# AirLink Wireless AirLink



# Gas Solutions

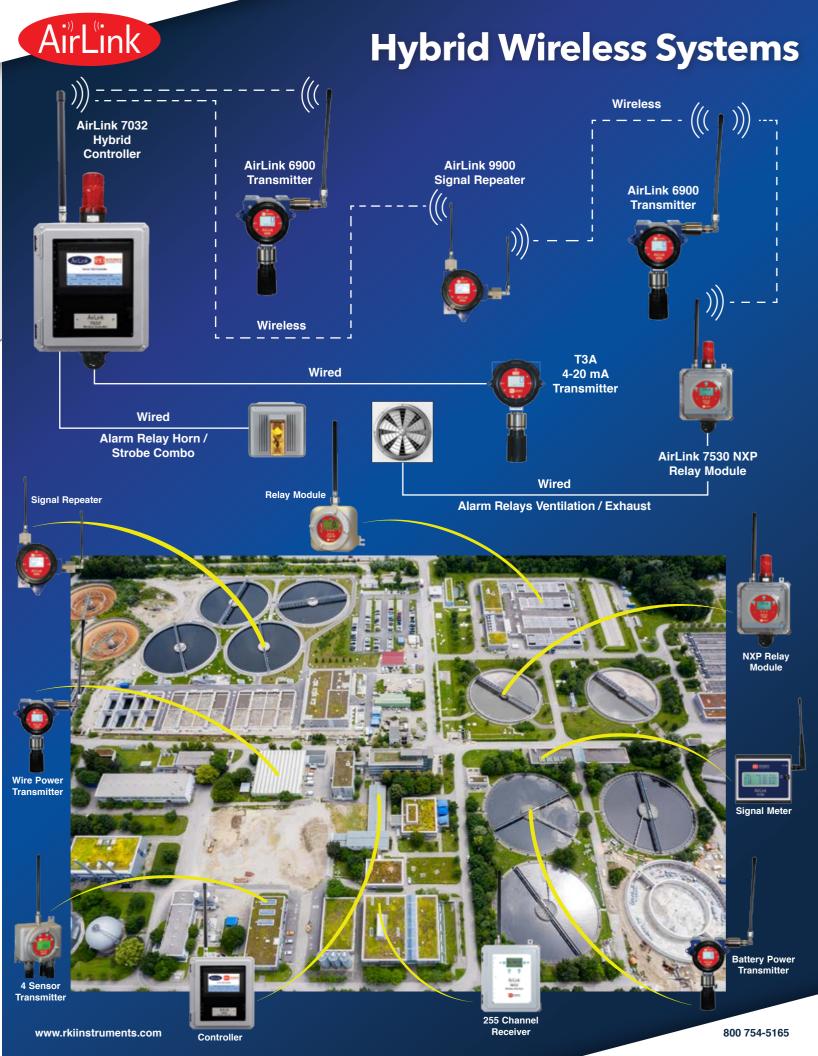
- · Controllers, transmitters, & repeaters
- Hybrid wireless & wired systems
- One mile line-of-site range
- 900 MHz or 2.4 GHz radios
- Up to 2 years battery life
- Secure network
- Explosion proof or non-explosion proof
- · Turn-key installation, maintenance, and training services available

AirLink 6900











#### Signal Repeater AirLink 9900

- 255 Channel wireless interface all addresses on configured network
- Radio options: 900 MHz radio or 2.4 GHz
- 12 to 35V DC operating voltage
- Non XP version available

- 900 MHz radio and 52 networks
- 2.4 GHz radio and 78 networks
- Operating voltage: 12V to 35V
- Graphical LCD with LED backlight, readable in sunlight
- Non XP version available

- multiple locations
- Radio transmission every 1 min. with no change from device, every 5 sec. with change from device (user configurable)
- Non XP version available



#### Wireless Signal Meter AirLink 9100

- Portable signal-strength meter
- Displays radio signal strength and gas readings
- Communicates with all wireless sensors on network

#### 32 Channel Relay AirLink 7530 XP Relayer

- 32 Channel wireless relays: Contains 3 relays that can be activated by up to 32 remote wireless sensors
- Radio options: 900 MHz radio or 2.4 GHz Standard
- 12 to 35 VDC operating voltage with optional AC power supply
- Non XP version available





255 Channel AirLink 9850 Interface

- 255 Channel wireless interface - all addresses on configured network
- Interfaces with PLC or SCADA system with RS-232/485, ethernet, or USB
- Radio options: 900 MHz radio or 2.4 GHz Standard
- 12 to 35 VDC operating voltage with optional AC power supply
- Provides optional 4-20 mA outputs, up to 32



6 Channel AirLink 7543 Controller

- 6 Channel controller accepts up to 6 wireless transmitters
- Radio options: 900 MHz radio or 2.4 GHz Standard
- 3 Programmable alarm set-points
- Optional HART output
- 12 to 35 VDC operating voltage with optional AC power supply
- 3 Programmable relays

# **Wireless Controllers**



AirLink 7010 Controller

- 32 Channel hybrid controller
- Supports wireless transmitters and up to 4 wired transmitters
- Radio options: 900 MHz radio or 2.4 GHz Standard
- 12 to 35 VDC operating voltage with optional AC power supply
- 4 Programmable relays



32 Channel AirLink 7032 Touchscreen

- 32 Channel hybrid touchscreen
- Supports wireless transmitters and up to 4 wired transmitters
- Radio options: 900 MHz radio or 2.4 GHz Standard
- 12 to 35 VDC operating voltage with optional AC power supply
- 4 Programmable relays



**Stand-Alone Transmitter** Air Alert

- Electrochemical, infrared, or PID sensor element
- Wire powered, 12 to 35 VDC operating voltage, optional AC power supply
- 4-20 mA (3-wire)

- 3 magnetic-button interface

# **Wired Solutions**



2 Wire Transmitter T2A

- **Electrochemical Sensor**
- 2-Wire loop-powered, 4-20 mA output
- Wire powered,12 to 35 VDC operating voltage
- Digital display of gas reading with backlight
- 3 magnetic-button interface
- 4-20 mA (2-wire) output



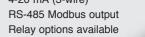
3 Wire Transmitter T3A

- Electrochemical, infrared or catalytic bead sensors
- Wire powered,12 to 35 VDC operating voltage
- Digital display of gas reading with backlight
- 4-20 mA (3-wire) output
- 3 magnetic-button interface
- RS-485 Modbus output



**VOC Pro** 

- · PID sensor options:
  - -10.0 eV lamp / 11.7 eV / 10.6 eV ppb / 10.6 eV ppm
- Wire powered,12 to 35 VDC operating voltage
- 4-20 mA (3-wire) output
- 3 magnetic-button interface
- RS-485 Modbus output



# **Detectable Gas Ranges**

Measurable Gases	Symbol	STEL	TLV/TWA	T2A	ТЗА	Air Alert	AirLink 6900/6940	AirLink Alert
Ammonia	NH3	35 ppm	25 ppm	75, 100, 200, 300, 400, 500, 1k ppm	100, 200, 30	0, 500, 1k ppm	100, 1	z ppm
Arsine	ASH3	_	0.005 ppm	1 ppm				
Carbon Dioxide	CO2	30,000 ppm	5,000 ppm	_	5k ppm, 5% Vol. 5% Vol.		/ol.	
Carbon Monoxide	СО	_	25 ppm	300, 500, 1k ppm	m 500, 1k ppm 1k ppm		pm	
Chlorine	Cl2	0.4 ppm	0.1 ppm	3, 10, 20 ppm	10 ppm			
Chlorine Dioxide	CIO2	C 0.1 ppm	_	1, 5 ppm	1 ppm			
Combustibles LEL (Cat)	LEL	_	_	_	100% LEL –			
Combustibles LEL (IR)	LEL	_	_	_	100% LEL			
Combustibles CH4 Vol. (IR)	CH4	_	_	_	— 100% Vol.			
Ethylene Oxide	EtO	_	1 ppm	10 ppm				
Fluorine	F2	C 0.5 ppm	0.1 ppm	1 ppm				
Freon	R410A	_	1,000 ppm	_ 2,000 ppm		_		
Freon	R404A	_	1,000 ppm	_ 2,000 ppm		_		
Formaldehyde	нсно	0.3 ppm	0.1 ppm		10 ppm			
Hydrocarbon % Vol.	HC	_	_	— 100% Vol.				
Hydrogen	H2	_	_	100% LEL				
Hydrogen Bromide	HBr	C 2 ppm	_		30 ppm			
Hydrogen Chloride	HCI	C 2 ppm	_	20, 30, 100 ppm	20, 30, 100 ppm		20, 100 ppm	
Hydrogen Cyanide	HCN	C 4.7 ppm	_	15, 30, 50 ppm	15, 5	50 ppm	50 p	pm
Hydrogen Fluoride	HF	C 2 ppm	0.5 ppm	10 ppm				
Hydrogen Sulfide	H2S	5 ppm	1 ppm	10, 25, 50, 100, 500, 2k ppm				
Nitric Oxide	NO	_	25 ppm	250 ppm				
Nitrogen Dioxide	NO2	_	0.2 ppm	20 ppm				
Oxygen	02	_	-	25%				
Ozone	О3	_	0.1 ppm	5, 100 ppm (100 ppm 6940 only) 5, 100 ppm				
Phosphine	PH3	C 0.15 ppm	0.05 ppm	5 ppm				
Sulfur Dioxide	SO2	0.25 ppm	_	20 ppm				
Volatile Organic Compound	VOCs	_	-	10, 20, 50, 100, 500, 1k, 2k ppm (VOC Pro)				

Authorized Distributor:

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World Leader In Gas Detection & Sensor Technology



### **Wired Controllers**



	F10 F10	-
	American B Baser	
-1	AC-7400	
	•	
3		1

AC-7400 8/12 channel analog

	<b>%</b>	9	4	***
AC-7400	8/12	4	4 total	No
MC-6400	64	4	4 total	No

#### o AC-7400

- · AC or DC supply
- 8 or 12 channels, 4-20 ma inputs, 2 or 3 wire
- 2 wiring hubsRS-485 Modbus output and 4 relays
- Compatible Transmitters:
   M2A, S2, GD-70D, T2A, T3A, VOC Pro

#### o MC-6400

- AC or DC supplyModbus input—64 channels
- · 2 wiring hubs
- RS 485 Modbus output and 4 relays



64 channel digital

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# How to access menus

#### AC-7400

- o Setup Mode

  - Press and hold MENU and ADD for 6 to 8 seconds
    Channel on/off, sensor type, scale, # of decimals, Relay Setup
- o Advanced Configuration Menu (Global Settings)
  - Cycle the unit's power using the power switch on the PCB. When the RKI Logo appears on the Display Screen, press MENU.
  - LCD contrast, restore factory default, fault relay setup, Modbus setup
- Calibration Mode
  - Press and hold MENU for five seconds





#### MC-6400

- o Setup Mode
  - From Normal Operating Mode, press and hold MENU and ADD for 8 seconds to enter Setup Mode.
  - Channel on/off, sensor type, channel number, relay setup
- o Advanced Configuration Menu
  - Cycle the unit's power using the power switch on the PCB. When the RKI Logo appears on the Display Screen, press MENU.
  - LCD contrast, restore factory default, fault relay setup, Modbus setup
- Calibration Mode
  - From Normal Operating Mode, press and hold MENU for 5 seconds
- o Relay Test mode
  - From Normal Operating Mode, press and hold RESET/ESC. Keep button pressed in, to cycle through all the relays.



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# **Wired Transmitters**



- Explosion Proof, Class I, Division 1 for CO, H2S, O2, & SO2 Class I, Division 2 for all other gases
- 2- wire Loop Powered
- 4-20 mA output (no relays)



#### T2A

- o Product Settings and Configuration Menu
  - press and hold the MENU button, for approximately 6 seconds
  - Alarm Test, System Information, Zero/Calibration Timers, Calibration Method, 4-20 mA Offset Settings: Zero Offset Setting, Full-Scale Offset Setting, Display Screen Contras Setting, Return to Factory Default Settings, Reset Zero and Calibration Values Only
- o Calibration menu
  - press the MENU buttonZero and Span



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# Wired transmitters continued



T3A 3-wire explosion proof

- Explosion Proof, Class I, Division 1 for CO, H2S, O2 & SO2
- Class I, Division 2 for all other gases 0
- 3 wire
- 4-20 mA and Modbus Output (with or without relays)



#### ТЗА

- o Product Settings and Configuration Menu
  - press and hold the MENU button, for approximately 6 seconds
  - Alarm Test, System Information, Zero/Calibration Timers, Unit Info, Relay 1: Latching/Auto Resetting Setting, Relay 2: Latching/Auto Resetting Setting, Relay 1: Fail-Safe Setting, Relay 2: Fail-Safe Setting, Fault Terminal Fail-Safe Setting, Calibration Method, RS-485 Modbus Address Setting, RS-485 Modbus Baud Setting, 4-20 mA Offset Settings: Zero Offset Setting, Full-Scale Offset Setting, Display Screen Contrast Setting, Return to Factory Default Settings, Reset Zero and Calibration Values Only
- o Operation Settings and Calibration

  - press the MENU button
     Zero, Span, Alarm settings



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# Wired transmitters continued



VOC Pro

- Explosion Proof, Class I, Division 1
- Output options: 4-20mA (3-wire) analog, and RS-485 Modbus (4 wire)
- With or without relays
- 10.0, 10.6, or 11.7 eV lamp



#### **VOC Pro**

- o Product Settings and Configuration Menu
  - press and hold the MENU button, for approximately 6 seconds
  - Alarm Test, System Information, Zero/Calibration Timers, Unit Info, Relay 1: Latching/Auto Resetting Setting, Relay 2: Latching/Auto Resetting Setting, Relay 1: Fail-Safe Setting, Relay 2: Fail-Safe Setting, Fault Terminal Fail-Safe Setting, Calibration Method, RS-485 Modbus Address Setting, RS-485 Modbus Baud Setting, 4-20 mA Offset Settings: Zero Offset Setting, Full-Scale Offset Setting, Display Screen Contrast Setting, Return to Factory Default Settings, Reset Zero and Calibration Values Only
- o Operation Settings and Calibration
  - press the MENU button
  - Zero, Span, Alarm settings



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# **Stand Alone**



Air Alert
Stand Alone, 3 color alarm LED's and buzzer

- 24 VDC (Optional 110 VAC power supply)
- With or without relays
- Output options: 4-20mA (3-wire) analog, RS-485 Modbus, optional 900 MHz or 2.4 GHz radio



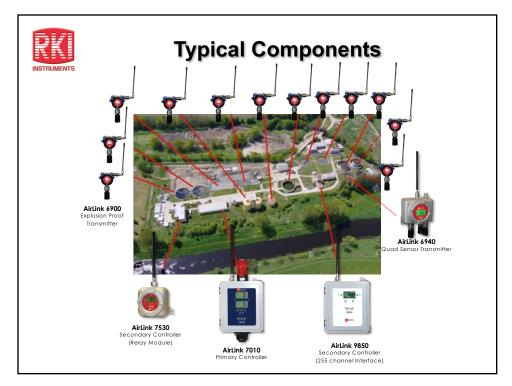
#### Air Alert and Airlink Alert

- o Product settings and configuration
  - Press and Hold the MENU button for 6 seconds
  - Relay Test, Network ID (if Airlink), System Information, Null/Calibration Timers, Unit Info, Background Setting, Calibration Method, Display Screen Contrast Setting, Return to Factory Default Settings, Reset Null & Calibration Values
- o Product settings and configuration
  - Press the MENU button
  - Calibration Zero and span, radio address (if Airlink), radio address setting (if Airlink)

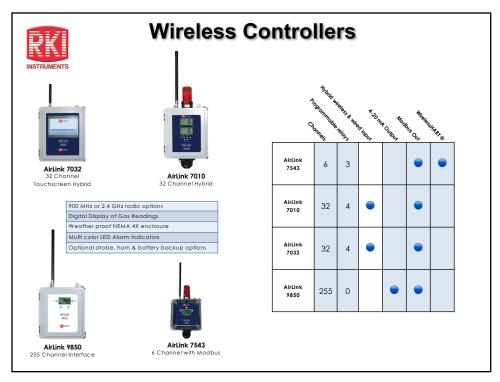


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#### Airlink 7010

- Channel Configuration Menu
   Press and hold MENU, ADD and SUB for five seconds
  - Channel selection, Channel on/off, Channel type—wired or wirefree, sensor type (wired only), scale (wired only), # of decimals (wired only), radio address (wirefree only), relay on/off, relay rise/fall, relay value, relay latching/unlatching, system information
- o Advanced Configuration Menu (Global Settings)
  - Cycle the unit's power by using the switch on the PCB. When the Display Screens illuminate, press MENU.
  - LCD contrast (upper), LCD contrast (lower), restore factory default settings, relay 4 fault relay, fault relay failsafe setting, fault terminal failsafe setting, Modbus address, Baud setting, Radio Timeout, Network channel, Monitor setup-primary or secondary
- Calibration menu
  - Press and hold MENU for five seconds.
  - Zero, and span
- o Relay test mode
  - Press and hold RESET. Relay 1 will activate after five seconds, Relay 2 will activate after an additional five seconds, etc.

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#### Wireless controllers continued



- 32 channel controller.
  - o Accepts 4 wired transmitters
- Wireless communication
  - 900 MHz radio and 52 networks
  - 2.4 GHz radio and 78 networks
- Four Programmable Alarm Relays
- NEMA 4X weather resistant enclosure (stainless-steel option available)
- Modbus output
- 24 VDC or 110 VAC
- Color touchscreen

32 Channel Touchscreen Controller

Airlink 7032



#### Airlink 7032

- o Channel configuration
  - Press the WireFree logo to enable the "Channel Config" button on the Home Screen
  - Press "Channel Config" to enter Channel Configuration Mode
  - Wired or wirefree, relay configuration, radio address (wirefree), scale (wired), sensor location, duplicate settings, turn channel off
- Configuration menu
  - Touch the WireFree logo, then Press and hold the GEN II logo until the Touchscreen shows the Configuration Menu.
  - View serial #, view date manufactured, calibration mode, relay tests, restart, VIEW Modbus Output Settings: Baud Rate, VIEW Radio Settings: Radio Timeout, VIEW Gen II Radio Settings: Network ID, VIEW Gen II Radio Settings: Primary or Secondary Monitor, VIEW OI-7032 Reset to Factory Default, VIEW Relay Settings: Relays 1-4 (Failsafe), VIEW Relay Settings: Fault Terminal, VIEW Relay Settings: Fault Relay Assign
- o Configuration Menu Modifications (Second-Level Configuration Menu)
  - To modify certain items in the Configuration Menu, the AirLink 7032 Terminal Board must be reset (while in the Configuration Menu). To reset the board, complete the following steps
    - Press "Restart AirLink 7032"
    - Wait for the pop-up window to disappear and the grayed-out buttons to become black
  - Modbus Address, Baud Rate, Radio Timeout, Network ID, Primary or Secondary Monitor, Reset to Factory Default, Relays 1-4 (Failsafe), Fault Terminal, Fault Relay Assign

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6 Channel with Modbus

#### Wireless controllers continued



- o 6 channel wireless controller
- 3 Programmable Alarm Relays
- Modbus or HART output
- o 24 VDC or 110 VAC
- NEMA 4X enclosure

Airlink 7543



#### Airlink 7543

- o Basic Configuration Menu
  - Press and hold MENU for five seconds
  - Channel Selection, Channel On/Off, Radio Address Setting, Relay On/Off, Relay Setting-Type (Rise/Fall), Relay Value Setting, Relay Latching/Unlatching, Duplicate Channel.
- o Advanced Configuration Menu
  - Cycle the unit's power (turn OFF, then ON). Power off the device by turning off the voltage supply at the power source (DC power), or by unplugging the unit (AC power). Power on the device by supplying voltage to the unit.
  - When the RKI Logo is shown on the Display Screen, press MENU
  - Adjust LCD Contrast, Restore Factory Default Settings, Fault Relay Setup: Relay 3 Fault Relay, Fault Relay Setup: Latching or Unlatching, Relay Failsafe Setup: Relay 1 Failsafe (right), Relay Failsafe Setup: Relay 2 Failsafe (below), Relay Failsafe Setup: Relay 3 Failsafe (right), Relay Failsafe Setup: Fault Terminal Failsafe (below), Radio Timeout Setting, Network Channel Setting, Primary/Secondary Setting



- o Relay Alarm test mode
  - Press and hold MENU and SUB for five seconds to enter Alarm Test Mode

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Wireless controllers continued



- o 255 channel wireless or Modbus input
- o Modbus output, or up to thirty-two 4-20
- 24 VDC or 110 VAC
- NEMA 4X enclosure

255 Channel Interface

Airlink 9850 Receiver Interface



#### Airlink 9850

- o Basic Configuration Menu
  - Press and hold MENU for five seconds
  - Modbus Setup Address Setting, Modbus Setup Baud, Modbus Setup Float Swap, Modbus Setup 485 or 232, 4-20 Port Setup, 4-20 Port Setup On/Off, 4-20 Port Setup Address, 4-20 Port Setup Output 1:1/Scaled, 4-20 Port Setup Min Scale, 4-20 Port Setup Max Scale, 4-20 Port Setup 4mA Offset, 4-20 Port Setup 20mA Offset, IP Address Setup Type, Address Selection for relay, Address On/Off Setup for relay, Address Rise/Fall Low Setup for relay, Low Alarm Setup for relay, Address Rise/Fall High Setup for relay, High Alarm Setup for relay, Address Setup: Duplicate.
- o Advanced Configuration Menu
  - Cycle the unit's power (turn OFF, then ON). Power off the device by turning off the voltage supply at the power source (DC power), or by unplugging the unit (AC power). Power on the device by supplying voltage to the unit.

    When the RKI Logo is shown on the Display Screen, press MENU

  - Adjust LCD Contrast, Radio Timeout, Network ID, Primary/Secondary Monitor Setting.

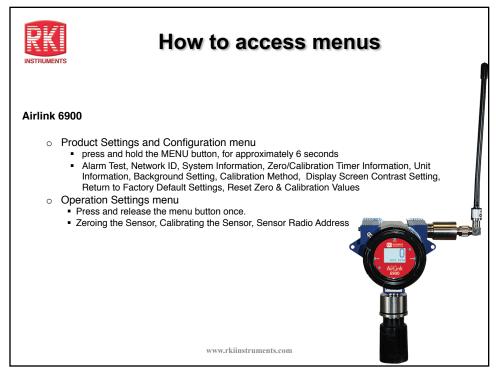


255 Channel Interface

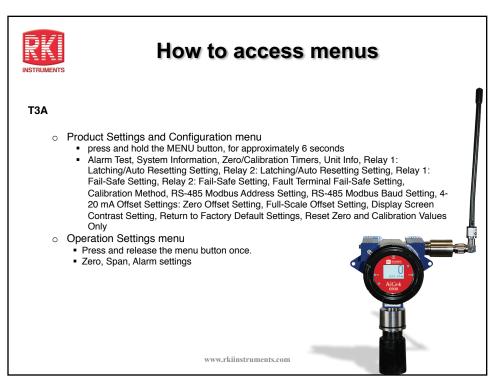
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#### **4 Sensor Transmitter**



- Continuously monitor up to 4 gases with one transmitter
- Wireless communication:
  - o 900 MHz radio and 52 networks
  - o 2.4 GHz radio and 78 networks
- o Batterv life:
  - o 6-months maximum
  - o 2-weeks plus for PID
- o Electrochemical, PID, or IR sensors available
- Explosion and non-explosion proof versions.





Airlink 6940 Battery Powered

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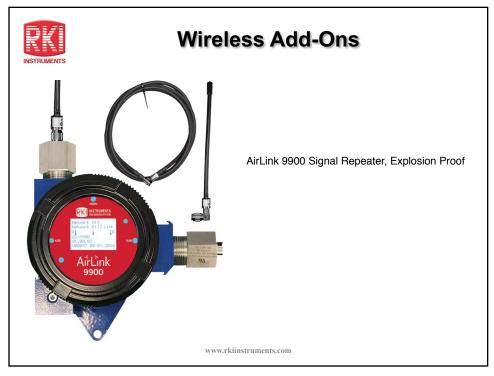
### How to access menus

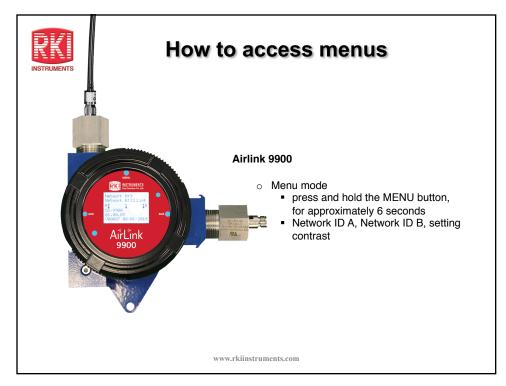
#### Airlink 6940

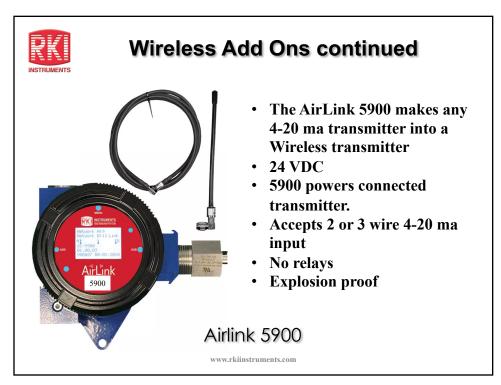
- o Product Settings and Configuration menu
  - press and hold the MENU button, for approximately 6 seconds
  - Global settings, Network ID, Unit information, Contrast setting, factory default settings, back menu, sensor settings, sensor on/off, nulling the sensor, calibrating the sensor, sensor radio address, sensor relay test, sensor background setting, sensor background setting, sensor background setting, sensor background low setting, calibration method, sensor information, null calibration timer information, reset sensor null/cal
- o Operation Settings menu
  - Press and release the menu button once.
  - Powering on, powering off, display behavior above background

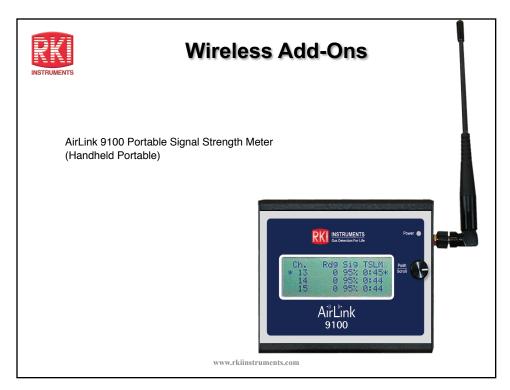


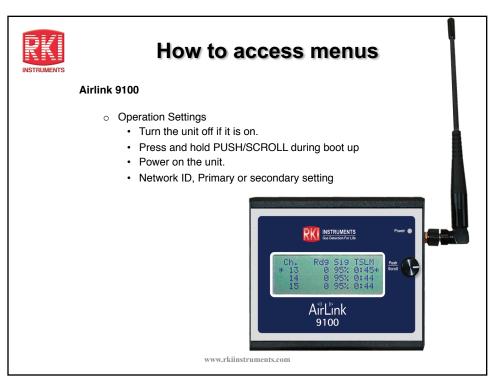














# **Wireless Add Ons continued**

#### AirLink 7530 Relay Module

- o Accepts up to 32 wireless transmitters
- o 3 programmable alarm relays out
- Optional light and horn available (uses 1 relay)
- Available in explosion and non-explosion proof

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### How to access menus

#### Airlink 7530

- o Configuration mode
  - Press and hold MENU for five seconds
  - Channel Selection, Channel On/Off, Radio Address Setting, Relay On/Off, Relay Setting-Type (Rise/Fall), Relay Value Setting, Relay Latching/Unlatching, Duplicate Channel.
- o Advanced Configuration menu
  - Cycle the unit's power (turn OFF, then ON). Power off the device by turning off the voltage supply at the power source (DC power), or by unplugging the unit (AC power). Power on the device by supplying voltage to the unit.
  - When the RKI Logo is shown on the Display Screen, press and hold the MENU button.
  - Adjusting LCD Contrast, Restore Factory Default Settings, Fault Relay Setup: Relay 3 Fault Relay, Fault Relay Setup: Latching or Unlatching, Radio Timeout Setting, Network Channel Setting, Primary/Secondary Setting.
- Relay test mode
  - Touch and hold the MENU and SUB buttons for five seconds to enter Alarm Test Mode.









- · Use Airlink 9100 and Airlink 6900
  - Check what the Network ID is in the 6900
  - Set the Airlink 9100's Network ID to the same as the 6900
  - Place the 6900 in relay test mode.
    - Press the Add and Sub buttons every 3-5 seconds. This will generate a signal to the Airlink 9100.
- The signal strength needs to be >40%

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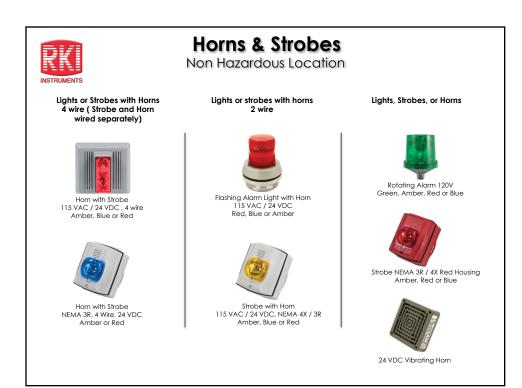
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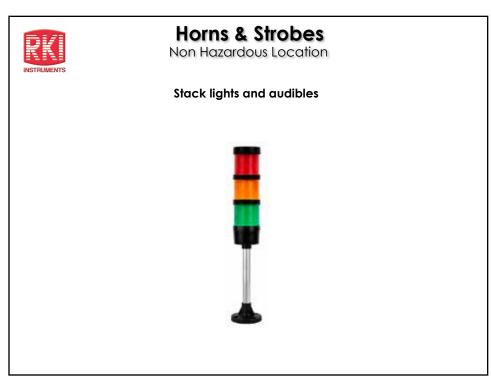


# **Peripheral Devices**

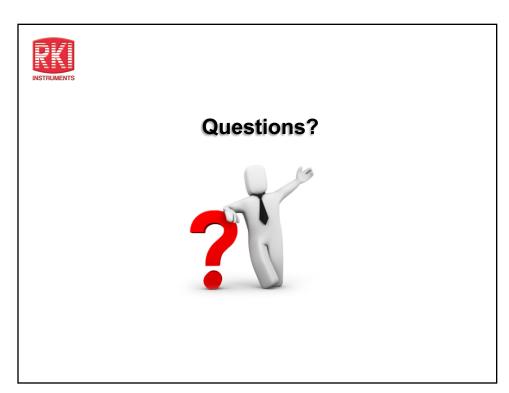
- · Battery back-up for many devices
- Auto dialers-voice recordings
  - Notify authorities
- WiFi text and email generators
- Datalogger
  - Document readings
- · UPS
  - Supplies back-up power to system and enunciators













# **Training Notes**
