

## AVAILABLE ACCESSORIES FOR USE WITH AIR PRODUCTS DUCT SMOKE DETECTORS

### REMOTE ACCESSORIES

#### MSR-100R Series Remote Accessory Controllers

MSR-100R/W	Remote Indicator/Control Assembly w/ White Single Gang Cover Plate
MSR-100R/R	Remote Indicator/Control Assembly w/ Red Single Gang Cover Plate
MSR-100R/S	Remote Indicator/Control Assembly w/ Stainless Steel Single Gang Cover Plate

#### MSR-100RS Series Remote Accessory Controllers with Strobe

MSR-100RS/W/C	Remote Indicator/Control Assembly w/ Strobe Assembly (Clear Lens); White Double Gang Cover Plate
MSR-100RS/W/O	Remote Indicator/Control Assembly w/ Strobe Assembly (Opaque Lens); White Double Gang Cover Plate
MSR-100RS/R/C	Remote Indicator/Control Assembly w/ Strobe Assembly (Clear Lens); Red Double Gang Cover Plate
MSR-100RS/R/O	Remote Indicator/Control Assembly w/ Strobe Assembly (Opaque Lens); Red Double Gang Cover Plate
MSR-100RS/S/C	Remote Indicator/Control Assembly w/ Strobe Assembly (Clear Lens); Stainless Steel Double Gang Cover Plate
MSR-100RS/S/O	Remote Indicator/Control Assembly w/ Strobe Assembly (Opaque Lens); Stainless Steel Double Gang Cover Plate

#### MSR-100S Series Remote Accessory Strobes (as an optional field upgrade kit for existing installed MSR-100R Controllers)

MSR-100S/R/C	Strobe Assembly (Clear Lens); Red Double Gang Cover Plate
MSR-100S/R/O	Strobe Assembly (Opaque Lens); Red Double Gang Cover Plate
MSR-100S/S/C	Strobe Assembly (Clear Lens); Stainless Steel Double Gang Cover Plate
MSR-100S/S/O	Strobe Assembly (Opaque Lens); Stainless Steel Double Gang Cover Plate
MSR-100S/W/C	Strobe Assembly (Clear Lens); White Double Gang Cover Plate
MSR-100S/W/O	Strobe Assembly (Opaque Lens); White Double Gang Cover Plate

### SMOKE TEST GAS

TG-1000	Solo Aerosol Test Gas with Spray Nozzle
TG-2000	Solo Aerosol Test Gas with Nozzle for SL- Series Test Port

### NOTCHED SAMPLING TUBES (SL- SERIES)

STN-1.0	For duct widths of 6" TO 1.0'
STN-2.5	For duct widths of 1.0' TO 2.5'
STN-5.0	For duct widths of 2.5' TO 5.0'
STN-10.0	For duct widths of 5.0' TO 10.0'

### SAMPLING TUBES (RW- AND SM- SERIES)

STS-1.0	For duct widths of 6" TO 1.0'
STS-2.5	For duct widths of 1.0' TO 2.5'
STS-5.0	For duct widths of 2.5' TO 5.0'
STS-10.0	For duct widths of 5.0' TO 10.0'

### WEATHERPROOF ENCLOSURES

WP-1	Weatherproof Enclosure for RW- and SM- Series Detectors
WP-2000	Weatherproof Enclosure for SL- Series Detectors

### POWER SUPPLIES

T-PB 202-1	24VAC @ 4.0A Class I Power Supply
T-PB 202-0	24VAC @ 4.0A Class I Power Supply
T-PB 303-1	24VAC @ 3.0A Class II Power Supply
T-PB 303-0	24VAC @ 3.0A Class II Power Supply

NOTICE: The information contained in this document is the most current available at the time of shipment of accompanying product, and is subject to change without notice. Future references should always be made to the most current revision of this document. The information contained in all this document should be considered before installing or using the product. Any example applications shown are subject to the most current enforced local/national codes, standards, approvals, certifications, and/or the authority having jurisdiction. All of these resources, as well as the specific manufacturer of any shown or mentioned related equipment, should be consulted prior to any implementation. For further information or assistance concerning this product, contact Air Products and Controls Inc. Air Products and Controls Inc. reserves the right to change any and all documentation without notice.

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## AIR PRODUCTS AND CONTROLS INC. INSTALLATION GUIDE FOR MSR-100 SERIES REMOTE ACCESSORIES

1749 East Highwood • Pontiac, MI 48340 USA  
US Toll Free 888.332.2241 • Phone 248.332.3900 • Fax 248.332.8807 • www.ap-c.com

### PRODUCT DESCRIPTION

The MSR-100 Series remote accessories offer the most comprehensive set of features, functionality and ease of installation ever available in a duct smoke detector remote accessory. They are compatible with the range of duct smoke detectors as described herein.

The remote accessory is available with only the single gang remote indicator/control (MSR-100R Products), or with the addition of a single gang strobe assembly (MSR-100RS Products), or as an optional field upgrade kit for existing installed MSR-100R Products (MSR-100S Products). All versions are compatible with standard Decora style cover plates (base color choice plate included).

The indicator/control assembly provides

- Visual indication of detector Pilot, Trouble and Alarm Functions
- Selectable audible indication of Alarm, Trouble or both
- Buzzer Silence function, with "ringback" following condition correction
- Lamp/Buzzer test function
- Key-Operated detector Test and Reset functions
- Lever-operated "No-Tools" terminal block
- Port for plugging in Strobe Assembly



MSR-100RS/W/C

The strobe assembly provides visual indication of alarm conditions, and is connected to the indicator/control assembly via the provided connector (observing connector polarity).

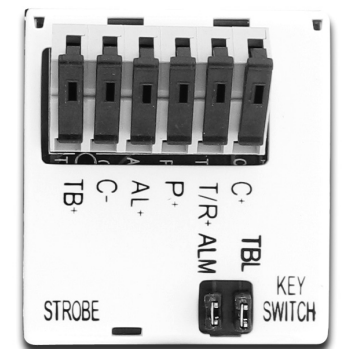
**NOTE:** The strobe and audible buzzer features are not ADA compliant, and not intended for life safety notification or evacuation purposes (public mode). These functions are for duct smoke detector status indication only (private mode).

### STROBE CONNECTION

To install the Strobe module, simply plug the provided connector onto the pins as indicated on the rear of the indicator/control module. Snap the strobe lens into the cover plate, and install cover plate following completion of remote module wiring.



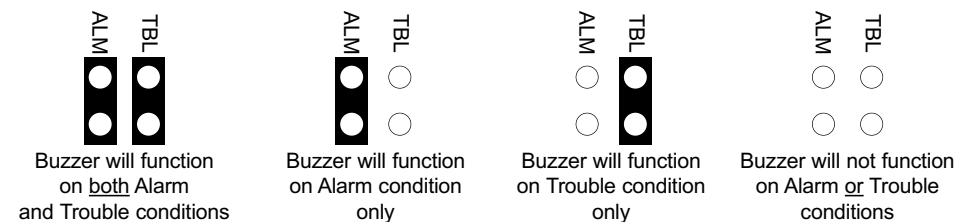
MSR-100R/W



REAR OF INDICATOR/CONTROL

### AUDIBLE BUZZER CONFIGURATION

There are two jumpers located on the rear of the indicator/control assembly. To enable audible buzzer operation for Alarm or Trouble conditions, simply leave the jumpers in place. To disable either or both functions, remove the appropriate jumper(s).

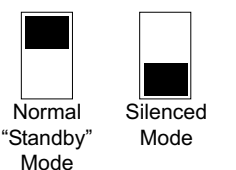


### SILENCE AND RINGBACK FUNCTIONS

On the occasion where an audible alarm or trouble condition needs to be silenced while the detector condition is inspected and remedied, the indicator/control module provides a silence function. The slide switch located on the front of the module is pushed DOWN to activate the silence function.

Upon correction of the notified condition, the silenced buzzer will resume sounding. This is the ringback feature which serves as a reminder to reset the silence switch to the "normal", UP position.

Note that the strobe module, when used, will not stop operating when the silence function is engaged.



## LAMP AND BUZZER TEST FUNCTION

The indicator/control module includes an integrated LED and Buzzer test function, to ensure that the visual and audible indicators are functioning and haven't "burned out". Simply depress the "LED TEST" button on the front of the module to activate test. If the remote accessory is functioning properly, all of the LEDs will illuminate, and the buzzer will sound (unless in "silence" mode or jumper programmed to not sound on alarm or trouble). Releasing the "LED TEST" button will return the unit to normal condition.

## TECHNICAL SPECIFICATIONS

Power Requirements:	Standby	13mA
	Alarm LED	22mA
	Trouble with Buzzer	33mA
	Trouble Silenced	33mA
	Trouble without Buzzer	13mA
	Alarm with Buzzer	37mA
	Alarm Silenced with Buzzer	37mA
	Alarm with Buzzer and Strobe	154mA
	Alarm Silenced with Buzzer and Strobe	157mA
	Lamp Test with Buzzer	62mA
	Lamp Test with Buzzer Silenced	52mA

Sound Pressure: 60db @ 10 ft

Dimensions: Single Gang Plate 4½" (114.3mm)H x 2¾" (69.85mm)W  
Double Gang Plate 4½" (114.3mm)H x 4½" (114.3mm)W

Wiring: 14-28AWG, Solid or Stranded

Approvals: UL Listed for use with Air Products and Controls duct smoke detectors referenced herein including all RW- Series, SM- Series and SL- Series duct smoke detectors  
UL URRQ.S7425  
CSFM 7300-1004:107  
MEA 73-92-E Vol.31



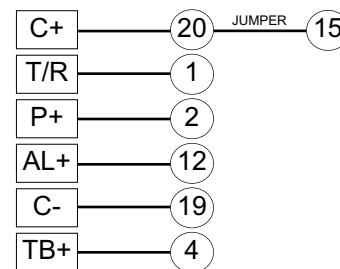
FRONT OF INDICATOR/CONTROL

**NOTE:** For proper installation, testing, operation and maintenance of a duct smoke detector, please refer to the detector installation guide. The following wiring diagrams are applicable only to compatible, current limited, UL Listed remote accessories from Air Products and Controls. Use of any other devices may result in damage to the duct smoke detector or those devices, potential injury, and will void any applicable warranties.

## WIRING INSTRUCTIONS

### SL-2000 Series Duct Smoke Detectors

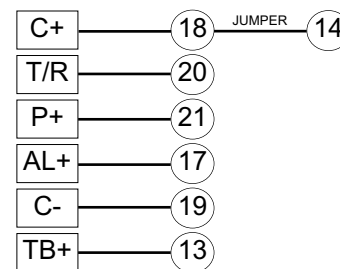
**NOTE:** A jumper wire must be placed between Terminals 20 and 15. The Trouble LED will illuminate when the detector cover is removed, or if the smoke detector head is removed and the cover replaced. Trouble contacts CANNOT be connected to a Fire Alarm Control Panel when using this option without the use of a slave relay.



**NOTE:** If duct smoke detectors are interconnected for common functions, please refer to unit installation guide for connection options for remote alarm functions.

### SM-501 Series Duct Smoke Detectors

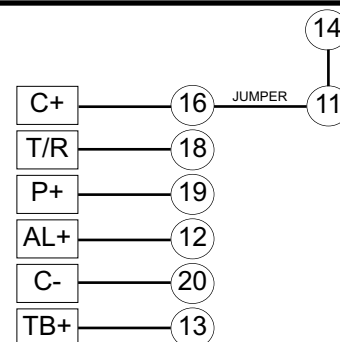
**NOTE:** A jumper wire must be placed between Terminals 14 and 18. The Trouble LED will illuminate when the smoke detector head is removed. Trouble contacts CANNOT be connected to a Fire Alarm Control Panel when using this option without the use of a slave relay.



**NOTE:** If duct smoke detectors are interconnected for common functions, please refer to unit installation guide for connection options for remote alarm functions.

### 2650-560APC and 2650-561APC Duct Smoke Detectors

**NOTE:** A jumper wire must be placed between Terminals 16, 11 and 14. The Trouble LED will illuminate when the smoke detector head is removed. Trouble contacts CANNOT be connected to a Fire Alarm Control Panel when using this option without the use of a slave relay.



**NOTE:** Use of an MSR remote accessory with these detector models requires the dedicated use of one set of alarm contacts.

**NOTE:** These models of duct smoke detectors are not intended for interconnection when using the MSR-Series Remote Accessories. For further information and assistance with this application, please contact our technical hotline.

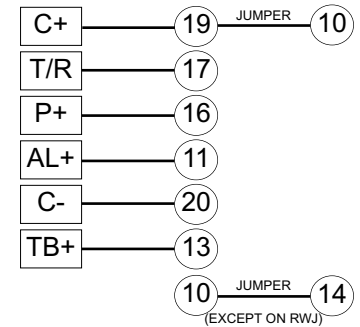
## RWJ, RWF Series Duct Smoke Detectors

**NOTE:** For RWJ Series duct smoke detectors, no jumper is required for remote accessory Trouble connections. A jumper is required, however, between to Terminals 19 and 10 to facilitate the alarm functionality. If the trouble contacts of the RWJ Series detector are being used for other switching applications, or for connection to a Fire Alarm Control Panel, the on-board RWJ option jumper must be removed (cut). Failure to remove the RWJ option jumper could result in damage to the Fire Alarm Control Panel or other connected equipment.

**NOTE:** For connection of MSR remote accessories to the RWF Series a jumper wire must be placed between Terminals 14, 10 and 19. The Trouble LED will illuminate when the smoke detector head is removed. Trouble contacts CANNOT be connected to a Fire Alarm Control Panel when using this option without the use of a secondary relay.

**NOTE:** Use of an MSR remote accessory with these detector models requires the dedicated use of one set of alarm contacts.

**NOTE:** These models of duct smoke detectors are not intended for interconnection when using the MSR-Series Remote Accessories. For further information and assistance with this application, please contact our technical hotline.

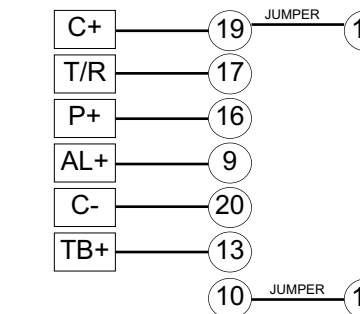


## RWX, RWL, RWH Series Duct Smoke Detectors

**NOTE:** For connection of MSR remote accessories to the RWX Series, RWL Series and RWH Series, a jumper wire must be placed between Terminals 14, 10 and 19. The Trouble LED will illuminate when the smoke detector head is removed. Trouble contacts CANNOT be connected to a Fire Alarm Control Panel when using this option w/out the use of a secondary relay.

**NOTE:** Use of an MSR remote accessory with these detector models requires the dedicated use of one set of alarm contacts.

**NOTE:** These models of duct smoke detectors are not intended for interconnection when using the MSR-Series Remote Accessories. For further information and assistance with this application, please contact our technical hotline.



## PACKAGE CONTENTS AND STROBE CONSTRUCTION

Remote accessories that include the indicator/control unit are shipped with the following parts:

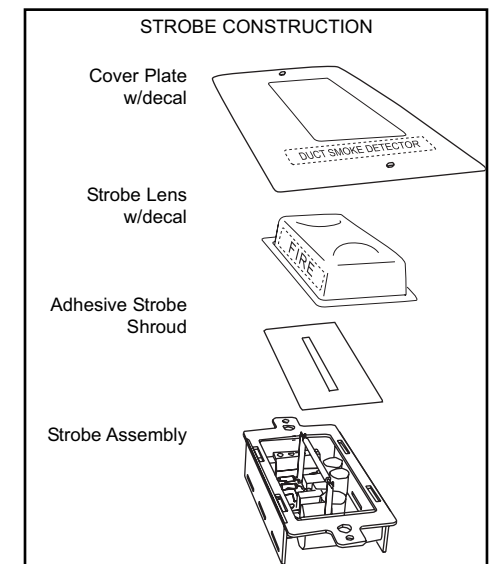
- Installation Instructions
- Indicator/Control Unit with back box mounting screws (back box not supplied)
- Keys for Test/Reset function
- Decora Style Cover Plate with mounting screws (single gang)
- "Duct Smoke Detector" Decal for optional use on cover plate

Remote accessories that include the indicator/control unit and strobe assembly are shipped with the following parts:

- Installation Instructions
- Indicator/Control Unit with back box mounting screws (back box not supplied)
- Keys for Test/Reset function
- Strobe Assembly with back box mounting screws (back box not supplied)
- Adhesive Strobe Shroud (place over strobe assembly upon removal of paper bulb protector, refer to illustration at right)
- Strobe Lens
- Strobe Lens Decals for optional use: "SMOKE", "FIRE" (2 of each version in horizontal orientation plus 2 each vertically set)
- Decora Style Cover Plate with mounting screws (double gang)
- "Duct Smoke Detector" Decal for optional use on cover plate

Remote accessories that include the strobe assembly are shipped with the following parts:

- Installation Instructions
- Strobe Assembly with back box mounting screws (back box not supplied)
- Adhesive Strobe Shroud (place over strobe assembly upon removal of paper bulb protector, refer to illustration at right)
- Strobe Lens
- Strobe Lens Decals for optional use: "SMOKE", "FIRE" (2 of each version in horizontal orientation plus 2 each vertically set)
- Decora Style Cover Plate with mounting screws (double gang)
- "Duct Smoke Detector" Decal for optional use on cover plate



FOR FURTHER ASSISTANCE, PLEASE CONTACT OUR TOLL-FREE TECHNICAL ASSISTANCE HOTLINE:  
1 (888) 332-2241 or +1 (248) 332-3900 outside the USA