

ND-24-IP QUICK GUIDE

DESCRIPTION

The ND-24-IP is a low cost professional MPEG-2 and H.264 decoder that is capable of receiving content from off-air, clear QAM, and IP sources. The ND-24-IP is capable of simultaneously outputting video content in SDI, HDMI and component formats. SDI outputs are available in 3G-SDI, HD-SDI, or SD-SDI formats.

The unit can be used as a stand-alone high quality decoder, or used in conjunction with other IP encoders, to provide an end-to-end IP video delivery solution over a managed network.

When the ND-24-IP decoder is used with Drake's PEG encoder (with Zixi option) and a Zixi Link License, it can provide a point-to-point reliable IP video transport from anywhere in the world with an internet connection. The ND-24-IP can also be used in a point-to-multipoint application, where the ND-24-IP would decode the IP based Zixi protocol stream from a Zixi Broadcaster.



STEP 1: Login



IMPORTANT: The Control Port (Management Port) and the Data Port **MUST** be on different subnets.

Access of the ND-24-IP is through the rear panel remote control ethernet port. Using the front-panel LCD display buttons, the user can set one of two options for ethernet control interface setup: "Enable DHCP > YES or NO". If you are connected from a LAN router then set "Enable DHCP" to "YES".

The router will automatically assign a local IP address that will be displayed on the front panel. If you are connecting directly to a computer the default IP address is "172.16.80.1". Make sure you have your computer's ethernet adapter within the same subnet when using the default IP address.

Pressing the ENTER key will enter the selected menu item. Selecting "Enable DHCP > NO" will provide additional settings for IP Address, Subnet Mask and Gateway Address. For editable items the LEFT ARROW

STEP 1: Login (continued)

and RIGHT ARROW keys will move the cursor left or right and the UP ARROW and DOWN ARROW keys will modify the value at the cursor. The ENTER key loads the new value into the field and then returns to the previous menu.

To save the value modifications to the unit, exit the edit menu by pressing the LEFT ARROW button and select "YES" when prompted to confirm the change.

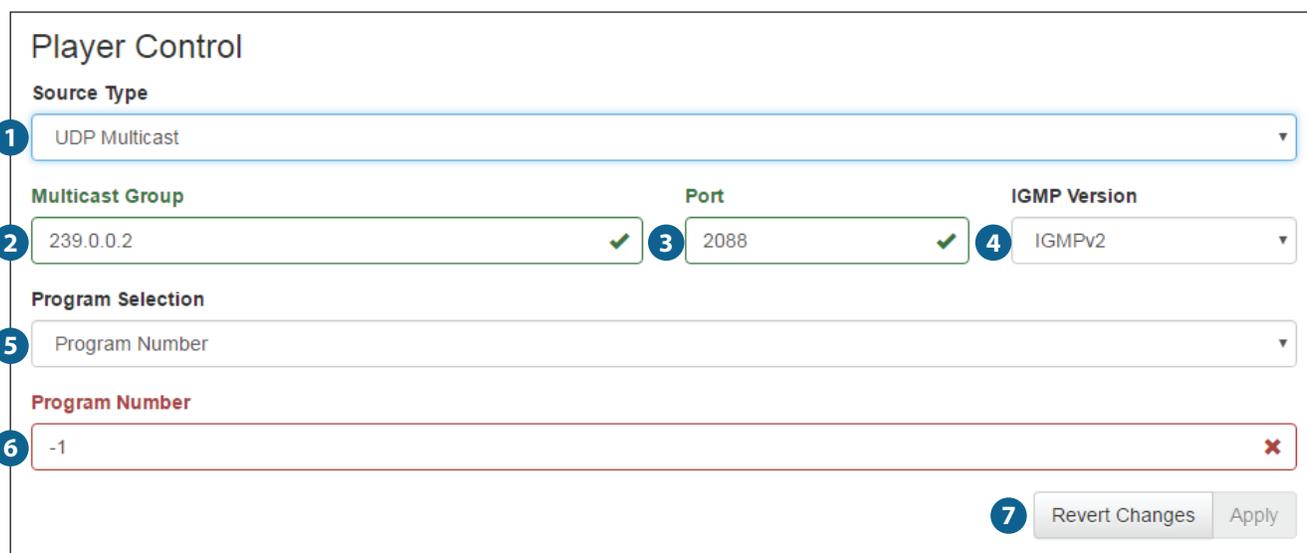
Open a web browser on your computer and enter the URL address (Control IP Address). Once the ND-24-IP web page has loaded you will see a login dialog popup. Enter the following case-sensitive factory default login credentials:

The username is "admin" and password is "pass".



STEP 2: Configure Inputs

A IP Stream Input



- 1 Source Type:** UDP Multicast or UDP Unicast
- 2 Multicast Group:** Specify Multicast Group
- 3 Port:** Specify port
- 4 IGMP Version:** IGMPv2 or IGMPv3. Only used for Multicast streams.
- 5 Program Selection:** Auto, Program Number, or Manual Select. Auto selects the first program in the PAT table. See below for Program Number. Manual Select will show a "Select Scan" button which will display all available programs. (Example of Manual Select is shown under **B** on the next page.)
- 6 Program Number:** Only used when Program Selection is set to Program Number
- 7 Apply** new settings or **Revert Changes** to previous settings.

STEP 2: Configure Inputs (continued)

B Zixi Push Input

If a Zixi Link License is not pre-installed with the unit for point-to-point links over the public internet, a separate Zixi Link License (Model: ND-24-Zixi-LIC; P/N: 1002654) will be required.

Player Control

Source Type

1 Zixi Push

Zixi Port 2 2088 ✓ **Channel/Stream ID** 3 2 ✓ **Password** 4 hockey ✓

Program Selection

5 Manual Select

6 Start Scan Selected Program: 917

Found 1 programs

Select	Program #	Program Info
<input checked="" type="checkbox"/>	917	{"content_pids":[{"pid":481,"type":"AVC video stream as defined in ITU-T Rec. H.264 ISO/IEC 14496-10 Video"}, {"pid":482,"type":"(ATSC) AC-3 Audio"}], "pcr_pid":481, "program_number":917}

7 Revert Changes Apply

- 1 **Service Type:** Zixi Push
- 2 **Zixi Port:** specify Zixi Port
- 3 **Channel/Stream ID:** must match either a PEG encoder ID for point to point or Zixi server stream ID for broadcast applications
- 4 **Password:** must match either a PEG encoder password for point to point or Zixi server stream password for broadcast applications
- 5 **Program Selection:** Auto, Program Number, or Manual Select. Auto selects the first program in the PAT table. Program Selection displays the "Program Number" field to input a specific program number. When using Manual Select, "Start Scan" button (6) will be displayed.
- 6 **Start Scan:** Available only when in Manual Select Program mode. Clicking on the scan button will display all available programs. Select the desired program by checking the respective Select box.
- 7 **Apply** new settings or **Revert Changes** to previous settings.

STEP 2: Configure Inputs (continued)

C Digital RF Channel

Player Control

Source Type

1 Tuner

Channel

2 11

Channel Plan

3 Broadcast

Modulation

4 8VSB

Program Selection

5 Manual Select

6 Start Scan Selected Program: 3

Found 3 programs

Select	Program #	Program Info
<input type="checkbox"/>	4	{"content_pids":[{"pid":65,"type":"(ATSC) MPEG-2 Video"},{"pid":68,"type":"(ATSC) AC-3 Audio"},"pcr_pid":65,"program_number":4}
<input type="checkbox"/>	5	{"content_pids":[{"pid":81,"type":"(ATSC) MPEG-2 Video"},{"pid":84,"type":"(ATSC) AC-3 Audio"},"pcr_pid":81,"program_number":5}
<input checked="" type="checkbox"/>	3	{"content_pids":[{"pid":49,"type":"(ATSC) MPEG-2 Video"},{"pid":52,"type":"(ATSC) AC-3 Audio"},{"pid":53,"type":"(ATSC) AC-3 Audio"},"pcr_pid":49,"program_number":3}

7 Revert Changes Apply

1 **Service Type:** Tuner

2 **Channel:** Selectable from 2 to 158 for CATV or from 2 to 69 for Broadcast

3 **Channel Plan:** CATV (STD,IRC,HRC) channel range 2 to 158. Broadcast channel range 2 to 69.

4 **Modulation:** Select QAM for CATV or 8VSB for Broadcast channel plans.

5 **Program Selection:** Auto, Program Number, or Manual Select. Auto selects the first program in the PAT table. Program Selection displays the "Program Number" field to input a specific program number. When using Manual Select, "Start Scan" button (6) will be displayed.

6 **Start Scan:** Available only when in Manual Select Program mode. Clicking on the scan button will display all available programs. Select the desired program by checking the respective Select box.

7 **Apply** new settings or **Revert Changes** to previous settings.

Firmware updates are available in the support section of the website. The full manual (PDF) is available on the "ND-24-IP" product page located on our website at:

www.blondertongue.com/rldrake