

NETWORK EXTENDER

IP-2000X-LT (Limitimer) IP-2000X-PC (PerfectCue)

Network Extender is an IP address-configurable adapter that allows multi-point control and display of countdown time from Limitimer®, speaker timer system or PerfectCue® remote cueing system.

An adapter is configured for one or the other product. It cannot be used for both.



The server-configured adapter can serve up to six (6) client-configured adapters to drive signal lights, slave timers or other cue lights across different networks.

Applications include video conferencing or meetings taking place across multiple locations.

How to set up:

Configuration is done with a Windows software application.

(<http://www.dsane.com/Network>) and a USB connection to the PC. The Network Extender must be powered.

1. Configure the first Network Extender as a **server**. Obtain an IP address from your network administrator or select an unused IP address within the range of your router (i.e., 192.168.1.2 to 192.168.1.254). Enter this as the Device IP address – not Server Address. Uncheck "Configure using DHCP" to activate the IP address input boxes.

If you want other devices to connect to this extender from outside of the local area network of your router, you must configure port forwarding in your router. Enter that port number in the Port input box. (Some port numbers are reserved for mail or internet traffic. You are safe to use a port number > 5000 and < 60000.)

The Gateway address is usually the first address of the router's range (i.e., 192.168.1.1). Obtain this information from the network administrator.

The Network Mask in most modest-size networks is 255.255.255.0. This means that the hosts on the local network are distinguished by the last octet. Larger networks will have masks such as 255.255.254.0 or 255.255.200.0.

Note: If you are just connecting the Network Extenders through a switch rather than a router, you don't need to set the Network Mask or the Gateway Address.

2. Configure the Extender used for the signal lights (or cue lights) as a client. Enter the Server Address with the device IP address that you used for the first Extender. Check to obtain an IP address through DHCP. Set the port number the same as was used for the server.

Note: If you are just connecting through an unmanaged switch, uncheck "Configure using DHCP" and enter a valid Device IP address.

Up to 6 clients can connect to one server. But additional server-configured Network Extenders can be daisy-chained to the first server, each additional server being able to serve 6 clients.

Local Network (Sample)

The image displays two screenshots of a network configuration application, likely for a Raspberry Pi, showing the 'Server' and 'Client' configuration screens. Red arrows indicate the assignment of IP addresses from a router to the devices.

Server Configuration:

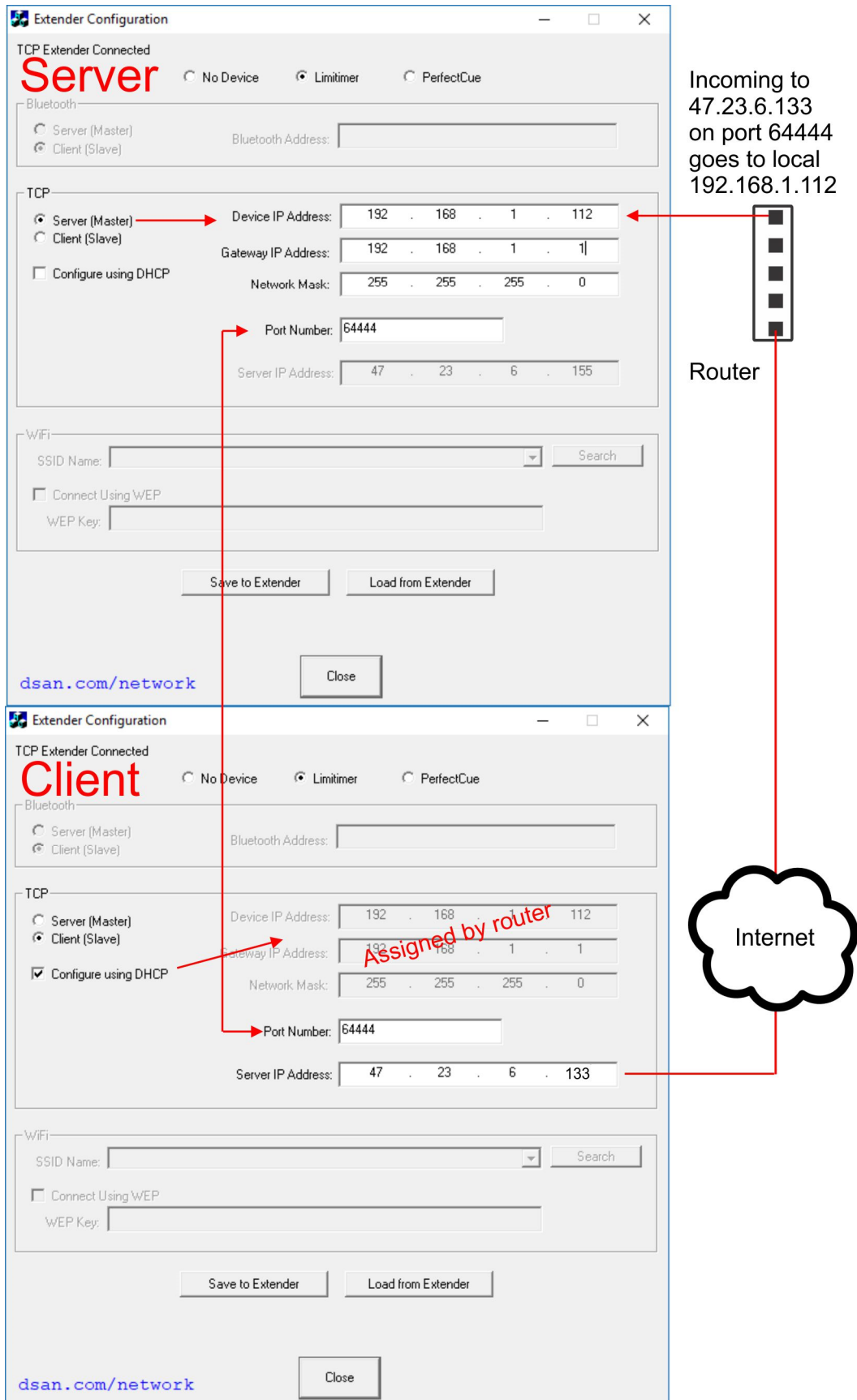
- TCP:**
 - ☒ Server (Master) is selected.
 - Device IP Address: 192 . 168 . 1 . 112
 - Gateway IP Address: 192 . 168 . 1 . 1
 - Network Mask: 255 . 255 . 255 . 0
 - Port Number: 64444
 - Server IP Address: 47 . 23 . 6 . 155
- WiFi:**
 - SSID Name: [Dropdown menu]
 - ☐ Connect Using WEP
 - WEP Key: [Text field]
- Buttons: Save to Extender, Load from Extender, Close

Client Configuration:

- TCP:**
 - ☒ Client (Slave) is selected.
 - Device IP Address: 192 . 168 . 1 . 112
 - Gateway IP Address: 192 . 168 . 1 . 1
 - Network Mask: 255 . 255 . 255 . 0
 - Port Number: 64444
 - Server IP Address: 192 . 168 . 1 . 112
- WiFi:**
 - SSID Name: [Dropdown menu]
 - ☐ Connect Using WEP
 - WEP Key: [Text field]
- Buttons: Save to Extender, Load from Extender, Close

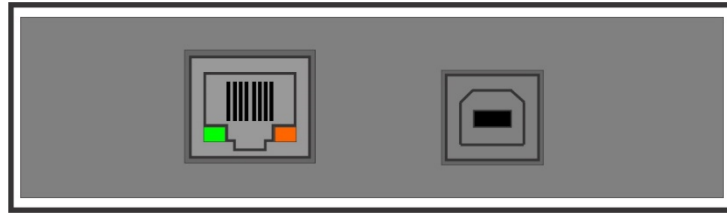
Red arrows point from the 'Assigned by router' text to the 'Device IP Address' and 'Server IP Address' fields in both configurations. The 'Server IP Address' field in the Client configuration is also highlighted with a red box.

From outside Local network (Sample)



Light Indicators:

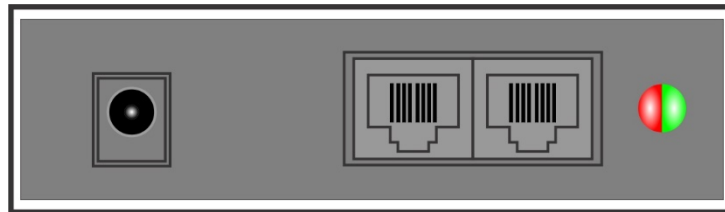
Network side



Green = Connected to a network (router); Yellow= Data flowing to/from another Network Extender on network; Yellow-blink intermittent = trying to connect to another Network Extender

Using PerfectCue, Yellow on only when cue is transmitted or received

Device side



Do not connect to network ports

Green = Connected to another Network Extender Green-Red blink* = Data flowing to/from another Network Extender

*Using PerfectCue, Red on briefly when cue is transmitted or received