professional or law enforcement related applications which demand interception of radio communications or radio wave monitoring from a remote location.

The client software is based on the Java 2 platform and requires version 1.6 (Java SE 6 runtime) or higher to be installed on the PC on which it is running.

The settings of ARL2300 can be easily changed through the local network (DHCP mode) by using a browser, based on Apple's "Zero configuration" software Bonjour.

● **Connection to the receiver**

Simply connect the control, audio and LAN cables. ARL2300 is receiving power directly from the receiver through the control cable, it does therefore not need to be powered by an AC adapter.

ARL2300 front panel

■ **Client software**

The supplied control software does allow remote control of the receiver connected to ARL2300. Our software is non-intrusive as it needs no executable installation and therefore can be easily copied / removed to and from the PC. Once the router and the ARL2300 are properly configured on the receiver (server) side, the client software does communicate in real time with the receiver. No particular LAN settings are necessary on the client side.


ARL2300 on top of the AR2300 receiver

Selectable audio bit rate allows adjustment to your network speed (LAN, 3G, Wifi, etc…).

Functions supported by the client software:

- Five selectable VFOs.
- Step size
- Reception mode
- Ten selectable IF bandwidths
- Attenuator
- Antenna selection
- Spectrum display (800kHz-10MHz)
- Live listening & recorded audio playback
  (More functions will be supported in the future!)
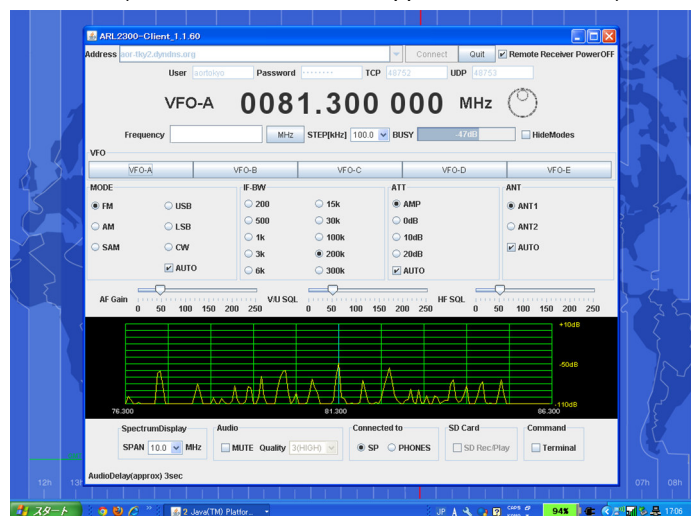
Computer requirements:

To use the client software in the best conditions, we advise these minimum specifications:

PC: CPU: Celeron M, 1GHz
        RAM: 512MB
        HDD: 1.5GB free space
        OS: Windows XP (SP.3)

MAC: CPU: Intel Core 2 Duo
        RAM: 512MB
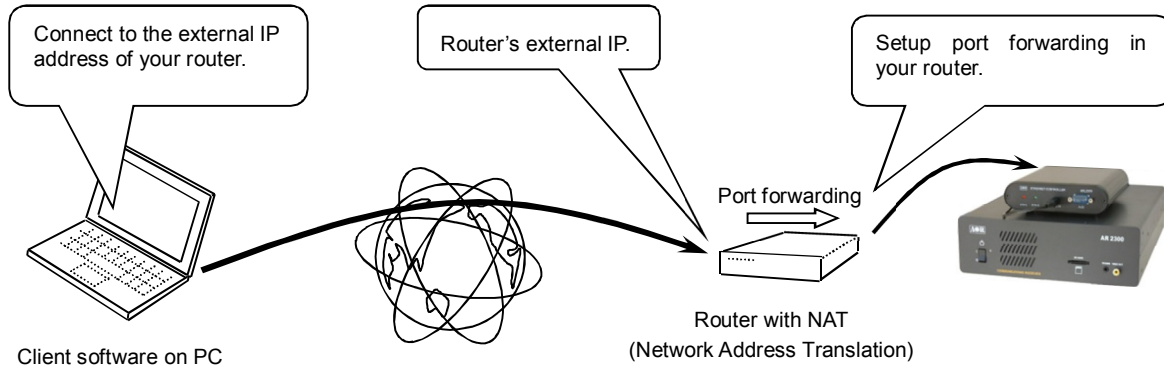   HDD: 1.5GB free space
        OS: OSX 10.5

A client software for Android tablet is under development.

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■ **Network configuration with a NAT router**

● PORT FORWARDING towards the IP address of ARL2300 must be setup in your router. As dynamically addressed IP addresses do often change by nature, it is necessary to have a GLOBAL IP address assigned to the external port of your router.

Connect to the external IP address of your router.

Router's external IP.

Setup port forwarding in your router.

Port forwarding

Client software on PC

Router with NAT
(Network Address Translation)

■ **Routed network configuration (no NAT)**

● As in an intranet where there is no network address translation, the client software is connecting directly to the IP address of ARL2300.

Connect to IP address of ARL2300.

IP address of ARL2300

Client software on PC

Router without NAT
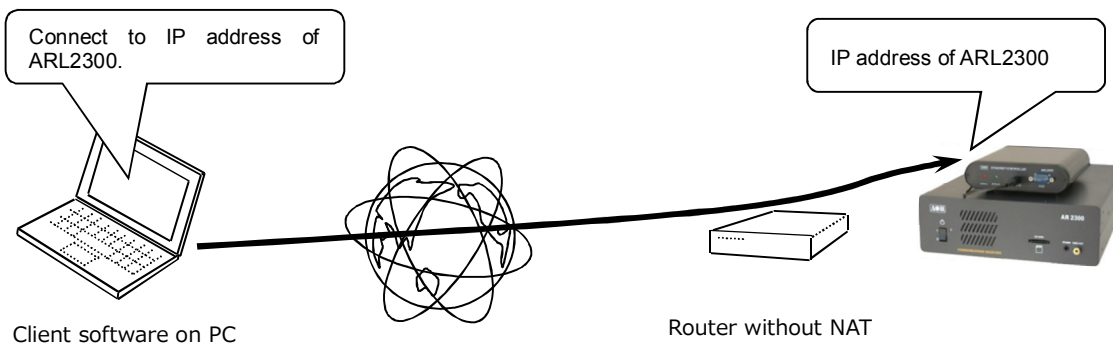
■ **ARL2300 specifications** (Subject to change without prior notice for product improvement or modification)

Function	Ethernet controller for AR2300/AR5001D receivers
LAN socket	RJ-45 type. 10BASE-T / 100BASE-TX10/100Mbps (auto-sense)
Receiver socket	D-sub 9pin type. Connection to AR2300/AR5001D receiver
Audio IN socket	3.5mm stereo used as mono. Connection to AR2300/AR5001D audio output
AUX socket	D-sub 9pin type, RS-232C (For future applications)
Network protocols	TCP (receiver control), UDP (voice transmission)
Required network speed	Constant 80, 160, 500kbps depending on sampling rate choice.
Controller	Cirrus Logic EP9307 CPU core ARM920T (200MHz)
Operating system	Linux (Kernel 2.6.x)
Power requirements	DC5V by ext. power source. When connected to AR2300/AR5001D, power supplied by receiver.
Power consumption	1.8W (typical)
Current consumption	Max. 400mA
Operating temperature	0 〜 50 °C
Dimensions	(H)35mm x (W)130mm x (D)150mm (projections excluded)
Weight	400g (without cables)

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