



M40

80W x 2 Channel Stereo Receiver

Installation & User Guide

IMPORTANT SAFETY INSTRUCTIONS

	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	
CAUTION: To reduce the risk of electric shock, do not remove cover (or back). No user-serviceable parts inside. Refer servicing to qualified service personnel.		

• Explanation of Graphical Symbols



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert you to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert you to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a damp cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.

CAUTION: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio / TV technician for help.

APPLICABLE FOR USA, CANADA OR WHERE APPROVED FOR USAGE

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE PLUG TO WIDE SLOT, INSERT FULLY.

ATTENTION: POUR EVITER LES CHOCS ELECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

PORTABLE CART WARNING



13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.
16. **CAUTION:** Servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.
17. **WARNING:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.



TABLE OF CONTENTS

IMPORTANT SAFETY INSTRUCTIONS	2
TABLE OF CONTENTS	3
INTRODUCTION	4
WHAT'S INCLUDED	5
M40 FEATURES	5
FRONT PANEL	6
REAR PANEL.....	9
M40 REMOTE FEATURES	12
INSTALLATION	14
AIR FLOW.....	14
SPEAKER PLACEMENT.....	15
CONNECTIONS	16
SPEAKER AND SUBWOOFER CONNECTIONS	16
Speaker A.....	16
Subwoofer.....	17
Speaker B.....	17
Multiple Pair Speaker Hookup For a Multiroom Sound System	18
REAR PANEL CONNECTIONS	21
Antenna Connections	21
Phono Connections	21
CD Connections	21
Tape In/Out Connections.....	22
Video 1 In/Out Connections	22
Video 2 Connections	22
Video 3 Rear Panel Connections	23
Remote IN/OUT Connections.....	23
AC Outlets Connections.....	24
AC Power Cord.....	24
FRONT PANEL CONNECTIONS	24
Video 3 Front Panel Connections.....	24
Headphones Connection.....	24
OPERATING THE M40	25
Install M40 Remote Batteries	25
Turning ON the M40	25
Selecting Speakers A/B	25
Volume.....	26
Mute.....	26
Tone and Balance Controls.....	26
Selecting a Source	27
Operating the Tuner.....	27
Presets.....	28
Dimmer.....	29
Sleep Timer.....	29
Tape Monitor (Audio Recording).....	30
Reset	30
TROUBLESHOOTING	31
SPECIFICATIONS	32
LIMITED 2-YEAR WARRANTY	34

INTRODUCTION

Congratulations and thank you for purchasing the Proficient M40 80W x 2 Channel Stereo Receiver.

The M40 combines the best of styling and performance in a full-featured, high performance receiver. The M40 can provide uninterrupted audio/video entertainment, switching from DVD movies to Sports on Cable or Satellite to Phonograph Records to Video Game Consoles. Every source of home entertainment can be connected to the M40.

The M40 is cool. Literally. The M40 features a high current audio amplifier that runs cool under most operating conditions when properly installed and connected. There are two sets of speaker terminals on the M40. Each can be turned ON/OFF independently and both can be run at the same time. But if that's not enough, the amplifier design and use of quality discreet components gives the M40 the ability to drive up to four pair of speakers for whole-house audio entertainment.

Complementing the two Speaker pair terminals are two independent subwoofer sections. Each features a full range mono line level audio output, a 14V DC Trigger Output and Link Switch to sync subwoofer ON/OFF status with its matched speaker pair.

The M40 includes a built-in AM/FM Stereo Tuner. The Tuner can store up to 30 Preset Channels (AM or FM). Preset Channels can be scanned for review of 'what's playing' on the air, or can be selected directly from the Numeric buttons on the M40 Remote.

The M40 features a variety of audio/video inputs and outputs that provide convenient connection and switching for up to seven home entertainment source components. There are three stereo audio source inputs, including a Phono Input with moving-magnet preamp and a Tape Monitor Loop for audio recording. There are also four audio/video inputs. Video 1 is an A/V IN/OUT that can be used for audio/video source recording and playback. The Video 3 Input is two selectable sets of Front and Rear Panel A/V connections. The Video 3 Rear Panel Inputs can be a DVD Player, Cable Box, Satellite Receiver or other 'permanent' A/V Source. The Video 3 Front Panel Inputs provide convenient connection for 'guest devices' such as Video Game Consoles, portable MP3 Players or cameras that might not always be connected to the system.

For the truly demanding, the M40 Front Panel Display can be dimmed or turned off should the display be distracting while viewing critical video content.

The M40 also features a Front Panel Headphone Jack for private listening plus, a Sleep Timer has been built in to the M40, to automatically shut the M40 OFF for those late night sessions when the M40 could keep running long after you have drifted off to sleep.

The M40 isn't just a solid performer, it looks good too. The cast aluminum Front Panel is like no other and makes an impressive addition to any stack of gear.

Fully Featured. Solid Performer. Great Looking. Home entertainment never looked and sounded this good.

Please read and follow the instructions in this guide to assist in proper installation connection and use of the Proficient M40 Receiver.

WHAT'S INCLUDED

- 1 – M40 80W x 2 Channel Stereo Receiver
- 1 – M40 IR Remote Control
- 2 – AAA Batteries
- 1 – FM Indoor Antenna
- 1 – AM Loop Antenna
- 1 – M40 Installation & User Guide



M40 FEATURES

Amplifier

- 80W Continuous x 2 Channels @ 8 Ω ; 20Hz - 20kHz; <0.07% THD
- 125W RMS x 2 Channels @ 4 Ω ; 20Hz - 20kHz; <0.1% THD @ 1kHz

Audio Inputs

- AM/FM Stereo Tuner with 30 Channel Preset Memory
- Moving-Magnet Phono
- CD
- Tape Monitor IN/OUT Loop
- Pre-OUT/Main IN Loop

Audio Video Inputs (Composite Video)

- Video 1 IN/OUT
- Video 2
- Video 3 (Front and Rear Panel - selectable)

Outputs

- Speaker A, B, A+B
- Tape Monitor OUT (line level audio)
- Video 1 OUT (line level audio/composite video)
- Sub Out A full band mono line level audio out with /14V DC trigger
- Sub Out B full band mono line level audio out with /14V DC trigger
- Headphone Jack

Control

- Sleep Timer

Front Panel Display

- Large, clear fluoro-display
- Dimmer for Front Panel Display - Dim, OFF

Remote Control

- Discreet ON/OFF Commands
- Power ON from source select
- Direct Numeric Tuning
- Direct Numeric Preset Select
- Manual Tuning
- Volume/Mute
- Speaker A/B Select
- Dimmer
- Sleep Timer



M40 FRONT PANEL FEATURES

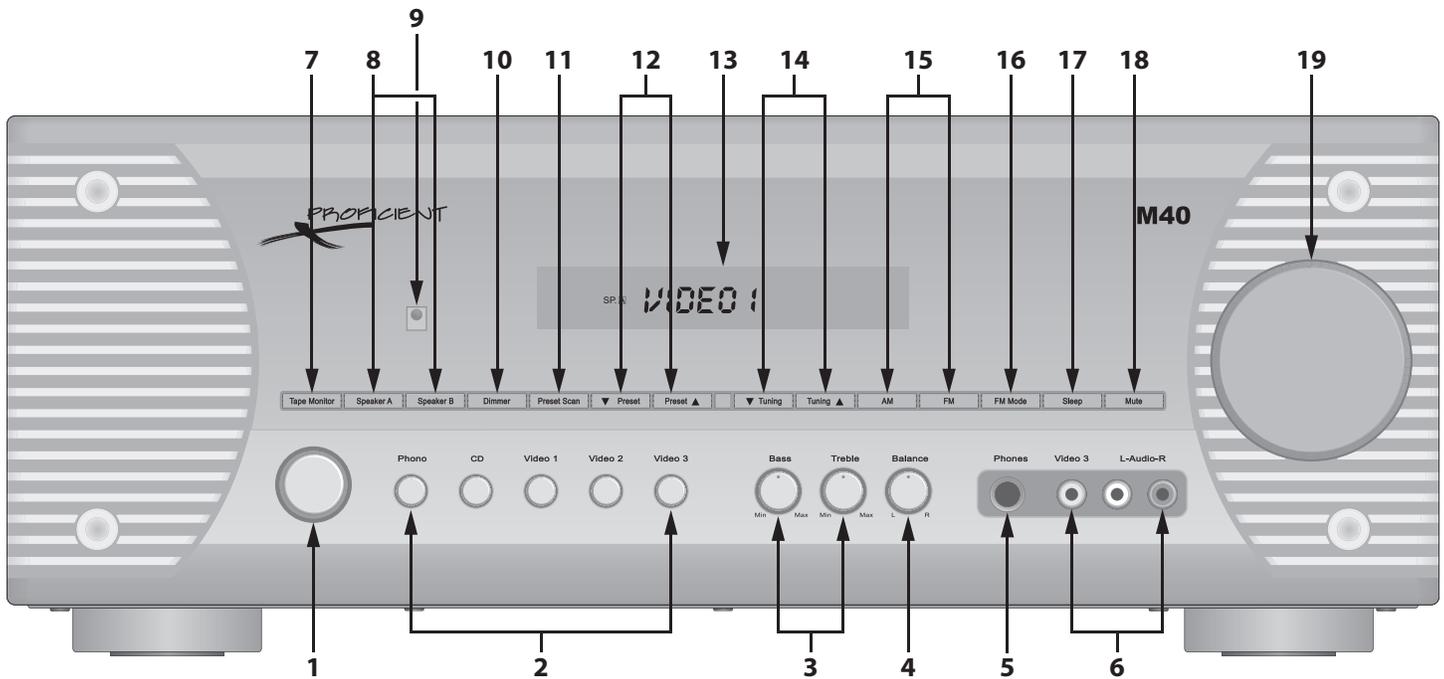


Diagram 1 M40 Front Panel Features

FRONT PANEL

1. **ON/STANDBY** - Press this button to turn the M40 ON/OFF. In Standby, the button is surrounded by a red backlight to indicate that the M40 main power is ON. To turn the unit ON, press the button. The backlight turns blue and the Front Panel Display illuminates. The M40 will go through a power up sequence of about five seconds after which the receiver is ready for use. To return to Standby, press the button and all the audio signal will be cut, the amp will turn off, the Front Panel Display will turn off after a short delay and the ON/Standby button backlight will illuminate red.
2. **SOURCE SELECT BUTTONS** - In Standby or with the M40 power ON, press the desired Source Select button. When selected, the source name will appear in the Front Panel Display to indicate the selected source.
3. **STONE CONTROLS** - Turn these knobs to adjust the bass (low frequencies) or the treble (high frequencies) in the speaker and Pre-Out level outputs. Turn counterclockwise to lower or turn clockwise to increase bass or treble. Center detente (click) is flat bass and treble EQ. Range: $\pm 10\text{dB}$.
4. **BALANCE** - Turn this knob to adjust the relative audio level between the left and right speakers. If the speakers are positioned so that they are not an equal distance from the Ideal Listening Zone, adjust the balance so the amount of sound coming from the left and right speakers is equal. Turn counterclockwise (left) to reduce right channel level; turn clockwise (right) to reduce left channel level.
5. **PHONES** - Connects to a standard stereo $\frac{1}{4}$ inch phone plug for listening through stereo headphones. The Speaker A and B Outputs are automatically turned off when headphones are connected to this jack. When headphones are connected, the Front Panel Display 'SP.AB' (Speaker A/B) Indicator will turn off. HP-IN will appear briefly and then the display will return to the selected source.
6. **VIDEO 3/L-AUDIO-R** - These Front Panel convenience jacks connect to an audio/video device such as a video game, MP3 Player, still or video camera, etc that is not a regular system component. This eliminates having to pull the receiver out of its installed position to get to the rear panel connections. These inputs are selected by first selecting VIDEO 3. A second press of the VIDEO 3 button (Front Panel or remote) will switch to the Front Panel VIDEO 3 Inputs. When selected, VIDEO 3 (rear) or VIDEO F (front) will appear in the Front Panel Display to indicate the selected input. The VIDEO 3/VIDEO F Inputs can be toggled by repeatedly pressing the VIDEO 3 button.

M40 FRONT PANEL FEATURES

- 7. TAPE MONITOR** - In Standby or with the M40 power ON, press this button to select the rear panel Tape Inputs. With a three-head tape deck or other device capable of outputting the actual recorded signal, this selection allows listening to the output of an audio recording device, while it is recording, to confirm the quality of the recorded signal. This function requires that the audio recording device is properly connected to the Rear Panel Tape IN/OUT Jacks. When selected, TAPE M will flash slowly on the Front Panel Display to indicate Tape Monitor is the signal being played at the speakers. The device being recorded/monitored (Phono, CD, Tuner etc) must be selected as the current source, by selecting that device from the Front Panel or Remote Control.
- 8. SPEAKER A** - Press this button to select the speakers connected to the Rear Panel Speaker A Terminals. If the Sub A Link S/W Switch is set to the ON position this will also activate the Sub A Mono output and Trigger Output for a subwoofer associated with Speaker A. When selected the Front Panel Display will indicate 'SP.A' to show Speaker A is active.

SPEAKER B - Press this button to select the speakers connected to the Rear Panel Speaker B Terminals. If the Sub B Link S/W Switch is set to the ON position this will also activate the Sub A Mono output and Trigger Output for a subwoofer associated with Speaker B. When selected the Front Panel Display will indicate 'SP.B' to show Speaker B is active.
- 9. IR SENSOR** - (Behind Front Panel Lens) The IR Sensor 'sees' the IR control commands output from the M40 Remote Control when buttons are pressed on the remote for armchair control of the M40. This sensor must be kept clear for direct line-of-sight to the remote, or the remote will not be able to control the M40.
- 10. DIMMER** - Press this button to control of the brightness of the Front Panel Display. When turned ON, the Front Panel Display will illuminate to full brightness. One press will dim the display to about half brightness, a second press will turn the display OFF. A third press will restore the display to full brightness.
- 11. PRESET SCAN** - With either the AM or FM Tuner selected, press of this button to start a preview of all programmed Preset Channels. The M40 can store up to 30 Preset Channels. Each Preset will play for five seconds and then the Tuner will advance to the next Preset for five seconds. If all 30 Presets are programmed, the M40 will cycle through from 1-30 and the start over at Preset 1. If not all 30 Presets are programmed, the M40 will cycle through the programmed Presets (i.e. 1-10) and then return to Preset 1. Pressing the Preset Scan button in scan mode will select the currently tuned station and stop the scan. Selecting another source will also stop the scan. The selected Preset Number is indicated on the Front Panel Display to the right of the tuned frequency.
- 12. AM/FM PRESET ▼ ▲** - With either the AM or FM Tuner selected, press the Preset ▲ button to select the next programmed Tuner Preset. Press the ▼ Preset button to select the previous programmed Tuner Preset. The selected Preset Number is indicated on the Front Panel Display to the right of the tuned frequency.
- 13. FRONT PANEL DISPLAY** - The Front Panel Display illuminates with receiver status to Source selected, Speakers selected, Tuner information, (frequency, preset, tuned, stereo), Volume level (briefly while volume is being set and for five seconds after), Mute and Sleep Timer. The brightness can be set with the Dimmer button on the M40 Front Panel or Remote Control. The Front Panel Display turns OFF when the M40 is in Standby.
- 14. AM/FM TUNING ▼ ▲** - With either the AM or FM Tuner selected, press the ▼ TUNING button to decrease the tuner frequency by one increment. press the TUNING ▲ button to increase the tuner frequency by one increment. When a tunable signal is received, the TUNED icon will appear in the Front Panel Display over the Band Indicator (AM/FM). If tuning FM, the STEREO icon will appear in red to indicate a stereo signal. If the tuned frequency is also a Preset, the Preset Number is indicated on the Front Panel Display to the right of the tuned frequency.
- 15. AM and FM** - In Standby or with the M40 power ON, press this button to turn the M40 ON, (if OFF) and select the AM Tuner. The tuner will select the last tuned AM Channel.
- 16. FM MODE** - With the FM Tuner selected, press this button to switch the FM Tuner between stereo and mono modes. Typically, FM Mode should be set to stereo mode. The mono mode can be useful for cleaning up background noise when tuned to weak stereo channels.

M40 FRONT PANEL FEATURES

- 17. SLEEP** - With any source selected, press this button to turn on the M40 Sleep Timer. Sleep Timer durations from 90-10 minutes, in 10 minute increments, can be set by repeatedly pressing the button until the desired sleep timeout is set. When set, a red clock icon will appear in the Front Panel Display and the display will dim to half brightness. (With a Sleep Timeout set, the display can be turned OFF with the M40 Remote or Front Panel Dimmer buttons, but cannot be set to full brightness.) To check time remaining to OFF, press the Sleep button ONCE. The remaining ON time will appear in the Front Panel Display and then return to the dimmed, normal display. TWO presses will cancel the remaining timeout duration.
- 18. MUTE** - With any source selected, press this button to cut the amplifier output to the selected speakers. (There will be no sound coming from the speakers) MUTE will slowly flash on the Front Panel Display. Press the Mute button again to un-mute the speakers.
Note: If an external amplifier is connected to the Pre-Out Jacks, MUTE will also mute/un-mute the line level audio signal at the Pre-Out Jacks.
- 19. VOLUME** - With the M40 ON turn this knob to adjust the speaker level audio output. Turn clockwise to turn volume up; turn counterclockwise to turn the volume down. The audio output level in dB (decibels) will be displayed on the Front Panel Display while the knob is being turned and for five seconds after a volume adjustment is made.

M40 REAR PANEL FEATURES

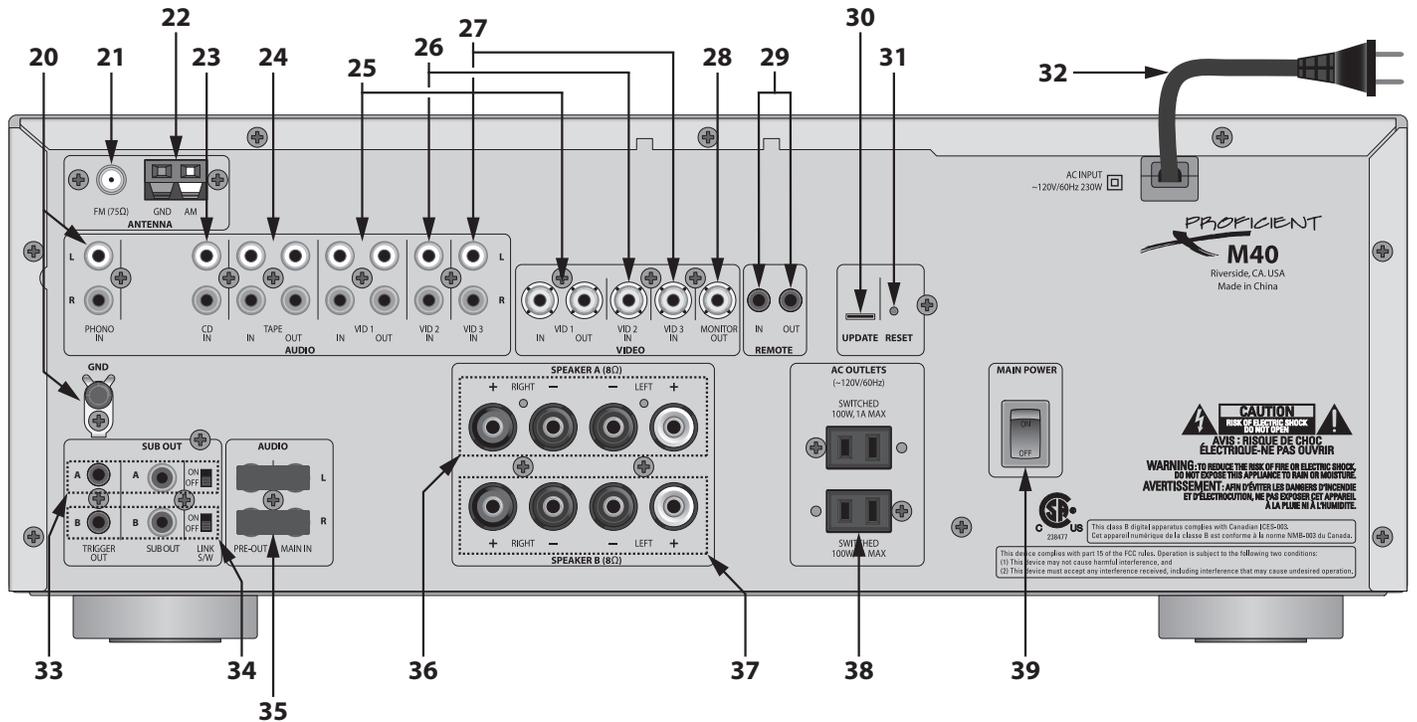


Diagram 2 M40 Rear Panel Features

REAR PANEL

20. PHONO IN - (2 RCA Jacks) Connect to the left and right audio output from a turntable. Phono In is selected by pressing the Phono button on either the M40 Front Panel or Remote Control. When selected, the Front Panel Display will indicate PHONO.
GND - If connecting a turntable, connect the ground wire from the turntable to reduce audio hum.

21. FM(75Ω) - (1 female 'F' type terminal) Connect to the included FM antenna.

22. GND/AM - (2 spring clips) Connect to the included AM Loop antenna.

23. CD IN - (2 RCA Jacks) Connect to the left and right line level audio outputs of a CD Player or other device such as a MP3 Player, Music Server, etc. CD IN is selected by pressing the CD button on either the M40 Front Panel or Remote Control. When selected, the Front Panel Display will indicate CD.

24. TAPE IN/OUT - (4 RCA Jacks) Connect to the left and right line level audio inputs and outputs of a tape deck or other audio recording device for recording and playback of analog audio content. The Tape Out Jacks will output line level audio from the currently selected source. Tape IN is selected by pressing the Tape Monitor button on the M40 Front Panel or the Tape M button on the Remote Control. The Front Panel Display will indicate the currently selected source and TAPE M will flash slowly to indicate that Tape Monitor is active.

IN - Connect to the left and right line level audio outputs of a tape deck or other analog audio record/playback device. This input can also be used as an auxiliary line level audio input if all other inputs are being used.

OUT - Connect to the left and right line level audio inputs on a tape deck or other analog audio recording device.

M40 REAR PANEL FEATURES

- 25. VID 1 IN/OUT** - (6 RCA Jacks) Connect to the left and right line level audio and composite video inputs and outputs of an audio/video recorder for recording and playback of analog audio and composite video. The VID 1 Out Jacks output line level audio and composite video from the currently selected source. (If it is an A/V source.) VID 1 In is selected by pressing the Video 1 button on the M40 Front Panel or Remote Control. The Front Panel Display will indicate VIDEO 1.
- IN** - Connect to the left and right line level audio and composite video outputs of a video recorder.
- OUT** - Connect to the left and right line level audio and composite video inputs on a video recorder.
- 26. VID 2 IN** - (3 RCA Jacks) Connect to the left and right line level audio and composite video outputs of a DVD Player, Satellite Receiver, Cable Box or other audio/video device. VID 2 In is selected by pressing the VIDEO 2 button on the M40 Front Panel or the VID 2 button on the Remote Control. When selected, the Front Panel Display will indicate VIDEO 2.
- 27. VID 3 IN** - (3 RCA Jacks) Connect to the left and right line level audio and composite video outputs of a DVD Player, Satellite Receiver, Cable Box or other audio/video device. VID 3 In is selected by pressing the VIDEO 3 button on the M40 Front Panel or the VID 3 button on the Remote Control. When selected, the Front Panel Display will indicate VIDEO 3.
- 28. MONITOR OUT** - (1 RCA Jack) Connect to the composite video input of a TV, or Video Display.
- 29. REMOTE** - (2 mono 3.5mm mini jacks) Allow connection to an IR Repeater System, (IN) and to appropriately featured devices with IR Control Inputs (OUT) for increased flexibility of IR control.
- REMOTE IN** - (1 mono 3.5mm mini jack) Connect to the standard IR Flasher output of an IR repeater system for remote control without having to use an IR Flasher. This connection also allows remote room control of the M40 when connected to a whole-house IR repeater system with multiple IR Receivers. (Visit www.proficientaudio.com and select 'accessories' or additional information.)
- REMOTE OUT** - (1 mono 3.5mm mini jack) Connect to the IR In on a device equipped with an appropriate IR Control Input. These types of inputs typically accept an IR control signal that has had the carrier stripped.
- Note:** Devices that feature IR Control Inputs for stripped carrier signals typically have parallel ports that allow daisy chaining multiple devices.
- 30. UPDATE** - Special factory connection for loading firmware and testing the M40. No user connection required.
- 31. RESET** - Should the M40 ever perform improperly, press this recessed button to return the unit to normal operation. If possible, set the unit to Standby by pressing the ON/Standby Switch, (switch backlight red). Using a small, non-conductive blunt object, press the Reset button. The M40 should be restored to normal operation.
- 32. AC POWER CORD** - A two prong power cord connects to an unswitched 110V AC outlet to provide power to the M40.
- 33. SUB OUT A** - This group includes one 3.5mm 2-circuit (mono) mini jack for 14V trigger output; one RCA jack for full-band mono line level audio and a Link S/W Switch to sync the Sub Out with Speaker A ON/OFF status.
- SUB A ON/OFF LINK S/W** - In the OFF position, Sub A Mono Out will pass full band mono line level audio, regardless of Speaker A ON/OFF Status and Trigger A Out has no function. In the ON position, when Speaker A is turned OFF, Sub A Mono Out is mute and Sub A Trigger is 0V DC (sub OFF). When Speaker A is turned ON, Sub A Out outputs full band mono line level audio and Trigger A Out will output 14V DC (sub ON).
- SUB A MONO OUT** - Connects to the mono line level audio input on an amplified subwoofer to be used with Speaker A. If adjustable, set the crossover point on the sub per sub manufacturer's instructions.
- SUB A TRIGGER OUT** - Connects to the Control In Terminal on the sub to turn the sub ON/OFF with Speaker A ON/OFF status. Check sub Control In polarity and voltage rating before making any connections. (Trigger Out ON = 14V DC) Trigger Out Polarity: TIP = +14V DC; SLEEVE = GND.

M40 REAR PANEL FEATURES

- 34. SUB OUT B** - This group includes one 3.5mm 2-circuit (mono) mini jack for 14V trigger output; one RCA jack for full-band mono line level audio and a Link S/W Switch to sync the Sub Out with Speaker B ON/OFF status.
- SUB B ON/OFF LINK S/W** - In the OFF position, Sub B Mono Out will pass full band mono line level audio, regardless of Speaker B ON/OFF Status and Trigger B Out has no function. In the ON position, when Speaker B is turned OFF, Sub B Mono Out is mute and Sub B Trigger is 0V DC (sub OFF). When Speaker B is turned ON, Sub B Out outputs full band mono line level audio and Trigger B Out will output 14V DC (sub ON).
- SUB B MONO OUT** - Connects to the mono line level audio input on an amplified subwoofer to be used with Speaker B. If adjustable, set the crossover point on the sub per sub manufacturer's instructions.
- SUB B TRIGGER OUT** - Connects to the Control In Terminal on the sub to turn the sub ON/OFF with Speaker B ON/OFF status. Check sub Control In polarity and voltage rating before making any connections. (Trigger Out ON = 14V DC) Trigger Out Polarity: TIP = +14V DC; SLEEVE = GND.
- 35. PRE OUT/MAIN IN** - (4 RCA jacks) Allows use of an external high power amplifier or signal processor. The M40 ships from the factory with two jumpers installed to pass line level audio from the M40 preamp to the M40 amplifier. Unless using an external amplifier or processor, the M40 will not output audio from the speakers if these jumpers are removed. The Pre Out can be connected to a high power 2-channel audio amplifier for a large listening area or to a multi-channel amplifier for multi-room capability.
- PRE OUT** - Connects to the left and right line level inputs on an external amplifier or signal processor.
- MAIN IN** - Connects to the left and right line level outputs on a signal processor to feed processed line level audio to the M40 amplifier. If using an external multichannel amplifier that has a loop through, the Main In can be connected to the external amp loop out to utilize the M40 amplifier as an additional room in the system.
- 36. SPEAKER A** - Connect the Left + and Left - Speaker A five way binding posts on the M40 to the main room Left + and Left - Speaker Terminals. Connect the Right + and Right - Speaker A Terminals on the M40 to the main room Right + and Right - Speaker Terminals. SPEAKER A is selected by pressing the SPEAKER A button on the M40 Front Panel or Remote Control. When selected, the Front Panel Display will indicate 'S.P.A.'
- 37. SPEAKER B** - Connect the Left + and Left - Speaker B five way binding posts on the M40 to the secondary room Left + and Left - Speaker Terminals. Connect the Right + and Right - Speaker A Terminals on the M40 to the secondary room Right + and Right - Speaker Terminals. SPEAKER B is selected by pressing the SPEAKER B button on the M40 Front Panel or Remote Control. When selected, the Front Panel Display will indicate 'S.P.B.'
- 38. AC OUTLETS** - (2 switched AC outlets - 100 Watts max power each) Connect AC power cords of source components that are to be turned ON/OFF with M40 power ON/OFF status to the switched AC Outlets.
- 39. MAIN POWER** - Turns the main power to the M40 ON/OFF. When first set to ON, the M40 will default to Standby (main power ON, unit OFF. In the OFF position the M40 has no power. The ON/Standby Switch on the M40 Front Panel will backlight red to indicate Standby and blue to indicate ON.

M40 REMOTE FEATURES

M40 REMOTE FEATURES

40. LENS - Infrared commands that control the M40 are output from LEDs hidden behind this lens. The lens should always be pointed directly at the IR Sensor on the M40 Front Panel (Item 14, Page 6) when pressing buttons on the remote for armchair control. The remote can control the M40 up to 40 feet away.

41. ON - With the M40 in Standby, (ON/Standby button backlight red), press this button to turn the M40 ON (ON/Standby button backlight blue).

42. SOURCE SELECT BUTTONS - In Standby or with the M40 power ON, press one of these to select a desired source. The Front Panel Display will indicate the selected source.

43. NUMERIC BUTTONS - With AM or FM Tuner selected, press these buttons to select programmed tuner preset channels. Channels can be tuned directly by first selecting a Band (AM/FM) then pressing the Direct button followed by the channel frequency (94.7, 95.5, etc).

44. DIRECT - With AM or FM Tuner selected, press this button, followed by the appropriate numeric buttons to enter a channel frequency. Direct In will scroll across the Front Panel Display followed by the frequency numbers as they are pressed.

45. DIMMER - Press this button to control of the brightness of the Front Panel Display. When the M40 is turned ON, the Front Panel Display will illuminate to full brightness. One press will dim the display to about half brightness, a second press will turn the display OFF. A third press will restore full brightness to the display.

46. MEMORY - With an AM or FM channel tuned, press this button to store it as a Preset Channel. PRESET CH will appear on the Front Panel Display and MEMO will flash slowly until a Preset Number is entered. Press 1-30 to store Preset. (The M40 can store up to 30 Presets total, AM and FM). Storing a channel on an already programmed Preset will replace the existing Preset.

47. AUTO PRESET - With the FM Band selected, press this button automatically program the Preset Channels with the first 30 tunable FM channels found. The M40 can store up to 30 Presets. If fewer than 30 FM channels are found the M40 will cycle the FM Band a second time to try to find more channels. The process will stop automatically after the second cycle.

48. CURSOR ARRAY/OK - With either the AM or FM selected, press the UP/DOWN buttons to tune the programmed Preset Channels. Press the LEFT/RIGHT buttons to increase/decrease the channel frequency by one increment. The OK button has no function.

49. FM MODE - With the FM Tuner selected, press of this button to switch the FM Tuner between stereo and mono modes. Typically, FM Mode should be left in the stereo mode. The mono setting can be useful for cleaning up background noise when tuned to weak stereo channels.

50. ▼ PRESET - With either the AM or FM Tuner selected, a press of this button will select the next previous programmed Tuner Preset. That is, if currently on Preset 4, a press of the ▼Preset button will select Preset 3. If Preset 1 is currently selected, the M40 will return to the highest number programmed Preset. The selected Preset Number is indicated on the Front Panel Display to the right of the tuned frequency.

PRESET ▲ - With either the AM or FM Tuner selected, a press of this button will select the next programmed Tuner Preset. That is, if currently on Preset 4, a press of the Preset ▲ button will select Preset 5. After selecting the highest number programmed Preset, the M40 will return to Preset 1. The selected Preset Number is indicated on the Front Panel Display to the right of the tuned frequency.

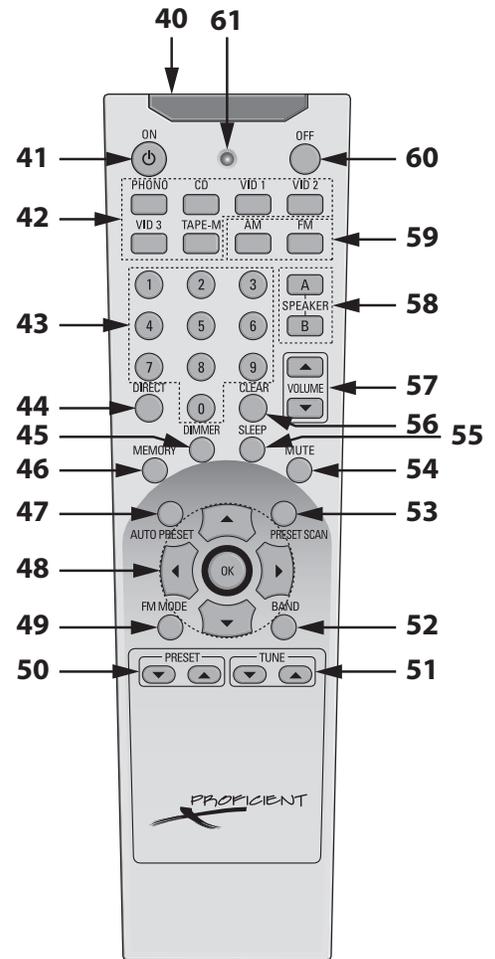


Diagram 3 M40 Remote Control Features

M40 REMOTE FEATURES

- 51. ▼ TUNE** - With either the AM or FM Tuner selected, a press of this button will decrease the tuner frequency by one increment. When a tunable signal is received, the TUNED icon will appear in the Front Panel Display over the Band Indicator (AM/FM). If tuning FM, the STEREO icon will appear in red to indicate a stereo signal. If the tuned frequency is also a Preset, the Preset number is indicated on the Front Panel Display to the right of the tuned frequency.
- TUNE ▲** - With either the AM or FM Tuner selected, a press of this button will increase the tuner frequency by one increment. When a tunable signal is received, the TUNED icon will appear in the Front Panel Display over the Band Indicator (AM/FM). If tuning FM, the STEREO icon will appear in red to indicate a stereo signal. If the tuned frequency is also a Preset, the Preset Number is indicated on the Front Panel Display to the right of the tuned frequency.
- 52. BAND** - With the M40 ON and the Tuner selected, press this button to switch between the AM and FM Bands.
- 53. PRESET SCAN** - With the M40 ON and the Tuner selected, a press of this button will start a cycle through the programmed Preset Channels. Each channel will play for five seconds and then the M40 will advance to the next Preset. Press the Preset Scan button again to select a Preset Channel.
- 54. MUTE** - With the M40 ON and with any source selected, pressing this button will cut the amplifier output to selected speakers. (There will be no sound coming from the speakers.) MUTE will slowly flash on the Front Panel Display. To un-mute the speakers, press the Mute button again.
- Note:** If an external amplifier is connected to the Pre-Out Jacks or if a subwoofer is connected to the Sub Out Jacks, MUTE will also mute/un-mute the external amp or subwoofer.
- 55. SLEEP** - With the M40 ON and with any source selected, pressing this button turns on the M40 Sleep Timer. Sleep Timer durations from 90-10 minutes, in 10 minute increments, can be set by repeatedly pressing the Sleep button until the desired sleep timeout is set. When set, a red clock icon will appear in the Front Panel Display and the display will dim to half brightness. (With a Sleep Timeout set, the display can be turned OFF with the Remote or Front Panel Dimmer buttons, but cannot be set to full brightness.) To check remaining time to OFF, press the Sleep button ONCE. The remaining time to OFF will appear in the Front Panel Display and then return to the dimmed, normal display. TWO presses will cancel the Sleep Timeout.
- 56. CLEAR** - With the M40 ON and either the AM or FM Band selected, press this button to delete numeric entries in Direct Tune Mode.
- 57. VOLUME▲ ▼** - With the M40 ON press the VOLUME ▲ button to turn volume up; press the VOLUME ▼ button to turn the volume down. The audio output level in dB (decibels) will be displayed on the Front Panel Display while either button is being pressed and for five seconds after a volume adjustment is made.
- 58. SPEAKER A** - With the M40 power ON, press this button to select the speakers connected to the Speaker A Terminals. When selected, the Front Panel Display will indicate 'SP.A' to show Speaker A is active. If Sub Out A is set to the ON position, this will also activate the Sub Out A associated with Speaker A.
- SPEAKER B** - With the M40 power ON, press this button to select the speakers connected to the Speaker B Terminals. When selected, the Front Panel Display will indicate 'SP.B' to show Speaker B is active. If Sub Out B is set to the ON position, this will also activate the Sub Out B associated with Speaker B.
- 59. AM** - In Standby or with the M40 power ON, press this button to turn the M40 ON, (if OFF) and select the AM Band. The tuner will select the last tuned AM Channel.
- FM** - In Standby or with the M40 power ON, a press of this button will turn the M40 ON, (if OFF) and select the FM Band The tuner will select the last tuned FM Channel.
- 60. OFF** - With the M40 power ON, press this button to turn the unit OFF (Standby). All functions will cease and the ON/Standby button backlight will illuminate red.
- 61. IR OUTPUT LED** - One, red LED flashes while the remote is outputting IR commands.

INSTALLATION

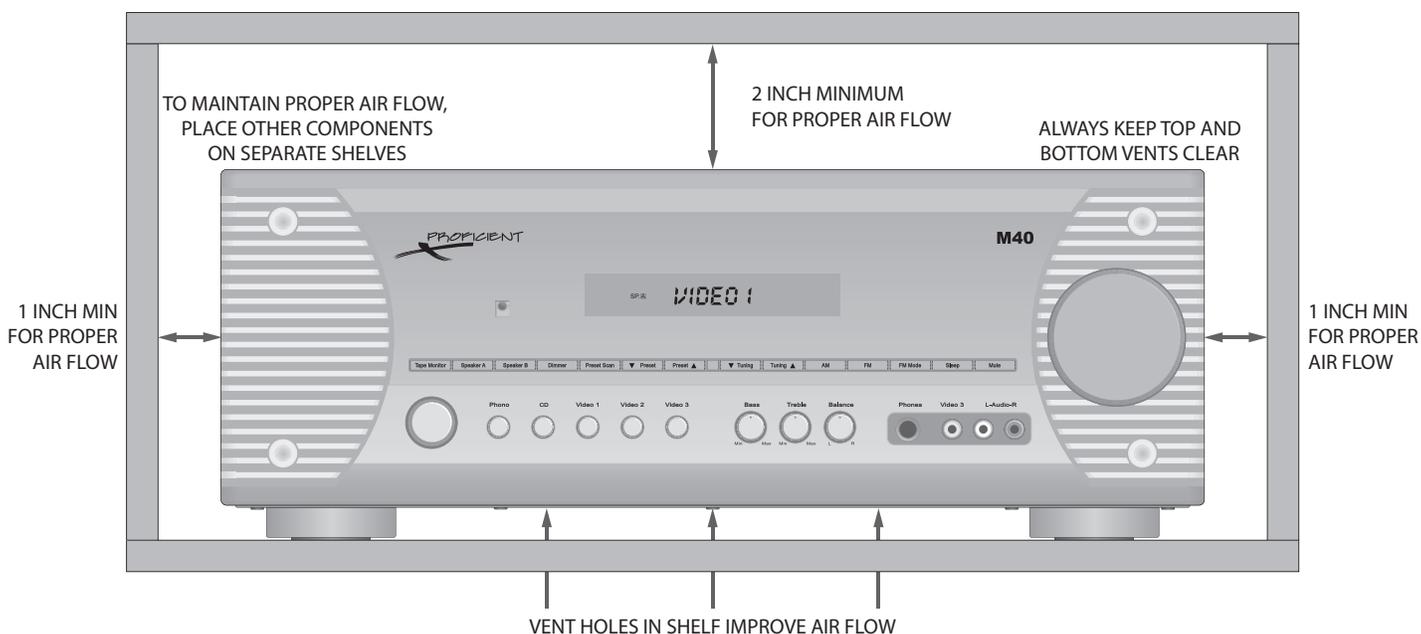


Diagram 4 M40 Air Flow Requirements

AIR FLOW

The Proficient M40 is designed to run cool under most normal operating conditions. However, closed spaces such as equipment cabinets and racks can get hot with the heat generated by microprocessors and motors in various devices. Providing proper ventilation for good air flow will help keep the temperature down and protect not only the M40 but all system components and help preserve their longevity.

When installing the M40 a few easy steps should be taken to assure proper air flow:

1. Never block the vent holes on the top or bottom of the M40.
2. Never remove the feet on the bottom of the M40.
3. Leave at least 2 inches above and 1 inch on each side of the M40 for free air flow.
4. Whenever possible, provide vent holes in the shelf under the M40 to increase air flow into the bottom of the unit.
5. Leave the back of the cabinet as open as possible for good air circulation.
6. Place other system components on separate shelves.
7. Install fans in cabinets and racks when equipment is generating high heat levels.

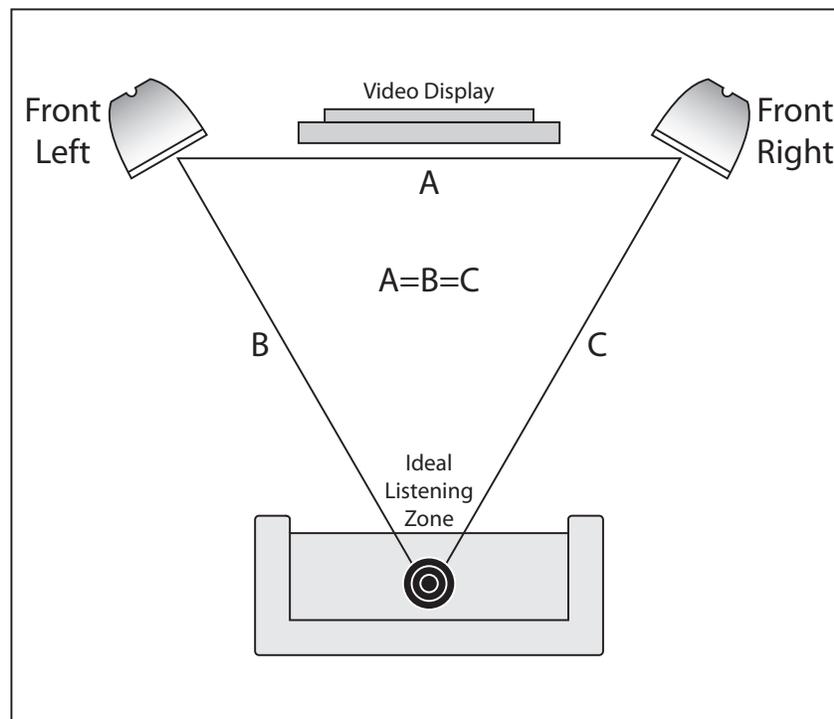


Diagram 5 *Speaker Placement*

SPEAKER PLACEMENT

Use the following recommendations when determining speaker placement.

Determine The Ideal Listening Zone

The area where the user will most likely be sitting when listening to the speakers is the Ideal Listening Zone.

Placement of Stereo Speakers

The distance between the left and right speakers should equal the distance from one speaker to the listener as closely as possible. ($A=B=C$) The left and right speakers should also be equal distances from a TV or Video Display for balance with audio/video content.

Bookshelf Speakers

In audio/video applications when using bookshelf speakers, locating the speakers at the same height as the TV or Video Display and at equal distances to left and right of the Video Display will create an effect where the sound emanates from the picture.

Inwall Speakers

Ideally, speaker placement should be similar to that described for bookshelf speakers. Many brands of inwall speakers, including most Proficient models, have pivoting tweeters that can 'focus' the high frequency content directly to the Ideal Listening Zone and compensate for sometimes less than desirable placement so the sound will still be balanced with the Video Display.

Ceiling Speakers

Ceiling speakers are very popular in modern architecture. Ceiling speakers, like bookshelf or inwall speakers, should be placed at an equal distance from each other and the Ideal Listening Zone. Many Proficient ceiling speakers have pivoting tweeters that can 'focus' the high frequency content directly to the Ideal Listening Zone and compensate for sometimes less than desirable placement so the sound will still be balanced with the Video Display.

Subwoofer

Subwoofer placement isn't quite as critical as placement of the left and right speakers. The low frequency output of a subwoofer is non-directional, so the sub can be placed almost anywhere in a room. A little bit of trial and error may help in finding a particularly good location. Refer to the instructions provided with the sub for additional information.

CONNECTIONS

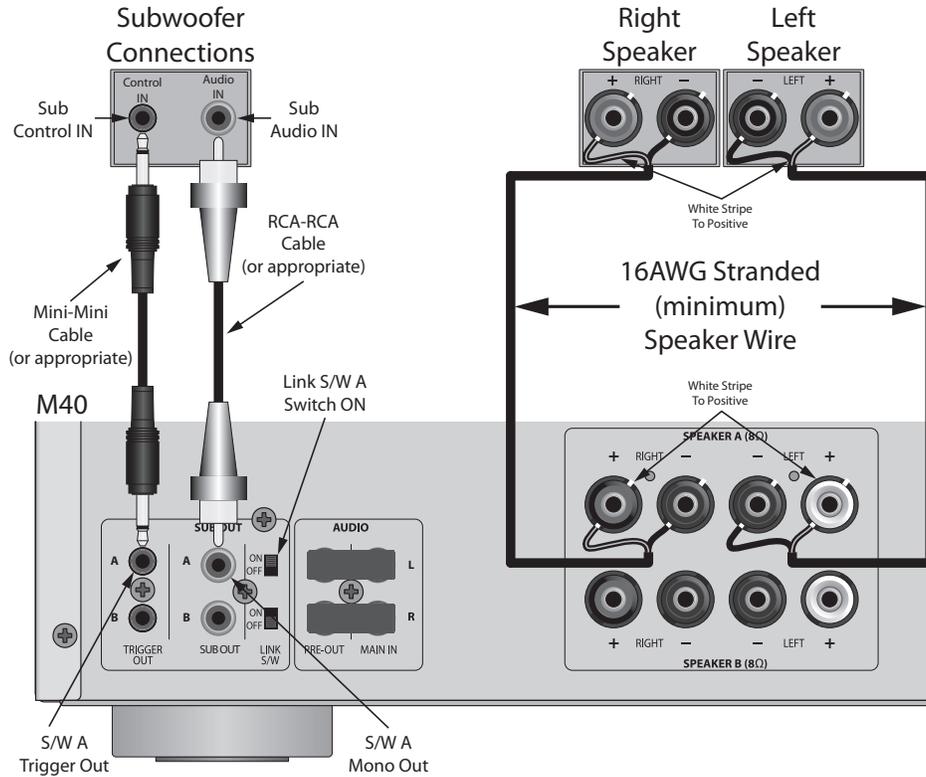


Diagram 6 Speaker & Subwoofer Connections

SPEAKER AND SUBWOOFER CONNECTIONS

Diagram 6 shows a typical application for connecting a pair of speakers to the M40 Speaker A Terminals and, if used, typical connections for adding an optional subwoofer to the Sub Out A.

Note: Do not connect more than one pair of 4Ω speakers directly to the M40. Do not connect more than one pair of 8Ω speakers directly to the Speaker A and B Terminals at the same time. This will cause the M40 to shut down and can damage the unit. This type of damage is not covered by the Warranty.

To connect multiple speaker pair to the M40, see Page 18.

Speaker A Connections

1. Use 16AWG (min) 2-conductor stranded speaker wire for speaker connection. (Refer to the Speaker Wire Length Chart on Page 18 for wire runs over 150')
2. Strip approximately ½ to ¾ of an inch off the ends and twist the strands together so there are no loose ends that can cause shorts.
3. Loosen the Speaker A Terminals as shown in **Diagram 7** so there is enough room between the post and the collar to feed the striped wire through without damaging the strands.
4. Tighten the post to secure the wire.
5. Repeat for all Speaker A Left and Right, + and –.
6. Confirm connection and polarity.
7. Connect the speaker wires to the appropriate left and right + and – terminals on the speakers.
8. Confirm connection and polarity.

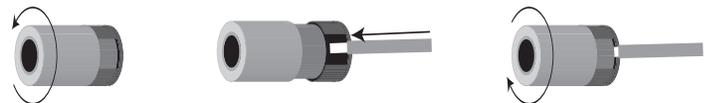


Diagram 7 Bare Wire Connections

Speaker B

A second pair of 8Ω speakers can be connected directly to the M40 using the Speaker B Terminals. This allows having a second pair of speakers that can be turned ON and OFF from the M40 Front Panel or Remote Control. This application is convenient for adding a pair of patio speakers that would not be left on all the time or a pair of speakers for another room.

Note: Do not connect more than one pair of 4Ω speakers directly to the M40. Do not connect more than one pair of 8Ω speakers directly to the Speaker A and B Terminals at the same time. This will cause the M40 to shut down and can damage the unit. This type of damage is not covered by the Warranty.

To connect multiple speaker pair to the M40, see Page 18.

Speaker B Connections

Follow all instructions for Speaker A, but this time use the Speaker B Terminals for the Left and Right Speakers.

Sub Out

Diagram 6 shows connections for adding a powered subwoofer with a 14V Control Input to Speaker A using the Sub Out A connections. This configuration will have the subwoofer turn ON when Speaker A is turned ON and turn OFF when Speaker A is turned OFF. The sub will also mute when Speaker A is mute. Configure Sub A as shown in **Diagram 6**.

Note: There are several different ways to connect a subwoofer to an audio receiver. One is to have the receiver's speaker level output connected to speaker level inputs on the sub. The sub then acts as a crossover, separating the high and low frequencies with the low frequencies going to the sub and the mid and high frequencies going to the connected left and right speakers. Some subs are passive (as just described), some are amplified, some have left and right line level inputs, some are mono for a mono signal from the receiver. The following describes a typical application for a powered sub that accepts a mono line level audio signal from the M40, with the left and right speakers connected to the M40 Speaker A terminals. Please refer to the subwoofer instructions for connection and operating options for varying subwoofer applications.

Sub Out A Connections

Audio

Using a mono RCA-RCA cable, connect the Sub A MONO Jack on the M40 to the Audio Line IN on the subwoofer. Some subs will have adjustable crossover points to match the low frequency cut-off of the left and right speakers. Refer to the sub manufacturer's instructions for additional information.

Trigger Out

Using a mono Mini-Mini Cable, connect the Sub A Trigger Out Jack on the M40 to the Control IN on the subwoofer.

Note: Some subs may have different types of connectors for the Control IN. Be sure to maintain proper polarity when making this connection. Refer to the sub manufacturer's instructions for additional information.

Trigger Out Polarity: TIP = +14V DC, SLEEVE = GND

Link S/W

Set the Link S/W A Switch to the ON position. This will have the Sub A Mono Out and Trigger Out turn ON/OFF with Speaker A status. (When Speaker A is ON, Sub A Mono Out will output full-band line level audio and Sub A Trigger Out will output a 14V DC Control Voltage. When Speaker A is OFF, both will turn OFF.

Sub Out B Connections

Follow all instructions for Sub Out A, but this time use Sub B Out for the subwoofer connections.

CONNECTIONS

Multiple Pair Speaker Hookup For a Multiroom Sound System

The previous section described connecting up to two pair of speakers to have music in two areas such as a Great Room and an adjoining Patio. What if that's not enough speakers? What about playing music throughout the entire house? The following section provides connection instructions for adding up to four pair of speakers to the M40 for a multiroom sound system with individual room volume control.

WARNING: *Never connect more than one pair of 8Ω speakers directly to the Speaker A and Speaker B Terminals at the same time. Doing so can damage the M40. This type of damage is not covered by the Warranty. Always use an impedance matching device such as the Proficient VC60i Volume Control (one for each speaker pair) to protect the M40 from overload. Multiple 8Ω speaker pair can be connected by adding one Proficient VC60i Impedance Matching Volume Control to each speaker pair. Never connect more than one pair of 4Ω speakers directly to the M40. Multiple 4Ω speaker pair connected directly to the M40 will cause the M40 to shut down and can damage the M40. This type of damage is not covered by the Warranty. Multiple 4Ω speaker pair can be connected by adding one Proficient VC60i Impedance Matching Volume Control to each speaker pair.*

Read and follow the instructions in this section when connecting multiple speaker pair to protect the M40 and help avoid unnecessary damage.

Speaker Wire

The whole house music application described below, requires that two pair of speaker wire be run from the M40 location to each volume control in home runs (each run direct from the M40 to each volume control). One additional pair of speaker wires will then be run from each volume control, to each of the speakers that will be controlled by that volume control.

In new construction, the wires should be pulled before the drywall is installed. In retrofit applications, (existing construction) the wires will need to be pulled through the walls and holes will need to be cut in the drywall for the volume controls and speakers. It is highly recommended that an audio/video installation professional be hired to do this type of work. Contact the retailer that the M40 was purchased from for information on professional installation.

Whole House Wire Requirement

1. Pull 1 run of 16AWG (min) 4-conductor stranded speaker wire from the M40 location to each volume control in a home run configuration. Leave extra length (24 inches) on both ends to work with when making connections.
2. Pull 1 pair of 16AWG (min) 2-conductor stranded speaker wire from the volume control to each of the left and right speakers that will be controlled by that volume control. Leave extra length (24 inches) on both ends to work with when making connections.

Use the following Chart to determine the proper wire gauge based on actual wire length from the M40 to each volume control and from the volume control to the speaker pair it will be controlling:

SPEAKER WIRE LENGTH	SPEAKER WIRE GAUGE
150' (46m)	16 AWG
400' (122m)	14 AWG
1,000' (305m)	12 AWG

Impedance Matching Volume Controls

Impedance matching volume controls can be set to compensate the overall load (number of speakers) that the M40 has to drive. This will keep the M40 from overloading and shutting down. The VC60i Volume Control has a slide switch that needs to be set according to the Impedance Matching Chart on Page 19. Do not mix different model impedance matching volume controls. The M40 must see a consistent load to all speakers.

The volume controls will need to be installed in proper low voltage J-boxes. Read and follow the instructions included with the volume controls for connection and installation of the volume controls.

Never install a volume control in a J-box with high voltage devices. This can introduce noise to the audio system and is a violation of Building and Electrical Code in most places.

The maximum number of speakers that can be connected to the M40 using impedance matching volume controls is four pair. All four pair should be connected to the Speaker A Terminal as shown in Diagram 8.

Setting Impedance

1. The M40 is capable of handling a 4Ω load. For 4Ω amp configuration using Proficient VC60i Impedance Matching Volume Controls, use **Chart 1**. If using another impedance matching device follow the manufacturer's instructions for that device.
2. Add up the number of 8Ω speakers that will be connected to one channel (left or right) of the amplifier or receiver. Find that number under "Number of 8Ω Speakers" on Chart 1.
3. Add up the number of 4Ω speakers that will be connected to one channel (left or right) of the amplifier or receiver. Find that number under "Number of 4Ω Speakers" on Chart 1.
4. On the chart, follow the column under the "Number of 8Ω Speakers" and the row next to the "Number of 4Ω Speakers" until they intersect. Set the slide switch to the letter in that box.
5. The gray area indicates a setting that is slightly below the amplifier or receiver's minimum impedance, but will most likely work.

VC60i Example 1:

The Example System in **Diagram 8** has four pair of Proficient C645 Ceiling Speakers connected to four Proficient VC60i Impedance Matching Volume Controls. The C645 are all 8Ω speakers.

1. To determine VC60i Slide Switch setting, use Chart 1.
2. There are four pair of 8Ω speakers. Find "4" under the 8Ω column on the chart.
3. There are no 4Ω speakers. Find "0" next to the 4Ω row on the chart.
4. The column and row intersect at "A".
5. Set the Slide Switch to "A".

VC60i Example 2:

Example System 2 has one pair of 8Ω speakers and three pair of 4Ω speakers.

1. To determine VC60i Slide Switch setting, use Chart 1.
2. There is one 8Ω speaker. Find "1" under the 8Ω column on the chart.
3. There are three 4Ω speakers. Find "3" next to the 4Ω row on the channel.
4. The column and row intersect at "B".
5. Set the Slide Switch to "B".

		Number of 8Ω Speakers						
		0	1	2	3	4	5	6
Number of 4Ω Speakers	0		A	A	A	A	B	B
	1	A	A	A	B	B	B	C
	2	A	B	B	B	B	C	C
	3	B	B	B	C	C	C	C
	4	B	C	C	C	C	C	C
	5	C	C	C	C	C	C	C
	6	C	C	C	C	C	D	D

Chart 1 Proficient VC60i Slide Switch Settings
4Ω Amp Configuration

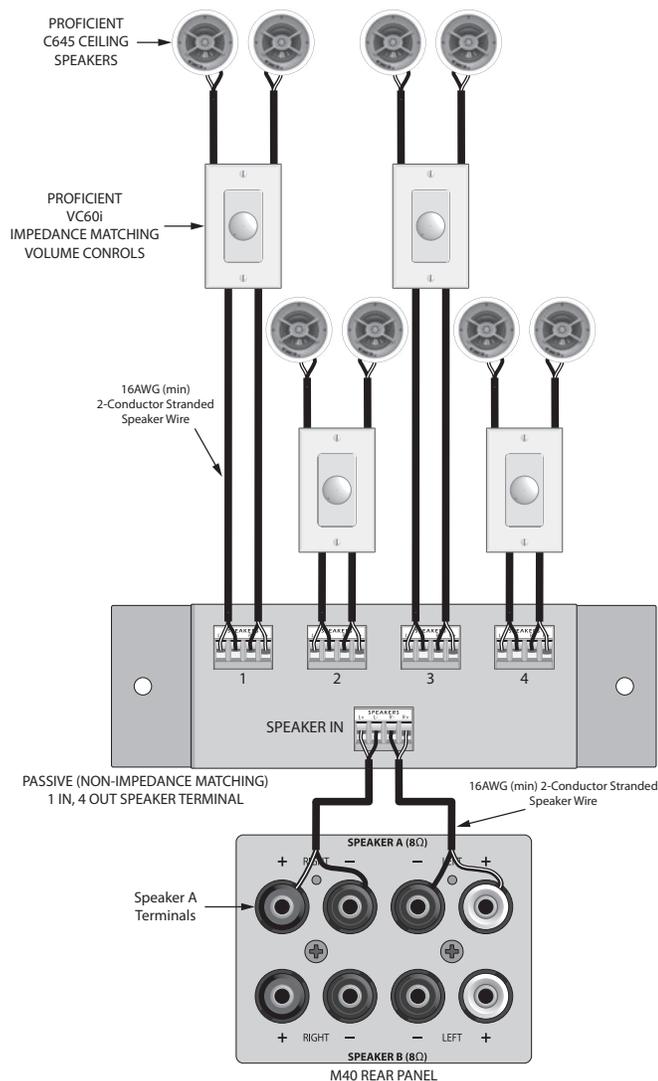


Diagram 8 Whole House Music Connections

CONNECTIONS

Multiple Speaker Pair Installation and Connections

Connecting the M40 to multiple speaker pair is pretty similar to connecting a single pair, just with more connections. The big difference is the use of impedance matching volume controls and use/connection of the 1 IN, 4 OUT Speaker Terminal.

Note: The 1 IN, 4 OUT Speaker Terminal shown in the Example System in **Diagram 8** is a generic representation of this type of device. There are many options available for this type of device, the only requirement is that it be a passive, (non-impedance matching) component, rated for 100 Watts, min.

1. Set the Slide Switches on the volume controls per the Impedance Matching Chart. (See **Chart 1**)
Note: The impedance setting should be the same on all volume controls.
2. Using 16AWG (min) 2-conductor stranded speaker wire, strip approximately $\frac{1}{2}$ to $\frac{3}{4}$ of an inch off the ends and twist the strands together so there are no loose ends that can cause shorts.
3. Loosen the Speaker A Terminals as shown in **Diagram 7** so there is enough room between the post and the collar to feed the striped wire through without damaging the strands.
4. Tighten the post to secure the wire.
5. Repeat for Speaker A Left and Right, + and -. Confirm connection and polarity.
6. Connect the speaker wires to the appropriate left and right, + and - Speaker IN Terminals on the 1 IN, 6 OUT Speaker Terminal, or equivalent, as shown in **Diagram 8**. Confirm connection and polarity.
7. Connect the speaker wire for Room 1 to the Speaker 1 left and right, + and - OUTPUT on the 1 IN, 6 OUT Speaker Terminal. Connect the other end to the left and right + and - INPUT on the Volume Control in Room 1. Confirm connection and polarity.
8. Connect the speaker wire for the Room 1 Speakers to the Volume Control left and right + and - OUTPUT. Connect the other end to the Room 1 left and right + and - Speaker Terminals. Confirm connection and polarity.
9. Install the volume control into the J-box per volume control instructions.
Note: *Never install a volume control in a J-box with high voltage devices. This can introduce noise to the audio system and is a violation of Building and Electrical Code in most places.*
10. Repeat Steps 8-9 for the Volume Control/Speaker sets for all other rooms.
11. To test, set the M40 to a moderate volume and play a source, (CD, Tuner, etc). Confirm audio output from both speakers in each room. Turn the VC60i Volume Control Knob to confirm volume UP/DOWN. Adjust the M40 Balance control full right to confirm only the right speakers are on. Adjust M40 Balance control full left to confirm only the left speakers are on. Correct connections as necessary.
12. For regular use, set the room volume controls to full ON. Adjust the M40 to a good listening level. Leave the M40 volume control in that setting and adjust volume with the individual room volume controls.

REAR PANEL CONNECTIONS

Antenna Connections

Connect the AM and FM Antennas to the AM and FM Antenna Terminals on the M40 Rear Panel as shown in **Diagram 9**.

AM Antenna

1. Connect the included AM Loop Antenna to the Antenna AM & GND Terminals. The spring clips are color coded, black and white. Connect the black wire from the antenna to the black terminal (GND) and the white wire to the white terminal (AM).
2. Position the AM Antenna for optimum reception. Experiment by moving the antenna high and low and turning it side to side until the best position is found. The antenna can be formed into a shelf top stand. With the antenna wire at the bottom and positioned AWAY from you, carefully pull the molded plastic piece in the middle away from you then down under the bottom of the loop. Pull toward the front until the tabs in the bottom of the loop snap into the slots in the molded piece. Be careful not to pinch the antenna wire. Position the antenna for best reception.

FM Antenna

Attach the FM Antenna 'F' connector to the FM(75Ω) Terminal. Extend the antenna to find the optimal position. Stretch the antenna completely vertical (up and down) and then try different side to side positions until optimum reception is attained. Use a small wire brad or thumb tack to secure the antenna to a wall or cabinet through the hole in the plastic end piece.

Phono Connections

Connect a Turntable to Phono IN and GND as shown in **Diagram 10**.

1. Connect the left and right RCA plugs from the Turntable to the L & R Phono INPUTS.
Note: Phono IN is a phono pre-amp input with a 2mV sensitivity for magnetic phono cartridges. If using a turntable with built-in phono pre-amp, use one of the other source, (line level) inputs.
2. Connect the ground wire from the turntable to the GND thumbscrew to reduce audio hum.

CD Connections

Connect a CD Player to CD IN as shown in **Diagram 11**.

Using a stereo RCA-RCA patch cable with gold ends, connect the L & R line level audio outputs of a CD Player to L & R CD IN on the M40 Rear Panel.

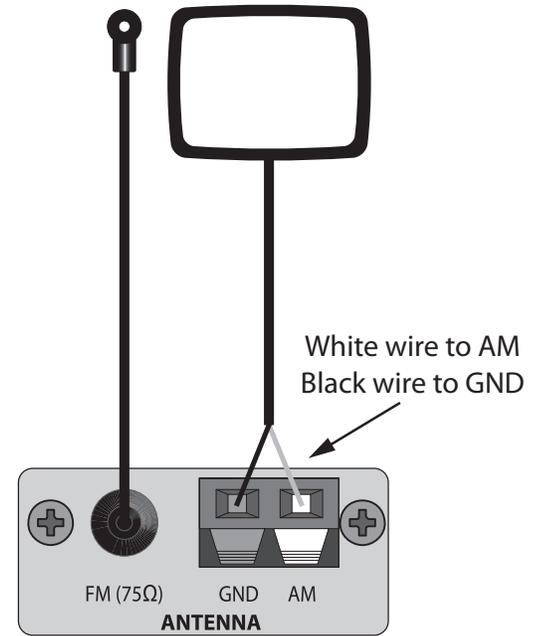


Diagram 9 Antenna Connections

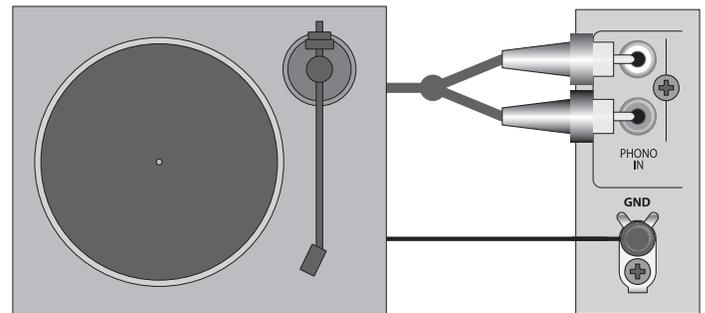


Diagram 10 Phono Connections

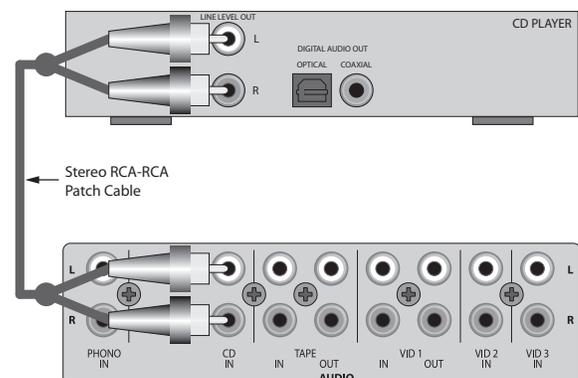


Diagram 11 CD Connections

CONNECTIONS

Tape In/Out Connections

Connect a CDR, Tape Deck or other audio record/playback device to Tape In/Out on the M40 Rear Panel as shown in **Diagram 12**. The Tape In/Out can also be used as a loop connection for an audio signal processor.

1. Using a stereo RCA-RCA audio patch cable with gold ends, connect the L&R line level audio OUT of the Audio Recorder to the L & R TAPE IN on the M40.
2. Using a stereo RCA-RCA audio patch cable with gold ends, connect the TAPE L&R OUT of the M40 to the appropriate L & R line level audio IN on the Audio Recorder.

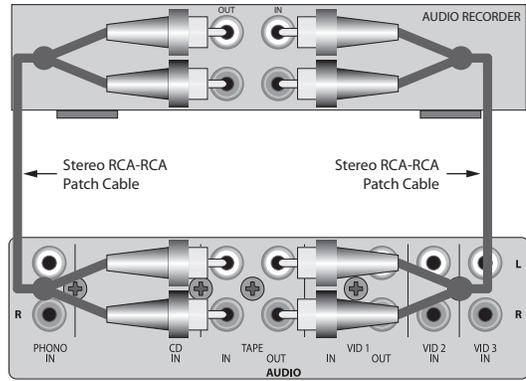


Diagram 12 Tape In/Out Connections

Video 1 In/Out Connections

Connect a DVR, VCR or other audio/video record/playback device to the Video 1 In/Out on the M40 Rear Panel as shown in **Diagram 13**. This will allow recording any A/V source selected on the M40 and playback of the recorded content.

1. Using a stereo A/V patch cable with gold ends, connect the L&R line level audio OUT of the A/V Recorder to the L & R VID 1 Audio IN on the M40. Connect the composite video OUT of the A/V Recorder to the VID 1 Video IN on the M40.
2. Using a stereo A/V patch cable with gold ends, connect the L&R VID1 Audio OUT on the M40 to the appropriate L & R line level audio IN on the A/V Recorder. Connect the VID Video OUT on the M40 to the appropriate composite video IN on the A/V Recorder.

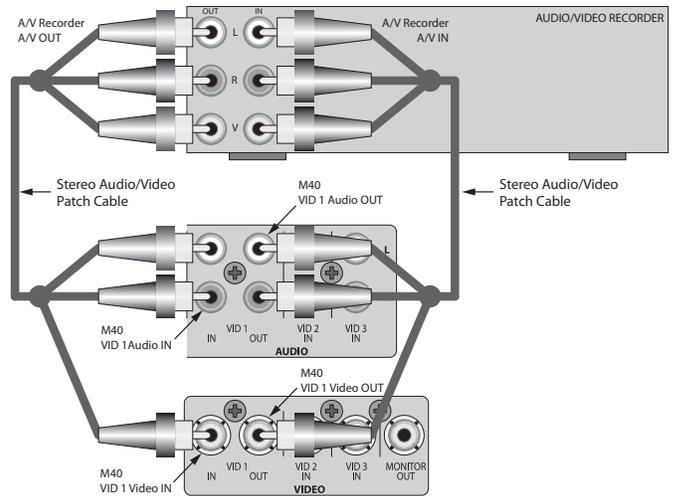


Diagram 13 Video 1 In/Out Connections

Video 2 Connections

Connect a DVD Player or other audio/video source to the VID 2 A/V Inputs on the M40 Rear Panel as shown in **Diagram 14**.

Using a stereo A/V patch cable with gold ends, connect the L&R line level audio OUT of the DVD Player to the L & R VID 2 Audio IN on the M40. Connect the composite video OUT of DVD Player to the VID 2 Video IN on the M40.

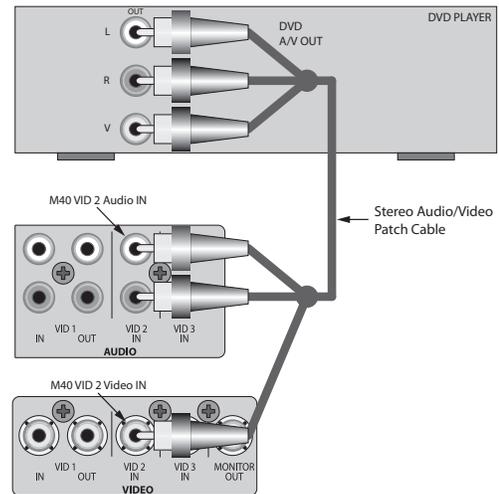


Diagram 14 Video 2 Connections

Video 3 Rear Panel Connections

Connect a Cable Box, Satellite Receiver or other audio/video source to the VID 3 A/V Inputs on the M40 Rear Panel as shown in **Diagram 15**.

Using a stereo A/V patch cable with gold ends, connect the L&R line level audio OUT of the Cable Box to L & R VID 3 Audio IN on the M40. Connect the composite video OUT on the Cable Box to the VID 3 Video IN on the M40.

Remote IN/OUT Connections

The Remote IN Jack on the M40 Rear Panel allows direct connection to the Flasher Output of an IR control system. This allows the M40 to be controlled when hidden in an equipment cabinet or closet, or from another room. Using the Remote IN Jack eliminates the need for attaching IR Flashers to the front panel of the M40.

The Remote OUT Jack can be connected to source components, that are equipped with compatible IR Control Input connections. This eliminates the need for IR Flashers on these devices.

Diagram 16 shows an application where the M40 Remote IN is connected to a Proficient IR Control System. In this example an IR Flasher is used on the DVD Player because it does not have an IR Control Input. Additional IR Receivers can be added for control from additional rooms. Additional Flashers can be added to control additional sources.

Diagram 17 shows an application where the M40 Remote IN is connected to a Proficient IR Control System. In this case, all of the sources have compatible IR Control Inputs and are daisy-chained for IR control without using IR Flashers.

Note: Not all devices that feature IR Control Inputs will be compatible with the Remote IN/OUT connection on the M40. IR Control Inputs typically receive IR signals that have had the carrier stripped but not all will be compatible. In some cases, IR Flashers will have to be used.

To make M40 Remote IN/OUT Connections:

- Using a mono mini-mini cable connect the Flasher OUT on a Proficient IR Router to the Remote IN Jack on the M40 Rear Panel.
- If using IR Flashers, connect the Flasher mini plug to a Flasher OUT on the IR Router. Attach the Flasher to the device being controlled, over the IR eye on that device. (**Diagram 16**) Add additional Flashers as needed.
- If using source components that feature IR Control Inputs, using a mono mini-mini cable connect the Remote OUT on the M40 Rear Panel to the IR Remote IN Jack on the device being controlled.
- To connect additional devices with IR Remote Inputs, connect a mono mini-mini cable to the IR Remote OUT on Source A to the IR Remote IN on Source B as shown in **Diagram 17**. Repeat Step 4 as needed.

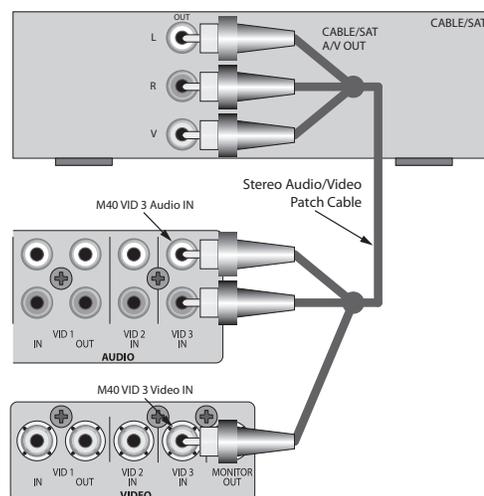


Diagram 15 Video 3 Connections

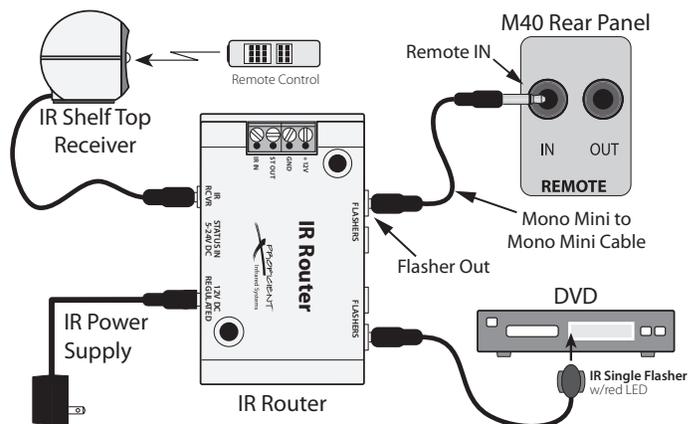


Diagram 16 Remote IN Connections with IR Flashers

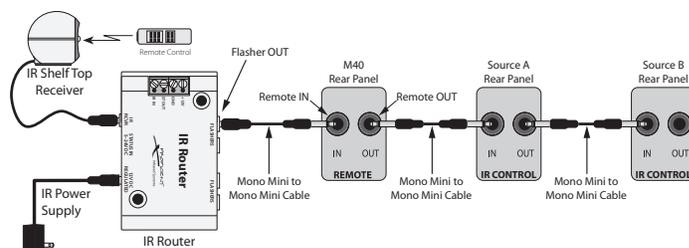


Diagram 17 Remote IN/OUT Connections with IR Control Inputs

CONNECTIONS

AC Outlets Connections

The M40 features two Switched AC Outlets. They turn ON/OFF with M40 power (ON/Standby). They can be used to control power on devices that are to be turned on and off at the same time as the M40. Devices with clocks and timers (DVR, TiVo, VCR) or that are connected to the internet for updates, (media servers, Satellite receivers, Cable Boxes) should be connected to unswitched outlets.

Only connect one device to each outlet. Be sure each device draws less than 100W.

1. Connect the power cords for up to two 'switched' devices to the AC Outlets on the M40 Rear Panel as shown in **Diagram 18**.
2. Set the mechanical power switch on each device to the ON position.

AC Power Cord

1. After all connections have been made and confirmed, and with the Main Power Switch in the OFF position, plug the attached AC power cord into an unswitched 110V AC outlet.
2. Turn the Main Power Switch ON. The ON/Standby button will illuminate red around the ON/OFF button. The M40 is ready for action.

FRONT PANEL CONNECTIONS

Video 3 Front Panel Connections

Connect a Video Game, MP3 Player, still or video camera, or other audio/video device that is not a regular system component to the VID 3 A/V Inputs on the M40 Front Panel as shown in **Diagram 19**. This eliminates having to pull the receiver out of its installed position to get to the rear panel connections.

Using a stereo A/V patch cable with gold ends, connect the L & R line level audio OUT of the Cable Box to L & R VID 3 Audio IN on the M40. Connect the composite video OUT on the Cable Box to the VID 3 Video IN on the M40.

Headphones Connection

Connect a pair of Headphones with a 1/4" stereo phone plug into the Phones Jack on the M40 Front Panel as shown in **Diagram 20**. Speaker A and B will be shut off while headphones are connected.

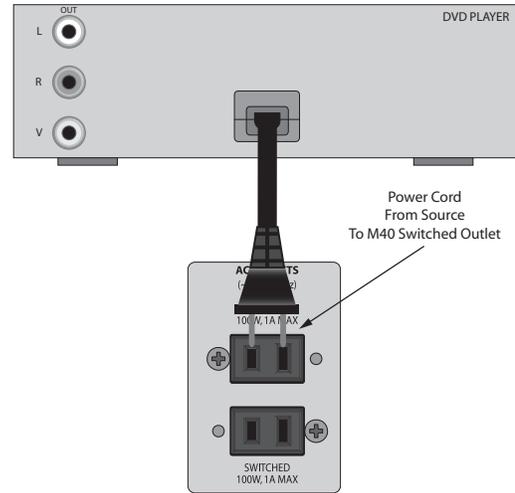


Diagram 18 Switched Outlet Connections

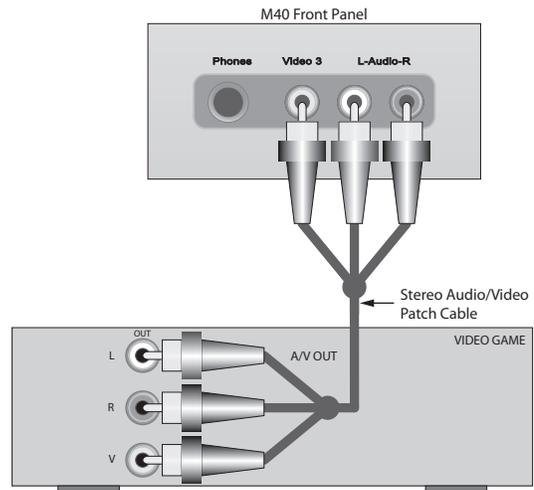


Diagram 19 Video 3 Front Panel Connections



Diagram 20 Headphones Connection

OPERATING THE M40

OPERATING THE M40

Before operating the M40, be sure all instructions from the previous sections have been followed regarding installation and connections.

Install M40 Remote Batteries

The M40 Remote Control comes with two AAA batteries. Install them into the Battery Compartment as shown in **Diagram 21**.

1. Remove the Battery Compartment Cover.
2. Batteries are most easily installed by first inserting the negative end (-) onto the spring terminals and then pressing the positive end (+) down into the Battery Compartment.
3. Replace the Battery Compartment Cover.

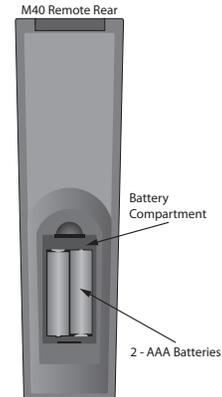


Diagram 21 Installing M40 Remote Control Batteries

Turning ON the M40

With the M40 properly installed and connected, and with the Main Power Cord plugged in to an unswitched 110V AC Outlet, turn ON the Main Power Switch on the M40 Rear Panel as shown in **Diagram 22**. The ON/Standby button Backlight will illuminate red to indicate Standby.

ON

Press the On/Standby button on the M40 Front Panel or ON button on the M40 Remote as shown in **Diagram 23**. The ON/Standby Backlight will turn blue and the Front Panel Display will turn ON.

OFF

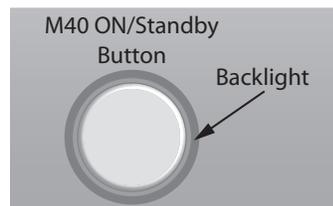
Press the On/Standby button on the M40 Front Panel or OFF button on the M40 Remote as shown in **Diagram 23**. The ON/Standby Backlight will turn red and the Front Panel Display will turn OFF.

M40 Rear Panel



Diagram 22 Main Power Switch ON

M40 Front Panel



M40 Remote



Diagram 23 M40 ON/Standby

Selecting Speakers A/B

With the M40 power ON, press the Speaker A button on the M40 Front Panel or M40 Remote to select Speaker A. Press the Speaker B button to select Speaker B. The selected Speaker(s) will appear in the Front Panel Display as shown in **Diagram 24**.

Deselecting Speakers A/B

With the M40 A and/or B Speaker(s) ON, press the Speaker A button on the M40 Front Panel or M40 Remote to deselect (turn OFF) Speaker A. Press the Speaker B button to deselect (turn OFF) Speaker B. The deselected Speaker(s) will not appear in the Front Panel Display.

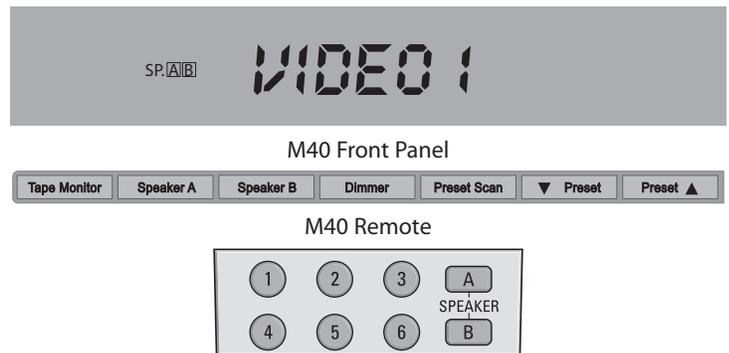


Diagram 24 Selecting Speakers A/B

OPERATING THE M40

Volume

With the M40 power ON turn the Volume Knob on the M40 Front Panel or press the Volume UP/Down buttons on the M40 Remote to adjust the speaker level audio output. Turn clockwise to turn volume up; turn counterclockwise to turn the volume down. The audio output level in dB (decibels) will be displayed on the Front Panel Display while the knob is being turned and for five seconds after a volume adjustment is made.

Mute

With the M40 power ON and with any source selected, press the Mute button on the M40 Front Panel or Remote to cut the amplifier output to the selected speakers. (There will be no sound coming from the speakers.) MUTE will slowly flash on the Front Panel Display. Press the Mute button again to unmute the speakers.

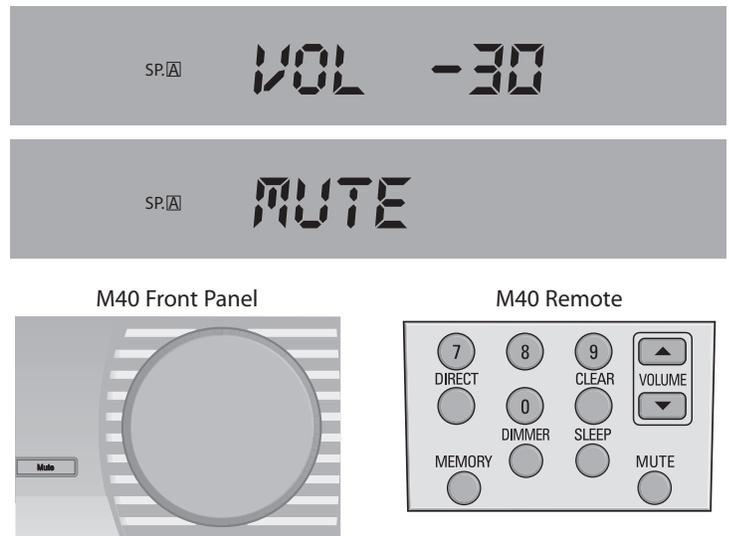


Diagram 25 Volume/Mute

Tone and Balance Controls

Bass

Turn the Bass Knob on the M40 Front Panel to adjust the bass (low frequencies) in the speaker level output. Turn counterclockwise to reduce bass; turn clockwise to increase bass. Center detente (click) is flat bass EQ.

Range: ± 10 dB.

Treble

Turn the Treble Knob on the M40 Front Panel to adjust the treble (high frequencies) in the speaker level output. Turn counterclockwise to reduce treble; turn clockwise to increase treble. Center detente (click) is flat treble EQ.

Range: ± 10 dB.

Balance

Turn the Balance Knob on the M40 Front Panel to adjust the relative audio level between the left and right speakers. If the speakers are positioned so that they are not an equal distance from the Ideal Listening Zone, (Diagram 5, Page 15) adjust the Balance so the amount of sound coming from the left and right speakers is equal. Turn counterclockwise to reduce right channel level; turn clockwise to reduce left channel level.



Diagram 26 Tone and Balance Controls

OPERATING THE M40

Selecting a Source

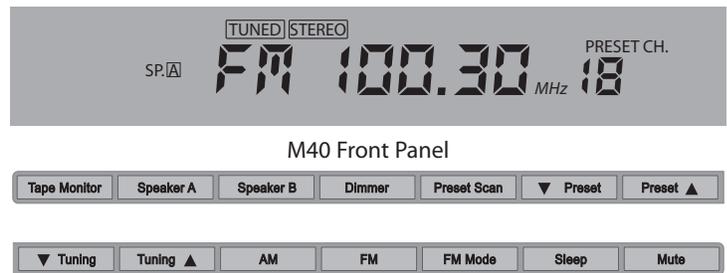
In Standby or with the M40 power ON, press one of the Source buttons on the M40 Front Panel or M40 Remote to select that source. The selected source will appear in the Front Panel Display as shown in **Diagram 27**. If the M40 is in Standby a press of one of these buttons will turn the M40 ON and select the source.



Diagram 27 Selecting a Source

Operating the Tuner

In Standby or with the M40 power ON, press the AM or FM button on the M40 Front Panel or M40 Remote to select the desired tuner band. The selected band and frequency of the last tuned channel will appear in the Front Panel Display as shown in **Diagram 28**. If the channel is FM Stereo, the STEREO icon will appear. If the channel is a Preset, the Preset Number will be displayed. If the M40 is in Standby a press of one of these buttons will turn the M40 ON and select the Tuner Band.



Tuning (Manual)

With either the AM or FM Tuner selected, press the ▼ TUNING or TUNING ▲ button on the M40 Front Panel, ▼ TUNE or TUNE ▲ button or Left/Right Cursor buttons on the M40 Remote to decrease or increase the tuner frequency by one increment. When a tunable signal is received, the TUNED icon will appear in the Front Panel Display over the Band Indicator (AM/FM). If tuning FM, the STEREO icon will appear in red to indicate a stereo signal. If the tuned frequency is also a Preset, the Preset Number is indicated on the Front Panel Display to the right of the tuned frequency.

Band

Press this button on the M40 Remote to toggle between the AM and FM Bands.

FM Mode

Press this button on the M40 Front Panel or Remote to switch the FM Tuner between stereo and mono modes. Typically, FM Mode should be left in the stereo mode. The mono setting can be useful for cleaning up background noise when tuned to weak stereo channels.



Diagram 28 Tuner Controls

OPERATING THE M40

Presets

The M40 can store up to 30 AM or FM Preset Channels (30 total). They can be stored manually by individually tuning channels and saving them as Presets. The Auto Preset function can be used to quickly store up to 30 FM channels. Auto Preset will scan the FM Band up to two times and then stop automatically.

Preset Programming (Manual)

1. Using the ▼ TUNING or TUNING ▲ buttons on the M40 Front Panel or the ▼ TUNE or TUNE ▲ buttons on the M40 Remote, manually tune an AM or FM Channel to be stored as a Preset.



Diagram 29 Programming Presets

2. Press the Memory button on the M40 Remote. MEMO will begin to flash slowly on the Front Panel Display. (Diagram 29)
3. Enter a number from 1-30 to store the channel as a Preset.
Note: If a Preset has already been programmed entering that Preset Number with a new channel will replace the existing Preset Channel.

Auto Preset

1. With the FM Tuner Band selected, press and hold the Auto Preset button on the M40 Remote until MEMO and Preset Number begin to flash in the Front Panel Display. (Diagram 29) The M40 Tuner will scan the FM Band, and automatically store up to 30 tunable FM channels. If fewer than 30 channels are found, the tuner will scan the band two times and then stop.

Note: Once programmed, there may be channels that have been stored using Auto Preset that may be undesirable. These channels can be replaced with AM channels or possibly some harder to tune FM channels that were not picked up in the scan mode using the Preset Programming method in the previous section.

Tuning Preset Channels

Preset Channels can be tuned in three ways: Preset Scan, Manual Preset Tuning, Direct Numeric Preset Tuning.

Preset Scan

With the M40 ON and the Tuner selected, press the Preset Scan button on either the M40 Front Panel or the M40 Remote to start a cycle through the programmed Preset Channels. Each Preset will play for five seconds and then the M40 will advance to the next Preset. Press the Preset Scan button again to select a Preset Channel. The selected Preset Number is indicated on the Front Panel Display to the right of the tuned frequency.



M40 Front Panel



M40 Remote



Diagram 30 Tuner Preset Controls

Manual Preset Tuning

With either the AM or FM Tuner selected, press the ▼ PRESET or PRESET ▲ button on the M40 Front Panel or M40 Remote to select the previous/next programmed Tuner Preset. The selected Preset Number is indicated on the Front Panel Display to the right of the tuned frequency. The M40 Remote UP/DOWN Cursor buttons can also be used for this function.

Direct Numeric Preset Tuning

With either the AM or FM Tuner selected, on the M40 Remote, press the Numeric buttons to select Preset Channels. To select Preset 1, simply press 1. To select Preset 30, press 3-0.

Dimmer

Press the Dimmer button on the M40 front Panel or M40 Remote to control of the brightness of the Front Panel Display. When the M40 is turned ON, the Front Panel Display will illuminate to full brightness. One press will dim the display to about half brightness, a second press will turn the display OFF. A third press will restore full brightness to the display.

Dimming the Front Panel Display may be desirable when watching movies or other video content in a darkened room, to reduce glare from the screen or if the illuminated display is distracting.

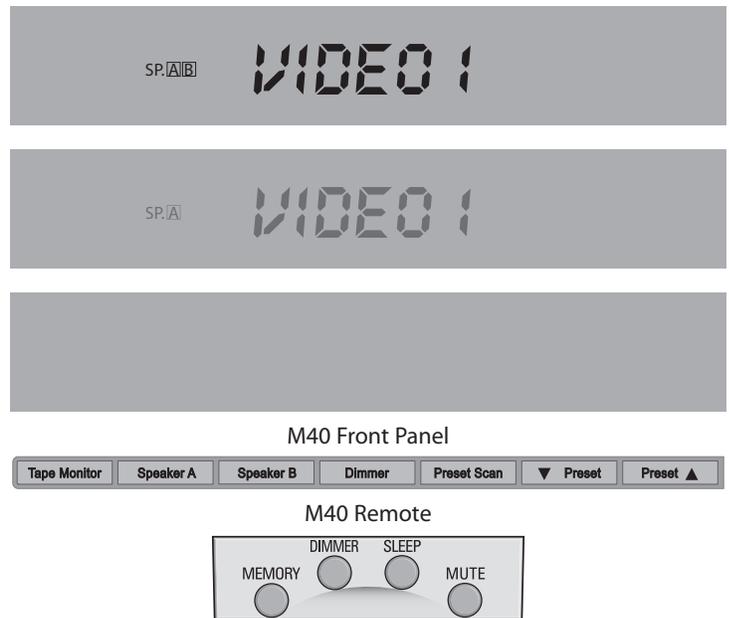


Diagram 31 *Dimming the Front Panel Display*

Sleep Timer

With the M40 ON and with any source selected, press the Sleep button on the M40 Front Panel or M40 Remote to turn on the M40 Sleep Timer. Sleep Timer durations from 90-10 minutes in 10 minute increments can be set.

1. Press the Sleep button. The Sleep Timer Setup will appear in the Front Panel Display as shown in **Diagram 32**. Repeatedly press the Sleep button until the desired sleep timeout is set. When set, a red clock icon will appear in the Front Panel Display and the display will dim to half brightness.

2. To check remaining time to OFF, press the Sleep button ONCE. The remaining time to OFF will appear in the Front Panel Display and then return to the dimmed, normal display. TWO presses will cancel the Sleep Timeout.

Note: With a Sleep Timeout set, the display can be turned OFF with the Remote or Front Panel Dimmer buttons, but cannot be set to full brightness.



Diagram 32 *Sleep Timer*

OPERATING THE M40

Tape Monitor (Audio Recording)

In Standby or with the M40 power ON, press the Tape Monitor button on the M40 Front Panel or Tape-M button on the M40 Remote to select the rear panel Tape IN/OUT. With a three-head tape deck or other device capable of outputting the actual recorded signal, this selection allows listening to the output of an audio recording device, while it is recording, to confirm the quality of the recorded signal.

1. Select the Source to be recorded by pressing that source button on the M40 Front Panel or Remote. The Source will be displayed in the Front Panel Display as shown in **Diagram 33**.
2. Press the TAPE Monitor button on the M40 front Panel or TAPE-M button on the M40 Remote to insert the Tape IN/OUT Loop. TAPE M will flash slowly on the Front Panel Display to indicate Tape Monitor is the signal being played at the speakers.
3. With the source to be recorded playing, (Tuner active, CD Play, etc) start the record process as appropriate on the audio recorder connected to the TAPE M Loop. A three-head recorder will output the recorded signal for monitor. (A standard two head recorder will typically pass the input signal through to its output while recording.)
4. To listen to the recorded content, after recording is finished, play the recorded content from the audio recorder via the TAPE M IN.

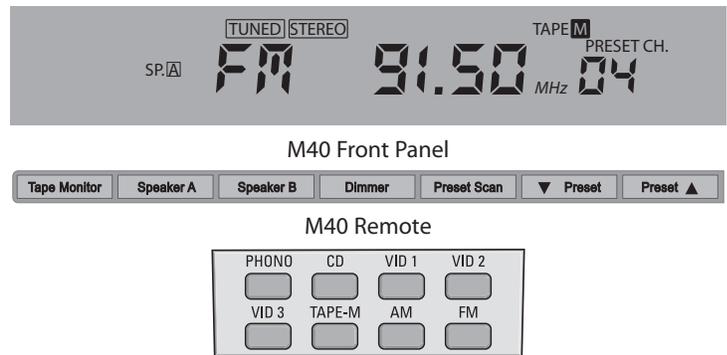


Diagram 33 Tape Monitor

Reset

In unusual circumstances, it may be necessary to reset the M40 microprocessor. After a power outage or surge, the M40 may not fully restore to normal operation. It may also be used to reset the M40 to factory defaults.

Note: Resetting the M40 by pressing the Preset Scan and Mute buttons will delete all Preset Channel Programming.

1. Turn the Main Power Switch on the M40 Rear Panel OFF.
2. Unplug the Power Cord for at least three minutes. Plug the Power Cord back in to the unswitched 110V AC outlet. Turn the Main Power Switch back ON and try to operate the M40. If it is still not operating properly, proceed with the following Reset Instructions.
3. Set the M40 to Standby. (ON/Standby button backlight red)
4. Press the Reset button on the M40 Rear Panel. Try M40 functions. If still not properly functional proceed to **Step 5**.
5. With the M40 in Standby, press and hold the M40 Front Panel Preset Scan and Mute buttons until the Firmware version appears on the Front Panel Display. Release the buttons. The display will flash a few times and turn off. The M40 will restore to Standby. If the M40 still does not function properly, call Proficient Technical Support at 877.888.9004.

Please remember Reset will clear all Tuner Preset programming.

TROUBLESHOOTING

PROBLEM	SOLUTION
Power	
Unit does not power up ON/Standby button Backlight does not illuminate	<ul style="list-style-type: none"> a) Confirm Power Cord is plugged in to an unswitched 110V AC Outlet. b) Confirm Main Power Switch on M40 Rear Panel is in the ON position.
Audio	
No Sound From Speakers Subwoofer does not turn ON/OFF with speakers	<ul style="list-style-type: none"> a) Confirm source audio connections. b) Confirm speaker connections. c) Confirm speakers are turned on. d) Confirm volume is turned up and un-muted. e) Confirm source is selected, turned on and playing. f) If connected, unplug headphones. g) Confirm Pre-Out/Main In Jumper connections. h) Confirm Tape Monitor is OFF if not the desired source i) Set Sub Out Link S/W Switch to ON. j) Confirm Sub Out Trigger connection.
Video	
No Video Signal on TV or Video Display	<ul style="list-style-type: none"> a) Confirm source video connections. b) Confirm video connection from M40 Monitor OUT to TV/ Video Display Composite Video IN. c) Confirm proper TV/Video Display Composite Video Input is selected. d) Confirm source is selected, turned on and playing.
Tuner	
No Reception Bad Reception	<ul style="list-style-type: none"> a) Confirm AM/FM antenna connections to M40. b) Confirm antenna(s) are in best position for optimum reception. c) Move antenna away from possible sources of interference such as computers, microprocessors, fluorescent lights, motors, etc.
No Preset Channels	<ul style="list-style-type: none"> a) Confirm Preset programming.
Remote Control	
Remote does not control M40	<ul style="list-style-type: none"> a) Replace batteries in remote. b) Confirm direct 'line-of-sight' from the remote to the IR Sensor on the M40 front Panel. c) Block any bright light or high ambient light that may be saturating the IR Sensor with light noise.

SPECIFICATIONS

Audio Sections

Power Output/Channel (RMS, two channels driven into 8Ω)	80 Watts, 20Hz to 20kHz
THD (at rated power)	<0.007%
Power/Channel (RMS, 2 channels driven into 4Ω)	125 Watts <0.1% @ 1kHz
Damping Factor	> 100
Input Sensitivity (For rated power @ max VC)	220 mV Line IN, 2.0mV Phono IN
Input Impedance (Source Inputs)	11 K Ohms Line IN, >20 k Ohms Phono IN
Input Overload (Source Inputs)	> 7 V Line IN, >110 mV Phono IN
Output Voltage @ Pre-Outs (w/220 mV @ Source Inputs)	1.25V, VC Setting, VC Max.
Output Impedance (Pre-Outs)	< 300Ω
Frequency Response (@ 1 Watt @ 8Ω)	10 Hz to 80 kHz ± 1.5 dB
Channel Separation	> 50 dB @ 10 kHz
Cross Talk Between Sources	> 80 dB @ 10 kHz
S/N Ratio (Re: Rated Output, IEC A, Line Inputs Shorted)	> 100 dB (VC 20 dB below FCW)
S/N Ratio (Re: Rated Output, IEC A, Phono Inputs Shorted)	> 90 dB (VC 20 dB below FCW)
Bass Control Range	±10 dB @ 100 Hz
Treble Control Range	± 10 dB @ 10 kHz

Video Section

Signal Format	Composite
Bandwidth (Outputs 75Ω Terminated)	10 Hz to 10 MHz ± 1dB
Input/Output Levels (I/O's 75Ω Terminated)	1.0V p-p ± 5%
Input/Output Impedance	75Ω, unbalanced

FM Tuner Sections

Tuning Range	87.5 - 108.0 MHz
Usable Sensitivity (IHF, 98.1 MHz)	10 dBf Mono
Sensitivity (50 dB quieting, 98.1 MHz)	17 dBf Mono, 35 dBf Stereo
S/N Ratio (65 dBf, 98.1 MHz)	75 dB Mono, 72 dB Stereo
Freq. Response (Mono or Stereo)	20 Hz to 15 kHz ± 3 dB
Separation (@ 1 kHz, 65 dBf)	> 40 dB
THD (1 kHz, 65 dBf, 98.1 MHz)	0.2% Mono, 0.4% Stereo
Capture Ratio (45 dBf)	2.0 dB
AM Rejection Ratio	50 dB
Alternate Channel Selectivity	70 dB

AM Tuner Sections

Tuning Range	520 to 1720 kHz
Sensitivity (20 dB Quieting, 1000kHz loop antenna)	500 mV/m
Selectivity (@ S/N 20dB, ± 10 kHz)	30 dB
S/N Ratio (400 Hz, 10 mV/m Input @ 1000 kHz, 30% Mod.)	45 dB
THD (400 Hz, 10 mV/m Input @ 1000 kHz, 30% Mod.)	0.8%
Selectivity	± 10 kHz, >25dB
Image Rejection (1400 kHz)	34 dB

SPECIFICATIONS

Control Sections

Trigger Outputs (0 to 14V DC)

14V @ 10 mA, 9.0V @100mA

General

Power Consumption 120V Version

Standby	3.0 Watts
No signal (idle)	55 Watts
At 1/8 Rated Power (10 Watts/Channel, 8Ω)	180 Watts
At 1/8 of 125 Watts (15.6 Watts/Channel, 4Ω)	260 Watts
Rear Panel marked Line Ratings	120V AC, 60 Hz, 230 Watts
AC Outlet Rating	120V AC, 100 Watts, 1 Amp each

Dimensions

17³/₈" W x 6¹/₂" H x 14³/₄" D

Weight

22²/₃ lbs

LIMITED 2-YEAR WARRANTY

Proficient Audio Systems (“Proficient”) warrants to the original retail purchaser only (“you”) that this product will be free from defects in materials and workmanship for a period of two years (the “Warranty Period”), subject to the limitations and exclusions set out in this Limited Warranty. This warranty is not transferable to subsequent owners of the product. If you discover a defect in material or workmanship within the Warranty Period, you can obtain warranty service by contacting Proficient during the Warranty Period at 877.888.9004 or techsupport@proficientaudio.com or by sending the product to Proficient at 940 Columbia Avenue, Riverside, CA 92507 or to the dealer from whom you purchased the product. Defective products must be shipped, prepaid and insured, together with proof of purchase. Warranty service requests made without proof of date of purchase will be denied. Freight collect shipments will be refused. It is preferable to ship this product in the original shipping container to lessen the chance of transit damage. In any case, the risk of loss or damage in transit is to be borne by the purchaser.

If, upon examination by Proficient it is determined that the unit is in fact defective, Proficient will, at its option:

- Repair or replace the product at no additional charge; or
- If the model is no longer available and cannot be repaired effectively, replace the unit with a current model of equal or greater value. In some cases where a new model is substituted, a modification to the mounting surface may be required. If mounting surface modification is required, Proficient assumes no responsibility or liability for such modification.

Proficient will bear the cost of returning the repaired or replaced product to you, freight prepaid. All replaced parts and product become the property of Proficient Audio Systems. The foregoing is your sole and exclusive remedy for breach of warranty. If the product is not found to be defective, Proficient will contact you to arrange for return of the product to you, at your expense.

EXCLUSIONS:

- This Warranty does not include service or parts to repair damage caused by accident, disaster, misuse, abuse, negligence, inadequate packing or shipping procedures, commercial use, voltage inputs in excess of the rated maximum of the unit, or service, repair or modification of the product by unauthorized dealers. This Warranty also excludes normal cosmetic deterioration caused by environmental conditions.
- This Warranty will be void if:
 - The Serial Number on the product has been removed, tampered with or defaced.
 - The product was not purchased from an authorized dealer.

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESSED AND IMPLIED WARRANTIES. PROFICIENT EXPRESSLY DISCLAIMS ALL SUCH OTHER WARRANTIES, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT. In no event will Proficient be liable for any incidental or consequential damages arising out of the use or inability to use the product, even if Proficient has been advised of the possibility of such damages, or for any claim by any other party. Notwithstanding the above, if you qualify as a “consumer” under the Magnuson-Moss Warranty Act, then you may be entitled to any implied warranties allowed by law for the Warranty Period. Further, some states do not allow limitations on how long an implied Limited Warranty lasts or allow the exclusion or limitation of consequential damages, so such limitations may not apply to you.

ATTENTION TO OUR VALUED CONSUMERS:

To insure that consumers obtain quality pre-sale and after-sale support and service, Proficient products are sold exclusively through authorized dealers. **Proficient products are not sold online** by Proficient or its authorized dealers, and this warranty is **VOID** if the products have been purchased from any internet reseller. If you have any questions about your reseller, please call Proficient at 877.888.9004.

For technical inquiries please call 877.888.9004 or email us at techsupport@proficientaudio.com. We are available to assist you every weekday, except holidays, between the hours of 7:00 a.m. and 5:00 p.m. PST.



940 Columbia Avenue, Riverside, CA 92507
877.888.9004 • Fax 951.750.6304 • proficientaudio.com
©2008 Proficient Audio Systems



1300-72400 (rev2)