

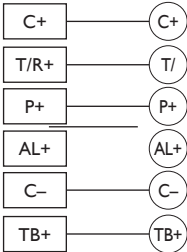


AIR PRODUCTS & CONTROLS

AIR PRODUCTS & CONTROLS
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RT-3000 Series Duct Smoke Detectors

- △ **NOTE:** *Trouble LED will illuminate on the MSR-100 if the smoke detector head is removed.*
- △ **REMARQUE:** *La LED de dépannage s’allumera sur le MSR-100 si la tête du détecteur de fumée est retirée.*
- △ **NOTE:** *If duct smoke detectors are interconnected for common functions, please refer to unit installation guide for connection options for remote alarm functions.*
- △ **REMARQUE:** *Si les détecteurs de fumée de conduit sont interconnectés pour des fonctions courantes, veuillez vous référer au guide d’installation de l’unité pour les options de connexion pour*



AVAILABLE ACCESSORIES FOR USE WITH
AIR PRODUCTS DUCT SMOKE DETECTORS

REMOTE ACCESSORIES

MSR-100R Series Remote Accessory Controllers (Featuring visual pilot, alarm functions, key operated test/reset and selectable audible indication with buzzer silence function)

- MSR-100R/R Remote Indicator/Control Assembly; Red Single Gang Cover Plate
- MSR-100R/W Remote Indicator/Control Assembly; White Single Gang Cover Plate

MSR-100RV Series Remote Accessory Controllers with Enhanced Buzzer (Featuring visual pilot, alarm functions, key operated test/reset and selectable audible indication with buzzer silence function)

- MSR-100RA/W Remote Indicator/Control Assembly w/ Audio Assembly; White Double Gang Cover Plate

MSR-100RV Series Remote Accessory Controllers with Enhanced Strobe (Featuring visual pilot, alarm functions, key operated test/reset and selectable audible indication with buzzer silence function)

- MSR-100RV/R/C Remote Indicator/Control Assembly w/ Visual Assembly (Clear Lens); Red Double Gang Cover Plate
- MSR-100RV/W/C Remote Indicator/Control Assembly w/ Visual Assembly (Clear Lens); White Double Gang Cover Plate

MSR-100RV Series Remote Accessory Controllers with Enhanced horn and Strobe (Featuring visual pilot, alarm functions, key operated test/reset and selectable audible indication with buzzer silence function)

- MSR-100RAV/W/C Remote Indicator/Control Assembly w/ Audio/Visual Assembly (Clear Lens); White Double Gang Cover Plate
- MSR-100RAV/R/C Remote Indicator/Control Assembly w/ Audio/Visual Assembly (Clear Lens); Red Double Gang Cover Plate

PART NUMBER EXPLANATION SERIES	ENHANCED INDICATION	ACEPLATE COLOR	VISUAL STROBE LENS TYPE
MSR-100R	A (Audio horn)	R (Red)	C (Clear)
	V (Visual Strobe)	W (White)	O (Opaque)
	AV (Audio horn & Visual Strobe)		



FOR FURTHER ASSISTANCE, PLEASE CONTACT OUR
TOLL-FREE TECHNICAL SUPPORTHOTLINE:

I (888) 332-2241 or +I (248) 332-3900 outside the USA
or visit: www.apcfire.com/support

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AIR PRODUCTS & CONTROLS

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INSTALLATION GUIDE FOR
MSR-100 SERIES REMOTE ACCESSORIES

MSR-100 Series

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PRODUCT DESCRIPTION

The MSR 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. All MSR-Series remote accessories are compatible with standard Decora style cover plates (base color choice plate included).

The MSR-100 Series

The 100 Series remote accessory is available with only the single gang remote indicator/control (MSR-100R Products), or with the addition of a single gang strobe/horn assembly (MSR-100RAV Products). Optional field upgrade kits for existing installed MSR-100R products are also available (MSR-100A and MSR-100AV Products).

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 quick-connect “No-Tools” terminal block
- Port for plugging in the Audible/Visual Assembly



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

* **NOTE:** *The strobe and audible horn 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. All units require one gang of space in a standard “Listed” deep gang box (minimum 2” deep) - not supplied.*

* **REMARQUE:** *Les fonctions stroboscopique et sonore ne sont pas conformes à l'ADA et ne sont pas destinées à la notification de sécurité des personnes ou à l'évacuation (mode public). Ces fonctions ne concernent que l'indication de l'état du détecteur de fumée de conduit. Toutes les unités nécessitent une bande d'espace dans une boîte de séparation profonde standard « répertoriée » (minimum 2 » de profondeur) - non fournie.*

TABLE 1: MSR-100 PART NUMBERS AND FEATURES

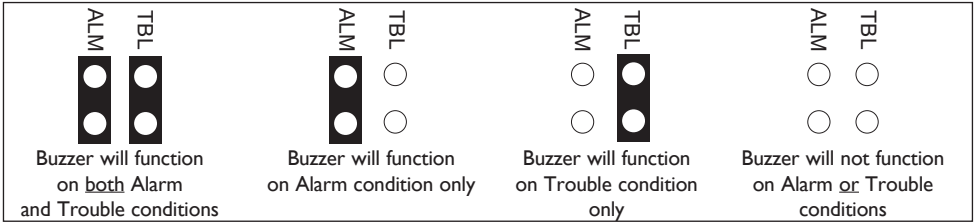
Part number	Description	Key/ Buzzer	Test/ reset Button	LED (Red=Alarm, Green= Pilot, Yellow=Trouble)	Horn	Strobe	White Plate	Red Plate	Size
MSR-100R/R	Remote Control Assembly w/ Single Gang Cover Plate, Red	x		x	x			x	2x4
MSR-100R/W	Remote Control Assembly w/ Single Gang Cover Plate, White	x		x	x		x		2x4
MSR-100RA/W	Control w/ horn Assembly, White Double Gang Plate	x		x	x		x		4x4
MSR-100RAV/R/C	Control w/ Strobe & horn Clear Lens, Red Double Gang Cover Plate	x		x	x	x		x	4x4
MSR-100RAV/W/C	Control w/ Strobe & Horn Clear Lens, White Double Gang Cover Plate	x		x	x	x	x		4x4
MSR-100RV/R/C	Remote Control Assembly w/ Double Gang Cover Plate, Red	x		x		x		x	4x4
MSR-100RV/W/C	Remote Control Assembly w/ Double Gang Cover Plate, White	x		x		x	x		4x4

STROBE CONNECTION

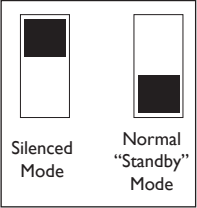
To install the Audible module, simply plug the provided connector onto the pins as indicated on the rear of the control module. If adding a strobe component, align the copper pins with the holes on the face of the audible module and press into place. Install cover plate following completion of remote module wiring.

AUDIBLE BUZZER CONFIGURATION - MSR CONTROL MODULE

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 - MSR CONTROL MODULE



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 UP to activate the silence function. Upon correction of the notified condition, the silenced buzzer will resume sounding. This the ringback feature which serves as a reminder to reset the silence switch to the “normal”, DOWN position. * Note that the silence function does not effect an add-on Audible module (in second gang position). If a horn module is connected via polarized connector, it will continue to sound even if the silence function is engaged. Also, the strobe module, when used, will not stop operating when the silence function is engaged.



MSR-100R/R

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.

NOTE: If a strobe module is connected, the strobe will not be tested (or flash) as part of the lamp and buzzer test function. That test is for the LED and audible indicators located on the control module only. To test the add-on strobe or horn/strobe modules simply insert the key and rotate the key switch to the Test/Reset position.

REMARQUE: Si un module stroboscopique est connecté, le stroboscope ne sera pas testé (ou ne clignotera pas) dans le cadre de la fonction de test de la lampe et du buzzer. Ce test ne concerne que les voyants LED et sonores situés sur le module de commande. Pour tester les modules stroboscopiques ou sirène/stroboscopique complémentaires, il suffit d’insérer la clé et de tourner l’interrupteur à clé sur le Tester/réinitialiser la position.

ELECTRICAL SPECIFICATIONS for the MSR-100

Power Requirements:	Standby Alarm Trouble with buzzer Trouble Silenced Trouble without horn Alarm with horn Alarm Silenced with horn Alarm with horn & Strobe Alarm Silenced w Horn & Strobe Lamp Test with Horn Lamp Test with Horn Silenced	18mA 45mA 23mA 23mA 24mA 62mA 42mA 101mA 100mA 60mA 50mA	Input Voltage: 24VDC 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 Temperature: 0°C to 49°C (32°F to 120°F)
With AV Module:	Alarm Current: 95mA; UL Listed Alarm db: 68 db @10 ft (high); 53 db @ 10 ft (low); Alarm candela: 2.0 on axis Reverberent Room Alarm db: 87 db @10 ft (high); 83 db @ 10 ft (low)		
Approvals:	UL Listed for use with Air Products & Controls duct smoke detectors referenced herein including all RW- Series, SM- Series SL- Series and RT-Series duct smoke detectors		

PACKAGE CONTENTS AND STROBE CONSTRUCTION

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

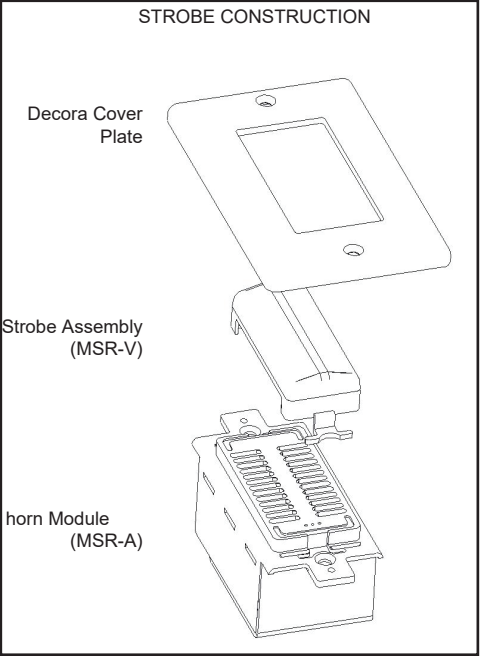
- Installation Instructions
- Indicator/Control Unit with back box mounting screws (back box not supplied)
- Keys for Test/Reset function
- Decora Style Cover Plate with mounting screws (single gang)

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

- Indicator/Control Unit package
- horn Module with back box mounting screws (back box not supplied)
- Decora Style Cover Plate with mounting screws (double gang)

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

- Indicator/Control Unit package
- horn Module package
- Strobe Assembly
- Strobe Lens Decals for optional use: “SMOKE”, “FIRE”
(1 of each version in horizontal orientation plus 1 each vertically set)



WIRING INSTRUCTIONS

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 & 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.

REMARQUE: Pour une installation correcte, le contrôle, l’exploitation et l’entretien d’un détecteur conduit de fumée, Prier de consulter le guide d’installation de détecteur. Les schémas de câblage suivants Sont seulement applicables aux accessoires pour commandes A’ distance de Air Product & Controls compatibles, a courant limite’es qualifier UL Listed. L’utilisation d’autres appareils peut causer des dommages au détecteur conduit de fumée ou de ces dispositifs, les risques de blessures, et annulera toute garantie applicable.

SL-2000 Series Duct Smoke Detectors

NOTE: Trouble LED will illuminate on the MSR-100 when the detector cover is removed, or if the smoke detector head is removed and the cover replaced.

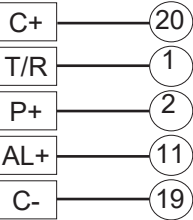
REMARQUE: Le voyant de dépannage s’allumera sur le MSR-100 lorsque le couvercle du détecteur est retiré ou si la tête du détecteur de fumée est retirée et que le couvercle est remplacé.

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

REMARQUE: Si les détecteurs de fumée de conduit sont interconnectés pour des fonctions courantes, veuillez vous référer au guide d’installation de l’unité pour les options de connexion pour les fonctions d’alarme à distance.

NOTE: If detector circuit board does not have a white stripe running from the top to the bottom on the left edge, use terminal 12 for the AL+ connection.

REMARQUE: Si le circuit imprimé du détecteur n’a pas de bande blanche allant du haut vers le bas sur le bord gauche, utilisez la borne 12 pour la connexion AL+.



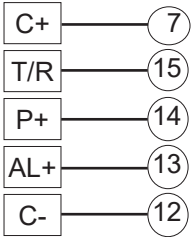
HS-100 Series Special Applications Duct Smoke Detectors

NOTE: Trouble LED will illuminate on the MSR-100 if the smoke detector head is removed.

REMARQUE: La LED de dépannage s’allumera sur le MSR-100 si la tête du détecteur de fumée est retirée.

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

REMARQUE: Si les détecteurs de fumée de conduit sont interconnectés pour des fonctions courantes, veuillez vous référer au guide d’installation de l’unité pour les options de connexion pour les fonctions d’alarme à distance.



SM-50I Series Duct Smoke Detectors

NOTE: Trouble LED will illuminate on the MSR-100 if the smoke detector head is removed.

REMARQUE: La LED de dépannage s’allumera sur le MSR-100 si la tête du détecteur de fumée est retirée.

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

REMARQUE: Si les détecteurs de fumée de conduit sont interconnectés pour des fonctions courantes, veuillez vous référer au guide d’installation de l’unité pour les options de connexion pour les fonctions d’alarme à distance.

