

RM-X INSTALLATION INSTRUCTIONS

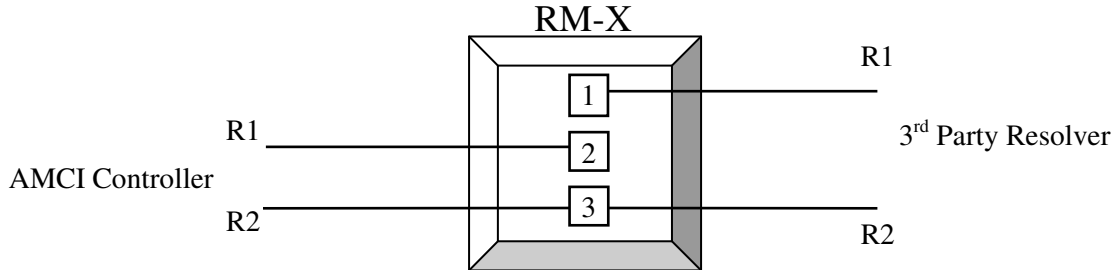
Resolvers are basically rotary transformers, and depending on how they are made, different resolvers will have different electrical characteristics. AMCI resolver modules are designed to work with AMCI resolvers that have a transformation ratio of 0.95. Other common transformation ratios are 0.45, 0.5, and 1.4. AMCI has developed a line of Reference, RM, Modules, to accommodate customers who are upgrading their control systems while keeping their existing resolvers in place.

The RM modules are toroid transformers that wire into the resolver cable, and adjust the reference voltage signal so that the 3rd party resolver will appear to the resolver module to have a transformation ratio of 0.95.

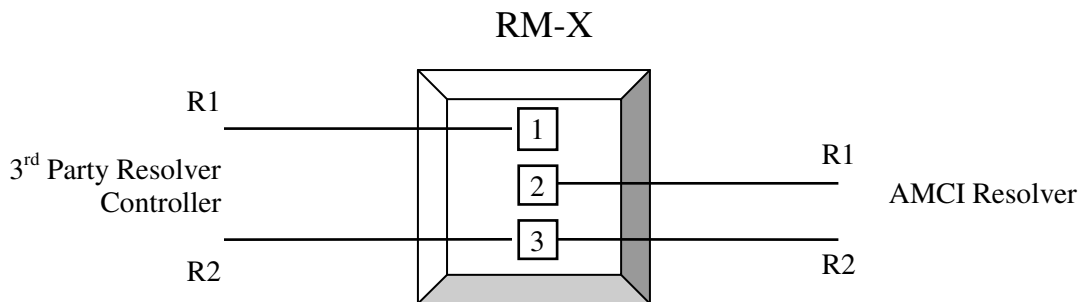
It is also possible to wire the RM modules so that you can use an AMCI resolver with your existing control system.

The RM-X reference module has a 1 inch square body and is 1.5 inches high. A 6-32 mounting stud makes it easy to install the Reference Module on an enclosure wall or mounting panel. The Reference Module must be mounted as close to the controller as possible.

The following diagram shows how to wire the RM-X reference module so that an AMCI controller will work with a third party resolver.



The following diagram shows how to wire the RM-X reference module so that an AMCI resolver will work with a 3rd party resolver controller.



In both of the above diagrams, connect all of the remaining resolver signals, S1, S2, S3, and S4, directly to the corresponding pin on the resolver controller.

AMCI currently manufactures three RM-X modules.

RM-1: 0.5 Transformation Ratio

RM-3: 1.4 Transformation Ratio

RM-5: 0.45 Transformation Ratio

A RM-4 reference module was previously available to interface with resolvers with a transformation ratios of 0.45. The RM-4 has been replaced with the RM-5.

The following table is a sample of known resolvers and their corresponding RM-X module.

Resolver	Transformation Ratio	RM-X
C&A/Namco	0.5	RM-1
Autotech	1.4	RM-3
Gemco / Ametek	1.4	RM-3
Reliance	0.45	RM-5
Harowe 11BRCX-300-C	0.45	RM-5
Tamagawa 800123-x	0.45	RM-5
Electro Cam	0.45	RM-5

Revision History

Revision 2 was released on 2/28/2017. Combined the separate wiring diagrams into one general wiring diagram, created a cross reference table of resolvers and RM modules, and removed most of the RM-4 references from the document.