MonsterEyes II™

User Manual

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MONSTEREYES II™ QUICK START

Although it has many advanced features, MonsterEyes II is quite easy to set up and it is fully operational right out of the box. You will need to connect a 12 volt DC source to the power jack on the right rear side. Next, you must decide if you will be connecting passive speakers to the speaker terminals or an audio system to the RCA connectors. Eyeballs need connected to the eyeball output connectors. Details about connecting eyeballs may be found on pages 6-8 of this manual. You may connect a sensor or trigger to the terminals on the back left side, if desired. Otherwise, just use the internal timer. Once power is applied, the unit will immediately start working.

Now choose your ambient and scare sounds or choose RANDOM for one or both audio selections. Out of the box, you will find the timer control fully counterclockwise which is the off position. If you're not using a sensor or other type trigger, rotate this control to the desired position for it to trigger itself. You can tweak the speed and brightness as per your own taste. The speaker knob will need to be rotated clockwise for the desired volume if you have connected passive speakers to the speaker terminals. If using line level audio from the RCA connectors, adjust the volume from your audio system to the desired level.

MONSTEREYES II™ CONTROLS

AUDIO SELECTION (AMBIENT)
This six-position rotary switch allows you to select one (1) of four (4) available ambient sound tracks. You may also choose no ambient sound by selecting OFF or you can have the four tracks play at Random by choosing "R".

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AUDIO SELECTION (SCARE)
Much like the ambient sound switch, this switch allows you to choose one (1) of the four (4) scare audio tracks provided, let the system choose the sound at random or you can choose no scare sound.

TIMER
In addition to external triggers, your MonsterEyes IITM includes an internal timer to trigger it at preset intervals. With the control fully counter-clockwise, the timer is off. Rotate slightly for 10 seconds and up to 60 seconds in the fully clockwise position. Top dead center (12 o'clock) is approximately 30 seconds from the end of one scare until the unit triggers again.

BRIGHTNESS
The normal position for this control is top dead center (TDC), which yields medium brightness of the eyeball LEDs. Rotating the control to the full coun-terclockwise position decreases the brightness by 50% for scenes where you may not want the eyeballs to be overwhelming. Rotating fully clockwise doubles the brightness or situations where there is more ambient light or when you just want MonsterEyes to be more prominent in a scene.

SPEED
The top dead center position of this control is the normal operating speed. Rotating to the fully counterclockwise position (CCW) cuts speed by 50%, while rotation it to the fully clockwise position doubles the speed.

SPEAKER VOLUME
The SPEAKER VOLUME control affects only the volume from the internal pow-er amplifier to passive speakers. It does NOT affect the line level output.

TEST
The TEST pushbutton allows you to confirm proper operation of the unit by triggering it manually. Note, the trigger indicator will not light when this button is pressed. See below for more details.

POWER
The green POWER indicator is on anytime appropriate power is applied to the DC power jack on the rear of MonsterEyes IITM.

STATUS
The STATUS indicator will glow blue when the controller is in the normal/calm mode. Once startled (triggered) the STATUS indicator will turn red along with all the connected eyeballs. When the controller returns to the normal/come mode the STATUS light will turn blue again. Triggering from any method (test button, internal timer or external trigger) will cause the STATUS light to be red.

TRIGGER

The TRIGGER indicator lights (red) when an external device triggers MonsterEyes IITM via the rear panel trigger connector. It does NOT light from the internal timer or from pressing the TEST button.

MONSTEREYES II™ SPECIFICATIONS

EYEBALL CHANNELS

16 Independent channels (4 channels per cat-6 cable) Up to 125 mA per channel

ENCLOSURE

5.25" x 9.18" x 1.68" Black, flame resistant ABS

ELECTRICAL REQUIREMENT

12 volt DC, 2-5 Amps
120vac desktop UL listed power supply included.

AUDIO SOURCE

Internal, user selectable digital audio • Four (4) ambient tracks
• Four (4) scare tracks
Select individual track, play in succession or at random

AUDIO OUTPUT

Internal 20-watt stereo Class-D power amplifier
Line-level output for external amplifier or powered speakers

SAFETY FEATURES

Power supply over voltage, over heat, over temperature protection Internal surge suppression and voltage regulation
Reverse polarity protection
Master fuse for short-circuit protection
Individual channel over current / short-circuit protection

TRIGGERS

Trigger via any dry switch closure (pushbutton, pressure mat, motion sensor, radio remote control, microwave sensor, prop controller, etc. Also includes user adjustable internal timer for 0-30 second self-triggering.

CONTROLS, SWITCHES AND INDICATORS

Front panel controls include: Brightness, Speed, Timer and Speaker Volume
Switches include: Test, Ambient sound and Scare sound
Indicators include: Power and Status (clam or triggered)

REAR PANEL CONNECTORS

2.1mm DC power jack, 4x RJ-45 eyeball outputs, speaker spring connectors, trigger screw terminal.

MONSTEREYES II™ FAQ

Q: Can MonsterEyes II™ be used in mobile applications like a car, truck or tractor?

A: *Absolutely. MonsterEyes II™ is designed for a nominal 12vdc, 5 amp power supply. Operation from vehicle power is fully supported.*

Q: What about use overseas?

A: *No problem. Just use a 12vdc, 5Amp power supply that matches the AC mains in your area.*

Q: **What if I accidentally apply higher voltage than recommended?**

A: *The controller has over-voltage protection. Once you reach 14.5vdc (+/-) an internal (user replaceable) fuse will blow, preventing damage to the unit.*

Q: How about reverse polarity?

A: *Reverse polarity input power will be ignored. It will not damage the controller, but the controller will not operate until polarity is corrected.*

Q: What if the voltage is too low.

A: *Reasonable results are possible down to about 10vdc. However, the eyeballs will not be as bright. Also, the output power of the internal audio power amplifier will be reduced.*

Q: What if an eyeball connection gets short-circuited?

A: *A current sensing circuit will shut down the channel that gets shorted. Once the short is eliminated, the channel will resume normal operation once the controller is shut down and powered back up. A shorted eyeball connection will not harm the controller.*

Q: Can I use the internal audio amplifier and the line-level output simultaneously?

A: *Yes, absolutely. The speaker output and line level outputs are independent of each other. Please note that the line level output is a fixed level, which depends upon your audio system to adjust volume. However, the speaker level outputs are controlled by the front-panel volume control.*

Q: Can I connect multiple "eyeballs" to a single channel?

A: *Absolutely! Using our iSocket board, you can easily use MANY pairs of eyeballs on each of the controller's sixteen (16) channels. The exact number is dependent upon the type and power requirements of the eyeball LEDs used, but the number is huge. You may use up to five (5) pairs of Lights Alive brand eyeballs per channel.*

Q: Can I use my own LEDS?

A: *Sure. We'll give you details on how to connect them and we can supply any (or all) of the parts needed to do so. While we highly recommend our eyeballs for normal use, the ability to make your own is often helpful when building eyes into props.*

CONNECTING MONSTEREYES II™, ISOCKET BOARDS AND EYEBALLS

Connecting iSocket boards to the MonsterEyes II controller is as simple as plugging in a cat-5 or cat-6 network cable to the controller and the iSocket. Both RJ-45 jacks on the iSocket board are identical, so it makes no difference which one you use. If you wish to connect more eyeballs to those same channels, simply daisy-chain up to five (5) iSocket boards using additional cat-5 or cat-6 cables.

We recommend not exceeding 100' total per channel on the network cabling, based on the math. The fact is that we tried using 1000' of cable and there was no perceptible difference. While cat-5 cables are fine for short runs, it is highly recommended that you use cat-6 cables for long runs as t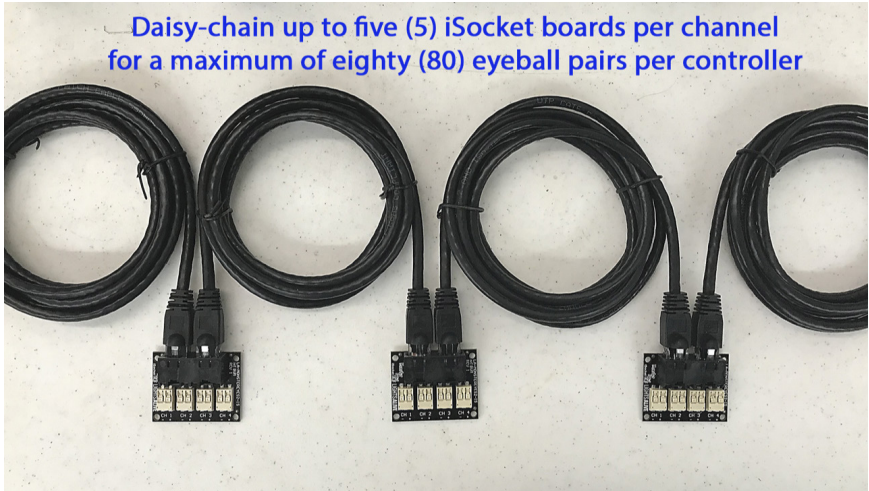he wire is heavier and there is less voltage drop. Eyeballs are connected to the iSocket board via the supplied 24AWG stranded zip cord. You may also use your own 22 or 24AWG stranded or solid wire. The wire we supply is color coded. The silver wire is negative (-) and the copper wire is positive (+). Polarity
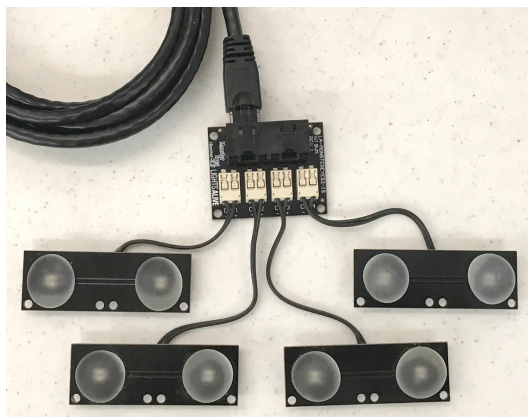
is extremely important for proper operation. Simply split, then strip the wire as shown in the illustration. Make sure to twist each wire as tightly as you can with your fingers.

Daisy-chain up to five (5) iSocket boards per channel for a maximum of eighty (80) eyeball pairs per controller

Split wire 5/8" and strip 1/4" insulation for both eyeball boards and iSocket boards.

Next, insert the wires into the proper hole in the wire-to-board connector. You must push harder than you might expect. In addition to the bare wire, you are pushing a bit of the insulation into the connector. When inserted properly, it's nearly impossible to remove without damaging the wire or connector. If you didn't press hard enough, the wire may actually fall out of the connector.
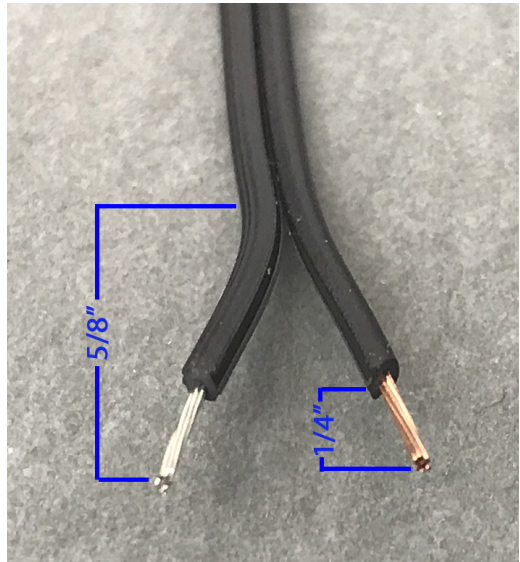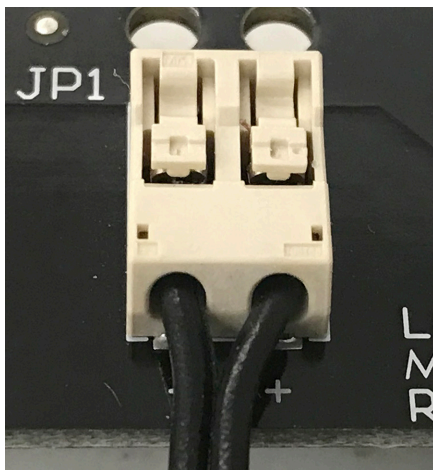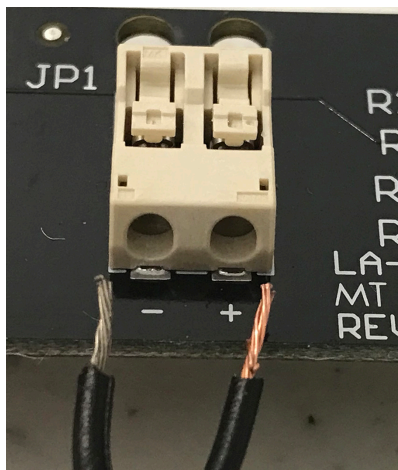
If you need to remove a wire, simply put a pointed, but blunt, tool in the indented area on the top of the connector (see photo). We have found several items around our shop and homes that will work fine. If you don't have something appropriate, a ballpoint pen will do the trick. Press hard on the release and the wire should come out relatively easily.

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