

6.0 Advantage^{DC} Troubleshooting and Customer Support Info

6.1 Diagnostic Guide

- Before performing diagnostics, ensure the system will not discharge accidentally
- Check all connections before replacing components. Look for broken wires, loose or broken connectors and pin/socket connections
- Look for evidence of corrosion on connectors, pins and sockets
- Check for connectors not completely engaged and pin/sockets not completely inserted into connectors
- Keep in mind that a fault condition will not show up as a service system flash code until five continuous seconds. Power failure will not be indicated until 20 seconds
- If a multimeter is used to check circuit voltage, continuity, or resistance, ensure the meter settings will not cause firing of the actuation circuit

6.2 Flash Code Troubleshooting Table

Service System Flash Code	Description	Troubleshooting
1X	Detection Zone 1	<ul style="list-style-type: none"> Check for continuity on detection zone 1. Resistance between terminal strip row A position 1 - 2 should read 470K ohms +/- 23.5K ohms If L.T. 445K ohms, check for moisture intrusion or chaffed wire If G.T. 495K ohms, check for poor connections or damaged wiring
2X	Detection Zone 2	<ul style="list-style-type: none"> Check for continuity on detection zone 2. Resistance between terminal strip row A position 3 - 4 should read 470K ohms +/- 23.5K ohms If L.T. 445K ohms, check for moisture intrusion or chaffed wire If G.T. 495K ohms, check for poor connections or damaged wiring
3X	Manual Release Zone	<ul style="list-style-type: none"> Check for continuity on manual release zone. Resistance between terminal strip row A position 5 - 6 should read 470K ohms +/- 23.5K ohms If L.T. 445K ohms, check for moisture intrusion or chaffed wire If G.T. 495K ohms, check for poor connections or damaged wiring
4X	Actuation Zone 1	<ul style="list-style-type: none"> Ensure actuator(s) is/are connected Check to ensure actuator is intact and not fired Inspect wiring to look for breaks or chafing Take care not to apply voltage to the actuation circuit if using a multimeter or other device to check for continuity
5X	Actuation Zone 2	<ul style="list-style-type: none"> Ensure actuator(s) is/are connected Check to ensure actuator is intact and not fired Inspect wiring to look for breaks or chafing Take care not to apply voltage to the actuation circuit if using a multimeter or other device to check for continuity
6X	Auxiliary Switch	<ul style="list-style-type: none"> Check for continuity on auxiliary switch input Resistance between terminal strip row A position 11 - 12 should read 0 ohms
7X	Actuation Disable	<ul style="list-style-type: none"> Check the actuation disable toggle switch. Unless intentionally switched, the toggle should be in the Normal position
8X	Local Buzzer	<ul style="list-style-type: none"> Check the buzzer internal wiring to ensure it is connected Verify the buzzer wiring has not been pinched Check the front of the buzzer to verify no damage has taken place Press the Push to Test button to verify buzzer is operating
9X	Ground Fault	<ul style="list-style-type: none"> The Advantage^{DC} panel monitors for Ground fault on all field wiring circuits. To determine if and where a wiring ground fault exists, flip the Actuation Disable switch then sequentially disconnect each circuit pair and use a jumper wire between each pair until the Ground Fault condition disappears. This indicates where the Ground Fault problem exists.
10X	Abort Switch Fault	<ul style="list-style-type: none"> Check for continuity on the Abort Switch Resistance between terminal strip row A position 13-14 should read 470K ohms +/- 23.5K ohms If L.T. 445K ohms, check for moisture intrusion or chaffed wire If G.T. 495K ohms, check for poor connections or damaged wiring
11X	Cross Zone Fault	<ul style="list-style-type: none"> This fault indicates a single detection zone is in Alarm when cross zoning is programmed.
12X	Temperature Fault	<ul style="list-style-type: none"> This fault indicates a high internal temperature of greater than 120°F has been recorded by the Advantage^{DC} panel.

Fire Alarm Flash Code	Description	Troubleshooting
1X	Alarm Zone 1	<ul style="list-style-type: none"> • Check zone 1 detection wiring circuit for closure. • Check manual release switch circuit for closure.
1X	Alarm Zone 2	<ul style="list-style-type: none"> • Check zone 2 detection wiring circuit for closure. • Check manual release switch circuit for closure

Other LED Indicators	Description	Troubleshooting
Power Fault	Power Fault	<ul style="list-style-type: none"> • Check to be sure both primary and secondary power connectors are plugged into the control panel • Open the cover of the Advantage^{DC} panel and check the power pc board. If the green LED is ON, then 24 vdc is available to the panel. If the green LED is OFF, then check the power source for voltage. • Check the date code on the control panel label. If the backup battery is older than two year from date of installation, replace the backup battery and replace it with the fresh battery. Record the battery change date