Field

Troubleshooting and FAQ

Revision A

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TO OUR CUSTOMER

http://qmotionshades.com/support.php

QMotion® Customer Service

Contact us Monday-Friday 8:00a.m. – 7:00p.m. (U.S. Central Time)

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Poor range of shade(s) or unreliable control

Source: The transmitters are damaged or transmitter battery is dead.

Diagnosis:

1. Test that all the transmitters are operating by pressing the buttons and making sure the LEDs turn on for all movement buttons.
2. Check that the antennas are screwed in firmly on QConnects and QSyncs. If the Antenna is broken the QConnect or QSync will have the same range when the antenna is removed.
3. Insure the QRelays are operating by watching for the LED to fade in and out for receiving a command and turning solid for repeating/transmitting the command.
4. Check that the range of one transmitter is similar to that of another like transmitter. Two Multi-channel Remotes should operate a shade at the same distance.
5. Check that the battery isn't dead. Replace from a working remote if available. The working remote should have the symptoms of the "dead" remote if the battery is dead.

Solution:

1. Replace battery in remote.
2. Replace the broken or underperforming Transmitter (Remotes, QConnects, or QSyncs).
3. Replace the Antenna on the QConnect or QSync.

Source: QRelays are transmitting at the same time.

Diagnosis:

1. Watch both QRelays at the same time from their installation point.
2. Send a command using the desired transmitter.
3. Both QRelays may light up the LED and it should start fading in and out unless one or both are on in Zone Specific Mode and learned to different channels.
4. If both Start fading in and out at the same time and both start Transmitting at the same time (LED is solid for about 2.5 seconds then turns off.) the QRelays are hurting the signal and drowning each other out.

Solution: Consider alternate Zone Specific mode setups that will remove the chance of both QRelays transmitting at the same time. One of the QRelays may need to be removed.

Source: Something physical is blocking the signal.

Diagnosis:

1. Walk around to determine if there is a good direction area that allows for good control.

Solution: Move the transmitter to a location that allows for more reliable control.

Source: The position of the shade is not good for control.

Diagnosis:

1. Switch the MCA that is not behaving well (MCA 1) with the MCA of one that is working (MCA 2).
   - The Motor ratios of the MCAs must be the same.
2. Test the operation of the shade.
3. The MCA 2 should now have poor control and MCA 1 should have good control.

Solution: Place the Transmitter closer to the position that has poor control.

Source: There is RF interference.

Diagnosis:

1. If there is an area of the home that has good control, switch the MCA that is not behaving well (MCA 1) with the MCA of one that is working (MCA 2).
2. Test the operation of the shade.
3. The MCA 2 should now have poor control and MCA 1 should have good control.
4. **(Field Tech Only)**If nothing improves, the environment needs to be examined for RF noise using an RF-Explorer.

Solution:

1. ***Low Noise Floor*** – Less than -80 dBm. Double check the batteries and current draw of board. Leave an overnight monitoring device.
2. ***Sporadic Signals*** – Remove the device causing the RF interference or use QRelays to fix issues. **(Field Tech Only)** An overnight test may be needed to determine the frequency of the signals. If a QConnect is installed, it may need to be programmed to fire multiple times to insure the command reaches the shades.
3. ***High Noise Floor*** – Greater than -80 dBm. Place QRelays where needed to improve signal or bring control devices closer to shades. (QConnect, QSync, Remotes)
4. **(Field Tech Only)**Double check the RF environment is not causing early battery drain.

Source: The MCA is damaged.

Diagnosis:

1. Switch the MCA that is not behaving well (MCA 1) with the MCA of one that is working (MCA 2).
2. Test the operation of the shade.
3. The MCA 2 should now have good control and MCA 1 should have poor control still.
4. See how close the remote needs to be to control the shade.
5. The remote should need to be within inches or a few feet.

Solution: Replace the MCA.

Shade Running Slow Before Intended Battery Life

Source: There is a bad battery.
Diagnosis:

1. Measure the voltage of each battery.
2. One or more of the batteries should measure negative or near zero while the rest are at a higher voltage.

Solution: Change the batteries.

Source: Spring is broken
Diagnosis:

1. Time the speeds up and down.
2. The shade should move faster down.

Solution: Replace the spring. The spring could be loose. If the installer is knowledgeable they may be able to tighten the spring once it is taken out.

Source: There is RF interference.
Diagnosis:

1. Test the battery voltage of each battery of every shade.
2. They should all be close to 1.0 volts.
3. All shades on the jobsite will be affected. Not just one or a scattered few.
4. **(Field Tech Only)**Analyze the job site for RF interference with the RF-Explorer
5. Leave an overnight device to monitor the environment.

Solution:

1. Remove the device causing the RF interference.
2. If using a QConnect, Program the events to fire twice to attempt to fire between the interfering signal.

Source: The MCA is damaged (Motor or Board)
Diagnosis:

1. After the battery change the shade may still run slow.
2. Tug the shade a foot or more.
3. The Motor may feel like the brake is on all the time or jitter while being tugged.
4. If the feeling of the brake is not understood, send the shade to the top and tug down 2 feet. The shade should release the brake after 6 inches or less.
5. **(Field Tech Only)**Test the run and sleep currents of the MCA is available.
6. The Currents should be too high.

Solution: Replace the MCA

Source: The MCA is damaged (Antenna)

Diagnosis:

1. The shade may only be controlled from inches away or a few feet by all remotes and transmitters.
2. All remotes have the same or similar short control distance.
3. This is the only shade affected in a bank of shades or entire jobsite.
4. **(Field Tech Only)**Analyze the job site for RF interference with the RF-Explorer
5. The RF environment should be clear.
6. The sleep current for the MCA may be too high.

Solution: Replace the MCA

Source: The brackets are too tight.

Diagnosis:

1. Attempt to move the shade side to side in the brackets. It should not budge side to side.
2. The shade may be hard to install.
3. The ends of the shade could be rubbing on the bracket causing the plastic to be worn.

Solution:

1. Cut down the shade.
2. Widen the brackets.

Shade is Unresponsive

Source: Shade in Shipping Sleep Mode

Diagnosis:

1. When the shade is tugged it will not respond to tugs.
2. After one minute the shade will seek a hardstop.

Solution:

1. Learn the Remote to the shade.
2. Tugging the shade one foot
3. Press and holding the Up button on the remote for 5 seconds.
4. Shade should start traveling up.

Source: Batteries not making contact

Diagnosis:

1. When the shade is tugged it will not respond to tugs.
2. The remote will not learn to the shade or control the shade if previously learned.
3. The shade will not seek a hardstop after one minute.

Solution:

1. Make the batteries connect.
2. Wiggle or twist the batteries in the tube.
3. Attempt to learn the remote to the shade one completed by pressing and holding the Up button.
4. The shade should Move up.
5. If the shade has never been woken from Shipping Sleep Mode it will need to be rolled up by hand at leat one foot to wake from shipping sleep mode.
6. Attempt to learn the remote to the shade one completed by pressing and holding the Up button.
7. The shade should Move up.

Source: Latch up issue.

Diagnosis:

1. The batteries were just changed and the shade stopped responding.
2. When the shade is tugged it will not respond to tugs.
3. The remote will not learn to the shade or control the shade.
4. The shade will not seek a hardstop after one minute.

Solution:

1. Remove the first battery in the shade.
2. Let the shade sit for 5 minutes.
3. Place the battery back in the shade.
4. Press the Up button on a learned remote.
5. The shade should move up.
6. If the shade does not respond, repeat steps 1-4 and leave the battery out for 10 minutes.

Shade Behaving Erratically

Source: Remote is held upside down.

Diagnosis:

1. Press the "up button" and the shade goes down.
2. Press the "down button" and the shade goes up.

Solution:

1. Read the remote.
2. Is "QMotion" right side up?

Source: EEPROM is corrupted.

Diagnosis:

1. The down position, that has never been set, is beyond the default curtain length.
2. Some of the other positions may or may not be incorrect.

Solution: Perform a Factory Reset. (***Use a QSync if one is available.)***

Source: Power loss in MCA.

Diagnosis:

1. Press the "down button" and the shade goes down and stops before the down position.
2. Press the "down button" again and the shade goes up.
3. The shade should seek a hardstop.
   - Noticed by tightening up to the hardstop then backing off to the set Upper Limit or Default Upper Limit.
   - May Jog at the top as well after the hardstop.

Solution:

1. Make sure the batteries are making contact.
2. Tighten the screw to the battery tube.
3. Replace the MCA if no screw is present (Rivet) or tightening does not work.

Source: Bottom bar is catching on the hardstop.

Diagnosis:

1. The down position is lower than previously set.
2. Send the shade to the 50% Position. (75% if 50% is too high to reach.)
3. Tug the shade one foot.
4. Press the Up button.
5. The shade should seek a hardstop.
6. Watch for the bottom bar to catch on the side of the bracket rather than going inside the bracket to the rubber stop.

Solution:

1. The brackets may be tilted. Adjust the brackets.
2. The shade could be telescoping. Note the direction of telescoping and correct with masking tape placed horizontally on the tube.
3. If the shade has been factory reset and the lower limit reset, the telescoping may have corrected itself temporarily. Cycle the shades up and down for a time to cause the telescoping to recur.

Source: The Position Encoders are not working properly.

Diagnosis:

1. The down position, that has never been set, is beyond the default curtain length.
2. After the shade hardstops, it starts moving in the down direction and does not stop.
3. Pressing the Up button may not stop the shade.
4. The shade does not go up again after the hardstop.

Solution:

1. Perform a Factory Reset. (***Use a QSync if one is available.)***
2. Replace the MCA.

Source: Low Torque Motor. (shade sags or cannot hold position)

Diagnosis:

1. Send the shade to the 75% position.
2. Tug the shade about one foot.
3. Send the shade to the up position by pressing the up button.
4. The shade may not reach the hardstop and gradually slow to a stop before the hardstop.
5. If the shade hardstops it may start to sag or slowly roll down.
6. Send the shade down by pressing the down button.
7. When the shade stops at the bottom it may travel too far and appear to bounce off the window sill.

Solution:

1. Add pre-winds to the spring to help the motor.
2. Replace the MCA for a higher torqued motor. (40:1 instead of 22:1)

Source: Under Sprung or broken springs. (Springs are not strong enough)

Diagnosis:

1. Send the shade to the 50% position.
2. The shade may attempt to “run away” if it was moving down to this position.
3. Tug the shade about one foot.
4. The shade may “run away” and keep moving after the tug stops.
5. Send the shade to the up position by pressing the up button.
6. Send the shade down by pressing the down button.
7. When the shade stops at the bottom it may travel too far and appear to bounce off the window sill.

Solution:

1. Add pre-winds to the spring to help the motor.
2. Send replacement springs.
3. **(Field Tech or Knowledgeable Installer Only)**The spring may have disengaged from the shaft. Pull out the springs and attempt to tighten again. This will make a mess. **Do Not Open** the spring housing.

Shade is noisy

Source: Springs broken or not engaging. (Clicking)
Diagnosis:

1. Send the shade down.
2. There should be a **clicking** noise coming from the spring side of the shade.

Solution:

1. Send replacement springs.
2. **(Field Tech or Knowledgeable Installer Only)** The spring may have disengaged from the shaft. Pull out the springs and attempt to tighten again. This will make a mess. **Do Not Open** the spring housing.

Source: Bearings are loose. (Thumping)
Diagnosis:

1. Send the shade up or down.
2. There should be a **thumping** noise coming from either side of the shade.
3. The noise should occur about every half turn.

Solution:

1. Send replacement springs or MCA
2. **(Field Tech or Knowledgeable Installer Only)** Either end can be taken out and taken apart. Place one wrap of masking tape around the bearings and install.

Source: Brackets are too tight. (Loud motor noise)
Diagnosis:

1. Send the shade up or down.
2. The Motor side should produce a loud noise in both directions.
3. Attempt to move the shade left to right in the brackets.
4. There should be a little room to move.
5. The should come out of the brackets easily and not need to be handled roughly.

Solution:

1. Widen the brackets
2. Cut down the shade

Source: Motor is relatively loud to other shades. (Non Issue)
Diagnosis:

1. Higher motor ratios will sound louder than lower motor ratios. This often correlates to larger shades are louder than smaller ones.
2. Not all Motors will sound the same. There is a variance on the noise created by motors of the same size that is deemed acceptable. A difference can be heard between shades with a motor of average noise sounding loud next to motors that are below average.

Solution: The shade is fine.

Source: The Motor is genuinely loud.

Diagnosis:

1. Send the shade up or down.
2. The Motor side should produce a loud noise in both directions.
3. This noise should be distinct and obnoxious.
4. The sound may be a ticking noise as well.

Solution: Replace the MCA.

Low Voltage

Shade appears to hesitate or jump while moving.

Source: The drive gear is not aligned correctly or the MCA is becoming detached.

Diagnosis:

1. The shade may only hesitate near the top.
2. The shade will stop momentarily when moving within the first 2 feet of the hardstop.
3. The shade may appear to rock while it is moving.

Solution:

1. Remove the MCA and align it correctly on the splines in the tube.
2. Send a replacement MCA.

Shades move slow

Source: Too many shades are on one power supply.

Diagnosis:

1. Time one shades travel time from Up to Down.
2. Time multiple shades moving at the same time.
3. The shades should move slower when moving together.

Solution: The shades should be split to their own power supplies.

Source: The Power Supply is under rated for the shades.

Diagnosis: Each shade requires 24 Volts 1.5 Amps to work properly.

Solution: The shades should be split to their own power supplies as rated.

The shade is unresponsive.

Source: There is no power to the shade.

Diagnosis:

1. Check the wires are plugged into the power supply.
2. Check the power supply is plugged up.
3. Check all wires are not broken, cut, stripped, or shorted.
4. Look closely around the edge of the motor shaft where the wires exit the shade for any cuts, or wires that may be stripped.

Solution:

1. Plug in the shade or power supply.
2. Reconnect broken wires
3. Wrap stripped wires with electrical tape.
4. If unrepairable replace MCA.

Source: There is no power to the shade. The MCA has been damaged.

Diagnosis:

1. Remove the MCA from the shade.
2. The MCA may pull apart when removing. The Wires could be seen to be twisted or broken.
3. Look closely around the edge of the motor shaft where the wires exit the shade for any cuts, or wires that may be stripped.

Solution: Replace the MCA

The Shade is noisy

Source: Bearing assembly is detaching or loose

Diagnosis:

1. Remove the MCA from the shade.
2. The MCA may pull apart when removing.
3. Look closely around the edge of the motor shaft where the wires exit the shade for any cuts, or wires that may be stripped.

Solution:

1. Replace the MCA
2. **(Field Tech or Knowledgeable Installer Only)** Either end can be taken out and taken apart. Place one wrap of masking tape around the bearings and install.