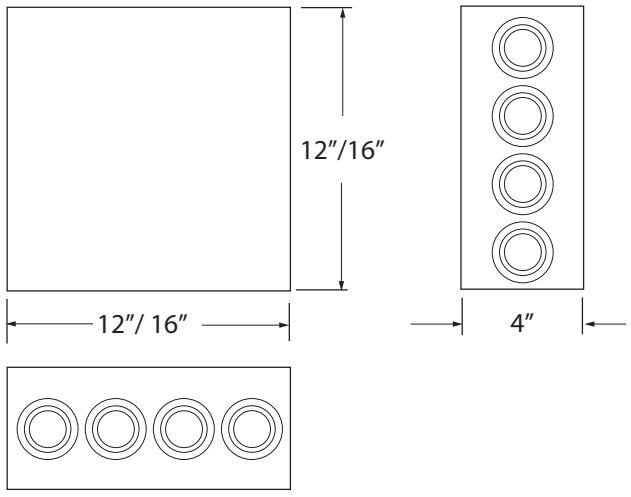
ADNM-VW | Power Supply with Variable Sub-Controller Installation

Profile Dimensions



16″ Box has knockouts On bottom only

Please verify the contents of the packages!

Please read instructions entirely before starting installation

Be sure power is turned off before installing or modifying the system

Call Tivoli, LLC tech support with questions

Caution: This Power Supply is designed to work on 100-277V AC line voltage only. Use of any other power source will cause damage, shorten the life of the fixture and will void the warranty.

Consult any and all applicable local and national codes for installation.

Do not conceal or extend exposed conductors through a building wall as per local electrical code.

Warning: With any luminaire or power supply for any application, basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injuries. This power supply should be installed by a certified professional.

Installation Instructions

Mounting Location Requirements

It is recommended that the enclosure be mounted with at least 10″ of open space around it for proper ventilation. Do not mount next to or above heat radiating equipment. Operating under high ambient temperature may increase the internal temperature and will require a de-rating in output current. This power supply will operate efficiently between -40° C to +80° C with adequate ventilation. The enclosure is NEMA 3R rated for outdoor/wet applications.

Outdoor Installation

Step 1: Locate Power Supply enclosure (NEMA 3R rated) in a suitable outdoor location.

Step 2: Orient the box in the proper orientation for outdoor use. The solid cover must be positioned at the top to maintain water proof integrity.

Step 3: Note the spacing of the mounting holes when determining mounting location.

Step 4: Knock out access holes as needed. The 12″ Box has knockouts along the bottom of the box. The 16″ does not include knockouts. Cut out access holes where needed.
Caution! Be careful not to damage internal electrical components.

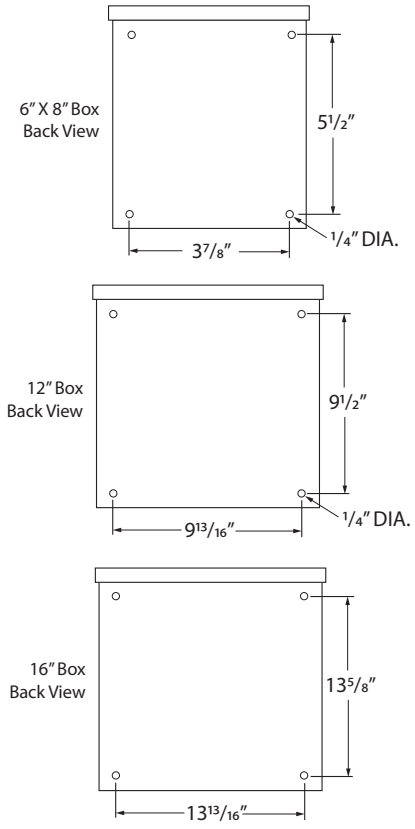
Step 5: Install strain reliefs (wire clamps) for ½″ hole size. Input lead wires are 18AWG. Output lead wires are 14AWG.

Input Connection:

Bring external Positive (Black) and Negative (White) Power Lines through Strain Relief on the input side of the Transformer. Connect to Black and White Transformer Leads using the correct size and UL approved Wire Nuts.

Grounding: Connect the Green Ground Wire from inside the enclosure and the Green Transformer wire to incoming ground wire.

Note: The 6″ X 8″ box has only one Ground Wire.



Warnings and Cautions

1. Risk of electrical shock and energy hazard. All failures should be examined by a qualified technician. Do not open the case of the power supply module.

2. Do not install LED power supplies in places with high ambient temperature or close to a fire source.

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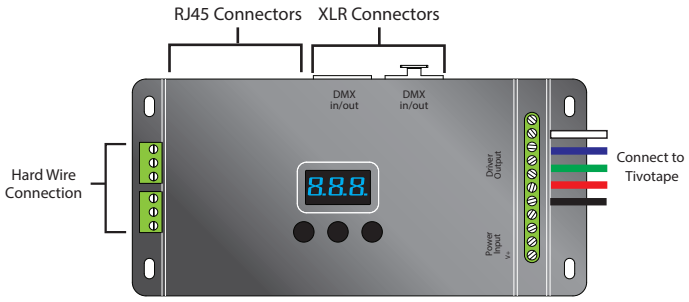
Luminaire Connections

Connection Options

There are three types of DMX In/Out ports:
1. RJ45
2. 3 Pin XLR
3. Screw connections



Programming 5 Channel DMX Sub-Controller

Programming the DMX Sub-Controller

Press "M" key to switch menus.
Press and hold "M" key to return to main menu.
Press "^" or "v" Key to to make selection.
Select "Exit" to return to previous Munu.

1. DMX Address Setting

DMX:001 Hz:High
Mode:RGB 8bit
Curve:Standard
Dim:Smo TOOL&v

Main page

Press "^" or "v" key to set DMX address.
Range: 001~512

2. PWM Frequency

DMX:001 Hz:High
Mode:RGB 8bit
Curve:Standard
Dim:Smo TOOL&v

Press "^" or "v" key to choose.
Optional :
Std (standard)
High
Mid (middle)
Low

No flicker in video camera.

Smooth and delicate, human eye is comfortable.

* It is recommended to use standard.

3. Mode

DMX:001 Hz:High
Mode:RGB 8bit
Curve:Standard
Dim:Smo TOOL&v

Press "^" or "v" key to choose.
Optional : Dim / CT
RGB / RGBW / RGBWY

4. Grey Level

DMX:001 Hz:High
Mode:RGB 8bit
Curve:Standard
Dim:Smo TOOL&v

Press "^" or "v" key to choose.
Optional : 8bit
16bit (choose it if the master controller support this function)

5. Dimming Curve

DMX:001 Hz:High
Mode:RGB 8bit
Curve:Standard
Dim:Smo TOOL&v

Press "^" or "v" key to choose.
Optional : Standard
Linear
LOG
0.1~9.9

It is recommended to use standard, 0.1-9.9 is for special requirements.

6. Enhance Dimming

DMX:001 Hz:High
Mode:RGB 8bit
Curve:Standard
Dim:Smo TOOL&V

Press "^" or "v" key to choose.
Optional : Std (standard)
Smo (smooth)
* It is recommended to use standard.
Smo: This option with smooth processing, realize the dimming flicker-free and dynamic effects more downy.

7. Tool

DMX:001 Hz:High
Mode:RGBW 8bit
Curve:Standard
Dim:Smo TOOL&V

Press "^" or "v" key to enter submenu.

Screen: ON+A ddr
Contrast: 40%
Beep: ON TEST&V
EXIT&V

Press "^" or "v" key to enter submenu of test.

CH1: 255 CH2: 255
CH3: 255 CH4: 255
CH5: 255 ALL: 255
EXIT &V

Brightnes s setting (range: 0~255)
Press" v" to exit

001

Screen: ON+A ddr
Screensaver open and display address if undo for 2 minutes.

Screen: ON+black
Screensaver open and black if undo for 2 minutes.

DMX:001 Hz:High
Mode:RGBW 8bit
Curve:Standard
Dim:Smo TOOL&v

Screen: OFF
Screensaver not enable.

* Fast self-testing function: press "^"or "v" keys simultaneousl y for 2-3 seconds under any page, decoder will enter self-tes ting function.

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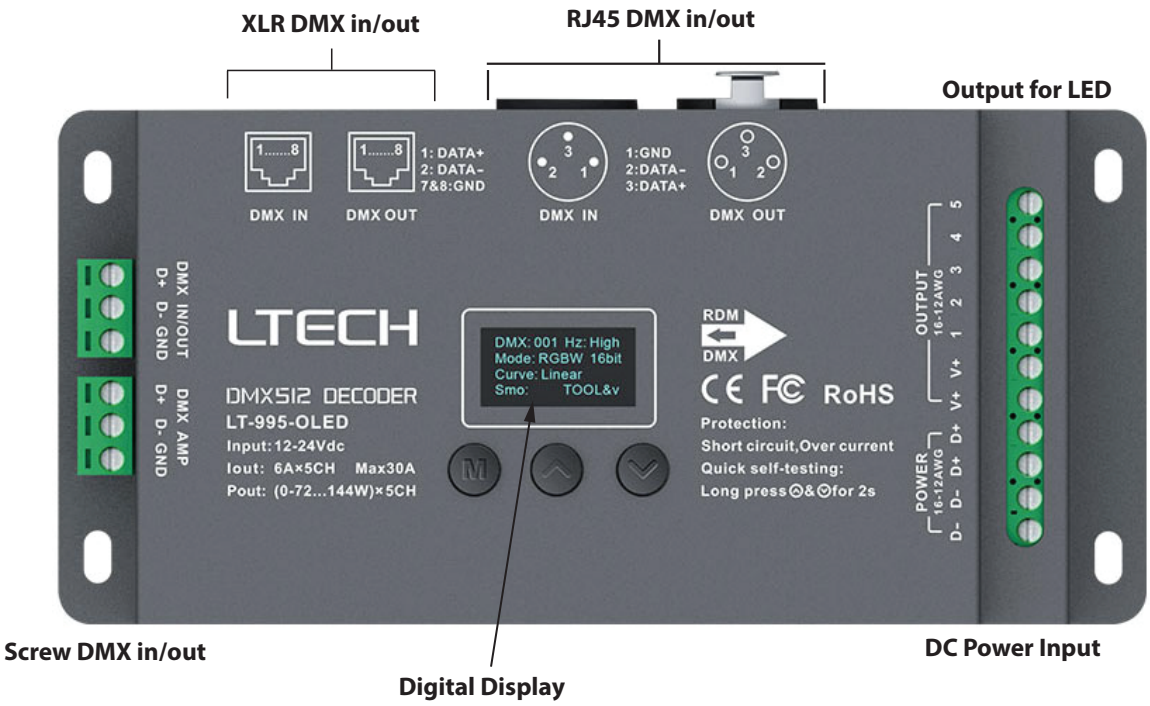
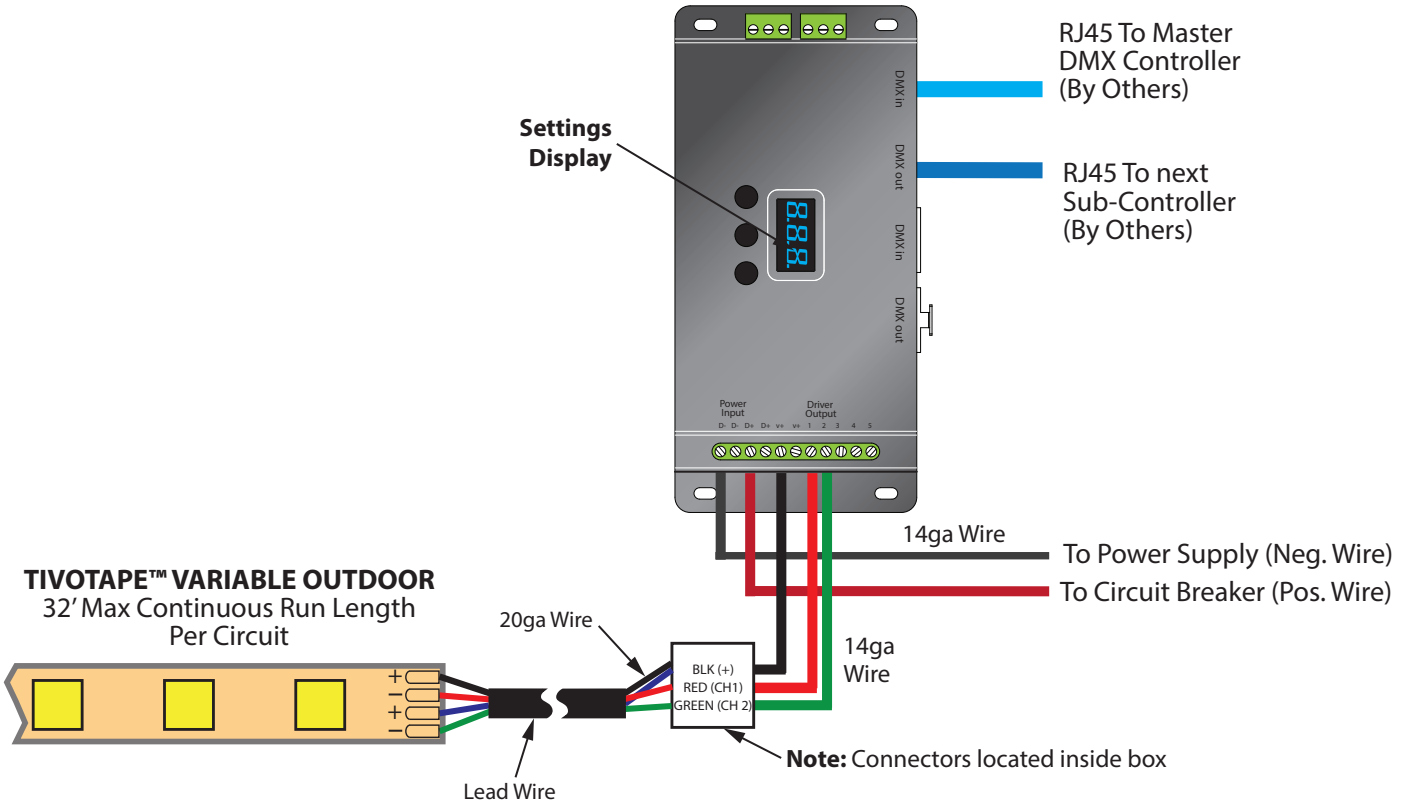
Tivotape™ Variable White Wiring Diagram for 5 Channel DMX Digital Controller

DMX512 & RDM Decoder





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Tivotape™ Variable Outdoor Wiring Diagram for 3 Channel Decoder

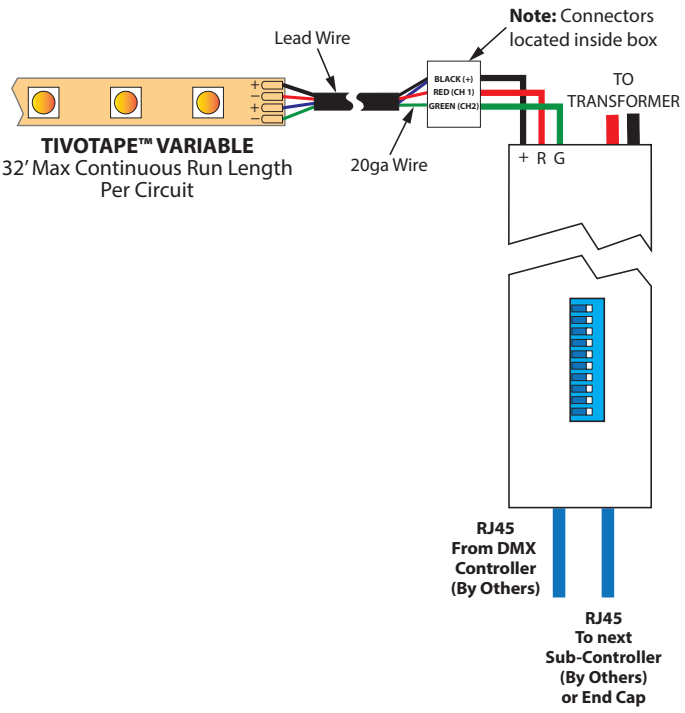
Install Transformer Enclosure

Step 1: Locate Transformer enclosure in a suitable indoor or outdoor location. Power supply enclosure is water-ltight and may be installed in outdoor wet environments.

Step 2: Connect Transformer input to 120-277V AC line voltage.

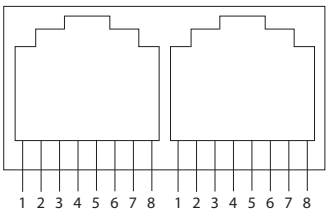
Step 3: Connect each luminaire linear run to one on the 3 circuit connectors. Installer is responsible to select the right size wire for run length and total wattage for each circuit. Do not exceed 90 watts per circuit.

TIVOTAPE™ PAD DESIGNATION	LEAD WIRE COLOR	ADNM-VW CONNECTOR WIRE COLOR
+	Black	Black (+)
-	Red	Red
+	Blue	Black (+)
-	Green	Green



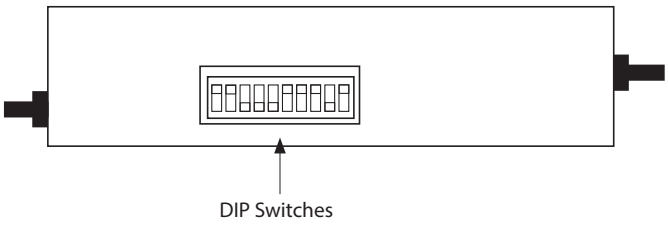
Connect RGB Controller to Sub-Controller

Step 1: Interconnect RGB controller (DMX512 signal) to Sub-Controller using CATS Cable with RJ45 connectors. Refer to the diagram for custom wiring appolications. Be sure to maintain corect polarity if custom wiring is required.



Pin 1: Data+
Pin 2: Data-
Pin 3: Purple
Pin 4: Green
Pin 5: Blue
Pin 6: Red
Pin 7: GND
Pin 8: GND

DMX-512 Address Code Setting



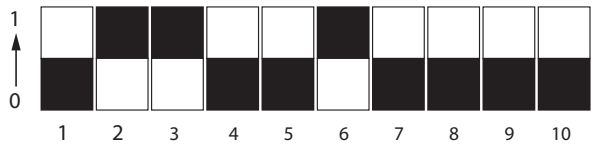
This sub-controller has a total of 512 address codes. 1 represents the least significant byte (LSB) and 9 is most significant byte (MSB). The initial address code is the DMX signal received by Channel 1 of the decoder. Channel 2 will receive data on the initial address code + 1 and Channel 3 will receive data on the initial address code + 2. The initial address code is the sum of DIP switches 1-9 in the "On" position. The 10th switch is not used.

Move a switch up to turn it on and leave it in the down position to achieve a "0" value.

Value of each DIP Switch

DIP	1	2	3	4	5	6	7	8	9
VALUE	1	2	4	8	16	32	64	128	256

Example: Set to 38
Set the 2nd, 3rd and 6th switch to "1" and set the rest to "0". The sum of the switches is 2+4+32 for an address of 38.



Basic Programming Codes:

RED: 1 off, 2 through 9 on
BLUE: 1 and 2 off, 3 through 9 on
GREEN: 2 off, 1 and 3 through 9 on
WHITE: 3 off, 1, 2 and 4 through 9 on
DMX SIGNAL: 1 on, 2 through 9 off

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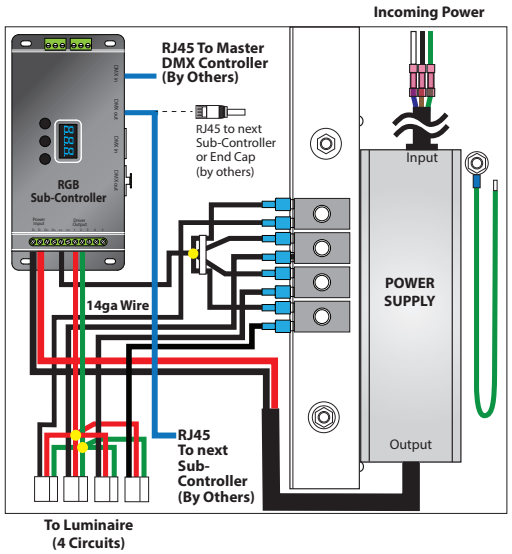
ADNM-VW Series Wiring Diagrams

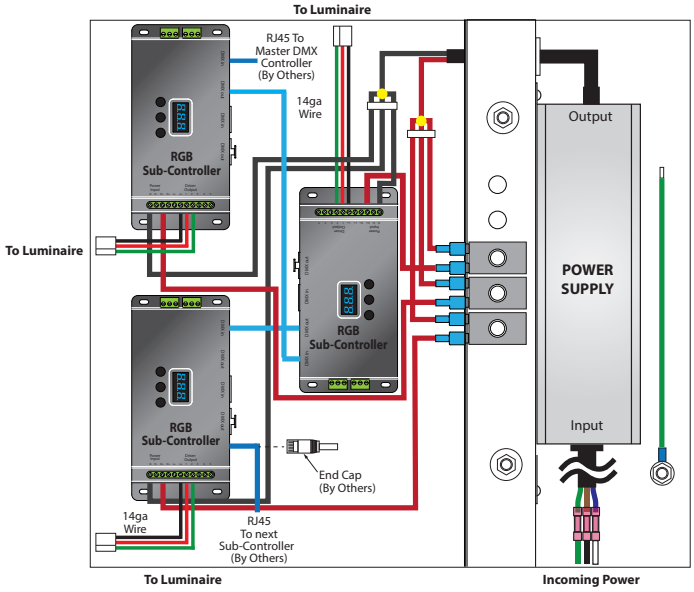
ADNM-320-4-5-12-VW
100-277V AC / 12V DC, 240W / 4 CIRCUITS X 5A

BOX SIZE:
12" X 12" X 4"
NEMA 3



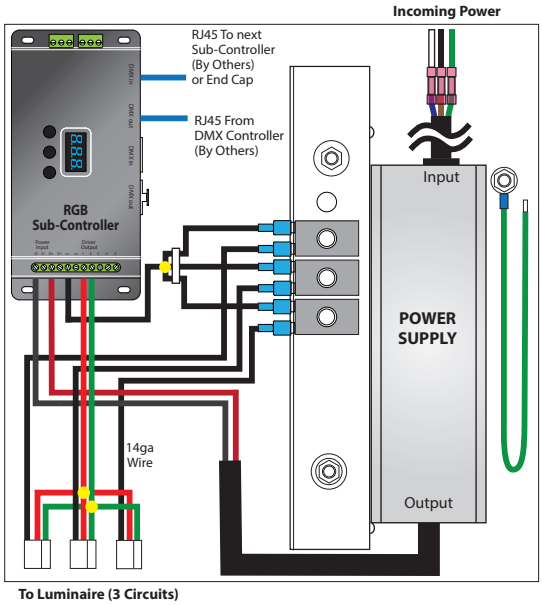
ADNM-240-3-5-12-VW-3
100-277V AC / 12V DC, 180W /3 CIRCUITS X 5A
ADNM-320-3-4-24-VW-3
100-277V AC / 24V DC, 288W /3 CIRCUITS X 4A

BOX SIZE:
16" X 16" X 4"
NEMA 3



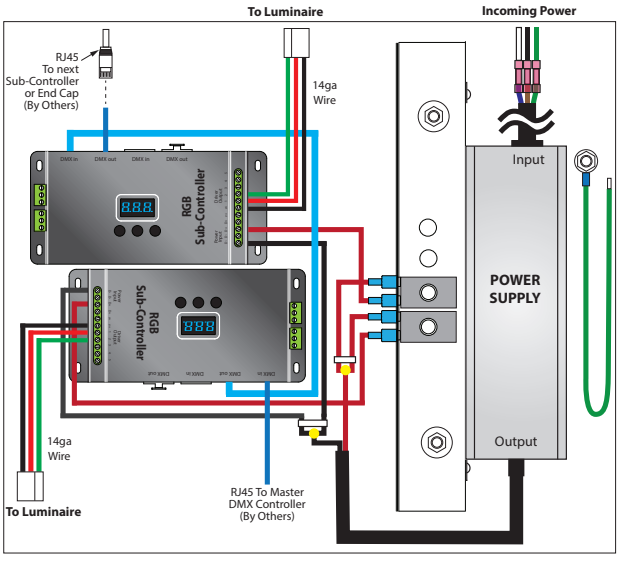
ADNM-240-3-5-12-VW
100-277V AC / 12V DC, 180W /3 CIRCUITS X 5A
ADNM-320-3-4-24-VW
100-277V AC / 24V DC, 288W /3 CIRCUITS X 4A

BOX SIZE:
12" X 12" X 4"
NEMA 3



ADNM-150-2-5-12-VW-2
100-277V AC / 12V DC, 120W /2 CIRCUITS X 5A
ADNM-240-2-4-24-VW-2
100-277V AC / 24V DC, 192W /2 CIRCUITS X 4A

BOX SIZE:
12" X 12" X 4"
NEMA 3



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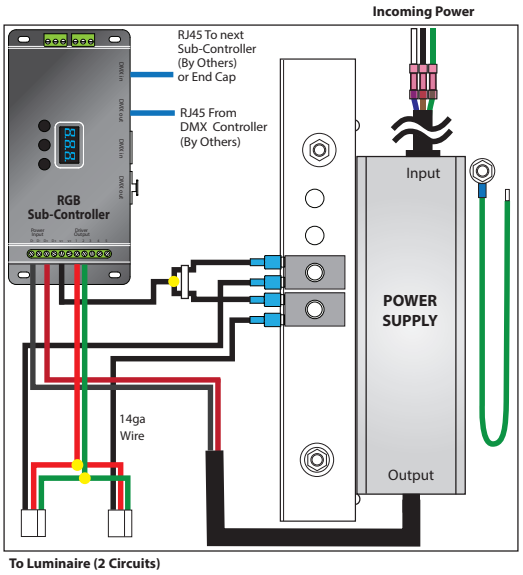
ADNM-VW Series Wiring Diagrams

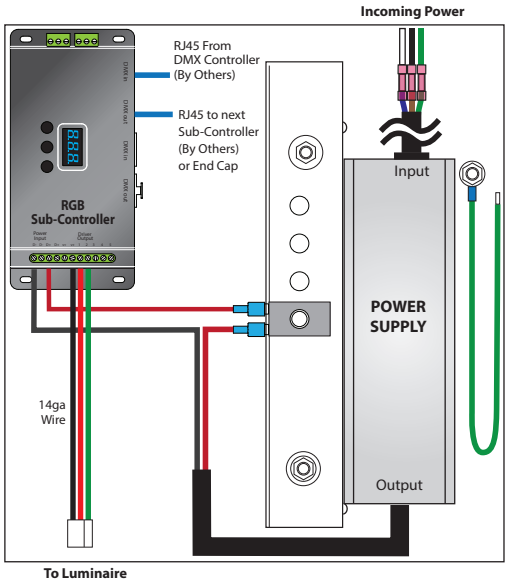
ADNM-150-2-5-12-VW
100-277V AC / 12V DC, 120W /2 CIRCUITS X 5A
ADUL-240-2-4-24-VW
100-277V AC / 24V DC, 192W /2 CIRCUITS X 4A

BOX SIZE:
12" X 12" X 4"
NEMA 3



ADNM-80-1-5-12-VW
100-277V AC / 12V DC, 60W /1 CIRCUIT X 5A
ADNM-120-1-4-24-VW
100-277V AC / 24V DC, 96W /1 CIRCUIT X 4A

BOX SIZE:
12" X 12" X 4"
NEMA 3



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