

R7140G,L,M Burner Control Modules Commercial/Industrial Combustion Controls



**Universal Plug-In
Replacement Control**

Honeywell

The R7140 Burner Control Module keeps burner control upgrades simple. By plugging directly into the existing R4140 or BC7000 subbase, the R7140 allows hassle-free update to the latest technology while keeping the same burner control functionality and minimizing down time.



The Universal Replacement

No Hassle Flame Safeguard Upgrade

- Plugs into existing Q520A 20-terminal Subbase
- Little or no wiring changes mean less down time
- Select desired Plug-In Purge Timer Card
- Select coordinating plug-in Amplifier for existing flame detector
- Microprocessor safety control technology with legacy device functionality

Flexible

- Compatible with most existing Honeywell flame detectors
- Compatible with 7800 SERIES Amplifiers, Plug-In Purge Timers & Keyboard Displays
- Selectable 10- or 4-second pilot flame establishing period
- Selectable Start-up Interlock Check: verifies proper interlock state during Initiate & Standby modes
- Connect to a ModBus™ network via the optional Keyboard Display with embedded ModBus capability
- Shutter drive for continuous applications that require self-check ultraviolet flame detectors

Valuable Service Tool

- Can be used as a service/diagnostic tool for troubleshooting older controls
- Visual status, fault indications and diagnostics available with the optional Keyboard Display

Reliable

- Same 7800 SERIES microprocessor proven technology

Plug in to 7800 SERIES Technology

If you're using R4140 and BC7000 burner and boiler controls, you can easily update to the latest technology with the easy-to-install R7140 Universal Replacement Controls.

- The R7410 series is based on proven Honeywell 7800 SERIES microprocessor safety control technology, but with the functionality of R4140 and BC7000 controls.
- Compatible with 7800 SERIES amplifiers, Plug-In Purge Timers, Keyboard Displays as well as many other accessories.
- Control will plug directly into the existing Q520A 20-terminal Subbase due to its adapter base. Replace legacy devices with little effort, allowing less down time and more burner operation.
- For information on compatible Honeywell flame detectors, spark generators, ModBus™ adapters and other accessories, go to <http://customer.honeywell.com>.

Legacy Replacement Guide

Relay Module	R7140G1000	R7140G2008	R7140L1009	R7140L2007	R7140M1007
Feature	Recycle Modulation	Recycle Modulation	Lockout Modulation	Lockout Modulation	Recycle On/Off
Replaces	R4140G with Pre Ignition Interlock	R4140G & BC7000L/PM720G with Start Interlocks (1)	R4140L	BC7000L/PM720L	R4140M & BC7000L/PM720M (2)
	R4140G1007 R4140G1015 R4140G1106	R4140G1031 R4140G1049 R4140G1056 R4140G1064 R4140G1072 R4140G1080 R4140G1130 R4140G1148 R4140G1163 R4140G1171 BC7000L PM720G2005 PM720G2013 PM720G2039	R4140G1189 R4140L1006 R4140L1014 R4140L1030 R4140L1055 R4140L1089 R4140L1097 R4140L1105 R4140L1139 R4140L1147	BC7000L PM720L1030 PM720L1139 PM720L2012 PM720L2020	R4140M1004 R4140M1012 R4140M1020 R4140M1038 R4140M1046 R4140M1053 R4140M1061 R4140M1079 R4140M1103 R4140M1111 R4140M1145 R4140M1152 R4140M1160 R4140M1178 R4140M1186 R4140M1194 BC7000L PM720M2002 PM720M2010 PM720M2036 PM720M2044 PM720M2051
For complete Honeywell Programmer cross-reference information, refer to Form 70-8313 (3)					
Legacy device Pre Purge Timing (using ST7800 card)	ST7800A1054: 60s	ST7800A1047: 40s ST7800A1054: 60s ST7800A1062: 90s	ST7800A1047: 40s ST7800A1054: 60s	ST7800A1021: 10s ST7800A1039: 30s	ST7800A1013: 7s ST7800A1039: 30s ST7800A1047: 40s ST7800A1062: 90s
Amplifier (depends on flame detector)	R7847, R7848, R7849, R7851, R7861, R7886				

Application Notes:

- (1) Start Interlocks become Pre Ignition Interlocks, which must remain closed until ignition trials begin.
- (2) R7140M models have additional J1 and J2 jumpers located on back of the attached adapter subbase, which provide an input for the control when the system does not have a spring return damper with a low fire switch. Consult the R7140 Installation Instructions, form #66-1153, for guidance when replacing legacy devices.
- (3) Before attempting a control replacement, verify the correct replacement model and review the installation instructions. Verify existing wiring per the instructions and that unused terminals are not used as tie points. Perform a static check-out before installing replacement controls to verify proper operation.

The R7140G,L,M Burner Control Module Family

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For complete Honeywell Programmer cross-reference information, refer to Form 70-8313					
Pre Purge (using ST7800 card)	2 sec to 30 min	2 sec to 30 min	2 sec to 30 min	2 sec to 30 min	2 sec to 30 min
Post Purge	15 seconds	15 seconds	15 seconds	15 seconds	15 seconds
Start-Up Interlock Check (Dynamic Airflow Switch)	Selectable via JR3	Selectable via JR3	Selectable via JR3	Selectable via JR3	Selectable via JR3
Pre Ignition Interlock					
Lockout Interlock					
Running Interlock					
High Fire Interlock					
Low Fire Interlock					Isolated
Modulation	4-wire	4-wire	4-wire	4-wire	2-wire isolated On-Off-On contacts
Pilot Flame Establishing	10/4 sec via JR1	10/4 sec via JR1	10/4 sec via JR1	10/4 sec via JR1	10/4 sec via JR1
Early Spark Termination		Terminal 18	Terminal 18	Terminal 18	Terminal 18
Intermittent Pilot	Terminal 6	Terminal 6			Terminal 6
Interrupted Pilot	10s: Terminal 5 15s: Terminal 6, clip JR2 30s: Terminal 6, clip JR2 & jumper T8-15		10s: Terminal 5 15s: Terminal 6	10s: Terminal 5 15s: Terminal 6	10s: Terminal 5
Run Test Switch (for interrupted pilot setup)					
Recycle Flame Fail Action (return to Pre Purge)					
Lockout Flame Fail Action					
Shutter Check					
Voltage	120 Vac, 50/60 Hz	120 Vac, 50/60 Hz	120 Vac, 50/60 Hz	120 Vac, 50/60 Hz	120 Vac, 50/60 Hz
Keyboard Display Module	Optional	Optional	Optional	Optional	Optional

 Equals feature included

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To Learn More

For more information please contact your Honeywell Distributor. Or visit <http://customer.honeywell.com>.

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63-9723
May 2007
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