

Troubleshooting Tips

There are many variables involved in Video Distribution. Cable lengths, splitter/combiners, and pre-existing signals can all impact picture quality. In general, good results are achieved when the field strengths (dB) of each signal are balanced throughout the system. Combinations of amplifiers, attenuators, and tilt compensators may be necessary to ensure an equalized and sufficient delivery of signal to each television. You may wish to consult your local A/V Professional whose tools and expertise can help provide you with optimal results.

Modulator Channels

Channel range for MM70, RM70, and MM73 Modulator function.

Modulator	Description	Television
Channels 0-13	Not valid channel selection.	No signal should appear on TV.
Channels 14-69	UHF Stations 14-69	Set TV to ANTENNA Tuning on UHF channels 14-69.
Channels 70-94	CABLE Stations 70-94	Set TV to CABLE Tuning on CABLE channels 70-94.
Channels 95-99	Not valid channel selections.	No signal should appear on TV.
Channels 100-125	CABLE Stations 100-125	Set TV to CABLE Tuning on CABLE channels 100-125.

All Modulators

This table covers all NetMedia Modulators, MM70, RM70 and MM73. Also see their individual tables for more help.

Symptom	Description	Recommended Action
No picture on programmed UHF channel 14-69	1. TV must be set to ANTENNA Tuning in order to view UHF channels 14-69.	1. Tune TV to channel 70. If successful, your TV is probably in CABLE Tuning mode then Check the switches or menus on your television and change from CABLE Tuning to ANTENNA Tuning. or Leave the TV in CABLE Tuning and program the modulator for a CABLE channel from 70-94, 100-125.
No picture on programmed CABLE channel 70-94, 100-125	2. TV must be set to CABLE Tuning in order to view CABLE channels 70-94, 100-125.	2. Tune TV to channel 70. If <u>not</u> successful, your TV is probably in ANTENNA Tuning mode then Check the switches or menus on your television and change from ANTENNA Tuning to CABLE Tuning. or Leave the TV in ANTENNA Tuning and program the modulator for a UHF channel from 14-69.
No picture through Cable Box.	3. Cable Boxes normally use CABLE Tuning. 4. Cable Boxes sometimes put the modulator signal on a different channel or do not pass the signal at all. 5. If you cannot get a signal through the Cable Box then you must bypass it and switch the TV between channel 3 and the modulator channel.	3. Program the modulator for a CABLE channel from 70-94, 100-125. 4. Check for the modulator signal several channels above and below the programmed channel. 5. Combine the modulator signal to the cable signal after the Cable Box. or Split the combined cable/modulator signal before the Cable Box and recombine again after the Cable Box. Use a filter or trap to eliminate channel 3 on the bypassed side. or Use an A/B Switch to select between modulated and cable signal.
No picture on programmed CABLE channel 95-99.	6. The modulator does not program channels 95-99.	6. Program the modulator for a CABLE channel from 70-94, 100-125.
Modulator has "forgotten" programmed channel.	7. The channel is stored in EEPROM and is not forgotten, though a bad power glitch may occasionally scramble the signal.	7. Disconnect modulator power supply and reconnect after waiting for several seconds. Programmed channel should reappear.
Bad signal on station next to programmed channel.	8. Modulated channels will interfere with adjacent channels, esp. the one just below it.	8. Program channels with at least one blank channel above and below.
"Noise" on programmed CABLE channel 70-94, 100-125.	9. Local UHF broadcast channels can interfere with CABLE channels.	9. Program the modulator for a CABLE channel 70-94, 100-125 that is not close to a local UHF broadcast channel frequency (UHF 14 to 43 add 51; UHF 44 to 69 add 56). Examples: UHF 43 is close to CABLE 94; UHF 44 is close to CABLE 100).
Weak, "snowy" signal on Cable, Antenna, or modulator channels after signals combined.	10. Signals must be balanced before combining. Cable and Antenna signals are generally not as strong as the modulator's. Also, the additional cable and combiners disperse and weaken their signal strength.	10. Amplify weaker "snowy" signal before combining with others to boost strength and help signal balance. Use other combinations of amplifiers, attenuators, and tilt compensators to provide a balanced and sufficient signal to each television.
Horizontal, diagonal, or herringbone lines on any distributed channel.	11. Signal may be too strong for television. Modulator output is at least +27dB. 12. Combined signal are unbalanced.	11. Weaken signal with gain controls, attenuators, splitter/combiners, or longer cable lengths. 12. See <i>Step 10</i> .



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Troubleshooting Tips

MM70 Single Modulator

This table covers the NetMedia MM70 Single Modulator. Also see the *All Modulators* table for more help.

Symptom	Description	Recommended Action
Modulator does not work.	<ol style="list-style-type: none"> 1. The modulator requires 12V DC 100mA power and good signal connections. 2. Rule out external factors such as cable, amplifiers, splitters, and other devices. 3. The modulator starts from zero each time you enter programming mode. 	<ol style="list-style-type: none"> 1. Disconnect and reconnect power supply. Modulator LED should then glow brightly before returning to normal dim state. Make sure all other connections are secure. Check for correct power supply. 2. Connect modulator to coax and coax directly to one TV. Set TV to channel 70, then program modulator to channel 70 and look for the momentary test bars. If TV will not tune to channel 70, see <i>Step 2</i> of the <i>All Modulators</i> table. 3. Review programming steps. Program modulator for a simple channel such as 20 (2 presses) or 70 (7 presses).

RM70 Single Modulator

This table covers the NetMedia RM70 Remote Powered Single Modulator. Also see the *All Modulators* table for more help.

Symptom	Description	Recommended Action
Modulator does not work.	<ol style="list-style-type: none"> 1. The modulator requires 12V DC 100mA power and good signal connections. 2. Power Injector is directional; power cannot pass through TV side. 3. Coax shielding may short circuit power by touching center conductor. 4. Sufficient power must reach modulator location. Each RM70 requires 12V DC, 100mA in addition to power requirement of attached device. 5. Rule out external factors such as cable, amplifiers, splitters, and other devices. 6. The modulator starts from zero each time you enter programming mode. 	<ol style="list-style-type: none"> 1. Disconnect and reconnect power supply. Modulator LED should then glow brightly before returning to normal dim state. Make sure all other connections are secure. Check for correct power supply. 2. Check Power Injector direction so that MOD Arrow goes toward modulator and TV Arrow goes toward television. 3. Check all coax F-connectors and replace if necessary. 4. Long cable runs will diminish power, place Power Injector closer to modulator. Amplifiers and some splitter/combiners do not pass DC power, replace them or move Power Injector so that those devices are not between it and modulator. Multiple devices require more power, use a larger power supply that gives each modulator and device enough power. 5. Connect modulator to coax, coax to Power Injector, and Power Injector directly to one TV. Set TV to channel 70, then program modulator to channel 70 and look for the momentary test bars. If TV will not tune to channel 70, see <i>Step 2</i> of the <i>All Modulators</i> table. 6. Review programming steps. Program modulator for a simple channel such as 20 (2 presses) or 70 (7 presses).
Problems with other devices connected to coax.	<ol style="list-style-type: none"> 7. Power Injector introduces 12V DC power to coax cable. 	<ol style="list-style-type: none"> 7. Place Power Injector so that no splitter/combiners are between it and the modulator. or Use DC Blockers to prevent power from entering other devices.
Problem with device connected to RM70.	<ol style="list-style-type: none"> 8. The RM70 can supply 12V DC power to an external device. There must be sufficient power for both units. 	<ol style="list-style-type: none"> 8. Make sure external device uses 12V DC power. Use a power supply that delivers 12V DC, 100mA + DEVICEmA.

MM73 TriplePlay Modulator

This table covers the NetMedia MM73 TriplePlay Modulator. Also see the *All Modulators* table for more help.

Symptom	Description	Recommended Action
Modulator does not work.	<ol style="list-style-type: none"> 1. The modulator requires 12V DC 300mA power and good signal connections. 2. Rule out interference from TriplePlay's other channels by setting them to 0. 3. Rule out external factors such as cable, amplifiers, splitters, and other devices. 4. The modulator starts from zero each time you enter programming mode. 	<ol style="list-style-type: none"> 1. Disconnect and reconnect power supply. All three modulator LED's should turn on momentarily before returning to normal single LED on state. Make sure all other connections are secure. Check for correct power supply. 2. Select each of the other two modulator LED's. Enter programming mode but do not select any channels. Wait for LED to Quit flashing. 3. Connect modulator to coax and coax directly to one TV. Set TV to channel 70, then program modulator to channel 70 and look for the momentary test bars. If TV will not tune to channel 70, see <i>Step 2</i> of the <i>All Modulators</i> table. 4. Review programming steps. Program modulator for a simple channel such as 20 (2 presses) or 70 (7 presses).



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CAModulator Channels

Channel range effects SC01, SC02, SCM1 and SCM2 CAModulator function.

CAModulator	Description	Television
Channels 0 and 1	Disable CAModulator signal.	No signal should appear on TV.
Channels 2-6	CAModulator displays test pattern. 2 = 20, 3 = 30, 4 = 40, 5 = 50, 6 = 60	Set TV to ANTENNA Tuning on UHF channels 20, 30, 40, 50, or 60.
Channels 7-12	CAModulator displays test pattern. 7=70,8=80,9=90,10=100,11=110, etc.	Set TV to CABLE Tuning on CABLE channels 70, 80, 90, 100, 110, or 120.
Channel 13	Not valid channel selection.	No signal should appear on TV.
Channels 14-69	UHF Stations 14-69	Set TV to ANTENNA Tuning on UHF channels 14-69.
Channels 70-94	CABLE Stations 70-94	Set TV to CABLE Tuning on CABLE channels 70-94.
Channels 95-99	Not valid channel selections.	No signal should appear on TV.
Channels 100-125	CABLE Stations 100-125	Set TV to CABLE Tuning on CABLE channels 100-125.

CAModulators

This table covers all CAModulators, SC01, SC02, SCM1 and SCM2. Also see *CAModulators Continued* table.

Symptom	Description	Recommended Action
CAModulator does not work.	<ol style="list-style-type: none"> The CAModulator requires proper power and signal connections. Power Injector is directional; power cannot pass through TV side. Coax shielding may short circuit power by touching center conductor. Sufficient power must reach CAModulator location. Each CAModulator requires 12V DC, 300mA. Rule out external factors such as cable, amplifiers, splitters, and other devices. CAModulator power must be disconnected between each channel change. Numbers on printed circuit board represent channels. Numbers on red dip switch block do not. 	<ol style="list-style-type: none"> Disconnect and reconnect power supply. CAModulator LED should be on. Make sure all other connections are secure. Check Power Injector direction so that MOD Arrow goes toward CAModulator and TV Arrow goes toward television. Check all coax F-connectors and replace if necessary. Long cable runs will diminish power, place Power Injector closer to CAModulator. Amplifiers and some splitter/combiners do not pass DC power, replace them or move Power Injector so that those devices are not between it and CAModulator. Multiple CAModulators require more power, use a larger power supply that gives each CAModulator sufficient power. Connect CAModulator to coax, coax to Power Injector, and Power Injector directly to one TV. Set TV to channel 70, then program CAModulator to channel 70 and look for camera picture. If TV will not tune to channel 70, see <i>No picture on programmed cable channel 70-94</i> section of the <i>CAModulators Continued</i> table. Review programming steps. Disconnect and reconnect power supply. Set CAModulator for a simple channel such UHF 40 or CABLE 80. See Step 6 of this table.
Problems with other devices connected to coax.	<ol style="list-style-type: none"> Power Injector introduces 12V DC power to coax cable. 	<ol style="list-style-type: none"> Place Power Injector so that no splitter/combiners are between it and the CAModulator. Or Use DC Blockers to prevent power from entering other devices.
Gray, hazy, fuzzy, or blurry picture.	<ol style="list-style-type: none"> Camera is out of focus. 	<ol style="list-style-type: none"> Turn lens clockwise or counterclockwise until picture is focused.
Difficulty inserting Lens into Decora plate (In-Wall Models)	<ol style="list-style-type: none"> Lens is designed to fit tightly into Decora plate. Care must be taken to prevent Decora plate from cracking. 	<ol style="list-style-type: none"> Place Decora plate on flat surface. Use both hands to center lens and press all corners down simultaneously. Repeat until all four corners are snapped into place.

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Troubleshooting Tips

CAModulators Continued

This table covers all NetMedia CAModulators, SC01, SC02, SCM1 and SCM2. Also see CAModulators table.

Symptom	Description	Recommended Action
No picture after changing channel.	1. The CAModulator power must be disconnected between each channel change.	1. Review programming steps. Disconnect and reconnect power supply. Set CAModulator for a simple channel such UHF 40 or CABLE 80.
No picture on programmed UHF channel 14-69.	2. TV must be set to ANTENNA Tuning in order to view UHF channels 14-69.	2. Tune TV to channel 70. If successful , your TV is probably in CABLE Tuning mode. Then Check the switches or menus on your television and change from CABLE Tuning to ANTENNA Tuning. Or Leave the TV in CABLE Tuning and program the CAModulator for a CABLE channel from 70-94 or 100-125.
No picture on programmed CABLE channel 70-94 or 100-125.	3. TV must be set to CABLE Tuning in order to view CABLE channels 70-94 or 100-125.	3. Tune TV to channel 70. If unsuccessful , your TV is probably in ANTENNA Tuning mode. Then Check the switches or menus on your television and change from ANTENNA Tuning to CABLE Tuning. Or Leave the TV in ANTENNA Tuning and program the CAModulator for a UHF channel from 14-69.
No picture through Cable Box.	4. Cable Boxes normally use CABLE Tuning. 5. Cable Boxes sometimes put the CAModulator signal on a different channel or do not pass the signal at all. 6. If you cannot get a signal through the Cable Box then you must bypass it and SWITCH THE TV between channel 3 and the CAModulator channel.	4. Program the CAModulator for a CABLE channel from 70-94 or 100-125. 5. Check for the CAModulator signal several channels above and below the programmed channel. 6. Combine the CAModulator signal to the cable signal after the Cable Box. Or Split the combined cable/CAModulator signal before the Cable Box and recombine again after the Cable Box. Use a filter or trap to eliminate channel 3 on the bypassed side. Or Use an A/B Switch to select between modulated and cable signal.
No picture on programmed CABLE channel 95-99	7. The CAModulator does not program channels 95-99.	7. Program the CAModulator for a CABLE channel from 70-94 or 100-125.
CAModulator has "forgotten" programmed channel.	8. The channel is not forgotten, though a momentary power outage may occasionally scramble the signal.	8. Disconnect CAModulator power supply and reconnect after waiting for several seconds. Programmed channel should reappear.
Bad signal on station next to programmed channel.	9. Modulated channels will interfere with adjacent channels, especially the one just below it.	9. Program channels with at least one blank channel above and below.
"Noise" on programmed CABLE channel 70-94 or 100-125.	10. Local UHF broadcast channels can interfere with CABLE channels. As a rough guide, UHF channel + 51 = CABLE channel. Example: UHF 40 is close to CABLE 91.	10. Program the CAModulator for a CABLE channel 70-94 or 100-125 that is not close to a local UHF broadcast channel frequency.
Weak, "snowy" signal on Cable or Antenna channels after CAModulator added.	11. Cable and Antenna signals are generally not as strong as the CAModulator's. Also, the additional cable and combiners disperse and weaken their signal strength.	11. Amplify Cable or Antenna signal before combining with CAModulator to prevent signal loss upstream and to help signal balance. Use other combinations of amplifiers, attenuators, and tilt compensators to provide a balanced and sufficient signal to each television.
Weak, "snowy" signal on programmed channel.	12. CAModulator signal is being dispersed and weakened through distribution system.	12. See Step 11 on this table.
Horizontal, diagonal, or herringbone lines on any distributed channel.	13. Signal may be too strong for television. CAModulator output is at least +27dB. Combined signals are unbalanced.	13. Weaken signal with gain controls, attenuators, splitter/combiners, or longer cable lengths. Use other combinations of amplifiers, attenuators, and tilt compensators to provide a balanced and sufficient signal to each television.



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Troubleshooting Tips

In-Wall and Interior/Exterior Mounted Cameras

This table covers the NetMedia SC50, SC51, SCE1, and SCE2 Cameras

Symptom	Description	Recommended Action
Camera does not work.	<ol style="list-style-type: none"> The Camera requires proper power and signal connections. Sufficient power must reach Camera location. Each Black & White camera requires 12V DC, 300mA. Each Color camera requires 12V DC, 100mA. 	<ol style="list-style-type: none"> Disconnect and reconnect power supply. Make sure all other connections are secure. Long cable runs will diminish power. Either use a larger power supply that gives each Camera sufficient voltage, or place power supply closer to Camera so that a shorter cable run can be used.
Gray, hazy, fuzzy, or blurry picture.	<ol style="list-style-type: none"> Camera is out of focus. 	<ol style="list-style-type: none"> Turn lens clockwise or counterclockwise until picture is focused.
Difficulty inserting Lens into Decora plate (In-Wall Models)	<ol style="list-style-type: none"> Lens is designed to fit tightly into Decora plate. Care must be taken to prevent the Decora plate from cracking. 	<ol style="list-style-type: none"> Place Decora plate on flat surface. Use both hands to center lens and press all corners down simultaneously. Repeat until all four corners are snapped into place.

Board Level Cameras

This table covers the NetMedia BL01 and BL02 Board Level Cameras

Symptom	Description	Recommended Action
Camera does not work.	<ol style="list-style-type: none"> The CAModulator requires proper power and signal connections. All connectors must be grounded. Sufficient power must reach Camera location. Each BL01 requires 12V DC, 300mA. Each BL02 requires 12V DC, 100mA. 	<ol style="list-style-type: none"> Disconnect and reconnect power supply. Make sure that +12V and Ground wires are not reversed. Make sure all other connections are secure. Make sure all connectors are grounded. Long cable runs will diminish power. Either use a larger power supply that gives each Camera sufficient voltage, or place power supply closer to Camera so that a shorter cable run can be used.
Gray, hazy, fuzzy, or blurry picture.	<ol style="list-style-type: none"> Camera is out of focus. 	<ol style="list-style-type: none"> Turn lens clockwise or counterclockwise until picture is focused.
No Video.	<ol style="list-style-type: none"> Video connector must be grounded. 	<ol style="list-style-type: none"> Use the Black Common Ground Wire (-) to ground the Video connector.



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Troubleshooting Tips

Video Switcher VS4X1

This table covers the NetMedia Video Switcher VS4X1

Symptom	Description	Recommended Action
VS4X1 does not work.	<ol style="list-style-type: none"> The VS4X1 requires 12V DC 100mA power and good signal connections. The Black RCA connector is for Output. The Yellow RCA connectors are Inputs. 	<ol style="list-style-type: none"> Disconnect and reconnect power supply. Make sure all other connections are secure. Ensure that the Black Output connector is used to send signal to the receiving device.
VS4X1 settings do not change after switches are changed.	<ol style="list-style-type: none"> VS4X1 power must be disconnected between each switch change. 	<ol style="list-style-type: none"> Disconnect and reconnect power supply. Check for changes in rotation time or number of sources.
Do not see all inputs.	<ol style="list-style-type: none"> VS4X1 must have a good video signal. The VS4X1 starts with input 1 and then rotates through 2, 3, and 4. If programmed for 3 inputs, then 1, 2, and 3 are used. If programmed for 2 inputs, then 1 and 2 are used. 	<ol style="list-style-type: none"> Ensure good signal from each input device. Test input device independently through a monitor. Ensure that video devices are plugged into correct inputs of VS4X1. Also Test by programming for 1 sec interval and 4 inputs (switches 6, 7, 8 ON). Also Check switch 7 and 8 programming for correct number of inputs.
Wrong rotation order.	<ol style="list-style-type: none"> The order is 1, 2, 3, 4, 1, 2, 3, etc. Input 1 is next to power connector. Input 2 is opposite the power connector. Input 4 is opposite the Black Output connector. 	<ol style="list-style-type: none"> Reconnect devices to desired input number.

Video Switcher VS4X4

This table covers the NetMedia Video Switcher VS4X4

Symptom	Description	Recommended Action
VS4X4 does not work.	<ol style="list-style-type: none"> The VS4X4 requires 12V DC 100mA power and good signal connections. Front LEDs are NOT in line with rear connectors. Output 1 is nearest the power connector. Next are Outputs 2, 3, and 4. Inputs 1, 2, and 3 follow. Input 4 is furthest from the power connector. Each Output can be disabled by pressing the minus (-) button. Each Input can be independently disabled on each Output by pressing the minus (-) button. 	<ol style="list-style-type: none"> Disconnect and reconnect power supply. At least one Input and one Output LED should be on or flashing. Make sure all other connections are secure. Arrange devices to the correct input and Output connections. Check Output LED, if it is flashing then it is disabled. Press the Output Selector button until its LED is lit again. Then press the plus (+) button to enable the Output. Its LED should be on without flashing. Select desired Output with Output Selector button. Press the Input Selector button until Input LED is lit. If it is flashing, then it is disabled. Press the plus (+) button to enable the Input. Its LED should be on without flashing.
Rotation order is scrambled.	<ol style="list-style-type: none"> Front LEDs are NOT in line with rear connectors (see #2). 	<ol style="list-style-type: none"> Arrange devices to the correct Input and Output connections.
Output does not rotate.	<ol style="list-style-type: none"> Each Output can be individually programmed for 1 to 4 inputs (see #3). Each Output rotation can be stopped on an individual Input. Rotation time can be as long as 4 minutes and 15 seconds. 	<ol style="list-style-type: none"> Ensure that Output is programmed for more than one Input. Restore Output to rotation mode by selecting Rotation Status LED. Set shorter rotation time.
Unable to program rotation time.	<ol style="list-style-type: none"> Rotation time is only programmable within 10 seconds of selecting Rotation Status LED. Rotation time begins at 0 every time new programming begins. 	<ol style="list-style-type: none"> Press Input Selector button until Rotation Status LED is on again. Time Status LED should also be on. Immediately program rotation time. Reprogram Rotation time using 0 as starting point. Each press of 10 SEC button adds ten seconds, each press of 1 SEC button adds one second.



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