Honeywell

AQ25A44B Programmable Boiler Relay Control Panel

System commissioning date: _____

Customer: _____

Building address: _____

This is a legacy product document supported by Resideo. It is no longer manufactured

INSTALLATION JOB RECORD

INSTRUCTIONS:

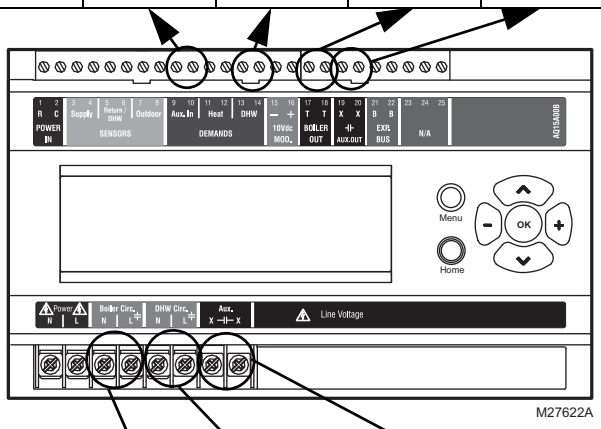
Fill in the details of the equipment connected to the control module and the zoning module:

- **A** Low voltage control module wiring
- **B** Low voltage zone thermostats
- **C** Low voltage zone valves with end switches
- **D** Line voltage Boiler pump, DHW pump and AUX output
- **E** Review and set DIP switch settings - once DIP switches for the zoning module (AQ15740B) have been set, complete the “Installer Settings” diagram by filling in the circles to indicate the DIP switch position set during installation

File this with other installation records for equipment used on this installation.

A Boiler Controller Module

Terminal #	9-10	13-14	17-18	19-20
Terminal ID	**Aux In**	**DHW**	**Boiler**	**Aux Out**
Function	**Installer defined**	**DHW demand**	**Boiler demand**	**Installer defined**
Equipment				
Manufacturer				
Model #				
Serial #				
Date Code				
Notes				



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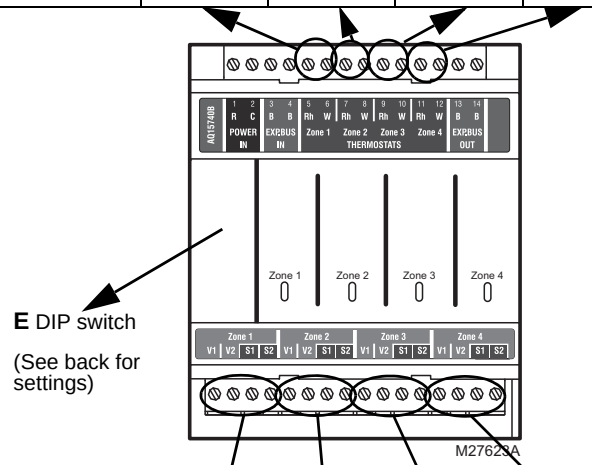
B Zoning Thermostats

Terminal #	5-6	7-8	9-10	11-12
Terminal ID	**TH1**	**TH2**	**TH3**	**TH4**
Function	**Zone call for heat**			
Equipment				
Manufacturer				
Model #				
Date Code				
Notes				



E DIP switch

(See back for settings)

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D Boiler Pump, DHW, and AUX Device

Terminal ID	Boiler	DHW	AUX
Function	**Boiler loop control**	**DHW loop control**	**Line voltage-rated Aux device control (installer-defined)**
Equipment			
Manufacturer			
Model #			
Power draw (Amps)			
Notes			

C Zoning Valves

Terminal ID	Zone 1	Zone 2	Zone 3	Zone 4
Function	**Zone control**			
Equipment	Valve	Valve	Valve	Valve
Manufacturer				
Model #				
Power draw VA				
Notes				

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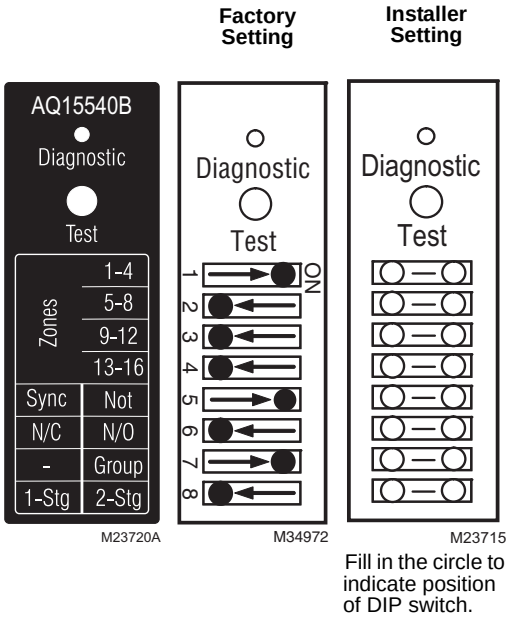
E Zoning Module DIP Switch Settings

DIP Number	Description
1	**Zone Address** Slide the DIP switch to the right-hand (ON) position to indicate which group of zones this is: The correct settings for each zone module are: • First Zone (1-4) Module: 1 = ON position; 2, 3, and 4 = OFF position • Second Zone (5-8) Module: 2 = ON position; 1, 3, and 4 = OFF position • Third Zone (9-12) Module: 3 = ON position; 1, 2, and 4 = OFF position • Fourth Zone (13-16) Module: 4 = ON position; 1, 2, and 3 = OFF position For each zone group, there can be only **one** DIP switch in the right-hand (ON) position.
2	
3	
4	
5	• If set to SYNC, zone synchronization is enabled. • If set to NOT, zone synchronization is disabled.
6	• If zone valves are normally closed (N.C.), set the NC/NO DIP switch to the OFF position. • If zone valves are normally open (N.O.), set the NC/NO DIP switch to the ON position.
7	• If set to Group (ON position), the AUX Pump contacts on the Control Module are switched when any of the zones on this Zoning Module are active.[a] • If set to - (OFF position), the AUX Pump contacts are not affected by activity on these zones.
8	• If set to 2-Stg (ON position), then 2-stage operation is activated on thermostat inputs. The zoning module operates as two 2-stage zones or 3 zones (one 2-stage and two 1-stage). • If set to 1-Stg (OFF position), then operates as four 1-stage zones.

[a] The EQUIPMENT SETUP > AUXILIARY I/O > AUX PUMP menu option on the AQ25A must be set to “GROUP”



NOTE: When wiring zone valves with end switches, note the transformer's VA:
If low voltage zone valves with end switches are used for zone control, make sure the selected zone valves do not draw more power (VA) than the 38 VA capacity of the AQ10X38 transformer supplied with the AQ25A Control Panel. This integral transformer has enough power to operate 4 motorized zone valves (such as Honeywell V8043E valves or 4 valves using low-amperage draw, heat motor actuators such as Honeywell MV100 actuators), plus power the electronics of the AQ25A's Control Module and up to 16 AQ1000 thermostats.
If zone valves with high-amperage draw, heat motor actuators are used, such as Taco 500 series zone valves, additional 24 Vac transformer capacity will need to be wired to the Zoning Module to power the valves. See the *AQ25A Series Programmable Boiler Control Panels* - Product Data document (form 69-2119) for recommended wiring of additional low voltage VA capacity to AQ2000 Series Zoning Modules.

⚠ CAUTION

Equipment Damage Hazard.
Can damage internal circuitry of Zoning Module.
The ES1 and ES2 terminals of the AQ15740B Zoning Module are powered terminals and must only be connected to a set of dry contacts, such as a zone valve motor's end switch. If power is applied to these contacts (for example, by running line voltage through the zone valves’ end switches to bring on a circulator feeding those valves), the internal circuitry of the Zoning Module will be damaged, in which case the warranty for this product will be voided.

EQUIPMENT SETTINGS

The Installer Menu is used to establish and modify the system's equipment and option settings. These include equipment settings for boiler operation, DHW management, zoning, auxiliary input/output operation, and option settings such as pump/valve exercise, and freeze protection.

Use Table 1 to record the equipment settings for this installation.

To record the equipment and option settings:

A Press the Home button to return to the Home Page display.
B Press and hold the OK button for 3 seconds until the message, INSTALLER MODE – ARE YOU SURE?, displays.
C Select YES, then press and release the OK button to display the Installer Menu.
D Select the Equipment Setup sub-menu.
E Record the configured settings in Table 1.
F Exit Installer mode by selecting the Installer Exit menu option.

Table 1. Installer Menu – Equipment Setup Sub-menu.

EQUIPMENT SETUP SUB-MENU				
Sub-Menu and Option		**Range**	**Factory Default**	**Equipment Settings Used**
BOILER SETTINGS				
	HIGH LIMIT	120°F to 225°F (49°C to 107°C)	190°F (88°C)	
	LOW LIMIT	60°F to 180°F (15°C to 82°C)	150°F	
	BOILER DIFF	2°F to 41°F (1°C to 23°C) / AUTO	AUTO	
	W.W.S.D.	- - 35°F to 100°F (2°C to 38°C)	70 °F (21°C)	
	MIN. RETURN	- - / 80°F to 180°F (27°C to 82°C)	140 °F (60°C)	
BOILER OPERATION				
	CYCLES/HOUR	2 to 6	4	
	FIRE DELAY	0 seconds to 3 minutes (in 5 second increments)	10 (seconds)	
	PURGE TIME	OFF, 10 seconds to 30 minutes (in 10 second increments)	30 (seconds)	
	EXERCISE	YES / NO	YES	
	FREEZE PROT	YES / NO	YES	
10V MOD. SELECT				
	10V MOD	0-10V / 2-10V	0-10V	
	USAGE	NONE / BOILER	NONE	
DOMEST.HOT WATER				
	DHW	ENABLE / DISABLE	ENABLE	
	DHW PRIO	YES / NO	NO	
	PRIO.OVER.	YES / NO	YES	
	DHW DEVICE	PUMP / VALVE	PUMP	
	DHW VLV.OP	0 - 230 seconds (in 5 second increments)	15 (seconds)	
	DHW PURGE	YES / NO	YES	
	DHW SENSOR	YES / NO	NO	
	DHW SETPOINT	- - 60°F to 160°F (16°C to 71°C)	140°F (60°C)	
	DHW DIFF	- - 5°F to 40°F (2.5°C to 22°C)	20°F (-7°C)	
	DHW VACANCY	- - [41°F + DHW DIFF] to 160°F ([5°C + DHW DIFF] to 71°C)	45°F (7°C)	
ZONING				
	HT DMND PRIO	YES / NO	NO	
	PRIO.OVER	YES / NO	NO	
	ZONING VALVES TIME TO OPEN	5 - 230 (seconds)	15 (seconds)	
	HT DMND PRIO	YES / NO	NO	

Table 1. Installer Menu – Equipment Setup Sub-menu. (Continued)

EQUIPMENT SETUP SUB-MENU				
Sub-Menu and Option		**Range**	**Factory Default**	**Equipment Settings Used**
AUXILIARY I/O				
	AUX.IN (optional)	SETBACK / VACANCY / EM. SHUT / NONE	SETBACK	
	AUX.OUT (optional)	BOILER / SETBACK / ZONE OP. / ALARM / AUX.IN / DHW IN / HEAT IN / HT DMND / COOL / NONE	BOILER	
	AUX.PUMP (optional)	BOILER / GROUP / OCC / BYPASS / FAN / NONE / AUX.IN / DHW IN / HEAT IN / HT DMND	BOILER	
A/C SETTINGS				
	CYCLES/HOUR	2 / 3 / 4 / 5 / 6	4	
	MIN.OFF TIME	2 to 10 (minutes)	5M	
	C.W.S.D.	- - 32°F to 100°F (0°C to 38°C)	65°F (18°C)	
	FAN MODE	AUTO / ON	AUTO	
A/C EQUIP CONFIG				
	ZONE	A-1 to D-16	A-1	
	A/C UNIT	NONE / 1	1	
	COOLING	ENABLE / DISABLE	ENABLE	
ENVIRACOM (not used at this time - reserved for future use)				
	Modules ID:	n/a	n/a	

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