LGT-412L
E-Z-Go Express
LED Headlights with RGBW Accent Lights and Retrofit Kit to OEM Harness
Installation Instructions

Caution: Please read through the instructions carefully. The included lights and light kit wire harness are designed for 12-48V operation only. Operating this kit at a higher voltage will void any and all warranties. **Optional add-on accessories and those sold as part of a Build Your Own Kit may not be rated for any voltage over 12V DC and can be damaged if installed at a higher voltage.** A voltage reducer (sold separately) is recommended when installing 12V accessories to avoid damage.

Before starting this project, remove the system's positive and negative connections from the battery or battery pack. Look behind each drill location BEFORE YOU DRILL. Installer is responsible for damage (i.e. drilling into a wiring harness, battery, fuel tank etc.).

Table of Contents

Headlight Hardware

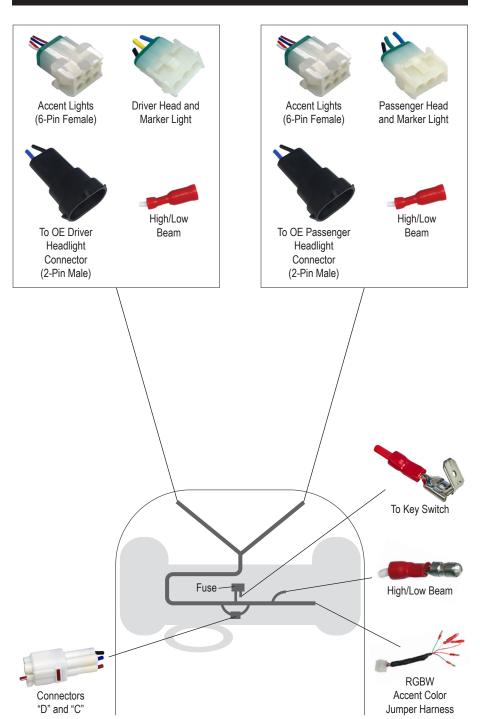**a**   **b**

Contents		QTY
a	No. 14 x 3/4" Hex Head Blunt Self Tapping Screws	2
b	No. 14 x 1/2" Hex Head Blunt Self Tapping Screws	6

Tools Needed for Installation

- Safety Glasses
- Screwdriver (Phillips & Flat Head)
- Center Punch
- Socket & Ratcheting Wrench (3/8")
- Drill & Hole Saw (3/4")
- Rivet Gun

Accent Lights
(6-Pin Female)

Driver Head and
Marker Light

Accent Lights
(6-Pin Female)

Passenger Head
and Marker Light

To OE Driver
Headlight
Connector
(2-Pin Male)

High/Low
Beam

To OE Passenger
Headlight
Connector
(2-Pin Male)

High/Low
Beam

To Key Switch

Fuse

High/Low Beam

Connectors
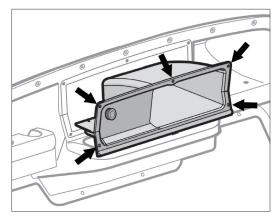"D" and "C"

RGBW
Accent Color
Jumper Harness

Before You Start

1. Turn Key OFF.
2. Place Tow/Run Switch in Tow if equipped.
3. Remove the system's positive and negative connections from the battery/battery pack.
4. Engage the parking brake.

Wire Harness Installation

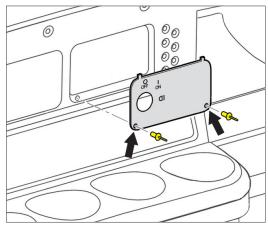1. Access the area behind the key switch.

Carts with Center Compartment:
Remove the center compartment from the dash by removing the (5) screws. Use caution not to damage any wires.
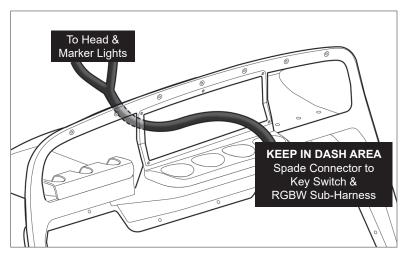

Carts with Key Switch Plate:
Remove the (2) rivets on the key switch plate and remove the plate. Use caution not to damage any wires.
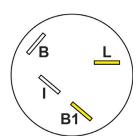
2. Route the headlight connectors through the opening in the dash and towards the headlights, keeping the other connections near the key switch.

To Head & Marker Lights

KEEP IN DASH AREA
Spade Connector to Key Switch & RGBW Sub-Harness

3. Place the cart in RUN with the key OFF.

4. Use a voltage meter to determine which terminal on the back of the key switch ("B1" or "L") is not energized when the key is OFF.

   NOTE: "B1" and "L" are the terminals that control the lights. Terminals "B" and "I" control the key switch.
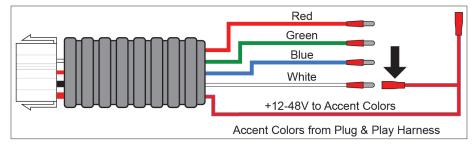

B
L
I
B1

5. Place the cart in TOW with the key OFF.

6. Unplug the OE lead connected to the terminal found in Step 4 and connect it to the piggyback spade connector labeled "To Key Switch" on the light kit's harness. Connect both leads to the non-energized terminal found in Step 4.

Accent Lighting Options

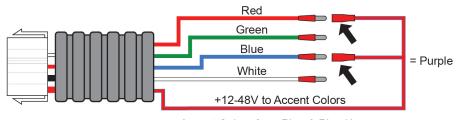### Single Color Accent Lighting (Out of the Box)

1. For WHITE accent lighting only, configure the plug & play harness as shown on Page 6. Cover the un-used male bullet connectors with electrical tape to protect them.

Accent Colors from Plug & Play Harness

2. For RED, GREEN or BLUE accent lights, switch the WHITE color wire with either of the three different RGB color wires (RED, GREEN or BLUE) as shown. Cover the un-used male bullet connectors with electrical tape to protect them.

2 Color Combination Accent Lighting

1. For two color combination accent lighting, connect the (2) female bullet connectors to any (2) of the RGBW color wires (RED, GREEN, BLUE or WHITE) for a single combined color (i.e. RED + BLUE = PURPLE).
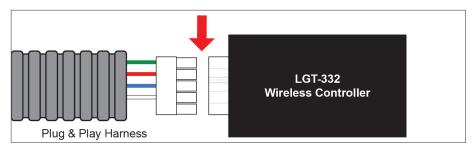

Accent Colors from Plug & Play Harness

2. Cover the un-used male bullet connectors with electrical tape to protect them.

Multi-Color Combination Accent Lighting (LGT-332 Controller Required)

1. Remove the RGBW jumper harness from the plug & play harness and replace it with the LGT-332 Wireless Controller.
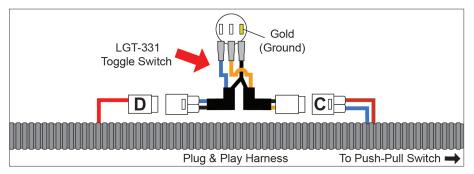

2. Scan the QR code on the controller to download the app to a smart device.
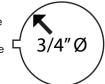
3. Once downloaded, enable Bluetooth® on your smart device. Connect the App to the LGT-332 wireless controller per the device's Bluetooth® instructions.

Independent ON/OFF Toggle Switch for Accent Lighting (LGT-331 Required)

1. Locate connectors "D" and "C" near the push-pull switch and separate them.

2. Connect the ON/OFF toggle switch between the connectors "D" and "C".

LGT-331 Toggle Switch

Gold (Ground)

D

C

Plug & Play Harness   To Push-Pull Switch ➡

3. Find a convenient location on the dash to mount the toggle switch. Mark the center of the mounting location with a marking device.

4. Drill a 3/4" hole at the marked location. File any rough edges. Use a small file to make a small notch on the left side of the mounting hole. This notch will align with the raised line on the left side of the toggle switch to prevent the switch from rotating.

3/4" Ø

5. Disconnect the wires from the toggle switch and insert the switch in the newly drilled hole. Reconnect the leads to the toggle switch as shown.

Headlight Installation

1. Connect the driver side headlight to the driver side headlight 3-pin connector and the 6-pin accent lights connector.

2. Connect the black connector on the light kit's harness to the OE driver side headlight connector.

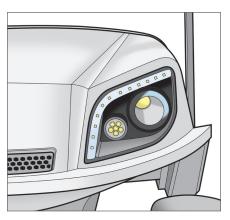LGT-412L Connector   OE Headlight Connector

3. For constant low beams, connect the bullet connectors on the back of the headlight together.

4. Install the headlight to the front cowl using (1) 1/4"-20 x 3/4" Hex Head Self-Tapping Screw (shown in blue) and (3) 1/4"-20 x 3/4" Hex Head Self-Tapping Screws (shown in yellow).

Turn to Adjust Headlight Position

5. Reconnect the battery cables, put the cart in the RUN position (if equipped) and turn the lights ON using the key.

6. Test the lights to make sure they function properly.

7. Secure any loose wires with cable ties so they are clear of any moving parts or pinch points.

8. Reinstall the center compartment or key switch plate using the Original Hardware or New Rivets (not included).

RUGGED STARTS HERE

Your E-Z-Go Express Light Kit is now complete.
Please enjoy safely!

Scan QR code or use the link to view our installation video library.
https://www.youtube.com/user/golfcartinstructions