

## RF Noise Interference

In rare cases, Radio Frequency (RF) noise can interfere with a control's or a thermostat's permanent memory operation resulting in one of the following EEPROM error messages:

<b>EEPROM Error Message</b>	<b>Control Model</b>
E01	157, 256, 257, 260, 261, 263, 264, 265, 268, 270, 279, 356, 360, 361, 374
CTRL ERR ADJS	262, 362, 363, 364, 369
CTRL ERR MNTR	262, 362, 363, 364, 369
CTRL ERR SCHD	262, 362, 363, 364, 369
CTRL ERR MISC	262, 362, 363, 364, 369
CTRL ERR A/D	262, 362, 363, 364, 369
RTU ERR ADJS	262, 362, 363, 364, 369
RTU ERR MNTR	262, 362, 363, 364, 369
RTU ERR SCHD	262, 362, 363, 364, 369
RTU ERR MISC	262, 362, 363, 364, 369
RTU ERR EE W	262, 362, 363, 364, 369
E01	420, 421, 422, 423, 541, 542, 543
E02	541, 542, 543
E03	541, 542, 543
E04	541, 542, 543
E05	420, 421, 422, 423, 541, 542, 543
CTRL ERR ADJS	274, 275, 544, 545, 546
CTRL ERR MON	544, 545, 546
CTRL ERR TIME	274, 275, 544, 545, 546
CTRL ERR SCN	544, 545, 546
CTRL ERR SCHD	274, 275, 544, 545, 546
CTRL ERR MISC	274, 275, 544, 545, 546

**120 V (ac) Products**

In the rare case where a 120 V (ac) product has had an EEPROM memory error occur, an RF noise filter can be installed on the input power wires.

Filters manufactured by Tyco Electronics Corcom, part# 20VK1 are recommended. These can be purchased from the following suppliers:

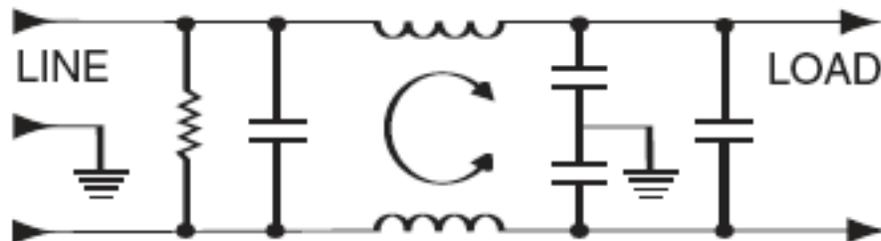
Arrow Electronics [www.arrow.com](http://www.arrow.com)

Digi-Key [www.digikey.com](http://www.digikey.com)

Mouser Electronics [www.mouser.com](http://www.mouser.com)

**Installation Instructions**

1. The 20VK1 should be installed inside a suitable enclosure.
2. Connect 120 V (ac) Line, Ground, and Neutral to the 20VK1 from a circuit breaker panel.
3. Connect the output Line and Neutral to the input power on the control.



**24 V (ac) Products and Sensor Wires**

In the rare case that a control or thermostat has had an EEPROM error message occur, a ferrite filter can be installed on 24 V (ac) input power wires, call for heat inputs, any wires connected to the control's relays that switch 24 V (ac) provided by the control, and sensor wires. Please note that demand inputs and other relay outputs do not require a ferrite filter. It is recommended that a filter be installed on the 24 V (ac) power leads first and the system tested. If EEPROM memory errors are still occurring, install filters on the other wires. Install the filters close to the control.

Ferrite filters manufactured by TDK, part# ZCAT2032-0930 are recommended. These can be purchased from the following suppliers:

Arrow Electronics [www.arrow.com](http://www.arrow.com)

Digi-Key [www.digikey.com](http://www.digikey.com)

Mouser Electronics [www.mouser.com](http://www.mouser.com)

**Installation Instructions**

1. Wrap the 24 V (ac) R and C wires around the ferrite filter clamp. Then snap clamp shut.
2. If required, install a separate ferrite filter for every pair of other circuit wires. Wrap the wires around the ferrite filter clamp. Then snap clamp shut.



Sincerely yours,

Jay Vath  
tekmar Control Systems Ltd.