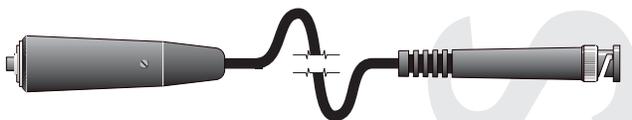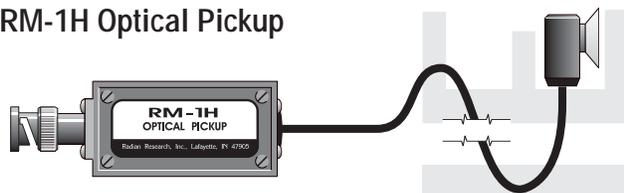## RM-1S Remote Reset Switch

RM-1H Optical Pickup

RM-OA Optical Adapter

RM-KYZ Pulse Input Adapter

RM-DS Meter Disk Sensor (field mount shown)

RM-RPP Remote Portable Printer

RM-TC Transit Container

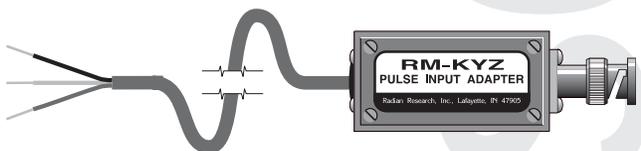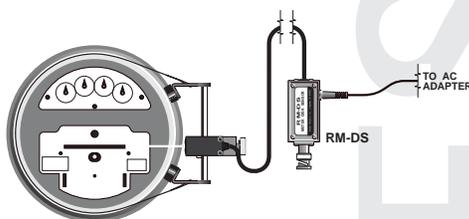
OVERVIEW

The **RM-1S Remote Reset Switch** is a normally closed push button switch. The RM-1S will connect directly to an input BNC of any Radian standard or to the RM-1S input of the RM-1N Solid State Meter Interface. The RM-1S may also be connected to port A of a RM-110 Automated Comparator in which case it can remotely toggle the enter and cancel keys in order to start, stop and reset any Radian Standard. The switch component of the RM-1S is hermetically sealed to provide increased reliability during field use.

The **RM-1H/RR-1H Infrared Optical Pickup** is used to sense the infrared pulses from the calibration LED found on most solid state meters. The pulses from the RM-1H are fed into the input section of the RM-1N Solid State Meter Interface or RM-110 Automated Comparator. With the RM-1H and the RM-1N or RM-110, testing of solid state watt-hour meters is done automatically. The wide angular displacement of this sensor allows for fast, non-critical alignment. Also, automatic gain control circuitry of the RM-1H assures operation in all ambient sunlight conditions. The **RM-1Hv** is also available for those solid state meters that have a visible calibration LED. The **RR-1H** is identical in function to the RM-1H but is designed specifically for use with Radian Dytronic Standards and the RM-17 Portable Test System.

The **RM-OA Optical Adapter** is used with solid state meters whose infrared calibration pulse is emitted from the optical communications port. The RM-OA magnetically couples to the communication port of the meters it supports. The suction cup of the RM-1H is attached to the clear polycarbonate cover of the RM-OA. The RM-OA incorporates a rare earth magnet for exceptional holding power over the life of the product.

The **RM-KYZ/RR-KYZ Pulse Input Adapter** is used to sense the KYZ output pulse of induction type or solid state meters. The pulses received from the meter's KYZ output are conditioned and fed into the input section of the RM-1N Solid State Meter Interface or the RM-110 Automated Comparator. With the RM-KYZ and the RM-1N or RM-110 testing of KYZ equipped meters is done automatically. The **RR-KYZ** is identical in function to the RM-KYZ but is designed specifically for use with Radian Dytronic Standards and the RM-17 Portable Test System.

The **RM-DS Meter Disk Sensor** is a reflective pickup assembly used to sense the disk rotation of an induction type meter. The pulses generated by the RM-DS are fed into the input section of the RM-1N Solid State Meter Interface or RM-110 Automated Comparator. With the RM-DS and RM-1N or RM-110, testing of induction type meters is done automatically and with a high degree of accuracy as compared to using a conventional push-button or snap switch. The RM-DS is available with three separate mounting alternatives: the **RM-DS/f** uses Velcro straps to mount on supported meters in the field or in the lab; the **RM-DS/s** is a shop mount option designed as a semi-permanent and flexible lab fixture; the **RM-DS/sm** uses suction cups to mount quickly on supported meters. The **RR-DS** is identical in function to the RM-DS but is designed specifically for use with Radian Dytronic Standards and the RM-17 Portable Test System.

The **RM-RPP Remote Portable Printer** is used for printing results from the RM-17 Hand Controller or the RM-110 Automated Comparator. The RM-RPP has an abundance of beneficial features in one of the smallest, lightest printer packages available. The RM-RPP permits the user to print results in the field for either internal use or distribution to an end customer. The RM-RPP uses a re-chargeable battery for remote use. The RM-RPP is the ideal accessory for maintaining records and addressing billing complaints.

The **RM-TC Transit Container** is an excellent packaging solution for safe shipment of Radian Standards. Applications may include internal company shipments of Radian standards as well as for shipments back to Radian Research for recertification services. The RM-TC provides absolute protection of your Radian standard in the most extreme environmental, shipping and handling conditions. The RM-TC's composition consists of a structural foam resin making it resilient to denting, cracking or corrosion. To further insure the integrity of your Radian

■ RM-1S & RM-2S REMOTE RESET SWITCH

APPLICATION	Used to reset the display of a Radian standard and re-arm the RM-1N or Radian Standard via connection with an RM-110 Automated Controller.
SWITCH	Normally closed contact; momentary open
SIZE	Handle; 19mm (0.75″) diameter x 79mm (3.1″)
	RM-1S cable, 1727mm (68″) Length; RM-2S cable, 2743mm (108″) Length
WEIGHT	RM-1S =0.12kg (0.26 lbs.); RM-2S= 0.15kg (0.33 lbs.)

■ RM-1H & RM-1Hv OPTICAL PICKUP

RM-1H APPLICATION	Senses pulses from infrared calibration LED; input pulses to RM-1N, RM-110 , RS-740, or Radian RD Standard.
RR-1H APPLICATION	Senses pulses from infrared calibration LED; input pulses to a Radian Dytronic Standard or RM-17 Hand Controller.
RM-1Hv APPLICATION	Senses pulses from visible calibration LED; input pulses to RM-1N, RM-110, RS-740, or Radian RD Standard.
PEAK SESITIVITY WAVELENGTH	RM-1H, 980 nm; RM-1Hv, 680nm
SIZE	Case; 30mm (1.2″) H x 57mm (2.25″) W x 23mm (0.9″) D
	Cable; 1905mm (75″) Length
WEIGHT	0.09 kg (0.19 lbs.)

■ RM-OA OPTICAL ADAPTER

APPLICATION	Magnetically couples to a solid state meter's optical communication port for the RM-1H suction cup.
MAGNET	Rare Earth, Permanent
LENS	Scratch Resistant Polycarbonate
SIZE	35mm (1.38″) diameter x 23mm (0.9″) H
WEIGHT	0.05 kg (0.1 lbs.)

■ RM-KYZ PULSE INPUT ADAPTER

RM-KYZ APPLICATION	Senses pulses from the KYZ output of a meter. The signal is conditioned and sent to the RM-1N, RM-110 or RS-740. For proper operation, it must be a true 3 wire Form C output.
RR-KYZ APPLICATION	Senses pulses from the KYZ output of a meter and sends them to a Radian Dytronic Standard or RM-17 Hand Controller. Unit is switch selectable between Form A and Form C outputs.
MAX. PULSE INPUT FREQUENCY	60 pulses per second
SIZE	Case; 30mm (1.2″) H x 57mm (2.25″) W x 23mm (0.9″) D
	Cable; 1905mm (75″) Length
WEIGHT	0.13kg (0.29 lbs)

■ RM-DS METER DISK SENSOR

RM-DS APPLICATION	Senses disk rotation of an induction meter. The signal is conditioned and sent to the RM-1N, RM-110 or RS-740.
RR-DS APPLICATION	Senses disk rotation of an induction meter and the signal is sent to a Radian Dytronic Standard or RM-17 Hand Controller.
SUPPLY VOLTAGE	9 volts DC to 24 volts DC
CURRENT CONSUMPTION	30mA
MAXIMUM DETECTION DISTANCE	100mm (4″)
FIELD MOUNT VERSION	Pickup Assembly; 95mm (3.75″) H x 71mm (2.8″) W x 44mm (1.75″) D, 0.1kg (0.22 lbs)
SHOP MOUNT VERSION	Base; 51mm (2″) diameter x 9.7mm (0.38″) H, 0.17kg (0.38 lbs) with Arm
	Flexible Arm; 8mm (0.32″) diameter x 465mm (18.3″) H

■ RM-RPP REMOTE PORTABLE PRINTER

APPLICATION	Printing hard copies of test data in the field
SIZE	135 (5.4″) L x 100mm (4″) W x 38mm (1.5″) D
WEIGHT	0.39kg (0.8 lbs)
PRINTING WIDTH	[Mode A] 41.5mm; [Mode B] 48mm
PAPER WIDTH	[Mode A] 58mm; [Mode B] 58mm

■ WARRANTY

Radian Research warrants each of our products to be free from defects in material and workmanship. Our obligation under this warranty is to repair or replace any instrument or component therein which, within two years after shipment, proves to be defective upon examination. Radian will pay local domestic surface freight costs for return of product from Radian to the customer. If service is required, contact your local Radian Research representative or Radian headquarters in Lafayette, Indiana.

■ RM-TC PORTABLE TRANSIT CONTAINER

APPLICATION	Transit container for shipment of Radian Standards
EXTERIOR SIZE	273mm (10.75″) L x 248mm (9.75″) W x 178mm (7″) D
INTERIOR SIZE	241mm (9.5″) L x 191mm (7.5″) W x 165mm (6.5″) D
WEIGHT	1.8kg (4 lbs)