EVENT LIGHTING

AN082

8 Universe Art-net Node

USER MANUAL

For safety, please read this user manual carefully before initial use.

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Description

AN082 is a reliable and versatile rack -mountable ethernet-to-DMX adapter with an integrated optical DMX splitter and ethernet switch capability. It has two 5-pin DMX In ports and eight 5-pin DMX Outports, all optically isolated. It takes up to 8 Art-Net™ or sACN universes simultaneously. The eight 5-pin DMX Out ports can be assigned to either of the DMX In ports or to one of the Art -Net™ or sACN universes. Neutrik® etherCON® ports are through ports that allow daisy chaining of AN082 units. It provides a reliable, highly customizable network infrastructure for complex control systems. Merge two controllers into the AN082 via DMX, Art-Net™, or sACN, supporting both LTP (Latest Takes Precedence) and HTP (Highest Takes Precedence) functions. Record function allows you to record looksfrom a controller and save them into memory and it is webserver supported for remote configuration and backup/update.

Features

- Rack mountable
- Both an ethernet node and an optical splitter
- Eight optically isolated output ports
- Variable operating modes for all DMX outputs
- Two Neutrik® etherCON® in/through ports
- Backup settings and configurations with same or other AN082s
- Webserver supported for remote configuration and backup/update
- Merge two controllers via DMX, Art-Net™, or sACN
- Record function allows you to record looks from a controller and save them into memory

Product Overview
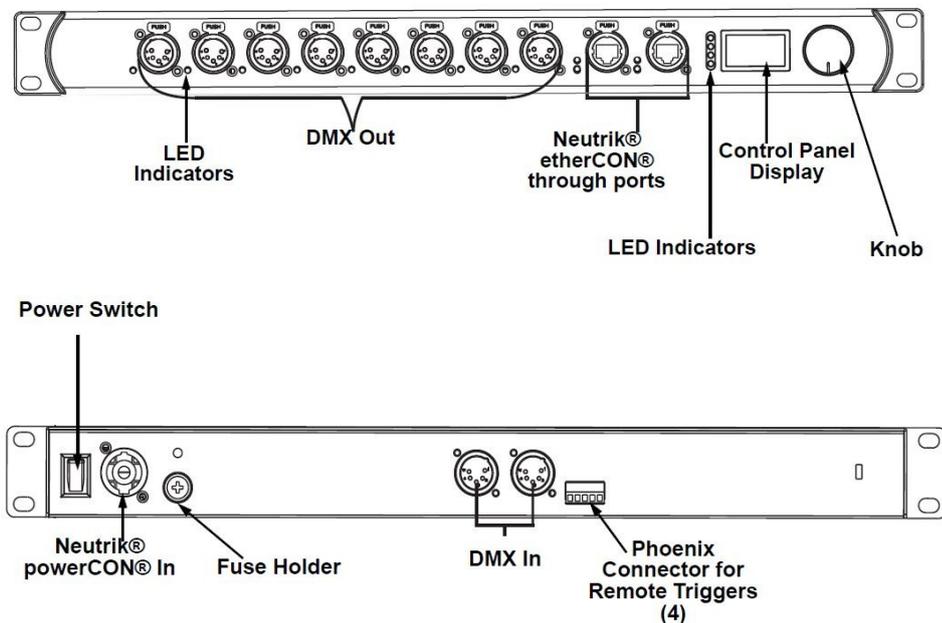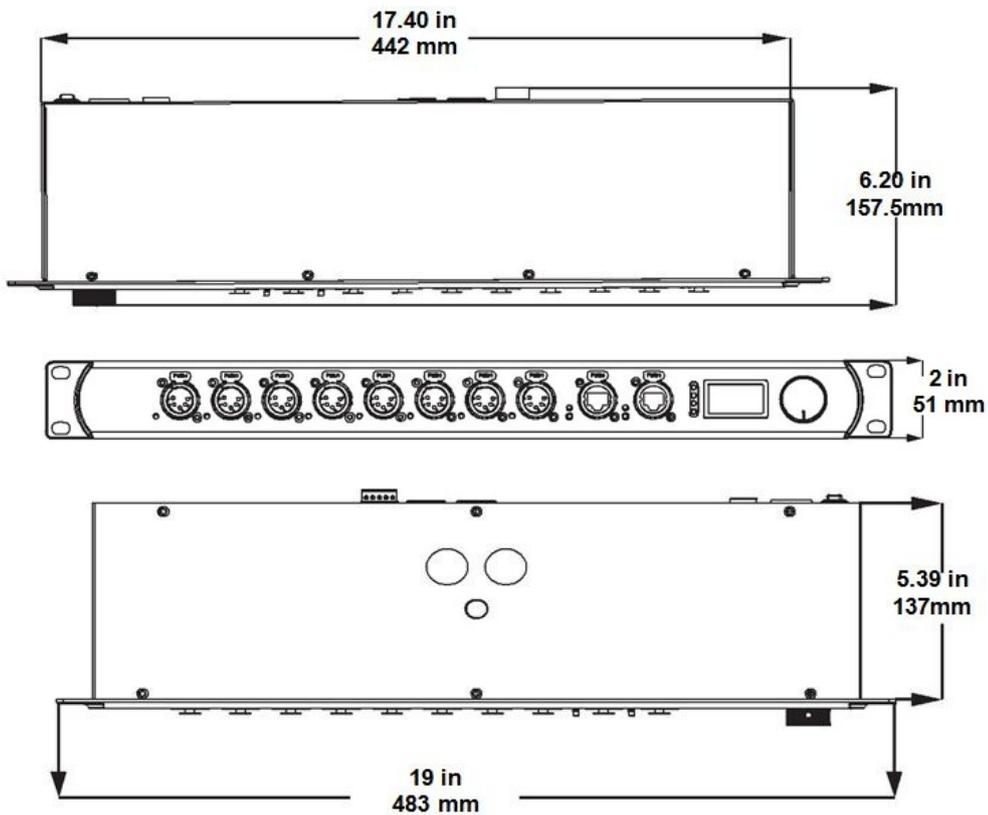
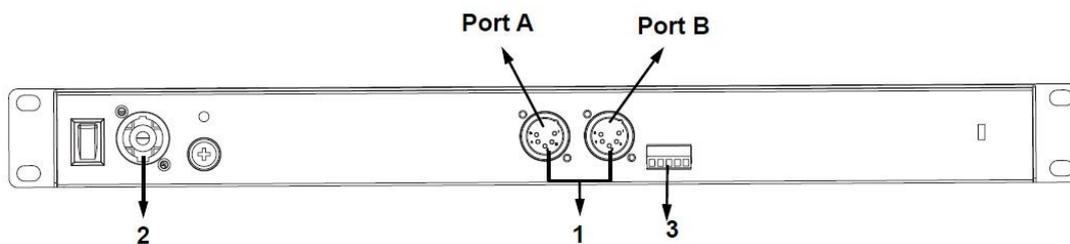## Signal Connection Diagrams
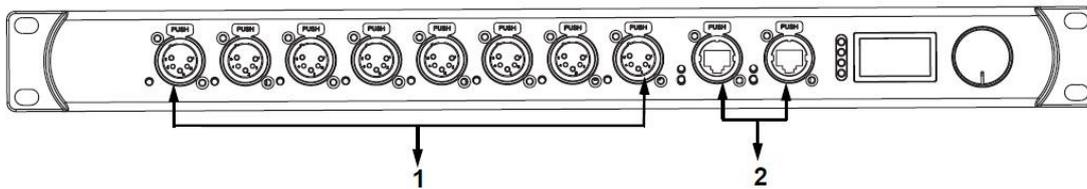
#	CONNECTIONS	PURPOSE
1	DMX Out	For DMX controlled products
2	Art-Net™ Ethernet	Link to an Art-Net™, sACN networks, and web server access

Input Connections Diagram

Port A   Port B

#	CONNECTIONS	PURPOSE
1	DMX In	DMX ports **A** and **B**.
2	Neutrik® powerCON® In	Power In
3	Phoenix Connector	To trigger recorded scenes

Control Panel Operation

The AN082 is configured through the control panel, using the control panel buttons. Once the AN082 is properly configured it operates without user intervention.

The AN082 can be used as a DMX splitter, in which case the DMX In ports must be assigned to the DMX Out ports, but the Net, Subnet, and IP address settings may not need configuration.

The AN082 can be used as an Art-Net™ node, in which case the Art-Net™ universes must be assigned to the DMX Out ports, and the Net, Subnet, and IP address settings must be configured.

The AN082 can be used as an sACN node, in which case the sACN universes must be assigned to the DMX Out ports, and the IP address settings must be configured.

The AN082 can be used as both a DMX splitter and either an Art-Net™ or sACN node simultaneously, in which case both the DMX assignments and the Art-Net™ or sACN settings must be configured. For more information, see Example Configurations.

The AN082 can be used to merge two DMX, Art-Net™, or sACN signals from different controllers and output as one signal, using LTP (Latest Takes Precedence) and HTP (Highest Takes Precedence) functions.

The AN082 has backup settings and configurations with same or other AN082s. The AN082 is webserver supported for remote configuration and backup/update.

The AN082's record function allows you to record looks from a controller and save them into memory

Control Knob

The AN082 has a knob that is used to scroll through the options in the menu. Press the knob tomake a selection.

Programming

Refer to the Menu Map to understand the menu options. The menu map shows the main level and avariable number of programming levels for each option.

1. To access the menu from the Home Screen, press the knob.
2. To scroll through the options on each level of the menu, turn the knob. Turn it clockwise to scrolldown, and turn it counter-clockwise to scroll up.
3. Press the knob to select the highlighted option. This will take you to the next programming levelfor that option, or it will highlight a value that can be edited.
4. To increase a selected number value, turn the knob clockwise. To decrease a selected numbervalue, turn the knob counter-clockwise.
5. Press **Exit/Cancel** to the previous main level.

Menu Map

MAIN LEVEL	PROGRAMMING LEVELS			DESCRIPTION
Custom Device Name	– – – – – – – – – – –	**Cancel**		Inputs a custom device name
		Enter		
Set IP Mode	**Static IP**	__ __ __ __		Default address-cannot be changed
	Manual IP	__ __ __ __	**Cancel**	Sets the IP addresses
			Enter	
	Exit			Exits to previous screen
Set Netmask	**A. 255.000.000.000**			Sets Netmask A
	B. 255.255.000.000			Sets Netmask B
	C. 255.255.255.000			Sets Netmask C
	Exit			Exits to previous screen
Operating Mode	**8 Port**			Assigns each port as an output/input (this also supports RDM over Ethernet)
	2 + 8 Port			Supports DMX merging with the two DMX inputs
	Exit			Exits to previous screen

MAIN LEVEL	PROGRAMMING LEVELS					DESCRIPTION
DMX Port Settings	**DMX Port 1-8**	**Port Mode**	**DISABLE**			Disables the output port
			OUTPUT	**ArtNet**	**000-255**	Sets the input source for the DMX port to Art-Net™
				sACN	**001-256**	Sets the input source for the DMX port to sACN
				DMX Input	**001-008**	Used for DMX splitter (does not support RDM functions)
				Exit		Exits to previous screen
			INPUT			Sets the port to receive DMX from a controller that can be routed to another DMX port
			Exit			Exits to previous screen
		DMX Merge	**OFF**			Disables Ethernet signal merging
			HTP			Sets Ethernet signal merging to Highest Takes Precedence
			LTP			Sets Ethernet signal merging to Latest Takes Precedence
		NET	**000-127**			Sets the net settings
	Exit					Exits to the previous screen
LCD Backlight	**On**					Backlight On
	10 Seconds					Display turns off after 10 seconds
	30 Seconds					Display turns off after 30 seconds
	Exit					Exits to the previous screen

User Preset	**Art-net 8-port DMX**	Sets all 8 ports to receive 8 universes of ArtNet from 0-7
	sACN to 8-port DMX	Sets all 8 ports to receive 8 universes of sACN from 1-8
	1x8 DMX Splitter	Sets the product to operate as a DMX splitter with all 8 outputs receiving DMX from input A
	2x4 DMX Splitter	Sets **1-4** outputs to **input-port A** and the **5-8** outputs to **input-port B**
	Exit	Exits to previous screen
Factory Reset	**NO**	Resets to factory settings
	YES	

	Name Scene	_____	Cancel	Customize scene name
			Enter	
	Step: (0/0)	000-100		Scroll to the step that you prefer to edit
Record Scenes <1-10>	**Add Step**			Adds steps to scene and takes a snapshot of all 8 ports and records step to memory
	Delete Step			Delete current step from scene
	Timing	**Save Step**		Saves timing for the selected step
		Fade In Time	0.10S-9M59S	Selects fade in time
		Fade Out Time	0.10S-9M59S	Selects fade out time
		Delay Time	0.10S-9M59S	Selects delay time
		Exit		Exits to previous screen

MAIN LEVEL	PROGRAMMING LEVELS		DESCRIPTION
Trigger Settings	**Trigger 1**	**Scene 1-10**	Assigns trigger 1 to one of the 10 scenes
	Trigger 2	**Scene 1-10**	Assigns trigger 2 to one of the 10 scenes
	Trigger 3	**Scene 1-10**	Assigns trigger 3 to one of the 10 scenes
	Trigger 4	**Scene 1-10**	Assigns trigger 4 to one of the 10 scenes
	Exit		Exits to previous screen
Backup	**Save**	**Preset 1-10**	Saves and loads configurations, press knob to confirm and **Exit** (to cancel).
	Load	**Preset 1-10**	
	Exit		Exits to previous screen
Firmware Version	__ __ _		Displays firmware version
Exit	**Exit**		Exits to main screen

Operating Settings Configuration

Home Screen

The AN082 has a home screen which displays the current status of all ports. The homescreen is displayed when the menu is not being accessed.

To access the menu from the home screen, press the knob. To return to the home screen from the menu, select **13.Exit** and press the knob, or wait 10 seconds after inactivity.
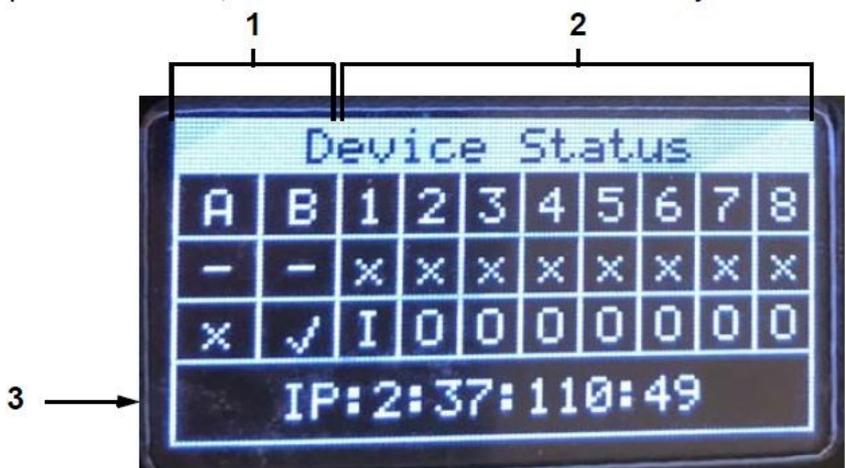
#	Symbol	Description
	A–B	Ethernet and DMX ports A and B
	- or x	x is connected
	(DMX ports)	- is disconnected
1	x or	is connected
	(Ethernet ports)	x is disconnected
	1–8	DMX ports 1–8
	x or	is receiving signal on assigned universe
2		x is not receiving signal on assigned universe
	I or O	Input or Output
3	IP:	Displays the IP address of the product

Custom Device Name

To assign the AN082 a custom device name, do the following:

1. Use the knob to select **1.Custom Device Name**.
2. Press the knob.
3. If there is no name set for this product, press the knob. If there is a name set for this product, usethe knob to select which letter to edit, then press the knob.
4. Use the knob to select the letter, number or symbol, from **A–@**. There are 63 options.
5. Repeat until the name is set as desired.
6. Use the knob to select either **Enter** to save the name, or **Cancel** to exit without saving.
7. Press the knob.

Set IP Mode

The AN082 can use a pre-set static IP address, or it can be set manually.

Static IP

To set the AN082 to a pre-set static IP address, follow the instructions below:

- Use the knob to select **2.Set IP Mode.**
- Press the knob.
- Use the knob to select **1.Static IP**.
- Press the knob.

Manual IP

To set the IP address manually, do the following:

1. Use the knob to select **2.Set IP Mode.**

2. Press the knob.

3. Use the knob to select **2.Manual IP**.

4. Press the knob.

5. The manual IP address can be set from **000.000.000.000 to 255.255.255.255** by using the knob to scroll and select the desired numbers **000-255** for each byte (set of three numbers). Use this process to set each of the four bytes.

6. Use the knob to select **Enter** to save the chosen IP address or **Cancel** to exit without saving.

Set Netmask

To set the Netmask, follow the instructions below:

1. Use the knob to select **3.Set Netmask.**

2. Press the knob.

3. Use the knob to select one of the following options:

   3. **A. 255.000.000.000**

   3. **B. 255.255.000.000**

   3. **C. 255.255.255.000**

   3. **Exit** (to cancel)

Operating Mode

The AN082 can operate as a splitter/converter, or a DMX merger. To switch between the 2modes, do the following:

1. Use the knob to select either **1. 8 Port** (Assigns each port as an output/input (this also supportsRDM over Ethernet) or **2. 2 + 8 Port** (Supports DMX merging with the two DMX inputs).

2. Press the knob.

3. **3.Exit** (to cancel)

DMX Port Settings

The AN082 has 8 DMX ports that can be set as outputs or inputs. To select a DMX port toconfigure, follow the instructions below:

1. Use the knob to select **5.DMX Port Settings**.

2. Press the knob.

3. Use the knob to select the desired DMX port, from **DMX Port 1-8**, or **Exit** (to cancel).

4. Press the knob.

Port Mode

The port mode determines whether the selected port functions as an input, an output, or is disabled.

1. Select the DMX port to configure as instructed in [DMX Port Settings](#).

2. Use the knob to select **1.Port Mode**.

3. Press the knob.

4. Use the knob to select the desired port mode from, **1.DISABLE**, **2.OUTPUT**, or **3.INPUT**, or **Exit** (to cancel).

5. Press the knob.

   5. For **2.OUTPUT**, select the protocol from **1.ArtNet**, **2.sACN**, or **3.DMX Input**, or **4.Exit** (to cancel). Press the knob then use the knob to select the source universe (for **1.ArtNet**: from **000–255**; for **2.sACN**: from **001–256**) or the source DMX port (for **3.DMX Input**: from **001–008**). Then, press the knob.

DMX Merge

The AN082 is capable of merging two signals of the same protocol into one,using HTP (Highest Takes Precedence), or LTP (Latest Takes Precedence) logic.

Select the DMX port to configure as instructed in <u>DMX Port Settings</u>.Use the knob to select **2.DMX Merge**.
Press the knob.

Use the knob to select the desired mode, from **OFF** (to disable mode), **HTP** (Highest TakesPrecedence), or **LTP** (Latest Takes Precedence).
Press the knob.

Net

To set the net setting, do the following:

Select the DMX port to configure as instructed in <u>DMX Port Settings</u>.Use the knob to select **3.Net.**
Press the knob.
Use the knob to select from **000-127.**
Press the knob

LCD Backlight

To set the amount of time after inactivity before the display backlight turns off, follow the instructions below.

Use the knob to select **6.LCD Backlight**.Press the knob.
Use the knob to select from the following options,
1.On (does not turn off),
2. 10 Seconds (turns off after 10 seconds of inactivity),
3. 30 Seconds (turns off after 30 seconds of inactivity),
or
4.Exit (to cancel).
Press the knob.

User Preset

This option saves 4 different preset menu option configurations. To set these presets, follow theinstructions below.

Use the knob to select **7.User Preset**.Press the knob.
Use the knob to select one of the four following presets:
1. Art-net 8-port DMX (Sets all 8 ports to receive 8 universes of ArtNet from 0-7).
2. sACN to 8-port DMX (Sets all 8 ports to receive 8 universes of sACN from 1-8).
3. 1x8 DMX Splitter (Sets the product to operate as a DMX splitter with all 8 outputs receiving DMX from input A).
4. 2x4 DMX Splitter (Sets **1–4** outputs to **input-port A** and the **5–8** outputs to **input-port B**).
5.Exit (to cancel).
Press the knob.

Factory Reset

To restore the AN082 to factory default settings, do the follow:

Use the knob to select **8.Factory Reset.**

Press the knob.

Use the knob to select **NO** (do not reset) or **YES** (reset to factory settings).Press the knob.

Record Scenes

The AN082 has the capability to record up to 10 scenes. To record scenes, follow the instructions below.

Use the knob to select **9.Record Scenes**.Press the knob.

Use the knob to select from **Scene 1–10**.Press the knob.

Scene Name

The AN082 allows you to customize the name of each scene. To name a scene, do the following:Select the Scene to configure as instructed in [Record Scenes](#).

Use the knob to select **1.Name:Scene_1-10**.Press the knob.

Use the knob to select the letter, number or symbol, from **A–@**. There are 96 options.Repeat until the name is set as desired.

Use the knob to select either **Enter** to save the name, or **Cancel** to exit without saving.Press the knob.

Scene Steps

This feature displays the amount of steps saved to the scene. To view previously saved steps, follow the instructions below.

Select the Scene to configure as instructed in [Record Scenes](#).Use the knob to select **2.Step:(0/0)**.

Press the knob.

Turn the knob to cycle through the saved steps.

Add Step

This function adds a step to the scene. To add a step to the scene, do the following:Select the Scene to configure as instructed in [Record Scenes](#).

Use the knob to select **Add Step**.Press the knob.

Delete Step

This function deletes a step from the scene. To delete a step from the scene, follow the instructions below.

Select the Scene to configure as instructed in [Record Scenes](#).Use the knob to select **Delete Step**.

Press the knob.

Timing

This function sets the intervals between steps, as well as a fading effect if desired.

Select the Scene to configure as instructed in [Record Scenes](#).Use the knob to select **5.Timing.**

Press the knob. Use the knob to select

1.Save Step (saves timing for the selected step),

2.Fade In Time:0.10S— 9M59S (selects fade in time),

3.Fade Out Time:0.10S—9M59S (selects fade out time),

4.Delay Time:0.10—9M59S (selects delay time),

or

5.Exit (to cancel).

Press the knob.

Trigger Settings

The AN082 can assign a trigger to an external switch to trigger a saved scene.

Use the knob to select **10.Trigger Settings**.Press the knob.

Use the knob to select **Trigger 1-4**.Press the knob.

Use the knob to select the desired **Scene 1-10**.Press the knob.

Backup

The AN082 has a backup setting that allows the product to save and load configurations.

Use the knob to select **11.Backup**.Press the knob.

Use the knob to select **1.Save**.Press the knob.

Use the knob to select **2.Load**.Press the knob.

Firmware Version

This function displays the firmware version of the product.

Use the knob to select **12.Firmware Version**.

Press the knob. The firmware version will display: **B1.0 V0.7**.Press the knob to exit.

Exit

This function exits out of the menu to the main screen.

Use the knob to select **13.Exit.**

Press the knob. The product returns to the home screen.

Warranty

Please contact your local dealer or contact Event Lighting.

www.event-lighting.com.au