

Swift Taillights TM

Portable Wireless Remote Controlled Taillights

User's Manual

Model: ST01







Swift Taillights are to be used only as temporary taillights.

Notice of Agreement of Use

By installing or otherwise using Swift Taillights you agree to follow the directions within this manual and be bound by the limitation of liability set out within this manual. If you do not accept this limitation, then you are not authorized to install or use Swift Taillights, which you should return for a refund.

Please read this manual carefully and thoroughly before any attempt to operate this product, and retain it for your future reference. Please practice and become comfortable working with the Swift Taillights before actual use in an application setting.

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Introduction

Thank you for purchasing the Swift Taillights. This product works on the ISM-433MHz frequency band that can be legally used worldwide without permission. The Swift Taillights are designed and intended to only be used as temporary taillights that can provide a quick and easy way to display driving signals on the road. Drivers can mount the two Swift Taillights (Left & Right) on the rear of what they are towing, and then use the hand-held remote control to display forward, stop, left turn, right turn, reverse and emergency signals. After their use, the Swift Taillights should be recharged for their next use.

Before installing or testing the Swift Taillights, please make certain that you are in a safe setting, and that you test the taillights completely before use. Please practice and become comfortable working with the Swift Taillights before actual use in an application setting.

Notice:

This product may cause interference with other wireless equipment that operates at 433MHz. Please turn off other equipment on 433MHz eliminate the interference.

Product Assurance:

This product will emit electromagnetic waves, just like other wireless products. But its transmitting power is less than other wireless products such as mobile phones. The product meets wireless frequency security standards and recommended indexes, and conforms with DOC regulations while working. These standards, indexes and regulations are certificated by academic organizations and represent the cognitive research of the scientific workers who continuously explore and annotate the involved fields. We believe that our products are safe and conform to these standards.

Warranty:

The Swift Taillights have a one year limited warranty against any defective parts. If you have questions about your Swift Taillights, please call (617) 600-8230 or send an email to: admin@swifttaillights.com

Swift Taillights – Toren Partners LLC does not warrant that the Swift Taillights will be without any errors that will affect their performance or the user's objectives. If any defects are determined, Swift Taillights – Toren Partners LLC will work within a reasonable timeframe to correct the issue.

Swift Taillights – Toren Partners LLC disclaims all representations, warranties, or conditions not contained in this manual that may arise in any law or use.

Do not return defective product to the retailer.

Approval Information:

This product meets the requirements of the FCC and has been granted with FCC/CE certification. They are authorized to bear the FCC mark.

FCC:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures.

- -Increase the separation between the product and the interfered device.
- -Consult Swift Taillights Toren Partners or an experienced radio/TV technician for help.

 This device complies with Part 15 of the FCC Rules. Operation is subject to the following

two conditions.

- (1) This device may not cause harmful interference.
- (2)This device must accept any interference received, including interferences that may cause undesired operation.
- (3) Changes and modification might not be expressly notified by the manufacturer or registrant of this product under Federal Communications Commission rules.

Restrictions:

DO NOT put the Swift Taillights in water. The Swift Taillights are designed to be water resistant – not water proof. Submersing the Swift Taillights in water will void their warranty. DO NOT put this product near any medical equipment. Radio waves might potentially cause breakdown of electrical medical equipment. So this product should be placed at least 1 foot away from any heart pacemaker. Radio waves might potentially influence heart pacemaker and lead to respiratory disturbance;

DO NOT use this product for any illegal activities. The manufacturer shall not be responsible for any consequences of illegal acts committed by the user.

Magnet Safety:

The Swift Taillights have two very strong magnets – one on the back of each taillight. Please keep the Swift Taillights away from anything that is magnetically sensitive or that may become attached to the magnets and become difficult to remove.

People with Pacemakers or other implanted medical devices should not handle the Swift Taillights.

Maintenance:

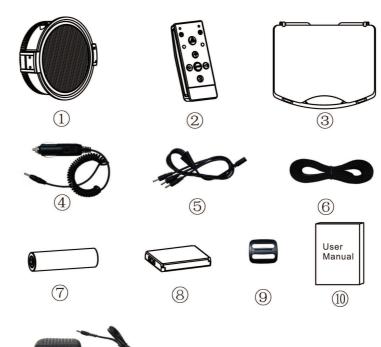
- 1. Do not shake or strike the product;
- 2. Keep it dry and dustless.
- 3. Keep product away from heat sources such as electric heater;
- 4. Do not use the product in the places which are enclosed by metal. The surrounding metal like aluminum trailer walls may shield the electromagnetic waves and result in failure of signal reception.
- 5. Please obey the local government's environmental protection policy.
- 6. Please turn off the power when left unused.
- 7. Do not disassemble or repair the taillight or remote controller. Doing so might cause damages to the product and also VOID THE WARRANTY

Product

Package Contents:

This package comes with the following items. Please check if they are all included in the packaging case, if one or more is missing, please contact the Manufacturer for replacement.

- 1. Taillight x 2 (Left & Right)
- 2. Remote controller x 1
- 3. Carrying case x 1
- 4. Cigarette lighter charger x 1
- 5. Charging cable adapter x 1
- 6. Strap for taillight(1 meter) x 2
- 7. Battery for taillight x 2
- 8. Battery for remote controller x 1
- 9. Buckle for strap x 2
- 10. Manual x 1
- 11. Wall outlet adapter to all three units x 1

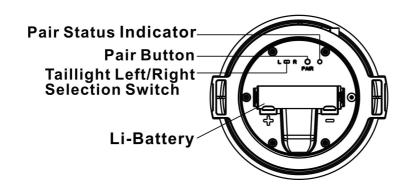


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Product Illustration and Detail:

1. Taillight





Power On/Off Button:

Turn the power of the Swift Taillights on/off.

Pair Button:

Every set of taillights are pre-paired at the time of manufacturing and are ready to use once taken out of the kit. Each taillight is controlled by its own remote controller, which is accomplished by the pairing setup between the remote controller and taillight – which does not need to be initially done before use.

Taillight Left/Right Selection Switch:

Each kit contains one Left and one Right taillight – assigned when manufactured.

This button is inside the taillight case, when it is selected as left (L side) the taillight will become a left light; when selected as right (R side), the taillight becomes a right light.

Power/Charging/Low Battery Indicator:

When the taillight is turned on, the indicator will be green on; when the taillight is being charged it will be red. When the charging is completed the red light will go off. When the battery is low, the light will be slow flashing red. When the taillight is in low battery status, the remote controller will also detect this status and has a flashing red LED above the pair key on to remind the user to charge the taillight. Low battery alert is removed when the taillight is recharged (it can be partially recharged) and has enough power.

Left Taillight Indicator (Above L letter):

When the taillight is selected as left taillight, this indicator light will be green when the taillight is turned on. After 60 seconds, it will be shutoff automatically.

Right Taillight Indicator (Above R letter):

When the taillight is selected as right taillight, this indicator light will be green when the taillight is turned on. After 60 seconds, it will be shutoff automatically;

Pair Status Indicator:

To display the status of pairing between remote controller and taillights.

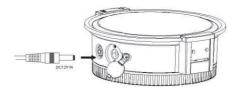
Battery Door:

Unscrew the battery door to load the battery. Please be careful when screwing the battery door back on that you do not cross-thread. The battery door should go on smoothly and fit snuggly

Charging Socket:

Gently pull out the plug covering the charging socket on both taillights. Plug in the charging cable that comes with the kit. When charging is in the progress, the

LED indicator in the center of the taillight will be red, when the charging is completed, the indicator LED will shut off. After charging, please carefully and securely push the plug covering the charging socket back in both taillights to make the product water resistant. When charging, the Swift Taillights need be powered off first.



Rubber Plug for Charging Socket:

It is the plug used to protect the charging socket to make it water-resistent. When taillights are charged, it needs to be gently pulled out, after charging, it needs to be securely pushed back.

Magnet:

It is a very strong magnet that can be used to attach the taillights.

Strap lock:

It is the place to lock the safety strap of the taillights when the taillights need to be attached to a non-steel surface. It is recommended that the Swift Taillights safety strap be used to help prevent the taillights from falling off all surfaces.

Li-Battery:

Is the battery used to power taillights which can be recharged.

Red LED:

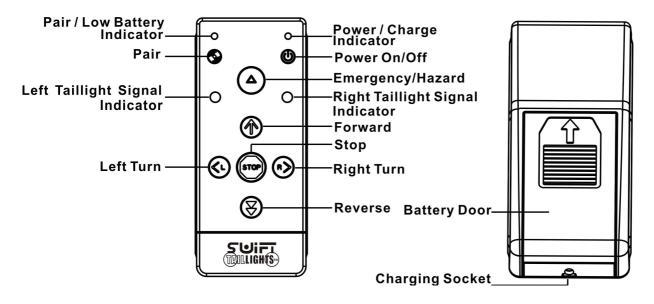
The LED for red color signals such as Forward, Stop, Emergency, Left turn and Right turn.

White LED:

The LED for white color signal such as Reverse.

Taillight Indicators			
Indicator Name	Indicator Status	Indicator Meaning	
Power/Charging/Low battery indicator	Green On/Off	Power On/Off	
	Red On/Off	Charging in progress /Finished (Taillight s need to be powered off to charge)	
	Flashing Red	Taillight battery is low and needs to be charged	
Left /Right Taillight Indicator	Green on	When it is on, it indicates it is Left or Right taillight. After 60 seconds it will automatically shutoff.	
Pairing Indicator	Quick flash/Constant on/Off	Not required prior to use – completed at time of Manufacturing. After both remote controller and taillight pair buttons are pressed, indicator is quick green flashing, once pairing is success, it will be constant on and then released, indicator will be off	

2. Remote Controller

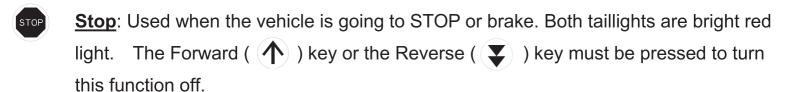


- Power On/Off: To turn the Remote Controller power on and off. The On/Off key will also turn the taillights light off but the battery in the taillights will still be on standby mode and must have each of the individual taillights on/off button pressed to completely turn off each taillight.
- Pair: Every controller is pre-paired at the manufacturing time and is ready to use out of the kit. Each remote controller can only control the Left and Right taillights, which have been paired together.

Pair and Low Battery Indicator: Every set of taillights are pre-paired at the time of manufacturing and are ready to use once taken out of the kit. When the remote controller and taillights are in pairing process after pressing the pair buttons on both sides, this LED starts flashing green and then becomes constant once pairing is successful and finished. When taillight (any one of two) battery becomes low, this LED starts slow red flashing as a reminder for the user to charge the taillight. When this indicator starts to slowly flash red, the taillights will have about 20 minutes running time left and shall be recharged as soon as possible.

<u>Power and Charge indicator:</u> When power is on, it is green. When the remote is charging, this LED is red, when charging is completed, red LED is off. The remote should be turned off when it is being charged.

- Emergency/Hazard: Both taillights are bright red blinking. Pressing this key again will turn this function ON/OFF.
- Left Turn: Used to indicate when a vehicle will make a left turn. Left taillight is bright red blinking and right taillight is low red. The Forward() key must be pressed to turn this function off.
- Right Turn: Used to indicate when a vehicle will make a right turn. Right taillight is bright red blinking and left taillight is low red. The Forward () key must be pressed to turn this function off.
- **Forward:** Used to indicate that the vehicle is moving forward, both taillights will be low red light. Forward lights are ON when the unit is first powered on.



Reverse: Used when the vehicle is going in reverse. Both taillights are bright white light. The Stop() or) key or Forward() key must be pressed to turn this function off.

Left Taillight Signal Indicator: This LED is the signal indicator for left taillight, whatever function the left taillight is showing, it shows the same on remote controller. This LED indicator also functions as alarm indicator if the left taillight falls off or is broken for some reason. Alarm signal is a quick flashing between red and white light. Right Taillight Signal Indicator: This LED is the signal indicator for right taillight, whatever function the right taillight is showing, it shows the same on remote controller. This LED indicator also functions as alarm indicator if the right taillight falls off or is broken for some reason. Alarm signal is a quick flash between red and white light. Charging socket: When you plug the charging cable that came with the kit into the remote controller, the charging indicator LED will become red color and will turn off when charging is completed.



Remote Controller Indicators

Trainers Controller indicators			
Indicator Name	Indicator Status	Indicator Meaning	
Pair/Low Battery Indicator	Quick Green Flash	(Not required before use – completed by Manufacturer) Pairing in progress	
	Constant Green On	Pairing is success and will be off after release	
	Slow Red Flash	Taillight battery (1 or both) is low and needs to be recharged.	
Power/Charge Indicator	Green On/Off	Power On/Off remote controller. Power On/Off Taillights to standby mode	
	Red On/Off	Charging in progress /Finished (Remote Controller needs to be powered off to charge)	
Left / Right Signal Indicator	Green On/Off	If green on letter L side, taillight is left. If green on letter R side, taillight is right.	
	Flashing between White and Red	Taillight has fallen off or is broken	

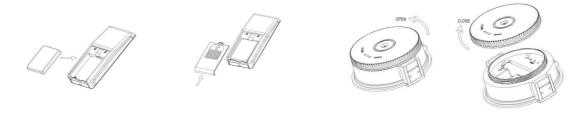
How to operate the Swift Taillights

Before installing or testing the Swift Taillights, please make certain that you are in a safe setting, and that you test the taillights completely before use. Please practice and become comfortable working with the Swift Taillights before actual use in an application setting.

1. Setting Up the Swift Taillights:

1.1 Load the batteries

Load the batteries into the remote controller and taillights based on diagrams below.



1.2 Pairing the remote controller with taillights:

Swift Taillights are pre-paired at the time of manufacturing and the user can bypass this step. Pairing the remote controller and taillight is activated by pressing the pairing button () at the same time on both sides. When pairing has started, LED indicators on both the remote and taillight are quick green flashing. Once pairing is successful, the green LED becomes solid green and the pairing button can be released. Pairing is necessary when using a replacement remote to control taillights.

1.3 Placing the taillights.

The Swift Taillights can be placed by using the strong magnet wherever the user wants temporary taillights. It is recommended that the Swift Taillights safety strap be used to help prevent the taillights from falling off. Once you have installed the Tail Lights, you must test them to be sure they are operating properly.

2. Operating the Swift Taillights:

Before installing or testing the Swift Taillights, please make certain that you are in a safe setting, and that you test the taillights completely before use. Please practice and become comfortable working with the Swift Taillights before actual use in an application setting.

- 2.1: Turn on the Left & Right Taillights and the Remote Controller.
- 2.2: When the Taillights are first turned on the lights will come on in the Forward mode. The green LED indicator will glow above the L or R on each Taillight to indicate which taillight is Left or Right.
- 2.3 By pushing the keys noted below on the Remote Controller the Taillights will change lighting patterns to indicate the following:
- Emergency/Hazard: Both taillights are bright red blinking. Pressing this key again will turn this function ON/OFF.
- Left Turn: Used to indicate when a vehicle will make a left turn. Left taillight is bright red blinking and right taillight is low red. The Forward () key must be pressed to turn this function off.
- Right Right: Used to indicate when a vehicle will make a right turn. Right taillight is bright red blinking and left taillight is low red. The Forward () key must be pressed to turn this function off.
- Forward: Used to indicate that the vehicle is moving forward, both taillights will be low red light. Forward lights are ON when the unit is first powered on.
- Stop: Used when the vehicle is going to STOP or brake. Both taillights are bright red light. The Forward () or the Reverse () key must be pressed to turn this function off.
- Reverse: Used when the vehicle is going in reverse. Both taillights are bright white light. The Stop (stop) or Forward () key must be pressed to turn this function off.

Product Specification

Item	Product	Description	Specification/Parameter	
1		Transmission Frequency	428MHz~438MHz @433MHz	
2	Remote	Modulation Mode	FSK	
3		Modulation Rate	0.123Kbps~256Kbps	
4	Controller &	Unobstructed Effective Range	50m	
5	Taillights	Charging Power Supply	DC 12V~DC25V	
6	rainigrito	Store temperature	-40°C~85°C / -40°F~185°F	
7		Operation temperature	-20°C~50°C / -4°F~122°F	
8		Power Consumption	80mA	
9		Receiving Sensitivity	-85dBm	
10		Battery type	Li-Battery 3.7V 1200mAH	
11		Charging Current	400mA (MAX)	
12	Remote	Charging Time	Up to 4 hours	
13	Controller	Working Time	Up to 12 hours	
14		Standby Time	Up to 1 year	
15		Weight	112g	
16		Main Size (L ×W × H)	129.5×56.3×21.6	
17		Operation humidity	85%	
18		Transmission Power	10dBm	
19		Battery type	Li-Battery 3.7V 1800mAH	
20		Quality of Red LEDs	24pcs	
21		Quality of Withe LEDs	18pcs	
22			150mA @ In Run mode	
23		Power Consumption	420mA @ In Stop mode	
24	Power Consumption	380mA @ In Reverse mode		
25			150mA~400mA @ In Emergency mode	
26	Taillight	Charging Current	400mA (MAX)	
27	Taillight	Charging Time	Up to 6 hours	
28			Up to 10 hours @ In Run mode	
29		Working Time	Up to 4 hours @ In Stop mode	
30			Up to 4 hours @ In Reverse mode	
31			Up to 6 hours @ In Emergency mode	
32		Standby Time	Up to 1 year	
33		Protection Levels	IP68	
34		Weight	370	
35		Main Size (W × H × T)	Ф145×48(MAX.)	

Trouble Shooting

When you experience an operation issue, please check the following before contacting Swift Taillights..

ISSUE	Possible Reason and Solution
Remote controller power LED is not on	Charge the battery before use
Low battery indicator is flashing on the remote controller	Taillight is low battery and needs to be charged
Remote controller has white and red flashing signals	At least one taillight has fallen off or is broken

Limitation of Liability

In no event will Swift Taillights – Toren Partners LLC or its suppliers be liable to the user or any other person or entity for any incidental, indirect, special, multiple, punitive, or consequential damages, arising out of or relating to Swift Taillights. Including, but not limited to: loss of profits, damage to personal property (including data), cost of recovery or any other similar harm or loss, regardless of the form of action, in contract or in Tort (including negligence), even if Swift Taillights – Toren Partners LLC or its suppliers have been advised of the possibility of such damages. Swift Taillights – Toren Partners LLC liability for any and all damages that might arise out of or relate to the Swift Taillights, regardless of the form of action, will in no event exceed two hundred dollars (\$200) USD.

Thank you for using the Swift Hitch!

Questions?

Please call: (617)600-8282

Monday - Friday 9:00am to 5:00pm EST

Emall to: swifthitch@sun-tronics.com