



Operating Manual

neWR-5 Programmable Button Remote Control

Introduction

The neWR-5 is a programmable Ethernet based remote control unit for all Ashly network enabled products, including NE processors, NE power amplifiers, Pema amplifiers, and nXe/nXp amplifiers. The neWR-5 offers remote control of preset recall/scroll, mute, zone source selection, individual channel and matrix point level control, and logic output control*. All programming is done using Ashly Protea^{ne} software for Windows[®].

**DSP must be installed in the target device in order to control zone source selection, level control, and matrix control.*

FCC Compliance

This device complies with part 15 of the FCC Rules for class A operation and is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

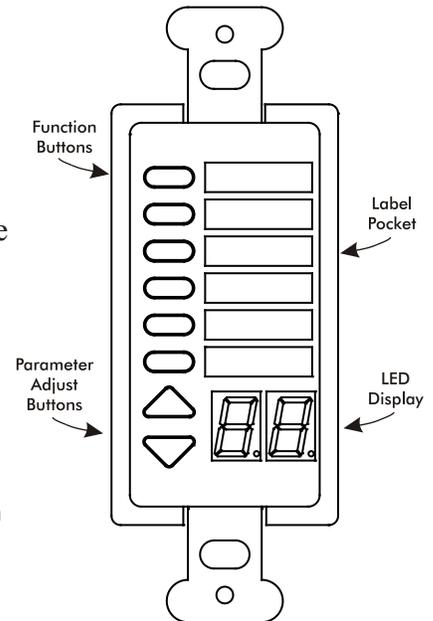
Features

The neWR-5 is designed to mount into a standard earth grounded North America electrical wall box. A decora cover plate (not included) can be purchased at hardware stores to cover the neWR-5 electrical box and satisfy the aesthetic needs of the installation.

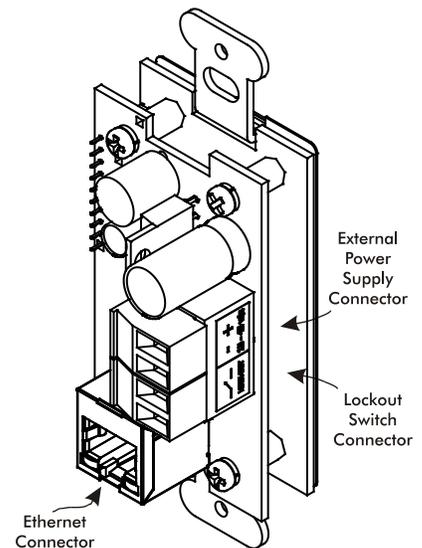
Connecting and powering the neWR-5 requires cat-5 Ethernet cable and a class 1 IEEE 802.3af power over Ethernet (PoE) switch, hub, or inline PoE injector. If PoE is unavailable, a 15-48VDC power supply capable of at least 2 watts per neWR-5 can be hard wired to a Euroblock connector on the back of the remote. The RJ-45 connector has a green LED to indicate an Ethernet connection has been made, and a yellow LED to indicate data is being transferred. There is a hard-wired lock-out feature on the neWR-5, where the closing of a switch wired to the lockout Euroblock renders all buttons inactive.

The neWR-5 has six programmable function buttons which can light up green, red, or amber to display status. To the right of the function buttons is a pocket in the mylar overlay for a paper function label to be inserted. The two other buttons are used to adjust function parameters such as gain or preset number, and are indicated by the LED display.

neWR-5 Front View



neWR-5 Back View



Hardware Installation

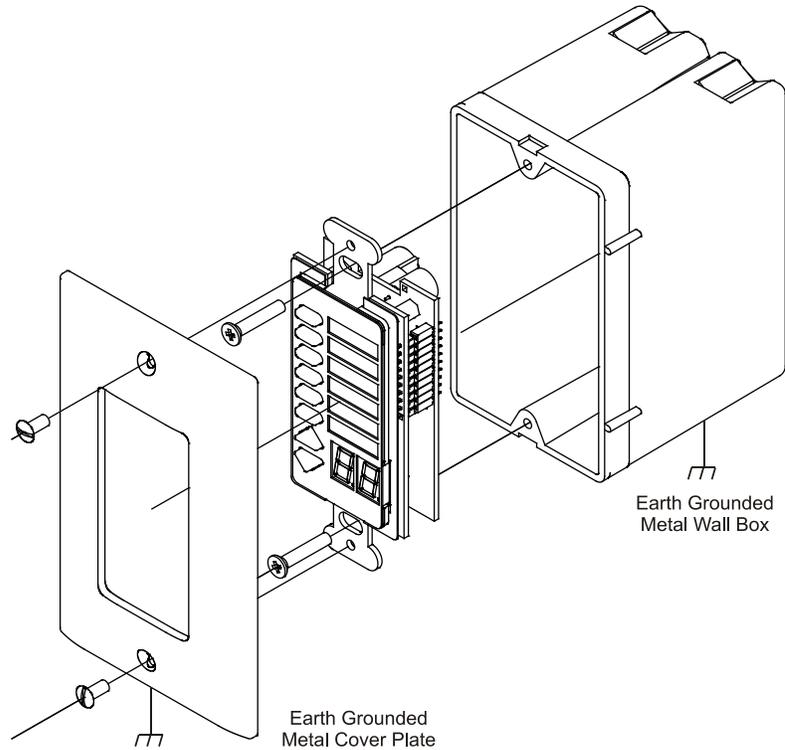
The neWR-5 Ethernet control connection is made using an RJ-45 terminated eight conductor cable connected directly to a computer, or indirectly over a standard 10/100M Ethernet network. Maximum cable distance for Ethernet is 100 meters from the nearest hub or switch for copper twisted pair cat-5 cable. If using class 1 IEEE 802.3af PoE, no further power supply is required, otherwise connect a 15-48VDC power supply to the neWR-5 via the labelled Euroblock connector. PoE current draw is 38mA @48VDC.

If desired, wire the lock out connector to an external remote or keyed switch.

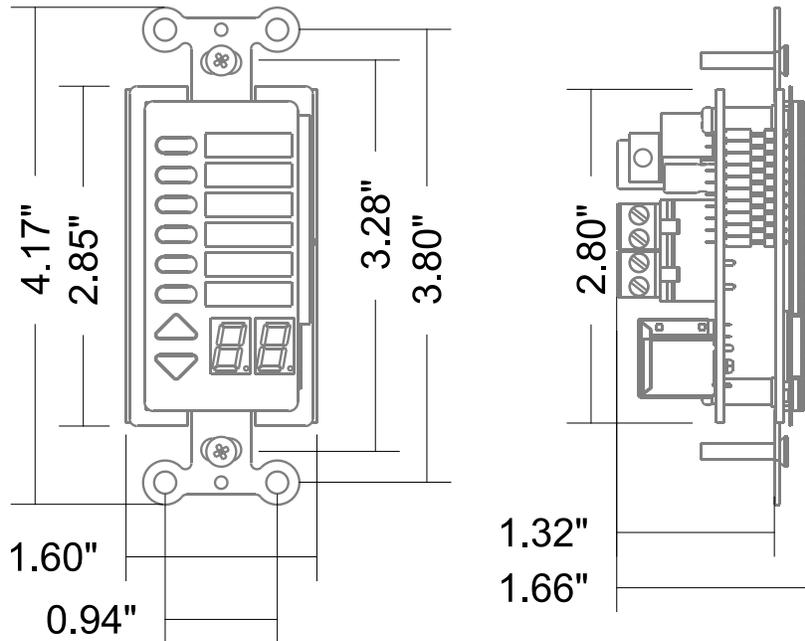
Upon connecting and powering up the system, the neWR-5 will have a “heart-beat”, meaning an internal small green LED on the PCB (behind the display bezel) will be flashing.

After power up, the LED displays “- -”. If there is a two-digit number showing in the display, that means the neWR-5 has been previously programmed to control a zone and that number is the gain level for that zone.

NOTE: For maximum protection against static shock disruptions to the neWR-5, mount it to an earth-grounded metal wall box, and be sure to earth-ground it’s metal cover plate as shown. This prevents incidental static discharge from flowing through the neWR-5 or it’s Ethernet cable, potentially disrupting the neWR-5. Do not rely on the Ethernet cable ground for earth ground.



Dimensions



Protea^{ne} Software

Ashly devices installed on the network will be automatically detected and displayed in the Ashly network device tree on the left side of the software startup screen. The software scans for active devices every time it loads, but the user can manually scan at any time as well with <Scan For Devices> at the bottom of the network device tree. All devices continuously broadcast their availability to the software. All currently connected and active Ashly devices are highlighted in green, while devices which have been formerly installed but are currently off-line or unavailable show up in red.

Individual products can be dragged onto the project canvas to simulate physical installation groups, but editing each product can be done from either the device tree or the project canvas. Lines, rectangles, text, and image files can be added to create a custom virtual control screen along with products and individual control objects. To see all available canvas tools, right click anywhere over open canvas. Projects, including all device settings and canvas drawings, can be saved as a file.

Checking <Design Mode> (right-click on canvas) allows placed objects to be moved around, while unchecking <Design Mode> locks objects in place. Once an image has been placed on the canvas, it must be deleted by hand if that device is no longer available to the software. Scanning for devices does not automatically remove images which may have been installed at one time but are now off line. To clear the canvas of all devices and drawn elements click <File - New>. *Further neWR-5 help is available in Protea^{ne} software by navigating through the online help menu.*

Main Control Surface

The main control surface is where the neWR-5 is named, its target device gets selected, where zone definition occurs, and where the function buttons are programmed, The neWR-5 comes with all function buttons set to “Off”. *Unlike the WR-5, changes must be saved to the neWR-5 before becoming effective.*

Not all of the button functions listed below are available on all products, for instance an amplifier will not have “matrix mixer” capability unless it has DSP installed, and some products do not have logic outputs. The software is able to determine which functions are available for neWR-5 control.

- 1) Off** - No function assigned and the button’s LED remains unlit
- 2) Preset Recall** - A single preset number is assigned to a button. When the button is pressed, the recalled preset number and the letters “PC” (Preset Change) are alternately flashed on the neWR-5 for five seconds, locking out any other neWR-5 action during that time.
- 3) Preset Scroll Mode** - A range of presets can be assigned to a function button which when selected, enables the up/down buttons to scroll through the available presets. Upon release of the up/down button, the currently displayed preset will load. The function button will glow amber for the duration of the preset scroll operation.
- 4) Gain Control** - Since there are many possible gain adjustment points within the targeted device audio signal path, the neWR-5 displays gain level expressed as a relative value. Gain could be changed elsewhere on the target device, independent from neWR-5 control. The neWR-5 can adjust relative gain from 0 to 99. An upper and lower number limit can be set in the function range section to limit the maximum and minimum for that control. *To control gain in the target device input or output signal path, a <neWR-5 Remote Gain> function must first be plugged into a block using the software DSP controls window.*

Gain Control over individual channel - When a gain control button is assigned to control one or more individual channels, pressing that button will cause it to light amber, during which time the up/down buttons determine gain for the selected channels. If the up/down buttons remain idle for five seconds, the gain button becomes inactive until being pressed again.

Gain Control over zone - If a zone output is active for that neWR-5, meaning one or more output check-boxes are selected within the neWR-5 zone setup mode, the current output gain for that zone will be shown as the default numerical display. The up/down buttons remain active to adjust that zone's overall gain control.

If a button is assigned for individual input channel gain control *in addition to* the neWR-5 being configured for output zone control, that button will turn amber when pressed. The neWR-5 up/down buttons and display will now adjust the individual channel gain, reverting back to output zone gain after five seconds of inactivity. If there is no zone output assigned for the neWR-5, the display shows "--" as the default.

5) Channel Engage/Mute - A button can be configured to mute one or more inputs or outputs, or any combination of the two. The button is green when engaged and red when the selected channels are muted.

6) Zone Source Selection - This button function will assign a selected group of input channels to the defined zone when pressed. Any function button can have any combination of inputs as sources, including overlapping channel assignments. A zone source selection button is green when selected, and red when unselected.

When different buttons are configured for zone source selection with different *or* overlapping input channels, each button simply adds to or subtracts from the previously pressed button's input selection, their effect is cumulative. However, if the <Exclusive Source Selection> box is checked in the software zone setup, only the currently pressed button's assigned inputs will be used.

The <Disable Zone Level Control> check-box allows input channel selections to be changed from the neWR-5 but not the gain for that zone. The output gain can still be changed from within the target device or from software, but the neWR-5 is locked out from making output zone gain changes.

7) Logic Output Active High - This function allows the user to toggle the assigned logic output pin status to a button. The switch turns green when the output goes high.

8) Logic Output Active Low- This function also allows the user to toggle the logic state of the assigned logic output pin, however in this case the output goes low when pressed.

9) Matrix Mixer - This is used to select one or more inputs for the zone under neWR-5 control, but allows level control of that group at the DSP matrix mixer point instead of at the output. Select one or more zone outputs in the zone setup to use the matrix mixer function.

Security

In addition to the hardware lockout available on the neWR-5, there are multiple user/multiple levels of software protection assignable to the neWR-5 within the security tab, from full access to view only. The security data is stored within the neWR-5 itself, not software. *Passwords are case sensitive.* Be sure to write down the password and store in a convenient place for future reference.

Network Properties

Hardware, device, and device network configuration details are displayed in the network properties tab. This includes the current neWR-5 firmware revision.

Flash Reprogram

The firmware, meaning the internal program which runs on the neWR-5, can be updated easily over the network. Look in network properties for the current firmware revision. To obtain the latest firmware, visit the Ashly Web site, download and save it to the computer, then run <Flash Reprogram> under the device options menu. The LED displays “Pr” during the reprogramming process.

Factory Reset

To restore factory default settings, a factory reset can be performed by connecting power to the unit while holding the top function button down for 10 seconds, during which time a countdown will occur on the LED display. Releasing the button at any time prior to completion of the countdown stops the process. Upon completion of the countdown, the LED displays “Fr” until the neWR-5 is reset.

Ashly Audio Inc. LIMITED WARRANTY (USA ONLY)

(Other countries please contact your respective distributor or dealer.)

For units purchased in the USA, warranty service for this unit shall be provided by ASHLY AUDIO, INC. in accordance with the following warranty statement.

ASHLY AUDIO, INC. warrants to the owner of this product that it will be free from defects in workmanship and materials for a period of FIVE years from the original-date-of-purchase. ASHLY AUDIO INC. will without charge, repair or replace at its discretion, any defective product or component parts upon prepaid delivery of the product to the ASHLY AUDIO, INC. factory service department, accompanied with a proof of original-date-of-purchase in the form of a valid sales receipt. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

EXCLUSIONS: This warranty does not apply in the event of misuse, neglect, or as a result of unauthorized alterations or repairs made to the product. This warranty is void if the serial number is altered, defaced, or removed. ASHLY AUDIO, INC. reserves the right to make changes in design, or make additions to, or improvements upon, this product without any obligation to install the same on products previously manufactured.

Any implied warranties, which may arise under the operation of state law, shall be effective only for FIVE years from the original-date-of-purchase of the product. ASHLY AUDIO, INC. shall be obligated to only correct defects in the product itself. ASHLY AUDIO, INC. is not liable for any damage or injury, which may result from, or be incidental to, or a consequence of, such defects. Some states do not allow limitations on how long an implied warranty lasts, or the exclusion, or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

OBTAINING WARRANTY SERVICE:

For warranty service in the United States, please follow this procedure:

1) Return the product to ASHLY AUDIO, INC. freight prepaid, with a written statement describing the defect and application that the product is used in. ASHLY AUDIO, INC. will examine the product and perform any necessary service, including replacement of defective parts, at no further cost to you.

2) Ship your product to:

ASHLY AUDIO, INC.
Attention: Service Department
847 Holt Road
Webster, NY 14580-9103

ASHLY AUDIO INC. 847 Holt Road Webster, NY 14580-9103, USA
Phone: (585) 872-0010 Fax: (585) 872-0739
Toll Free (800) 828-6308 ashly.com

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