



User Manual

Wireless Turn Signals +

Horn

Hazzard

Auto Cancel

Dash Indicators

EZ Install

Hand Control



WTS+ User Manual

Thank You for purchasing the WTS+ turn signal kit.
This document will inform you on how to use the system.

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Operating WTS+

Overall Turn Signal Information

The turn signals work similar, but not exactly, to the turn signals in a standard automobile.

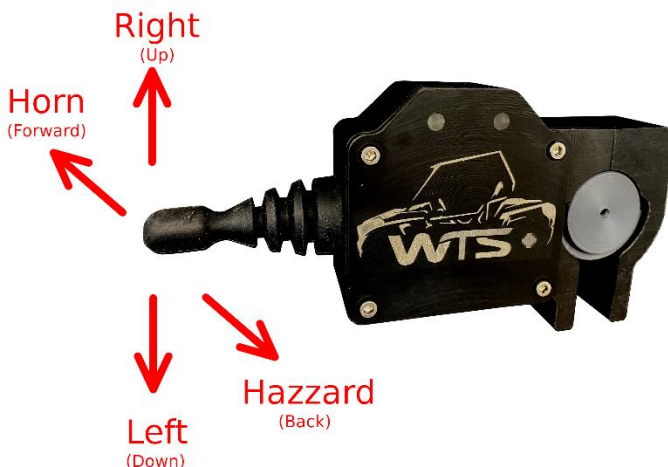
When activated the lever will automatically move back to the center position. This is normal.

Included is a feature which will automatically turn off the turn signal, thus preventing you from accidentally driving down the trail or road with a flashing turn signal. This feature works in the following way.



1. It will stop signaling automatically after approximately twenty seconds. If this duration is not enough to complete your turn, simply push the turn signal lever again.
2. While the brake is applied, the turn signal will continue indefinitely. After the brake has been released the turn signal will automatically stop after eight seconds. If you reapply the brakes before the eight seconds are up, the turn signal will revert to continuing indefinitely. If this duration is not enough to complete your turn, simply push the turn signal lever again.

Below is a graphic indicating the movement options of the Hand Control.



Left Turn Signal

1. Push down on the batt lever.
2. The left turn signal should immediately start.
3. The left turn indicator light should now flash to indicate it is signaling.
4. After releasing the lever, it should automatically move back to the center position.

The turn signal will automatically stop as detailed in the section Operating WTS+

5. Overall Turn Signal.

To manually cancel the signal, push the Hand Control lever down while it is signaling. It will stop the signal immediately.

You can switch from a right to left signal by pushing down on the lever while a right turn signal is in process.

Right Turn Signal

1. Push up on the Hand Control lever.
2. The right turn signal should immediately start.
3. The right turn indicator light should now flash to indicate it is signaling.
4. After releasing the lever, it should automatically move back to the center position.

The turn signal will automatically stop as detailed in the section Operating WTS+

5. Overall Turn Signal.

To manually cancel the signal, push the Hand Control lever up while it is signaling. It will stop the signal immediately.

You can switch from a left to right signal by pushing up on the lever while a left turn signal is in process.

Hazard Signal

1. Push the Hand Control lever back towards the driver.
2. The hazard lights should immediately start to flash.
3. Both the left and right turn signal indicators should be flashing to indicate the hazards are on.
4. The hazard lights will remain on until they are stopped as follows:
 - a. Push the Hand Control lever back towards the driver while the hazard lights are flashing.

Note: If the turn signals are activated while the hazards are on, the signals will override, and the hazard will resume once the signals have completed.

Horn

1. Push Hand Control lever forward towards the dash.
2. The horn should immediately sound.
3. Continue pushing the Hand Control lever forward for the desired duration. The horn will sound if the Hand Control lever is pressed forward. Simply release the lever and the horn will stop.

Indicator Lights

The Hand Control comes with indicator lights that turn green to communicate the status of the WTS+ system. The indicators should be one of the following:

The indicator behavior can be customized through a web browser. See the Customizing WTS+ section of this document for more information.



Left Turn	Left flashing light, solid right light
Right Turn	Right flashing light, solid left light
Hazzard	Both left and right flashing light
Power On	Both lights solid, only for brief time at startup

A module is not working	Both the left and right flash three times. This will occur every few minutes until the module is fixed
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Starting WTS+

Normal Startup

This is the normal mode for using the WTS+ system. There are no configuration options available in this mode.

1. Turn the key on
2. All modules will turn on its light to indicate it has power and turn off the light when it has finished starting up. This should appear as a quick flash.
 - a. If a module does not flash at start, it may not have power, or there is an error in the module.

Configuration Mode Startup

This mode has all the functionality of the Normal Startup Process but also enables configuration options including pairing, unpairing, and changing user settings via a local Wi-Fi and website.

Important: Only enter this mode when all other UTV's in the area with a WTS+ installed are not also in the Configuration Startup Process. This prevents inadvertently pairing/unpairing or changing user settings on the wrong UTV.

1. Push the hand control forward, as if using the horn.
2. Turn the key on
3. All modules will turn on its light to indicate it has power and turn off the light when it has finished starting up. This should appear as a quick flash.
 - a. If a module does not flash at start, it may not have power, or there is an error in the module.
4. The WTS+ will function normally with the addition of the following configuration documented in the following sections.

Pairing/Unpairing Modules

Normal Pairing Procedure

Initially WTS+ will be unpaired for both the hand control and the modules. Follow the steps below to pair them. **Note: Must be in Configuration Mode**

1. The hand control will boot up and wait for modules to pair.
2. The modules will boot up and automatically pair with the hand control.
3. All modules will flash 5 times to indicate they have been successfully paired.
4. Turn off the key, you are successfully paired. The next time you turn the key on all modules should work normally and connected to the hand control.

Pairing An Individual Module

Individual modules will automatically attempt to pair to a hand control that is in the Configuration mode. If an individual module became unpaired for whatever reason, entering the Configuration mode will either re-pair it or pair it if it was not previously paired.

If the hand control already has been paired with previous modules, the hand control will refuse to pair with a new module. If this is the case, the hand control must be unpaired to connect different modules to it. Follow the steps in Normal Pairing Procedure.

Unpairing Hand Control and Connected Modules

To unpair the hand control and all modules that are currently paired and active, follow the steps below. This will not fully unpair an individual module that is not active, See Unpairing Only Modules.

1. Pull back on the Hand Control until the hand control indicators flash continuously.
2. If the modules also flash continuously, they are unpaired.
3. Turn the power off.

Note: If there are modules that are not flashing, they have not unpaired successfully. Follow the steps in unpairing modules only.

Unpairing Modules Only

If modules have been paired to a hand control but are not able to connect to the hand control for five minutes, they will automatically unpair themselves from the hand control. This method is used to reset the modules so they can be paired with a hand control. This method will unpair all modules from the hand control including active and non-active modules.

1. Ensure the key is off.
2. Disconnect the hand control from the power connector.
3. Turn the key on.
4. Verify the modules powered up with a quick flash.
5. Leave the modules powered up for a minimum of 5 minutes.
6. All the modules will now be unpaired from its hand control.
7. Turn the key off.
8. Reconnect the hand control to the power connector.

At this point all the modules will be unpaired from the hand control.

Customizing WTS+

Customizing WTS+ and verifying module connectivity can be done from your phone or other Wi-Fi enabled module with a browser. Below are the steps to getting connected to the customizing feature.

Must be in Configuration Mode, See Starting WTS+

Connecting to the WTS+ Hand Control

In configuration mode WTS+ has a local WIFI and website for managing the pairing of modules as well as some user settings. Follow the steps below to get connected.

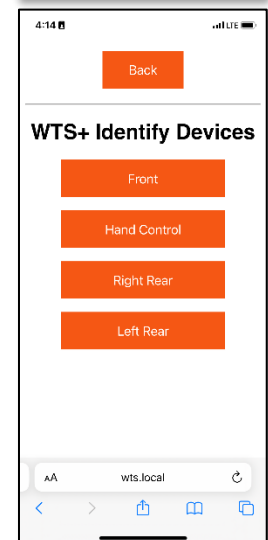
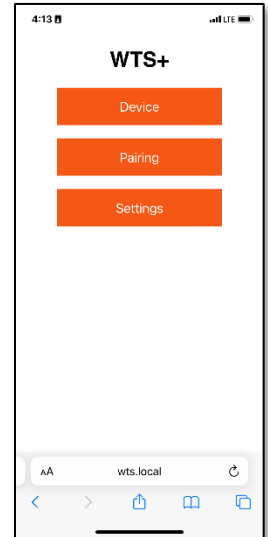
1. Ensure your phone, pad, laptop is in the same room as the UTV.
2. Connect the phone, pad, laptop to the WIFI named "WTS".
 - a. See your phone, pad, laptop instructions on how to connect to a WIFI network.
3. From the phone, pad, laptop, open a web browser.
4. For the site name use either **"wts.local"** or **"192.168.4.1"**
5. You should now see the WTS+ local webpage.

Module

Allows you to see the modules currently connected and individually identify them by pressing the corresponding button. The module will flash three times when the button is pressed.

If a button is missing for a module, the module is currently not connected or not functioning properly.

Pressing the back button opens the main page.



WTS+ User Manual

Pairing

Allows you to see the modules that are paired and unpaired to the hand control.

The Ver column displays the software version of each module.

The Status column displays the status of each module is as follows:

Red There is no module paired.

Yellow There is a module paired but may not be active.

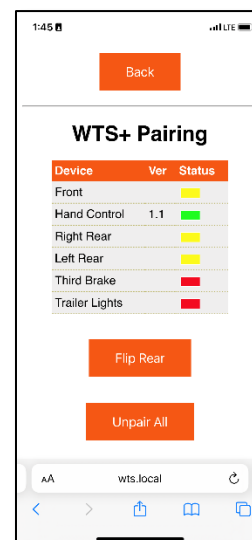
Green There is a module paired and it is active.

Pressing the status color will unpair the specific module.

Pressing the Reset button will unpair all modules.

Pressing the Flip Rear button will flip the right and left brake light.

Pressing the back button opens the main page.



Settings

Allows you to control user settings that impact the behavior of the WTS+ hand control. After making changes you must press the Update button to make the changes take effect.

Turn Duration: Specifies the length of time the turn signals flash.

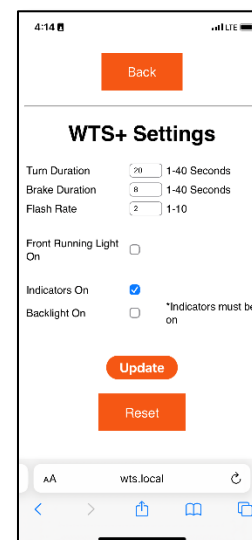
Brake Duration: Specifies the length of time the turn signals will flash after stepping off the brake.

Flash Rate: Specifies the speed the flashers blink with a setting between 1-10. 1 being the fastest and 10 being the slowest.

Front Running Light: When enabled, will turn the front lights on solid when the signals or hazards are not flashing. This will also turn on the dash indicator.

Indicators On: When enabled, will flash the indicator lights of the Hand Control when signaling or hazard lights are on. This setting is useful if you only want to use the in-dash indicators and not use the indicators in the Hand Control.

Backlight On: When enabled, will turn the Hand Control indicators to be on all the time.



Installation

The installation instructions have been organized into two separate documents and can be found on the WTS+ support website at www.SwanEmersonAccessories.com/wts-support

Quick Install Guide	Provides an overall understanding of the installation process. This document is provided with the contents of the product.
WTS Install Instructions	Provides detailed step-by-step instructions, including pictures, for the complete installation process. As a result of the size of this document, it is provided online only.

Contact support@swanemerson.com for additional support.

Limited Warranty

What Is Covered

This limited warranty covers defects in materials and workmanship in this product.

What Is Not Covered

- Damage caused by the owner modifying, attempting to fix, or otherwise altering the product.
- Damage as a result of improper installation of the product. This includes but is not limited to improper electrical connections etc.
- Damage as a result of unstable electrical devices such as winches etc.

How Long Does this Coverage Last

This warranty lasts for one (1) years from the date of original purchase of this product.

Who is Covered

This limited warranty covers only the original purchaser of the product. The limited warranty is not transferable to subsequent owners or purchasers of this product.

What Swan Emerson will do

- Repair the item.
- Replace the item if we can't repair it within a reasonable amount of time.

No Other Express Warranty Applies

This warranty is the sole and exclusive warranty. No employee, agent, dealer, or other person is authorized to alter this warranty or make any other warranty on behalf of Swan Emerson.

Limitation of Liability

Swan Emerson shall not be responsible for any incidental or consequential damages. Some countries, districts, or states do not allow the limitation or exclusion of relief, incidental, consequential, special, or indirect damages, or the limitation of liability to special amounts, so the above limitations or exclusions may not apply to you.