



NILA

VARSA USER GUIDE



Nila light fixtures are intended for indoor use only (unless clearly specified for outdoor use).



Nila light fixtures should not be used if the ambient temperature is over 50° C (120°F).



Do not use Nila light fixtures in wet conditions unless clearly specified for all-weather use. A shock hazard may exist if a fixture is placed directly in water.



Nila light fixtures are not suitable for direct mounting on normally flammable surfaces (suitable only for mounting on non-combustible surfaces).



When mounting a Nila light fixture for use, make sure the power cable is not stressed or kinked. A shock hazard may exist if the power cable is being stressed due to the position of the fixture.



Only connect Nila light fixtures to grounded power supplies. Nila lights can only be attached to AC power supplies of 90 to 240 volts AC, 50 to 60 hertz (unless specifically noted as DC compatible).



Nila products conform to all applicable CE directives.



Nila products comply with North American safety standards.

RoHS

Nila products comply with the Restriction of Hazardous Substances Directive.

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Patents Pending

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ENVIRONMENTALLY SUSTAINABLE LED LIGHTING

Thank you for purchasing a Nila LED light fixture. You're now a member of an elite group of savvy lighting professionals who are ushering in a new age of lighting possibilities. Take a moment to read this manual and familiarize yourself with the operation of your new light fixture. With a little care, your Nila light fixture should give you many years of exceptional service.

STATEMENT OF WARRANTY

Please register your new Varsa fixture to protect your investment:

<http://nila.com/register>

Your Nila Varsa is covered by a warranty against manufacturing defects from the date of purchase by the original owner for two (2) years. Under this guarantee Nila Inc.'s liability is limited to repair or replacement of the product with the same or an equivalent product and does not include installation costs, removal costs, or transportation costs, nor loss or damage of any kind whatsoever, whether incidental, consequential or otherwise. Nila Inc. reserves the right to determine whether the equipment manufactured by Nila Inc. is defective. Damage due to normal wear and tear, incorrect installation, misuse, abuse, accident, or any cause other than a manufacturing defect is not covered by the warranty. Nila disclaims any liability for damage to products, adapters, other property, or personal injury resulting in whole or in part, from improper installation or use of its products. Commodities not manufactured by Nila Inc. are subject to the warranty or guarantee set forth by the manufacturer, and then only to the extent Nila Inc. is able to enforce the warranty or guarantee.

POWER OPTIONS

AC OPERATION

Your Nila light fixture has a universal switching power supply that works at 90-240V AC input. Make sure that the main power switch is in the OFF position before attaching or removing the power cord from the fixture.

An AC power cord is provided for each Nila fixture. A variety of plug types is available. Your Nila light fixture will work anywhere in the world as long as you have the proper plug type for the region. Regardless of plug type, a grounded power source is always necessary for safe operation.

Nila fixtures are not designed to be used with external dimmers.

DC OPERATION

Nila's revolutionary **Direct DC** option makes it possible to connect your Nila light fixtures directly to a DC source. **Direct DC** makes powering your lights in the field a snap. Simply connect an XLR output from the battery to the rear of your fixture and run the light as usual.

An optional V-mount or gold-mount battery plate is available for your Varsa. It's designed to be conveniently attached to the fixture's yoke.

The Varsa accepts 10-18 volt DC input. If your battery's voltage falls outside the recommended range, the fixture will not function. We recommend that you use batteries rated at 6 amps or higher. If you use a battery whose current rating is lower than 6 amps, you risk damaging the battery. If a battery is connected with its polarity reversed, the fixture will not function and built in polarity protection will protect your Varsa light fixture from damage.

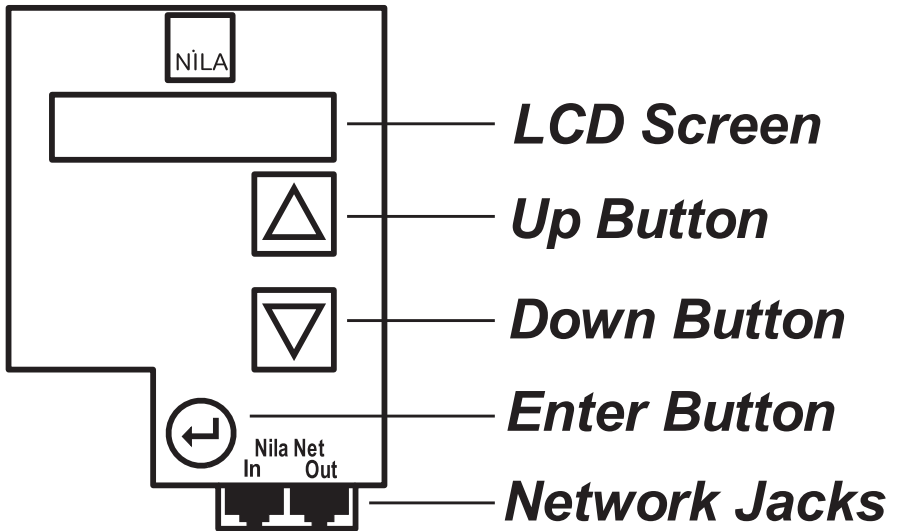
Both AC and DC power can be connected at the same time without risk of failure. If both are connected, the fixture will continue to draw power from the DC input until the battery's voltage drops below nominal voltage. You can hot swap AC and DC cables with the light powered on and you will not see any change in the light output.

DC extension cables should not exceed 10' (3m) in length.

Varsa XLR Pins: 1 & 2: Negative DC V In
 3 & 4: Positive DC V In

CONTROLS

Your Varsa light fixture comes equipped with the control pad illustrated below.



CONTROL MODES

There are two different operating modes for controlling your Varsa light fixture. On power up, the LCD screen on the rear of the fixture will display the startup screen followed by the software version. Once startup is complete, the display will indicate both the output level (0 to 100%) and the operating mode that the fixture was in when last switched off.

The two operating modes are Master Mode and Nila Net Mode. The light fixture will arrive from the factory in Master Mode. It will automatically switch to Nila Net mode when a cat6 control cable is inserted and a Nila Net signal is present. It will remain in Nila Net mode until it is manually reset to Master Mode.

To force your Varsa light fixture into Nila Net mode when there is no Nila Net signal present, turn the unit off and hold down the **Down Arrow** while turning the unit back on. Continue to hold the **Down Arrow** until startup is complete. The lower half of the LCD screen should now indicate "Nila Net Mode".

To reset a Varsa light fixture to Master Mode, turn the unit off and hold down the **Up Arrow** while turning it back on. Continue to hold the **Up Arrow** until startup is complete. The lower half of the screen should now indicate "Master Mode".

MASTER MODE

Master Mode allows for local dimming control of each individual fixture. To change the intensity of a fixture's light output, press the **Up or Down Arrows** on the rear of the fixture. The LCD screen will display the intensity of the output from 0 to 100%.

A Nila fixture in Master Mode may also be used to control other Nila fixtures with the same control software. Simply connect a cat6 cable from the **Nila Net Out** jack on the rear of the Master fixture to the **Nila Net In** jack on any other Nila fixture. Slave fixtures will automatically switch to Nila Net Mode and will mirror the intensity setting of the Master Mode unit.

No two fixtures in a chain may be in Master Mode at the same time.

NILA NET MODE

Nila Net Mode allows for remote dimming control of individual fixtures. This mode requires input from a Nila fixture in Master Mode or a DMX control system with a Nila Net adapter.

Nila Net allows for each fixture to be addressed to a single control channel between 1 and 512. These addresses correspond to those of a DMX control device. When there is a valid Nila Net signal present, the LCD screen will display the fixture's current channel setting and output level. If there is no Nila Net signal present, the LCD screen will read "Nila Net signal not present".

To change the control address of any Nila light fixture, press the **Enter Button** to display the current address. An asterisk will be visible above the first digit in the address. Use the **Up and Down Arrows** to change that digit, then press the **Enter Button** again to move the asterisk to the next digit. Cycle through the digits to set a channel number between 1 and 512. Once the channel is set, the display will return to the mode screen. The channel is now written to memory and will not change even if the light fixture is powered off.

If the screen reads "XXX is not a Legal Value", you've chosen an invalid address. All addresses must be between 1 and 512.

When in Nila Net Mode, the last light in any chain will display a "T" on its display. This indicates that the control signal is terminated at that light fixture. If more than one light fixture in a chain displays a "T", then there is a faulty cable or fixture.



"T" Indicates DMX Termination Point

NOTE: There are multiple versions of the Nila Net control system. The mode selection and networking illustrations presented here are for the version that came with your fixture. Other Nila fixtures may operate differently.

NETWORKING EXAMPLES

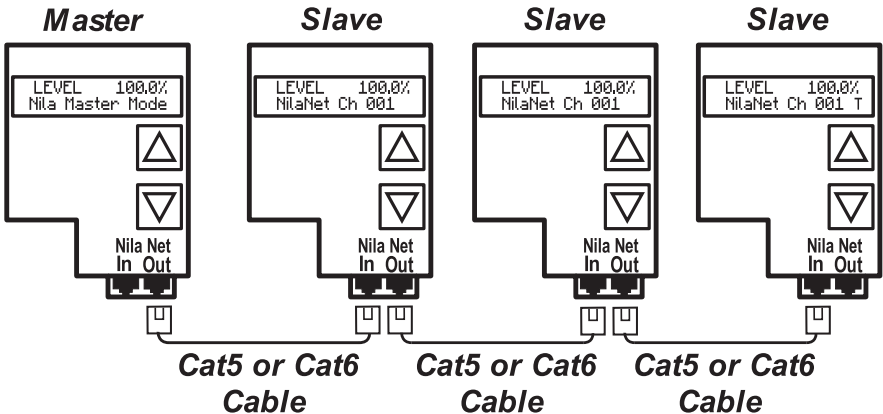
All of the examples presented here require all controlled fixtures to be in Nila Net mode. When connected to a Nila Net controller or DMX-to-Nila Net adapter cable, the light fixtures will switch to Nila Net Mode automatically. The fixtures may also be set to Nila Net Mode manually.

To force a Nila light fixture into Nila Net mode when there is no Nila Net signal present, turn the unit off and hold down the **Down Arrow** while turning the unit back on. Continue to hold the **Down Arrow** until startup is complete. The lower half of the LCD screen should now indicate "Nila Net Mode".

To reset a Nila light fixture to Master Mode, turn the unit off and hold down the **Up Arrow** while turning it back on. Continue to hold the **Up Arrow** until startup is complete. The lower half of the screen should now indicate "Master Mode".

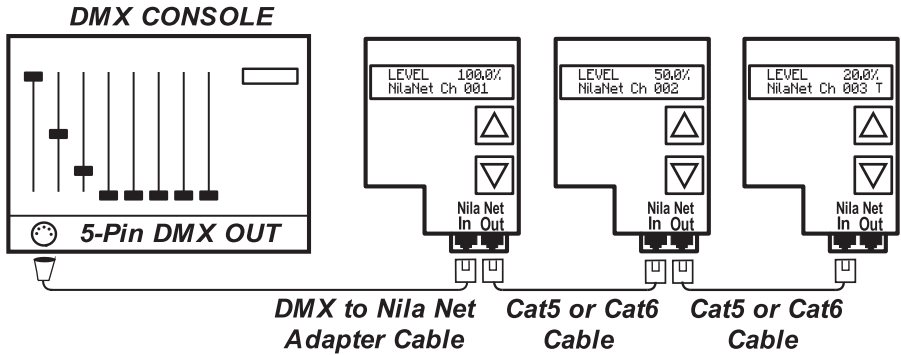
USING A MASTER FIXTURE

The simplest control network uses a Nila light fixture in Master Mode to control others in Nila Net Mode. Simply connect a cat6 data cable as shown and make sure all fixtures are on the same control channel. The **Up and Down Arrows** on the back of the fixture that is in Master Mode will now control the level of all of the lights in the chain.



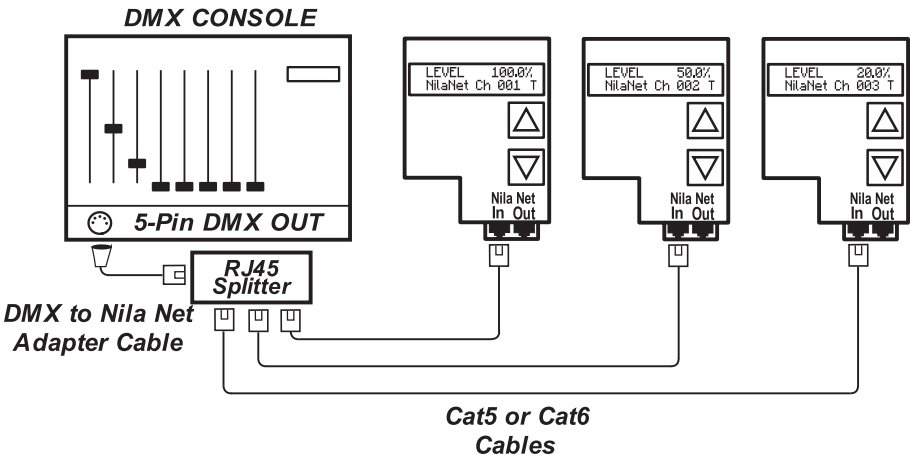
USING A STANDARD DMX CONSOLE (in series)

Nila light fixtures can be controlled by any standard DMX control console. The DMX standard 5-pin XLR output must simply be adapted to the Nila Net standard RJ45 connector. Nila offers a 5-pin DMX to RJ45 adapter cable.



USING A STANDARD DMX CONSOLE (in parallel)

Connect the 5-pin XLR output of the DMX console to a non-powered RJ45 splitter using our DMX to Nila Net adapter cable. Use the splitter to distribute the control signal to each fixture. Each fixture can be assigned its own channel or controlled together on the same channel. When using this sort of arrangement, every fixture will display a "T" on its screen indicating that the control signal terminates at each fixture.

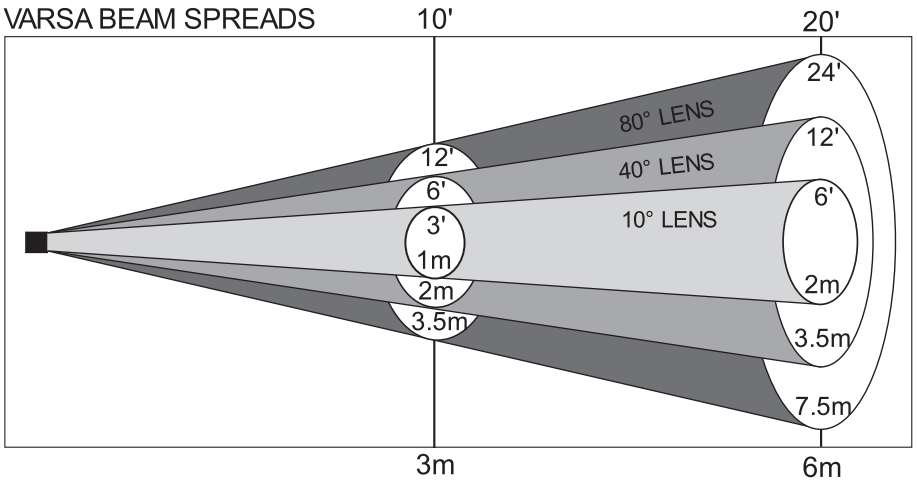


VARSA SPECIFICATIONS



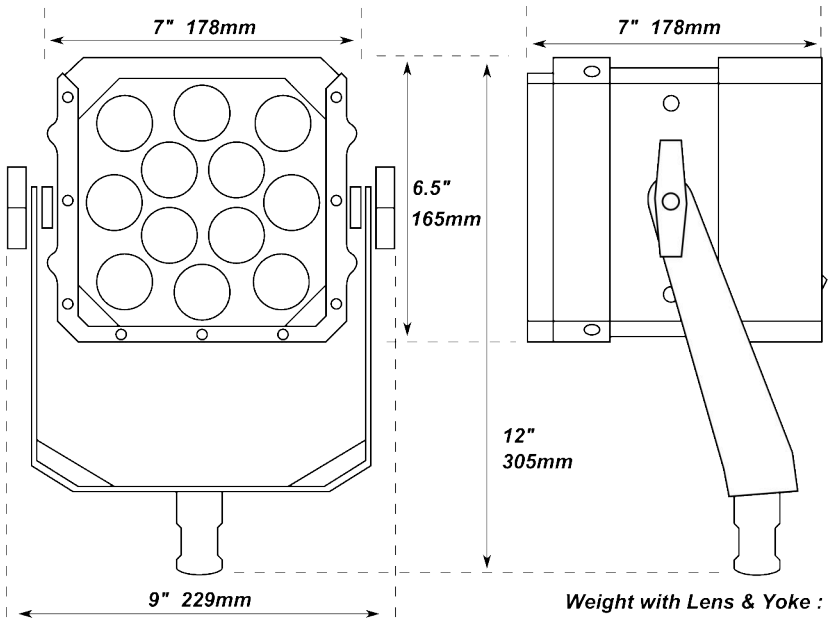
- input voltage: 100-240V AC, 10-18V DC
- input current: 0.65A at 115V AC
- system watts: 75
- power factor: >.95 @ 115V AC, >.97 @ 240V AC
- dim range: 0-100% (onboard dimmer)
- compatible shutter speeds: all (flicker-free at any frame rate at 100% output, and up to 5000 fps when dimmed)
- light source: single-color, high-brightness LEDs
- LED rated lifespan: 20,000+ hours
- color temperature: 5600°K (daylight), 3200°K (tungsten)
- UV output: none
- color spectrum: continuous
- CRI: 86 (5600°K), 92 (3200°K)
- TLCI: 84 (5600°K), 90 (3200°K)
- beam angle: 10° to 80°
- focus method: holographic film lenses
- control network: DMX512
- control connections: RJ45 (5-pin XLR adapter optional)
- built-in Chimera mount
- weight: 10 lbs. (4.5 kg)
- certifications: ETL & CE
- operating temperature: -22°F to +122°F (-30°C to +50°C)
- housing construction: aluminum
- mounting: yoke (w/junior pin & baby receiver)
- operating position: any
- cooling: passive (no fans)
- power cable: 10' locking IEC
- power connector: NEMA 5-15P (AC), 4-pin XLR (DC)
- country of origin: USA
- warranty period: two years

VARSA BEAM SPREADS



VARSA PHOTOMETRICS (daylight balanced)

Lens	3 Ft (FC)	10 Ft (FC)	20 Ft (FC)	1m (lux)	3m (lux)	6m (lux)
Raw	9400	1200	300	100000	13000	3200
10	5000	500	140	54000	5500	1500
20	2000	190	50	22000	2000	520
40	900	80	20	9600	840	210
60	480	42	11	5000	450	110
80	340	28	7.4	3600	300	80
60x10	1500	140	37	17000	1500	400





**LIGHT
SMARTER**