

AirSwitch

License Free - 900 Mhz - Wireless Switch

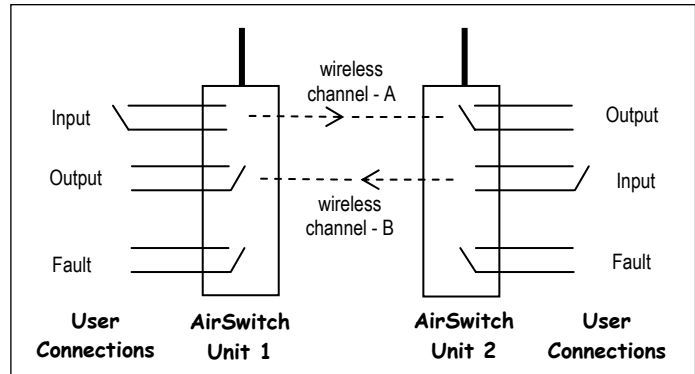
Wireless Contact Repeater

Control Your Remote Equipment without Wire

Easy-to-Use

AirSwitch is a wireless, 2-way remote on/off switch. A switch closure at one unit is re-generated as a contact closure at a remote unit. The output exactly mimics the input, both open and close, but without wire.

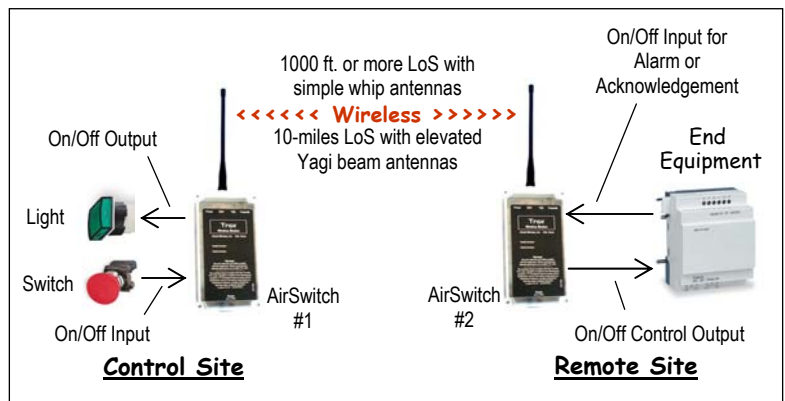
Each AirSwitch unit includes a contact input and a contact output to give a channel in each direction. The reverse channel permits the remote device to acknowledge back to the control point, or send an alarm. An additional fault output is included to signal a communications failure or power loss. This can be wired in series with the control output for interlocking, fail-safe operation.



Basic Single Channel System Showing On/Off Contacts Between Units

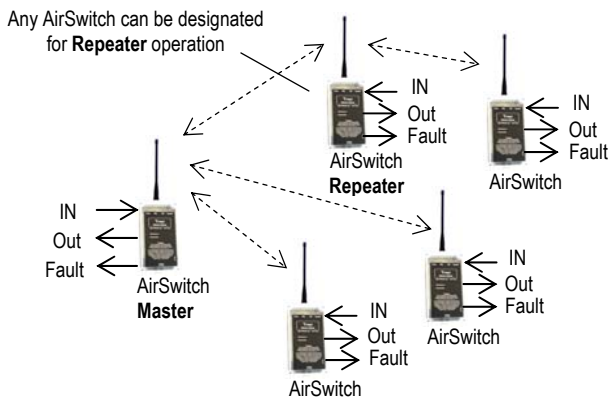
Basic Features

- simple out-of-the-box operation, no programming
- units mount outside, cable extends to equipment
- full 1-watt RF power for max signal distance
- fast end-to-end response time
- surge protected for high lightning environments
- high current solid state relays, no moving parts
- external power relays available for user equipment



Simple Application with Equipment Operated Remote using On/Off Contacts

Advanced Single Channel System



All units are the same model -- One is configured as the Master

Control and Monitor Multiple Remote Devices

One AirSwitch unit is configured as the master to control up to four remote units distributed across a wide area. The input at the master is duplicated at the output of each remote unit. Since the wireless link is 2-way, a closed switch at any remote is reflected back at the master output. All AirSwitch units can be configured for **repeater** operation for beyond line-of-sight operation.

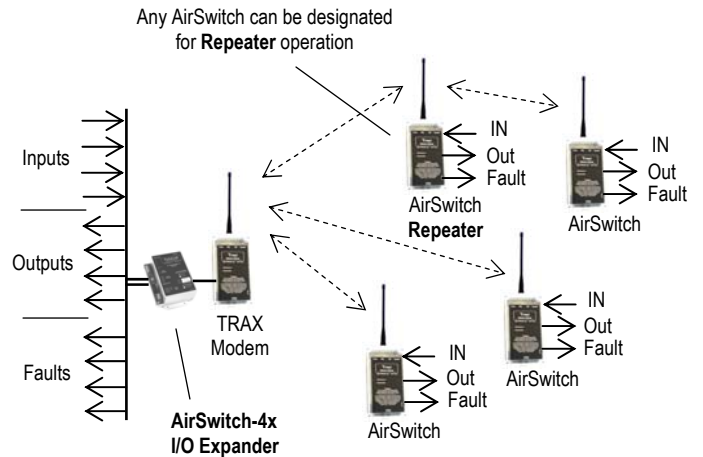
AirSwitch is a Trademark of TriLink Wireless, Inc.

AirSwitch - Wireless Contact Repeater

4X Multi-Channel System

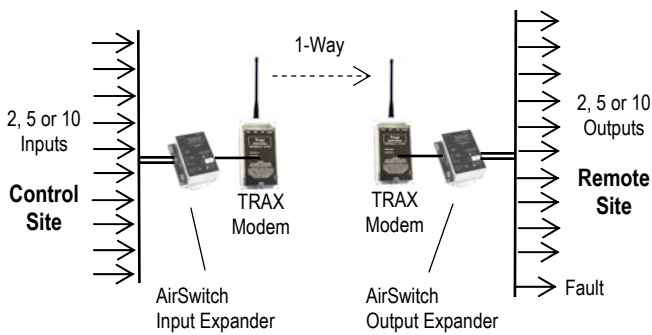
AirSwitch-4x is an I/O Expansion unit that provides 4-inputs and 4-outputs at the master. One input and one output dedicated to each AirSwitch remote for individual monitoring and control of up to 4 sites. 2-Way operation, fault outputs, and **repeater** capability is included.

The radio at the master site is a TRAX wireless modem available from TriLink Wireless. The TRAX modem installs with the same mounting options as AirSwitch units. A CAT-5 cable extends from the modem to the AirSwitch-4X unit which is installed near the user equipment.

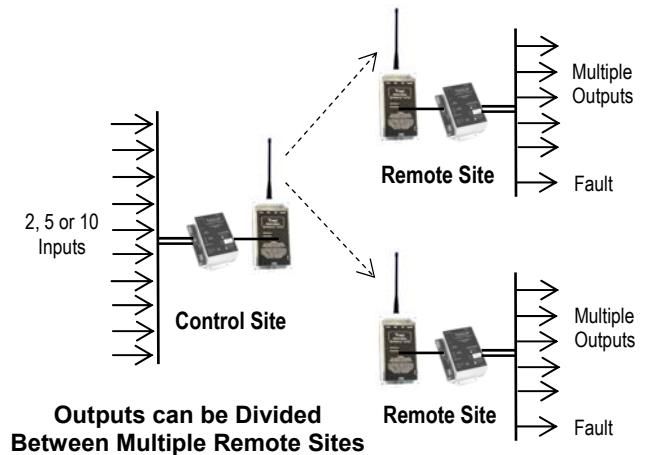


2X, 5X, 10X Multi-Channel Series

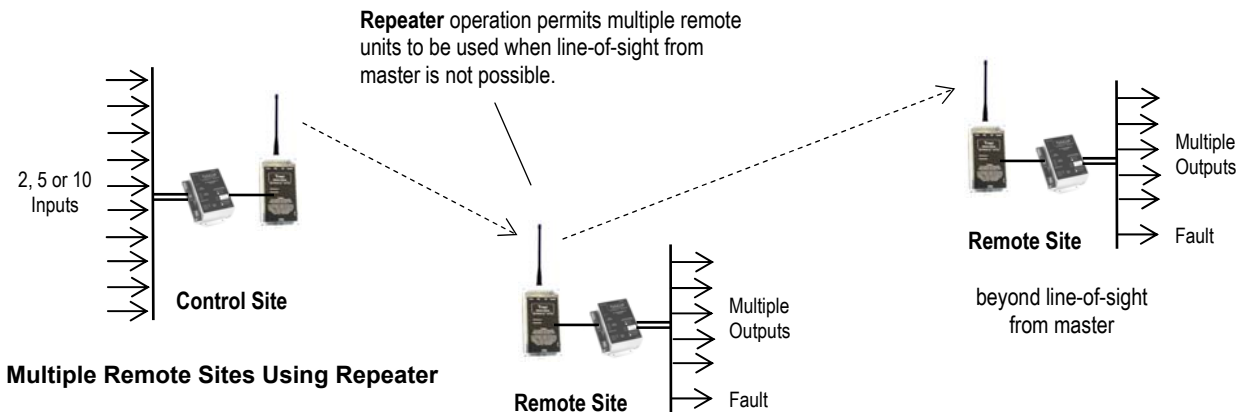
This option provides up to 10 one-way control channels from a master control site to a remote site. The system consists of an input Expander unit wired to a TRAX wireless modem at the control site, and an output Expander unit wired to a second TRAX modem at the remote site. The TRAX modem installs with the same mounting options as single channel AirSwitch units. The Expander unit installs near the user equipment. A CAT-5 cable extends between the TRAX modem and Expander unit. This option is available as a 2, 5, or 10 channel system. Operation is one direction only.



All Outputs Appear at a Single Remote Site



Outputs can be Divided Between Multiple Remote Sites



Multiple Remote Sites Using Repeater

AirSwitch is a Trademark of TriLink Wireless, Inc.

AirSwitch - Wireless Contact Repeater

Specifications

Radio	<ul style="list-style-type: none">- full 1-watt RF power for max signal distance- license free operation, 902-928 Mhz ISM band- frequency hopping spread spectrum, 50 channels- repeater feature for beyond line-of-sight applications- multiple systems in same area- complies with FCC Part-15 rules
Antennas	<ul style="list-style-type: none">- whip for short range, omni-directional coverage- Yagi directional gain antenna for longer range
Signal Range	<ul style="list-style-type: none">- over 10-miles line-of-sight with elevated Yagi antenna- range varies with surroundings and conditions
Inputs	<ul style="list-style-type: none">- 2 wire contact inputs include 5-12 vdc wetting voltage- includes input surge protection- 1 second duration for valid state change detect
Outputs	<ul style="list-style-type: none">- contact and fault outputs are dry solid state relays- 2 wire isolated connections for each contact output- contacts rated for 40 vdc / 28 vac, 1 Amp loads- includes surge protection
Fault Outputs	<ul style="list-style-type: none">- can be wired in series with contact outputs- normally closed but open with:<ul style="list-style-type: none">- no response from remote unit- loss of power
Update Rate	- wireless exchange between units every 500 mS
Configuration	- on-board DIP switches used for all programming
Power	- 9-12 vdc, 120 vac with wall transformer
Misc.	<ul style="list-style-type: none">- temperature 0 C to + 70 C (extended range available)- 6.6"L x 3.4"W x 2.2"D- outdoor rated, NEMA-4 type polycarbonate enclosure- enclosure includes 4 mounting holes for wall mount- optional mounting bracket for pipe / pole mount- screw compression terminals accept up to #14 wire

Specifications subject to change without notice or obligation to TriLink Wireless, Inc.



Single channel AirSwitch or TRAX modem with whip antenna mounted on a pole and mounted on a wall. Whip antennas provide shorter range, omni-directional coverage. A CAT-5 type control cable carries power and contact connections down to the user equipment.



Single channel AirSwitch or TRAX modem used with Yagi directional gain antenna mounted on elevated pole. Yagi antennas provide longer range, focused signal in a specific direction. A CAT-5 type control cable carries power and contact connections down to the user equipment.

The AirSwitch I/O Expander provides connections for multiple inputs, outputs and faults. Outputs are 2-wire solid state relays. Use external relays for extended contact ratings. Fault outputs can be wired in series for fail-safe operation.

Secure Wireless Link

AirSwitch units provide a secure wireless link between the control site and the remote equipment. AirSwitch radios include 2-way communications so not only can the control site turn the remote equipment on and off, the remote equipment can acknowledge its on/off status back to the control site. An alarm contact can be used with this reverse channel in cases where the remote equipment does not include an on/off confirmation contact. With either case, the operator or supervisory system receives positive feedback that all is well at the remote site, and is superior to simple one-way systems that do not provide this feedback.

AirSwitch radios utilize 900 Mhz, frequency hopping, spread spectrum technology. Each unit transmits a full 1-watt RF signal, the maximum permitted by FCC rules. All this plus 50-channel operation and encryption ensures a reliable and secure wireless link.

An addressing scheme permits multiple AirSwitch systems to operate in the same coverage area.

AirSwitch is a Trademark of TriLink Wireless, Inc.

AirSwitch - Wireless Contact Repeater

Ordering

Single Channel AirSwitch Units

(single channel AirSwitch units include built-in radios)

- model **ASW1** - Wall Mount AirSwitch Wireless Unit with Omni Whip Antenna
- model **ASW2** - Pole Mount AirSwitch Wireless Unit with Omni Whip Antenna (includes pole mount bracket)
- model **ASW3** - Pole Mount AirSwitch Wireless Unit with Yagi Directional Gain Antenna (includes pole mount bracket)
- model **PAD1** - Power Adaptor (simplifies wiring between Wall Transformer, AirSwitch unit, and External Power Relays)

Multiple Channel AirSwitch I/O Expander Units

(each multi-channel AirSwitch I/O unit requires a TRAX wireless modem as the radio -- Listed Below)

- model **ASW-4X** - AirSwitch-4X I/O Expander Unit (includes 4-inputs, 4-outputs, and 4-fault outputs)
- model **ASW-2XT** - 2-Input Expander Unit *
- model **ASW-5XT** - 5-Input Expander Unit *
- model **ASW-10XT** - 10-Input Expander Unit *
- model **ASW-2XR** - 2-Output Expander Unit * (multiple of these can be used with a single 5 or 10-Input Expander unit)
- model **ASW-5XR** - 5-Output Expander Unit * (two of these can be used with a single 10-Input Expander unit)
- model **ASW-10XR** - 10-Output Expander Unit *
- model **TRX11** - Wall Mount TRAX Wireless Modem with Omni Whip Antenna
- model **TRX12** - Pole Mount TRAX Wireless Modem with Omni Whip Antenna (includes pole mount bracket)
- model **TRX13** - Pole Mount TRAX Wireless Modem with Yagi Directional Gain Antenna (includes pole mount bracket)

* Expander units can be powered with 120 vac Wall Transformer, 12 vdc, and 24 vac

Optional Items

- model **RLY1** - External Power Relay (operated by AirSwitch contact output)
- model **XFR1** - 120 vac Wall Transformer

Warning ! Use only the antennas supplied with this equipment. Others may degrade performance and violate FCC rules.

AirSwitch is a Trademark of TriLink Wireless, Inc