WHELEN®

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Installation Guide:
Talon Series LED Dash Lights

Automotive: Beacons

Safety First

This document provides all the necessary information to allow your Whelen product to be properly and safely installed. Before beginning the installation and/or operation of your new product, the installation technician and operator must read this manual completely. Important information is contained herein that could prevent serious injury or damage.
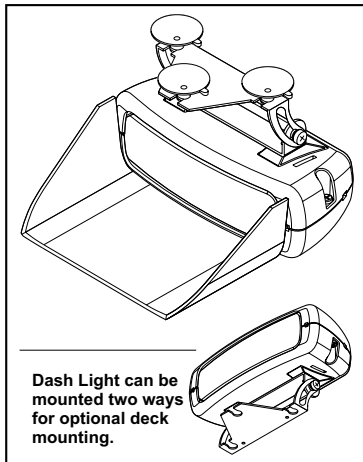
- **Proper installation of this product requires the installer to have a good understanding of automotive electronics, systems and procedures.**

- **If mounting this product requires drilling holes, the installer MUST be sure that no vehicle components or other vital parts could be damaged by the drilling process. Check both sides of the mounting surface before drilling begins. Also de-burr the holes and remove any metal shards or remnants. Install grommets into all wire passage holes.**

- **If this product is mounted with tape or Velcro™, clean the mounting surface with a 50/50 mix of isopropyl alcohol and water and dry thoroughly.**

- **Do not install this product or route any wires in the deployment area of your air bag. Equipment mounted or located in the air bag deployment area will damage or reduce the effectiveness of the air bag, or become a projectile that could cause serious personal injury or death. Refer to your vehicle owners manual for the air bag deployment area. The User/Installer assumes full responsibility to determine proper mounting location, based on providing ultimate safety to all passengers inside the vehicle.**

- **For this product to operate at optimum efficiency, a good electrical connection to chassis ground must be made. The recommended procedure requires the product ground wire to be connected directly to the NEGATIVE (-) battery post (this does not include products that use cigar power cords).**

- **If this product uses a remote device for activation or control, make sure that this device is located in an area that allows both the vehicle and the device to be operated safely in any driving condition.**

- **Do not attempt to activate or control this device in a hazardous driving situation.**

- **This product contains either strobe light(s), halogen light(s), high-intensity LEDs or a combination of these lights. Do not stare directly into these lights. Momentary blindness and/or eye damage could result.**

- **Use only soap and water to clean the outer lens. Use of other chemicals could result in premature lens cracking (crazing) and discoloration. Lenses in this condition have significantly reduced effectiveness and should be replaced immediately. Inspect and operate this product regularly to confirm its proper operation and mounting condition. Do not use a pressure washer to clean this product.**

- **It is recommended that these instructions be stored in a safe place and referred to when performing maintenance and/or reinstallation of this product.**

- **FAILURE TO FOLLOW THESE SAFETY PRECAUTIONS AND INSTRUCTIONS COULD RESULT IN DAMAGE TO THE PRODUCT OR VEHICLE AND/OR SERIOUS INJURY TO YOU AND YOUR PASSENGERS!**

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Form No.13766D (111703)

Mounting (All Talons)...

CAUTION! Nighttime operation of this product may produce reflected light within the vehicle! Use with caution!

The Talon includes a complete suction cup mounting kit (see your Whelen dealer for information on other optional mounting brackets). Refer to the parts diagrams for hardware illustration.

1. Secure the lower mounting bracket to the Talon (the Dual Talon uses two brackets).

2. Slide the suction cups onto the upper mounting bracket and secure the upper mounting bracket onto the lower mounting bracket.

3. Attach the reflector tape to the visor hood. Then secure the visor hood to the unit.

4. Apply the suction cups to the windshield. **Do not locate the Talon in any location where it will interfere with the drivers ability to safely operate the vehicle. Refer to the safety warnings on the cover of this manual.**

5. Adjust the angle of the Talon so that the visor hood is in full contact with the windshield.

There are holes on the upper bracket to be used if permanent mounting is desired. Using the upper bracket as a template, mark the areas where the mounting holes are to be drilled. Secure the unit using the appropriate hardware (customer supplied).

Dash Light can be mounted two ways for optional deck mounting.

Wiring...

NOTE: Standard Talons use a cigar cord for power connection and no further wiring is necessary. Sync Talons are required to be wired as outlined below.
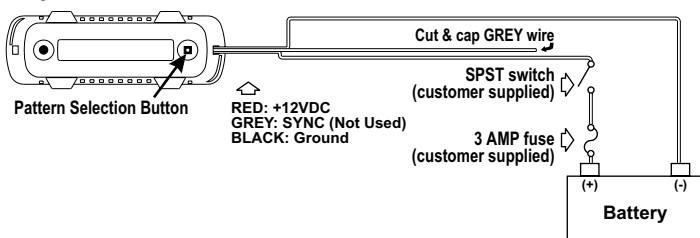
One Sync Talon (single or double)

1. Extend the RED wire to a Single Pole/Single Throw switch. From this switch, extend a wire to +12VDC. Fuse this wire @ 3 Amps.

All customer supplied wires that connect to the Positive (+) battery terminal must be sized to supply at least 125% of the maximum operating current and fused "at the battery" to carry that load.

2. Extend the BLACK wire to chassis ground.

3. The GREY wire is not used. Cut & cap this wire.
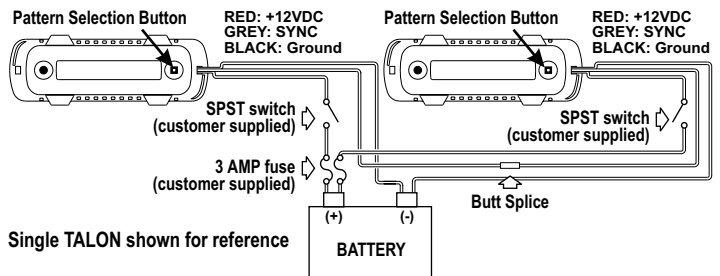
Single TALON shown for reference

Cut & cap GREY wire
SPST switch (customer supplied)
Pattern Selection Button
RED: +12VDC
GREY: SYNC (Not Used)
BLACK: Ground
3 AMP fuse (customer supplied)
(+) (-)
Battery

Flash Pattern Selection:

To advance to the next flash pattern, press the pattern selection button for less than 1 second.

To cycle backwards to previous patterns, press the pattern selection button for more than 1 second.

To reset to the factory default pattern, begin by turning off power to the

Pattern Selection Button
RED: +12VDC
GREY: SYNC
BLACK: Ground
Pattern Selection Button
RED: +12VDC
GREY: SYNC
BLACK: Ground
SPST switch (customer supplied)
SPST switch (customer supplied)
3 AMP fuse (customer supplied)
Butt Splice
(+) (-)
BATTERY

Single TALON shown for reference

lighthead. While pressing the pattern selection button, turn the lighthead back on. and keep the pattern selection button depressed for more than 5 seconds.

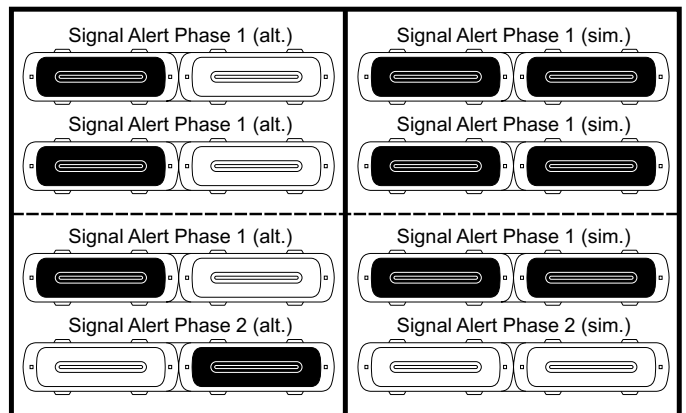**Flash patterns for the Talon are listed on the following 2 pages.**

Two (or more) Sync Talons (single or double)

1. Extend the RED wire from one Talon to a Single Pole/Single Throw switch. From this switch, extend a wire to +12VDC. Fuse this wire @ 3 Amps. Repeat for the remaining Talon

2. Extend the BLACK wires from each Talon to chassis ground.

3. Butt splice the two GREY wires together.

Synchronizing Single Talons - To sync two or more lightheads, configure all lightheads to display the same *Phase 1* pattern. When the lightheads are activated, the patterns displayed will be synchronized. To configure specific lightheads to alternate their patterns with other lightheads, advance the pattern of the desired lighthead(s) to the *Phase 2* mode of the current pattern (see Sync pattern table for pattern list).

Synchronizing Dual Talons - The dual Talon has 4 unique modes for each of the 5 available patterns; Alternating Phase 1, Alternating Phase 2, Simultaneous Phase 1 and Simultaneous Phase 2. In Alternating mode, the left lighthead in a dual Talon alternates with the right lighthead. In Simultaneous mode, the left and right lighthead in a dual Talon flash simultaneously.

The diagram below shows the relationship between two, dual synchronized Talons. Keep in mind that all Talons connected by the Grey wire must be configured to flash the same pattern (as shown, both Talons are displaying Signal Alert).

Signal Alert Phase 1 (alt.) | Signal Alert Phase 1 (sim.)
Signal Alert Phase 1 (alt.) | Signal Alert Phase 1 (sim.)
Signal Alert Phase 1 (alt.) | Signal Alert Phase 1 (sim.)
Signal Alert Phase 2 (alt.) | Signal Alert Phase 2 (sim.)

TALON LED DASH LIGHT (SINGLE)

QTY	ITEM	PART NUMBER	DESCRIPTION
*		01-0685926-_S	TALON SINGLE LED DASH LIGHT
1	1	01-0485926-00	KIT / INSTALLATION DASH LIGHT
2	2	15-06521B-080	SCREW / 6 X 1/2 PPH PLASTI-LOK SS BLACK OXIDE
2	3	11-463555-000	HOUSING / SINGLE DASH LIGHT
A/R	4	01-0269508-10	SUB ASSY. LINEAR LED DASH LIGHT / AMBER
A/R	5	01-0269508-20	SUB ASSY. LINEAR LED DASH LIGHT / BLUE
A/R	6	01-0269508-30	SUB ASSY. LINEAR LED DASH LIGHT / WHITE
A/R	7	01-0269508-50	SUB ASSY. LINEAR LED DASH LIGHT / RED
A/R	8a	02-0169576-00	PCB ASSY / SINGLE TALON (SYNC)
A/R	8b	02-0169486-00	PCB ASSY / SINGLE TALON (STANDARD)
1	9	21-31000512-0	PLUG / HOLE RUBBER 5/32 DIA
	10	68-3963604-10	LENS / AMBER SNAP-ON LED DASH LIGHT
A/R	11	68-3963604-20	LENS / BLUE SNAP-ON LED DASH LIGHT
A/R	12	68-3963604-30	LENS / CLEAR SNAP-ON LED DASH LIGHT
A/R	13	68-3963604-50	LENS / RED SNAP-ON LED DASH LIGHT

01-0685926-50 = RED LED / CLEAR LENS

└── LED-LENS COLOR

LED-LENS COLOR
A = AMBER/AMBER   1 = AMBER/CLEAR
B = BLUE/BLUE   2 = BLUE/CLEAR
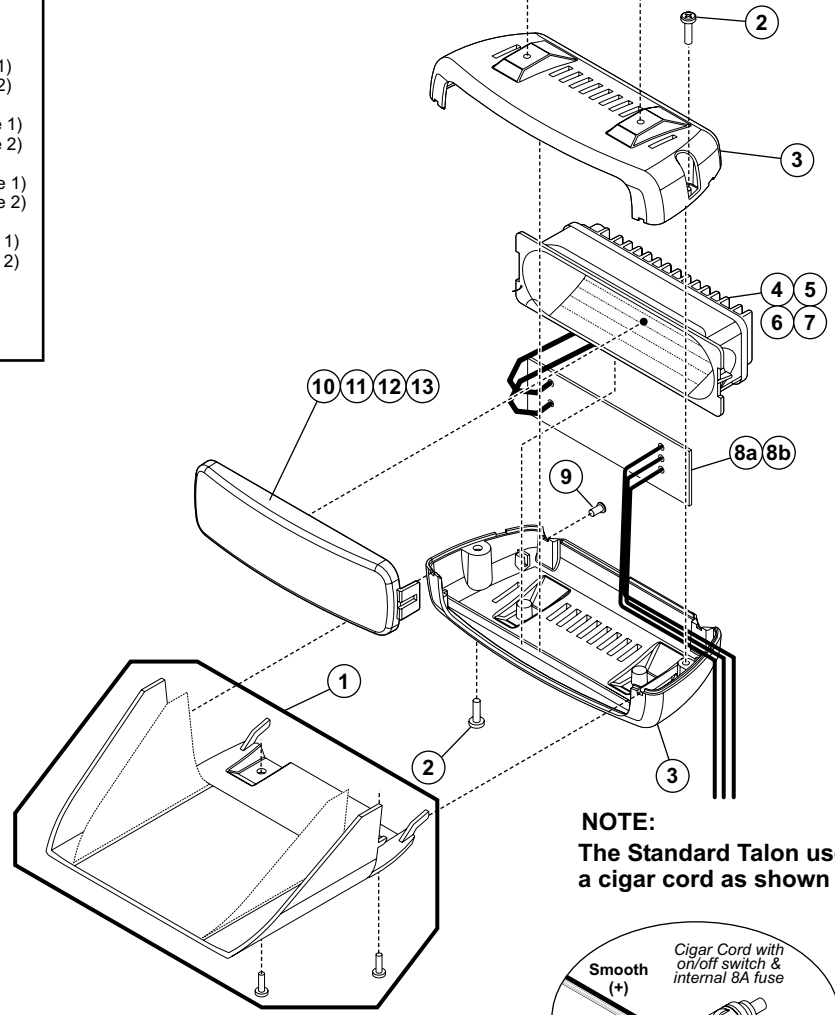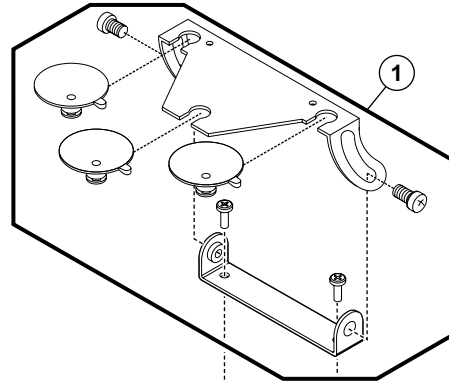W = WHITE/CLEAR   5 = RED/CLEAR
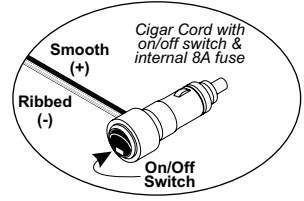R = RED/RED

Single Talon Flash Patterns

Standard	Sync
Signal Alert 75	Signal Alert (Phase 1)
Signal Alert 150	Signal Alert (Phase 2)
Single Flash 375	
Single Flash 150	Comet Flash (Phase 1)
Single Flash 75	Comet Flash (Phase 2)
Single Flash 15	
Double Flash 150	Double Flash (Phase 1)
Double Flash 75	Double Flash (Phase 2)
Comet Flash 75	
Action Flash	Single Flash (Phase 1)
Modu Flash	Single Flash (Phase 2)
Com Alert	
Action Scan	Com Alert (Phase 1)
Signal Alert Steady	Com Alert (Phase 2)
Steady	

NOTE:
The Standard Talon uses a cigar cord as shown here.

Smooth (+)

Ribbed (-)

Cigar Cord with on/off switch & internal 8A fuse

On/Off Switch

TALON LED DASH LIGHT (DUAL)

QTY	ITEM	PART NUMBER	DESCRIPTION
*		01-0685925S_ _	TALON DUAL LED DASH LIGHT
1	1	01-0485925-00	KIT / INSTALLATION DASH LIGHT
3	2	15-06521B-080	SCREW / 6 X 1/2 PPH PLASTI-LOK SS BLACK OXIDE
2	3	11-483849-000	HOUSING / DUAL LED DASH LIGHT
A/R	4	01-0269508-10	SUB ASSY. / LINEAR LED DASH LIGHT / AMBER
A/R	5	01-0269508-20	SUB ASSY. / LINEAR LED DASH LIGHT / BLUE
A/R	6	01-0269508-30	SUB ASSY. / LINEAR LED DASH LIGHT / WHITE
A/R	7	01-0269508-50	SUB ASSY. / LINEAR LED DASH LIGHT / RED
1	8a	02-0169608-00	PCB ASSY / DUAL TALON (SYNC)
1	8b	02-0169484-00	PCB ASSY / DUAL TALON (STANDARD)
1	9	21-31000512-0	PLUG / HOLE RUBBER 5/32 DIA
A/R	10	68-3963604-10	LENS / AMBER SNAP-ON LED DASH LIGHT
A/R	11	68-3963604-20	LENS / BLUE SNAP-ON LED DASH LIGHT
2	12	68-3963604-30	LENS / CLEAR SNAP-ON LED DASH LIGHT
A/R	13	68-3963604-50	LENS / RED SNAP-ON LED DASH LIGHT

01-0685926-50 = RED LED / CLEAR LENS
          └── LED-LENS COLOR

LED-LENS COLOR
A = AMBER/AMBER   1 = AMBER/CLEAR
B = BLUE/BLUE   2 = BLUE/CLEAR
W = WHITE/CLEAR   5 = RED/CLEAR
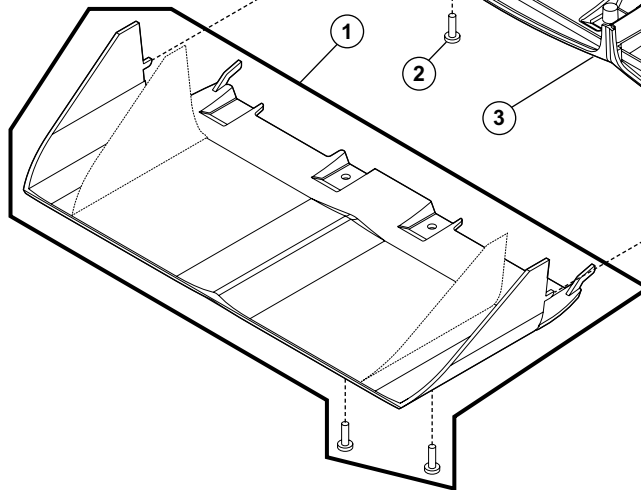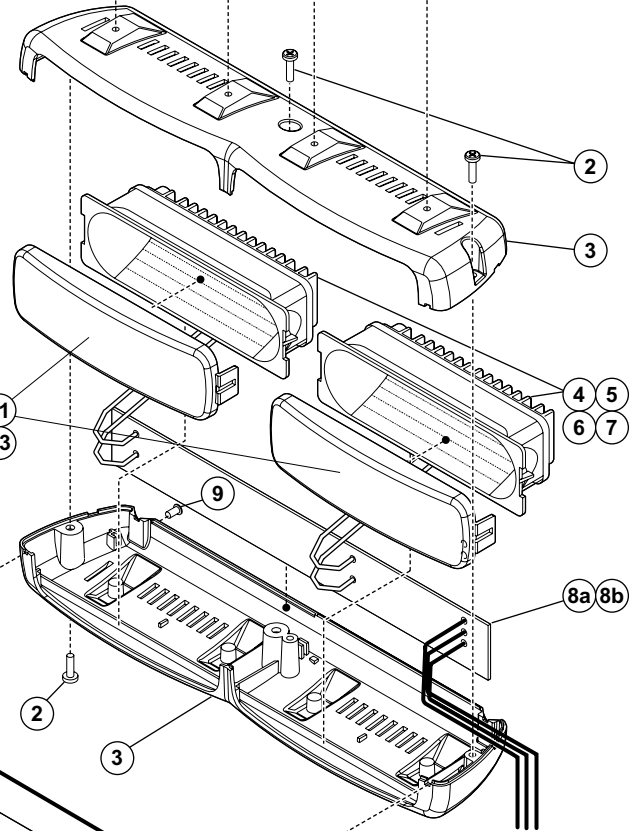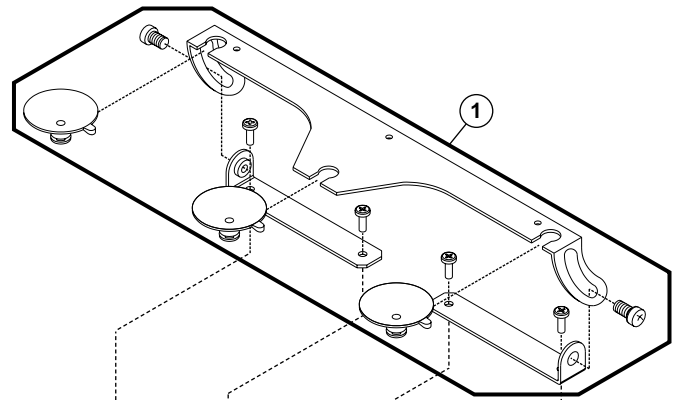R = RED/RED

Dual Talon Flash Patterns

Standard	Sync
Rapid Fire 680	Signal Alert (Alt. / Phase 1)
Rapid Fire 240	Signal Alert (Alt. / Phase 2)
Rapid Fire 120	Signal Alert (Sim. / Phase 1)
Simultaneous Rapid Fire 150	Signal Alert (Sim. / Phase 2)
Double Flash 240	
Double Flash 120	Comet Flash (Alt. / Phase 1)
Simultaneous Double Flash 150	Comet Flash (Alt. / Phase 2)
Comet Flash	Comet Flash (Sim. / Phase 1)
Simultaneous Comet Flash	Comet Flash (Sim. / Phase 2)
Action Flash	
Simultaneous Action Flash	Double Flash (Alt. / Phase 1)
ModuFlash	Double Flash (Alt. / Phase 2)
Simultaneous ModuFlash	Double Flash (Sim. / Phase 1)
Signal Alert 120	Double Flash (Sim. / Phase 2)
Simultaneous Signal Alert 80	
Scan Flash	Single Flash (Alt. / Phase 1)
Cal. Flash	Single Flash (Alt. / Phase 2)
Cal Steady w/Rapid Fire	Single Flash (Sim. / Phase 1)
Cal. Steady w/Cal. Flash	Single Flash (Sim. / Phase 2)
Cal. Steady w/Comet Flash 120	
Cal. Steady w/Action Flash	Com Alert (Alt. / Phase 1)
	Com Alert (Alt. / Phase 2)
	Com Alert (Sim. / Phase 1)
	Com Alert (Sim. / Phase 2)

NOTE:
The Standard Talon uses a cigar cord as shown here.

Smooth (+)
Ribbed (-)
Cigar Cord with on/off switch & internal 8A fuse
On/Off Switch