

# **LED Replacement Lights with lens for Locomotives**

**By  
Bob Rohwer**

# The Results

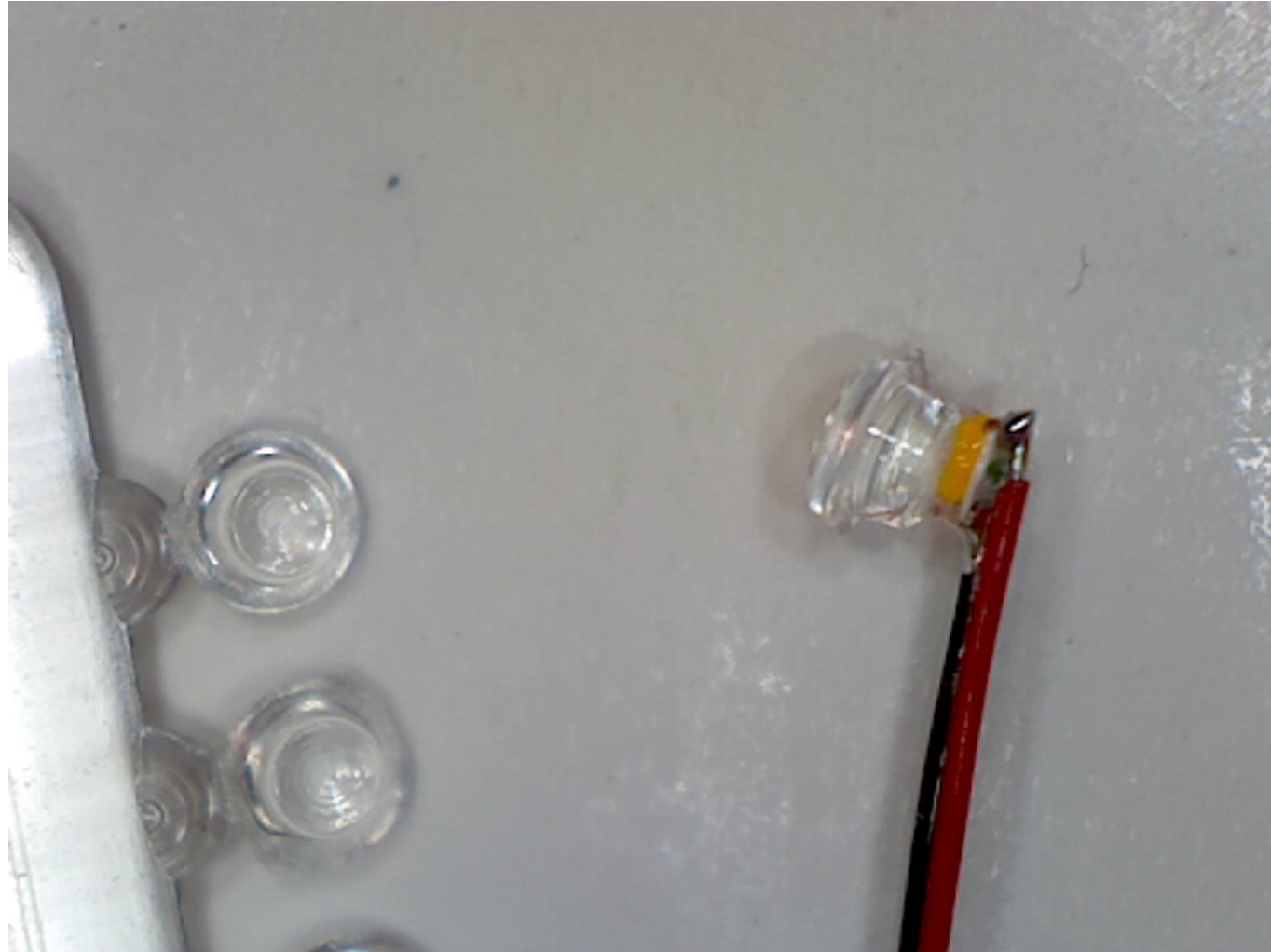


**402 Warm White LED + DW LN341 Lens**



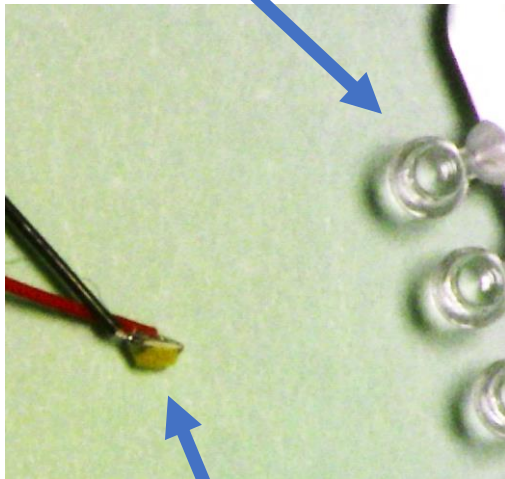
# LED Locomotive Headlight

Warm White 402 prewired SMD LED + DW LN341 Lens

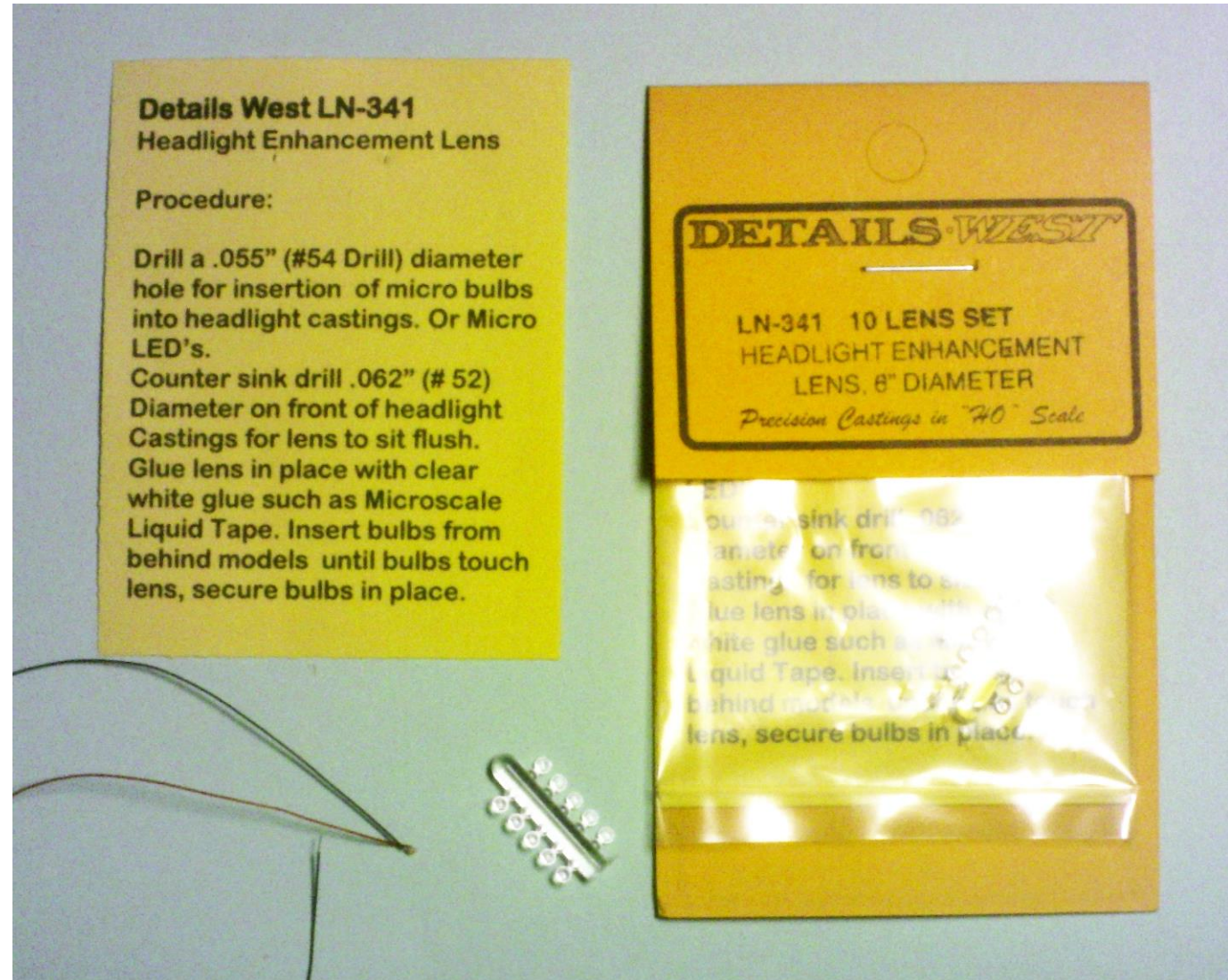


# Supplies

## Details West LN-341 Lens



## Wired 402 Warm white LED



# LED's Listed on Amazon Using 402 Prewired Warm White



EDGELEC 20pcs Prewired 0603 Warm White SMD LED Light Emitting Diode  
3V Micro Litz Length 7.8in. (20cm)  
Orderer's Model Toy Decoration

EDGELEC

60 ratings | 43 answered questions

\$9.99 Prime FREE Delivery & FREE Returns

Color: [2] Warm White

Size: 0603 Prewired

0402 Prewired | 0603 Prewired | 0805 Prewired

1206 Prewired

Roll over image to zoom in

## Magnifier with Lighting (Amazon)



V-LIGHT Full Spectrum Natural Daylight Effect Magnifier



Brightech LightView Pro 2 in 1 XL Magnifying Floor Lamp

## Where to Get Supplies

1. [https://www.amazon.com/EDGELEC-Prewired-Emitting-Soldered-Decoration/dp/B07DLCLQWR/ref=sr\\_1\\_8?dchild=1&m=A3S1JN3RP90N86&marketplaceID=ATVPDKIKX0DER&qid=1588896272&s=merchant-items&sr=1-8&th=1](https://www.amazon.com/EDGELEC-Prewired-Emitting-Soldered-Decoration/dp/B07DLCLQWR/ref=sr_1_8?dchild=1&m=A3S1JN3RP90N86&marketplaceID=ATVPDKIKX0DER&qid=1588896272&s=merchant-items&sr=1-8&th=1)

402 warm white pre-wired LED      Amazon:    20 each - \$9.99

2. Details West LN-341 6" Headlight Lenses      Railroad Hobbies, Online

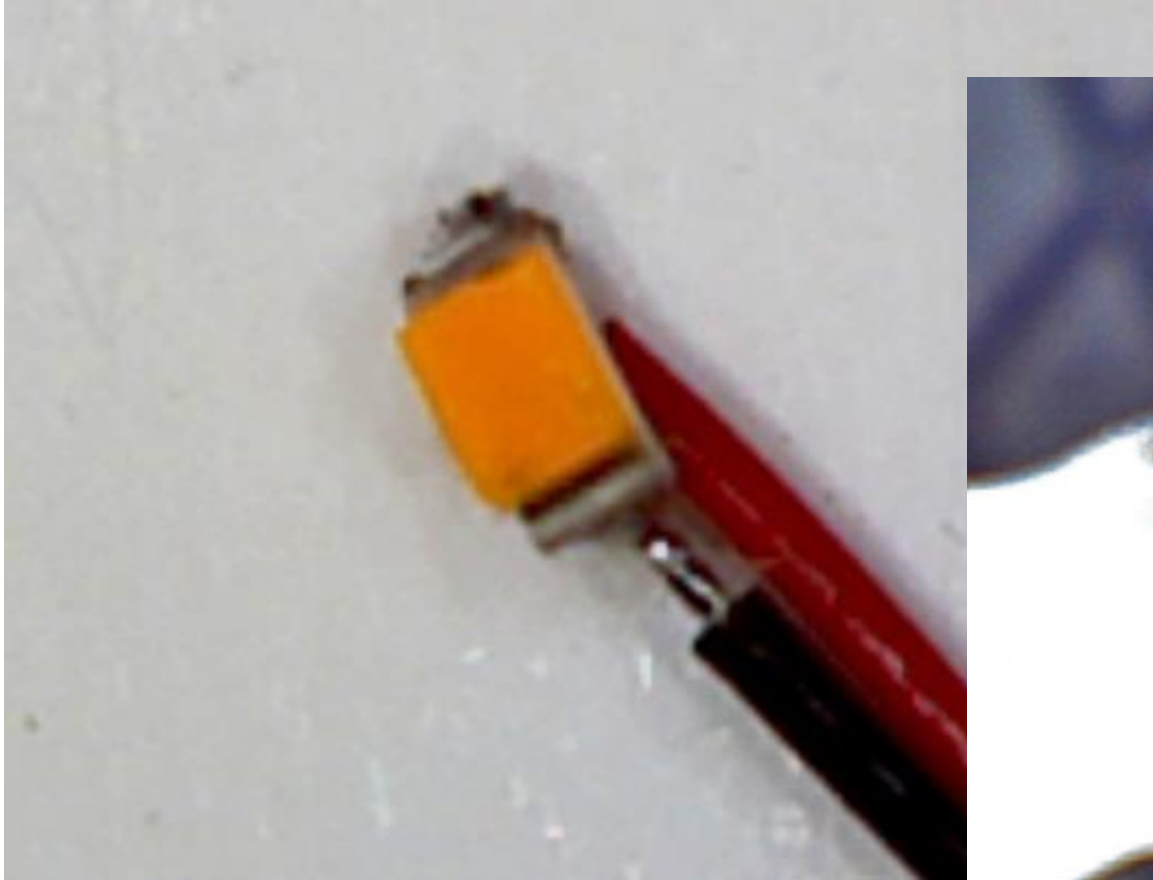
3. [https://www.amazon.com/Spectrum-Daylight-Magnifier-Mounting-VS40203BR/dp/B07FWC5GYC/ref=sr\\_1\\_7?dchild=1&keywords=lite+magnifier&qid=1598462213&sr=8-7](https://www.amazon.com/Spectrum-Daylight-Magnifier-Mounting-VS40203BR/dp/B07FWC5GYC/ref=sr_1_7?dchild=1&keywords=lite+magnifier&qid=1598462213&sr=8-7)

V-LIGHT Full Spectrum Natural Daylight Effect Magnifier

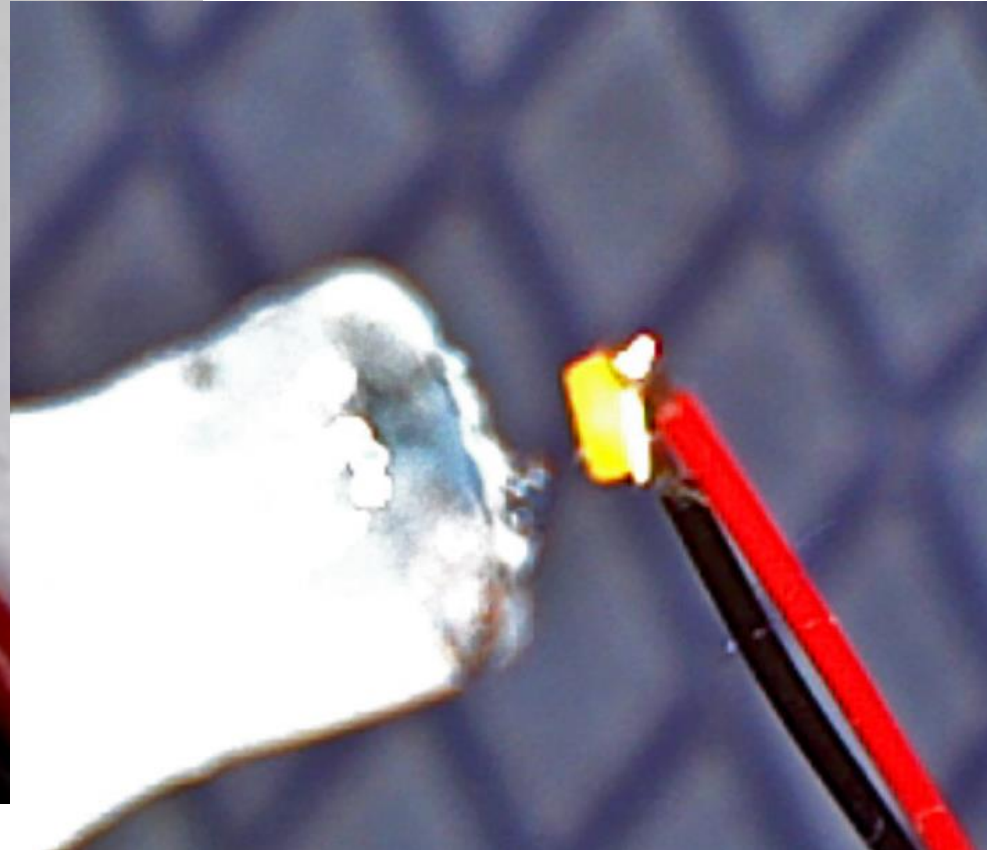
4. [https://www.amazon.com/Brightech-Lightview-Lighted-Magnifying-Glass/dp/B06XGX72LQ/ref=sr\\_1\\_68?dchild=1&keywords=bright+tech+desk+lamp&qid=1598462849&sr=8-68](https://www.amazon.com/Brightech-Lightview-Lighted-Magnifying-Glass/dp/B06XGX72LQ/ref=sr_1_68?dchild=1&keywords=bright+tech+desk+lamp&qid=1598462849&sr=8-68)

Brightech LightView Pro 2 in 1 XL Magnifying Floor Lamp

# Making the Headlight LED



Pre-wired 402 SMD LED

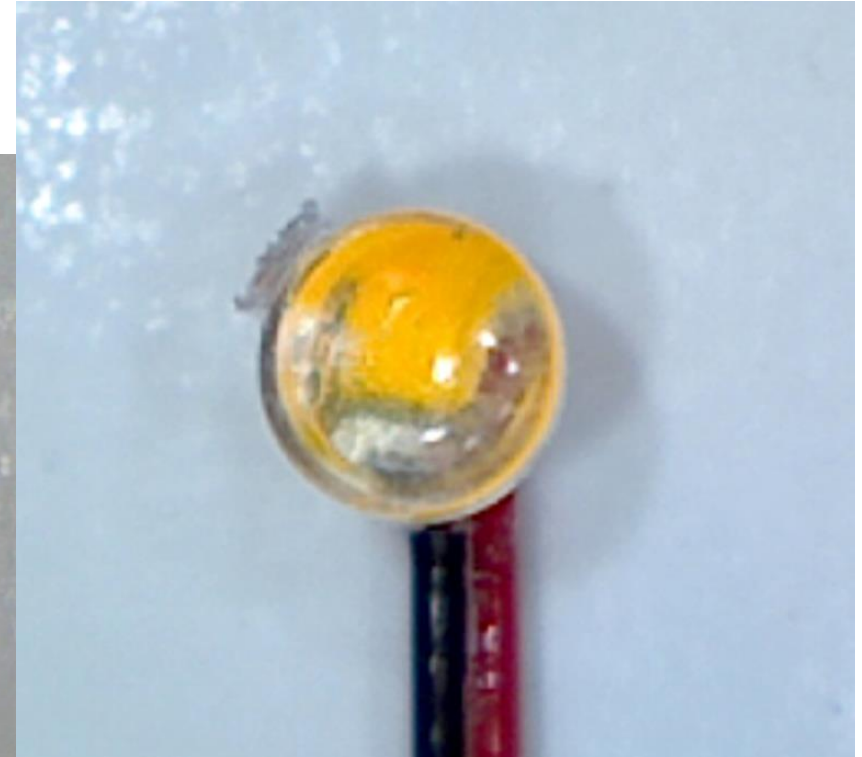


Put a bead of thick ACC on LED



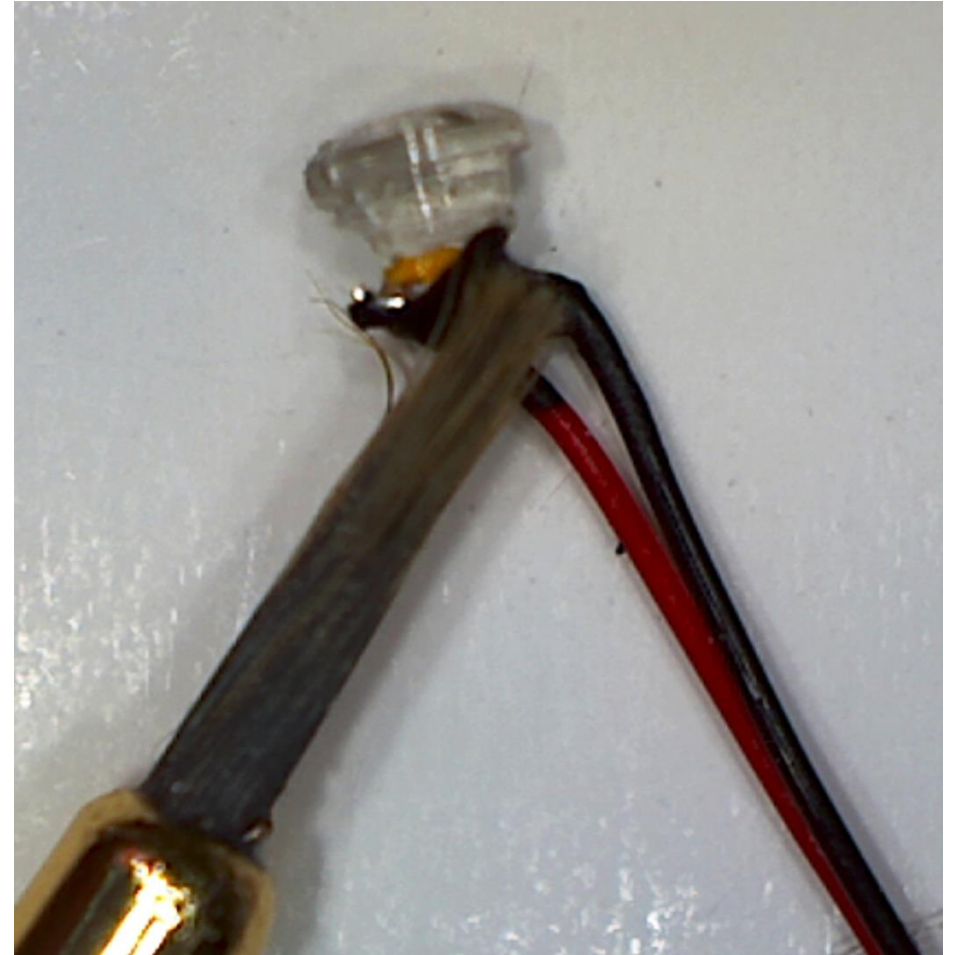
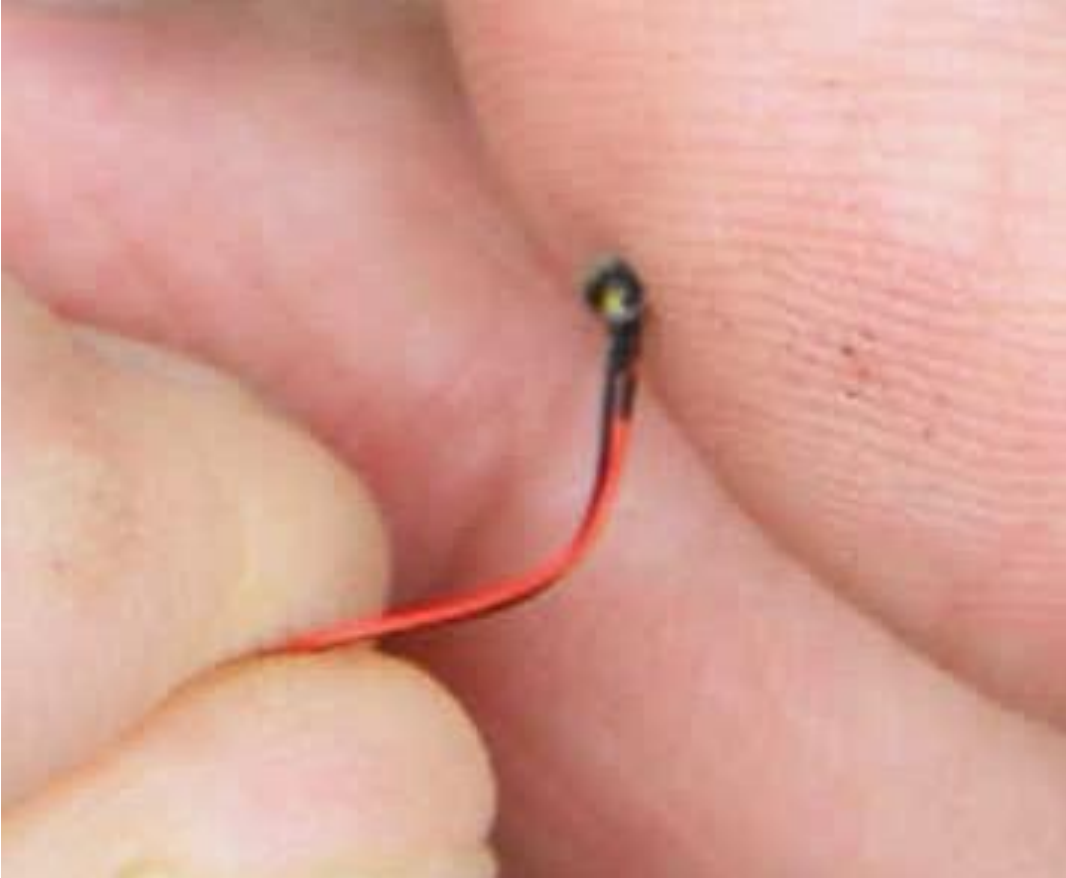


# Making the Headlight LED



1. Put a DW LN-441 Lens face down on a piece of paper.
2. Place 402 LED with the Bead of ACC centered on the back of the lens. ( magnification helps )
3. Lift the lens with the LED wires and inspect

# Making the Headlight LED



- 1. Use you finger to center the lens on the LED. Let it Dry.**
- 2. Paint the LED with black paint not getting any paint on the back of the wide part of the lens.**
- 3. After drying, bend the wires so they will clear the holes for the lights on the model.**

# Making the Headlight LED

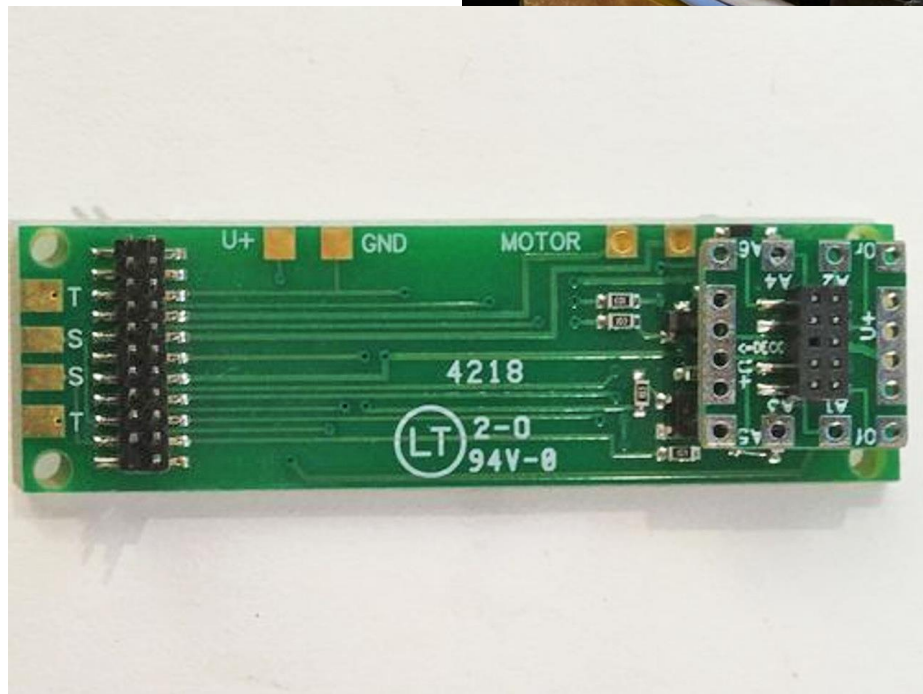
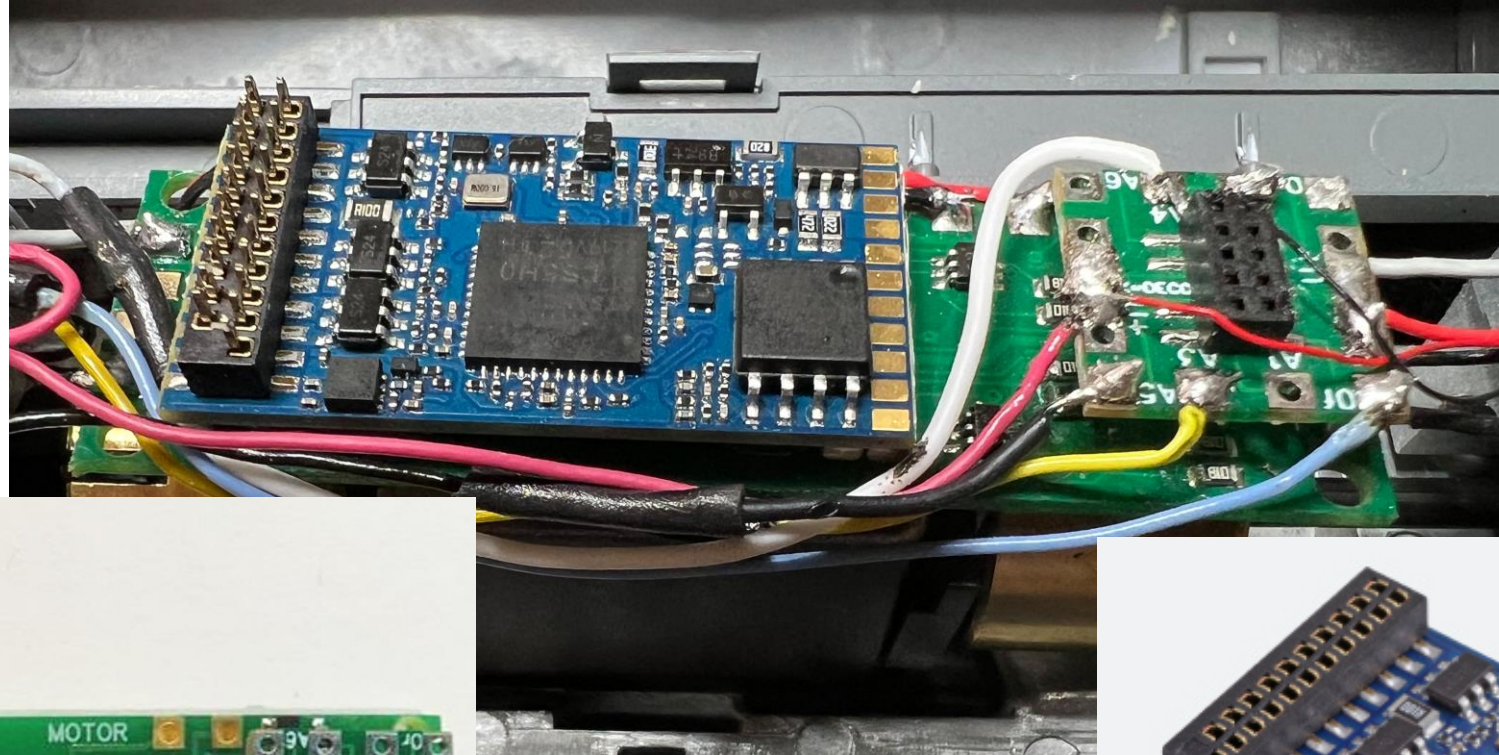


1. Push the wire into the holes for the lights. You may have to drill the hole larger.
2. Put a small quantity on canopy cement at the edge of the hole to hold the lens.
3. You may have to fiddle with the lens to get them to fit. White glue on the wire will also hold the lens.

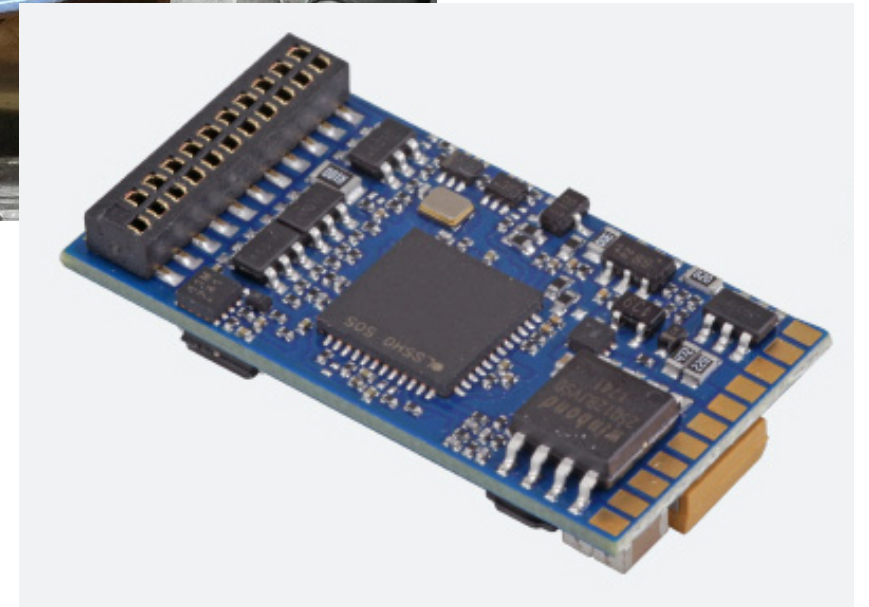
**Final Product**



# Favorite DCC Combination (1K)



NixTrainz Decoder Buddy Mini with 1k Ohm resistor - NTZ2

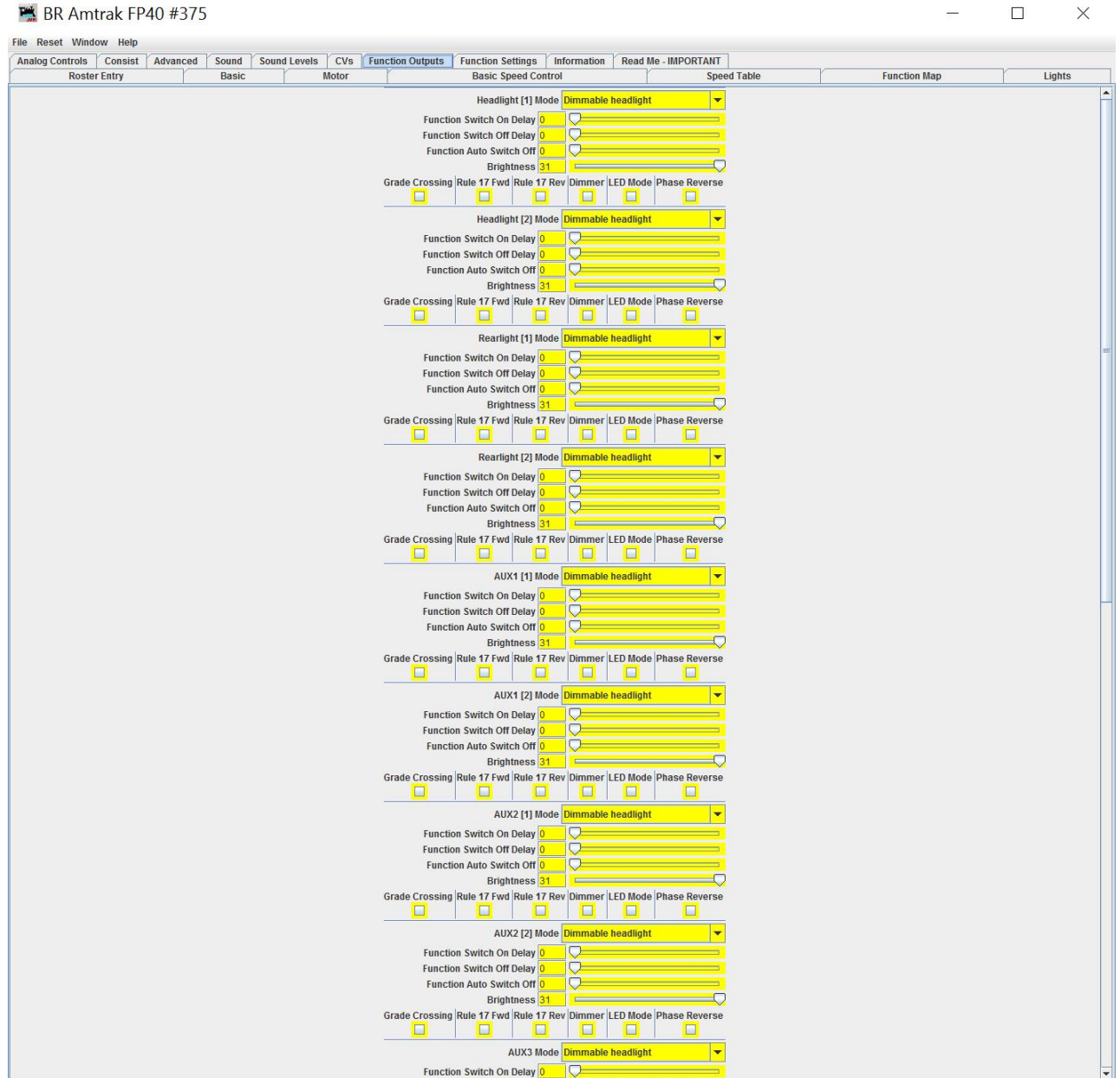


LokSound 5 DCC

# ESU LokSound 5 DCC Software Adjustable Brightness

Use Decoder Pro  
to adjust brightness

Start at 10 to 20



# Questions



## **Sacramento Model Railroad Society, Inc.**

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posted on the SMRHS Site.**

**<http://www.smrhs.com/>**