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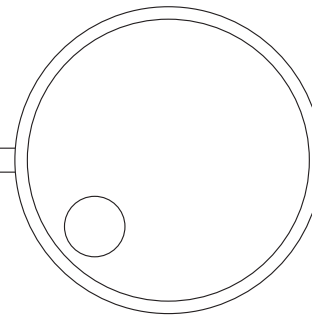
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[www.myryad.co.uk](http://www.myryad.co.uk)

# Z-SERIES

## Z140 Remote Controlled Integrated Amplifier

## Z160 Power Amplifier

# Owner's manual



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INTRODUCTION

The Myryad Z140 and Z160 have been designed to offer a combination of high quality sound reproduction and elegant styling.

The Z140 Integrated Amplifier can accept up to six line-level input sources, including two tape recorders. Outputs are provided for one pair of loudspeakers, for headphones and for an auxiliary power amplifier. All functions – input selection, volume and standby – can be operated using the infra-red remote control handset supplied.

The Z160 power amplifier can be used to provide power for high quality stereo systems when partnered by a suitable preamplifier or, in partnership with a Z140 Integrated Amplifier, to provide a very high performance four channel solution for bi-amp capable loudspeakers. Multiple Z160 amplifiers can also be used to power a full-surround music or Home Cinema sound system of the highest quality.

The Z160 has a pair of unbalanced line inputs plus directly linked line outputs, all on RCA phono sockets.

The Z140 and Z160 are both Smart My-Link compatible. When the Z140 is linked via the “Smart My-Link” to other compatible Myryad Z-Series, Cameo or M-Series products a number of extra features become available which make the system as a whole easier and quicker to operate.

INSTALLATION AND SAFETY NOTES

The Z140 and Z160 both generate a modest amount of heat and thus require ventilation. Do not place either on a rug or other soft surface into which they could sink, obstructing the air inlets in the underside. Do not allow papers or cloth to obstruct the ventilation grille in the top cover. Neither amplifier should be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided. If a number of Z-Series units are stacked on top of one another, the amplifier(s) should be placed on top.

**CAUTION: TO PREVENT A FIRE OR SHOCK HAZARD, DO NOT PERMIT ANY OF THESE PRODUCTS TO BECOME WET. IF LIQUID IS ACCIDENTALLY SPILLED ON ONE, IMMEDIATELY SHUT OFF ITS POWER AT THE WALL SOCKET AND UNPLUG THE AC POWER CORD. ALLOW SUFFICIENT TIME FOR COMPLETE EVAPORATION TO OCCUR BEFORE OPERATING IT AGAIN. IF THE LIQUID IS ANYTHING BUT WATER AND/OR ALCOHOL, A QUALIFIED SERVICE TECHNICIAN SHOULD EXAMINE THE UNIT BEFORE IT IS USED AGAIN.**

**DO NOT PLACE NAKED FLAMES SUCH AS LIGHTED CANDLES ON THIS PRODUCT.**

Do not remove the cover, or attempt to modify or repair any item yourself. Refer all servicing to a qualified technician.

ACCESSORIES

The Z140 and Z160 are supplied with the following accessories.

- Z140 Integrated Amplifier**
- Separate mains power cord to suit country of sale.
  - Remote control handset.
  - Four AAA batteries for handset (not in some countries).
- Z160 Power Amplifier**
- Separate mains power cord to suit country of sale.

Z-SERIES SYSTEM OPERATION WITH SMART MY-LINK

When used as a linked system (e.g Integrated Amplifier plus Power Amplifier, CD Player, DVD Player and Tuner), Z-Series products have a number of extra features that make the system as a whole easier and quicker to use than a normal hi-fi. These include:

**Start-on-Play (CD, DVD):**  
Press play on the CD or DVD Player (or the relevant remote control) and the player and Amplifier will switch out of standby (if necessary) and play the disc. The Amplifier will automatically select the appropriate source.

**Start-on-Open (CD, DVD):**  
With the units in standby, press open/close on the player. Both the player and amplifier will switch out of standby and the player’s drawer will open. The Amplifier will automatically select the appropriate source.

**Intelligent Input Selection (Amplifier):**  
Press a source select button on the remote control and the system will awaken (if in standby) only the Amplifier and the selected source.

**Mute/Pause Control (Amplifier/CD or DVD):**  
When using the CD or DVD Player, selecting mute from the remote control will mute the Amplifier and pause the disc. When the amplifier mute is cancelled, the disc will continue playing.

**Power-Saving Mode (Amplifier):**  
The Amplifier will switch the CD Player, DVD Player or Tuner into standby if any source remains unused for more than ten minutes.

**Automatic Switch-On (CD, DVD, Tuner):**  
If the standby button on the Tuner, CD or DVD player is pressed, the Amplifier will also awaken and select the correct source.

TROUBLE-SHOOTING GUIDE

Possible solutions to some of the most common problems.

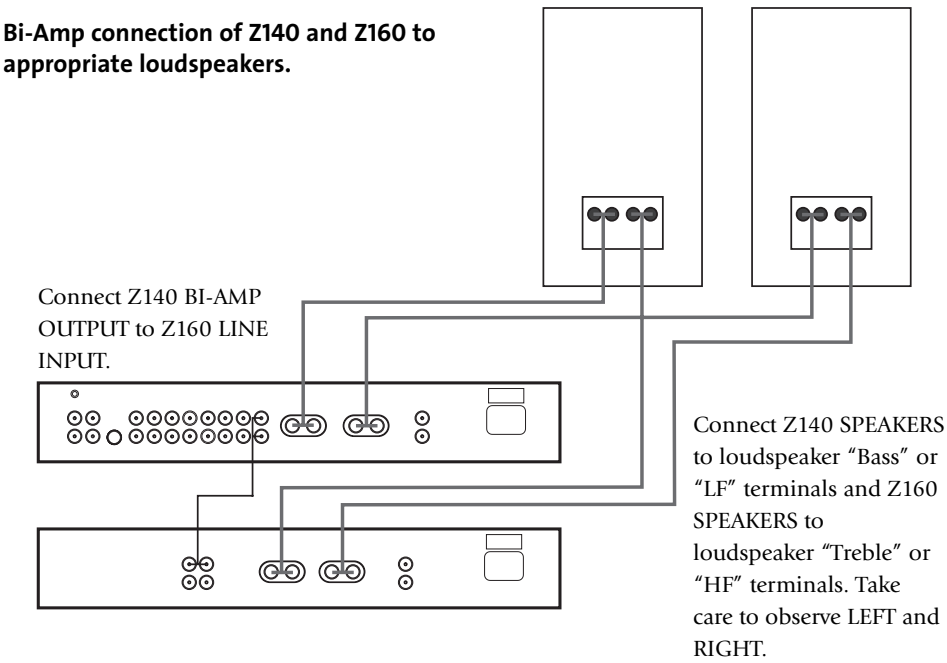
- No sound:**
- Power turned off or system in standby mode. Check that the green STANDBY LED in the amplifier is illuminated and that the relevant source component is also active.
  - An inoperative input has been selected (e.g. CD input with no CD playing).
  - An input has been selected with no source connected.
  - Protection relay has operated because of a short circuit loudspeaker wire or amplifier overheating. Carefully check all wiring after

- switching the amplifier POWER OFF to allow it to cool.
- UK version only: The fuse in the mains plug has failed. Check and replace if necessary.

- Sound in one channel only:**
- Loudspeaker cable pulled loose. Check all connections, both at the loudspeakers and amplifier.
  - Interconnect cable pulled loose or making poor contact. Check and, if necessary, un-plug and re-plug all relevant cables.

- Loud buzz or hum:**
- Interconnect cable pulled partially out of its socket.
  - Defective interconnect cable.

For further help please visit:  
[www.myryad.co.uk/faqs.html](http://www.myryad.co.uk/faqs.html)



SPECIFICATIONS

<b>Z140 Integrated Amplifier</b>	
Continuous rated power output, 8Ω (<0.1% THD) .....	50W
Signal/noise ratio (A-weighted, ref 50W) .....	102dB
Input sensitivity (ref 50W) .....	Line inputs: 250mV
Input sensitivity (ref 50W) .....	Phono input: 2.5mV
Frequency response (20Hz – 20kHz) .....	±0.3dB
Dimensions (w x h x d) .....	436 x 78 x 316mm
Weight (net) .....	6.7kg
Supply voltage (set by internal wiring) .....	120 or 230V
Finish .....	Natural Silver fascia with Silver Grey casing/Satin Black fascia with Black Casing.
<b>Z160 Power Amplifier</b>	
Continuous rated power output, 8Ω (<0.1% THD) .....	50W
Signal/noise ratio (A-weighted, ref 50W) .....	110dB
Input sensitivity (ref 50W) .....	700mV
Frequency response (20Hz – 20kHz) .....	±0.3dB
Dimensions (w x h x d) .....	436 x 78 x 316mm
Weight (net) .....	6.0kg
Supply voltage (set by internal wiring) .....	120 or 230V
Finish .....	Natural Silver fascia with Silver Grey casing/Satin Black fascia with Black Casing.

# LOUDSPEAKER OUTPUT PROTECTION AND MUTING

When the amplifier is in standby mode the loudspeaker output terminals are isolated from the amplifier by high quality relays. When the amplifier is first switched on from standby mode the loudspeaker outputs remain disconnected for a few seconds to allow the internal voltage levels to settle. The same process occurs when the amplifier is switched back into standby mode. This power-on mute does not disconnect the headphone socket, so it is recommended that headphones are unplugged from the amplifier before switching to standby mode and plugged in again after switch-on.

The same loudspeaker mute relay is used to protect both the amplifier and your loudspeakers against possible damage. If any one of a number of fault modes is detected (loudspeaker outputs short circuit, amplifier overheating, amplifier DC fault) the loudspeakers will be disconnected from the amplifier to protect both. In the case of a short circuit or DC fault the loudspeakers will be re-connected after a few seconds, but will be disconnected again if the fault persists. If overheating has caused the protection system to operate, then it will take some time for the heatsinks to cool sufficiently to allow the loudspeakers to be re-connected (probably between five and fifteen minutes depending upon the room temperature and ventilation). The amplifier will cool more quickly if it is switched to standby mode, or if the POWER is switched OFF.

# REMOTE CONTROL HANDSET OPERATION

The Z140 Integrated Amplifier is supplied with a System Remote Handset which can also control the Z-Series CD Player and Tuner.

The nine keys at the top of the handset control the Z140 Amplifier. The first five keys (CD, VIDEO, TUNER, AUX and TAPE 2) are used to select the input in a similar way to the front panel SOURCE button, but allowing any of these five sources to be accessed directly.

The “VIDEO” key selects the DVD input on the Z140. The TAPE 1 key functions exactly as the front panel TAPE 1 button.

Pressing one of the VOLUME  $\uparrow$  or  $\downarrow$  keys will cause the motorised volume control in the amplifier to rotate clockwise or anti-clockwise respectively. There is one aspect in which the remote operation of the volume control is different from manual operation. If the amplifier is in mute mode (after pressing MUTE on the R/C handset) then pressing the VOLUME  $\uparrow$  key will automatically disengage mute mode and re-connect the loudspeakers. This prevents an excessively high volume level from being set by mistake.

Pressing the MUTE key on the handset will engage mute mode. The loudspeakers will be disconnected and the green STANDBY LED will flash slowly. MUTE is a “toggle” function, so pressing the key again will disengage the mute mode.

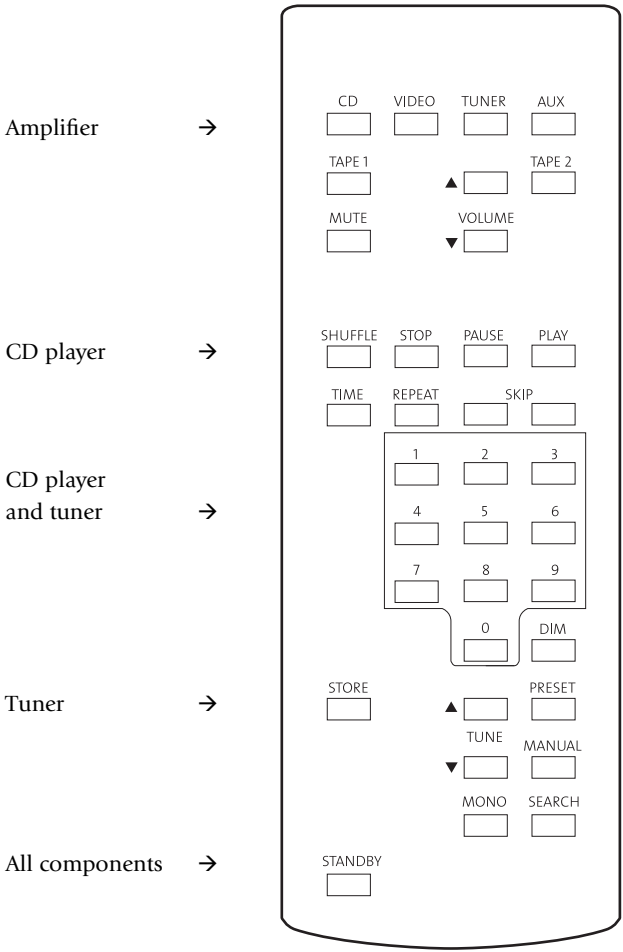
The green STANDBY key at the bottom left of the handset can be used to toggle the amplifier into or out of STANDBY mode (see Front Panel Controls, section).

The remainder of the System Handset buttons are dedicated to controlling the Z-Series CD Player and Tuner. Notes on their use can be found in the appropriate Owner’s manual.

# INSTALLING AND REPLACING HANDSET BATTERIES

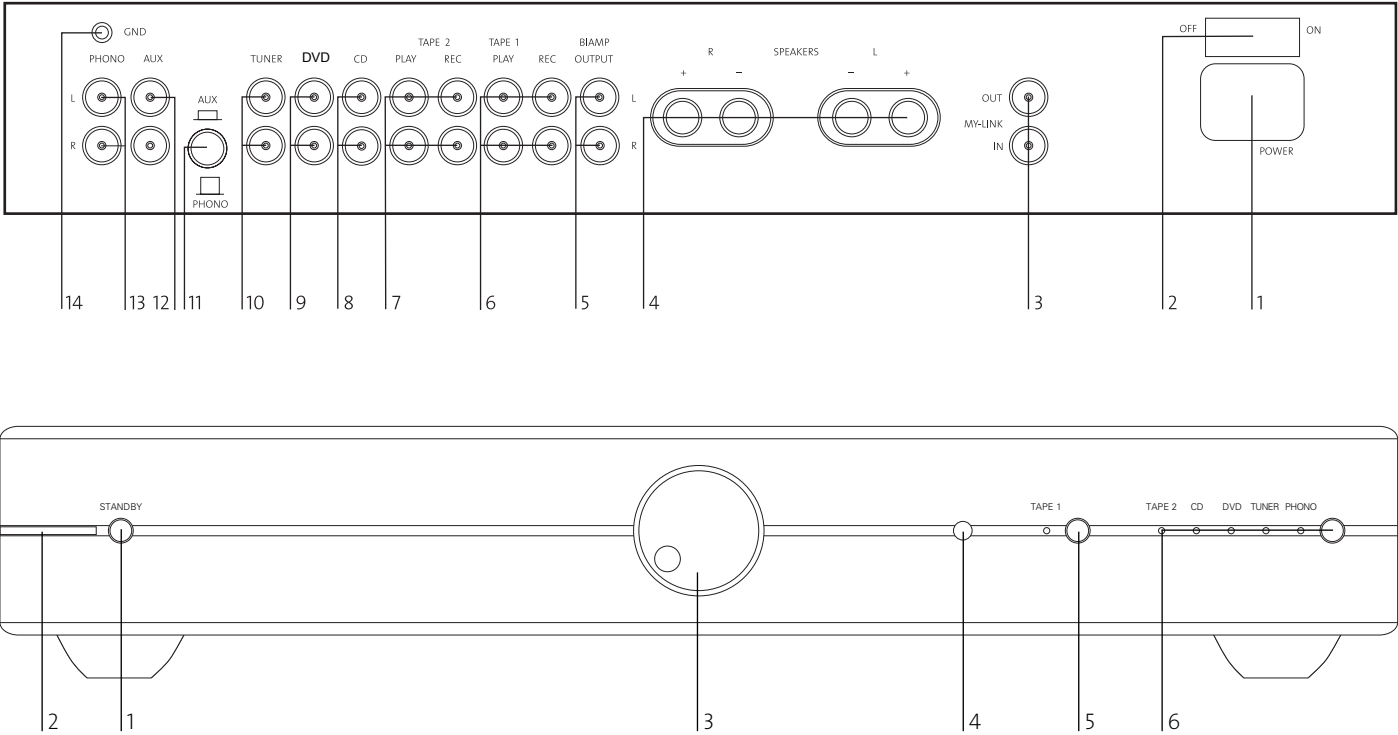
The System Remote Handset uses four 1.5 V type AAA batteries. To fit new batteries first open the battery compartment in the rear of the handset and remove any existing batteries. Fit the new ones as directed by the symbols moulded inside the battery compartment, then replace the battery compartment cover.

The batteries should always be removed if they are discharged (indicated by no remote control operation or by operation only at very short range), or if the remote control is not going to be used for an extended period.

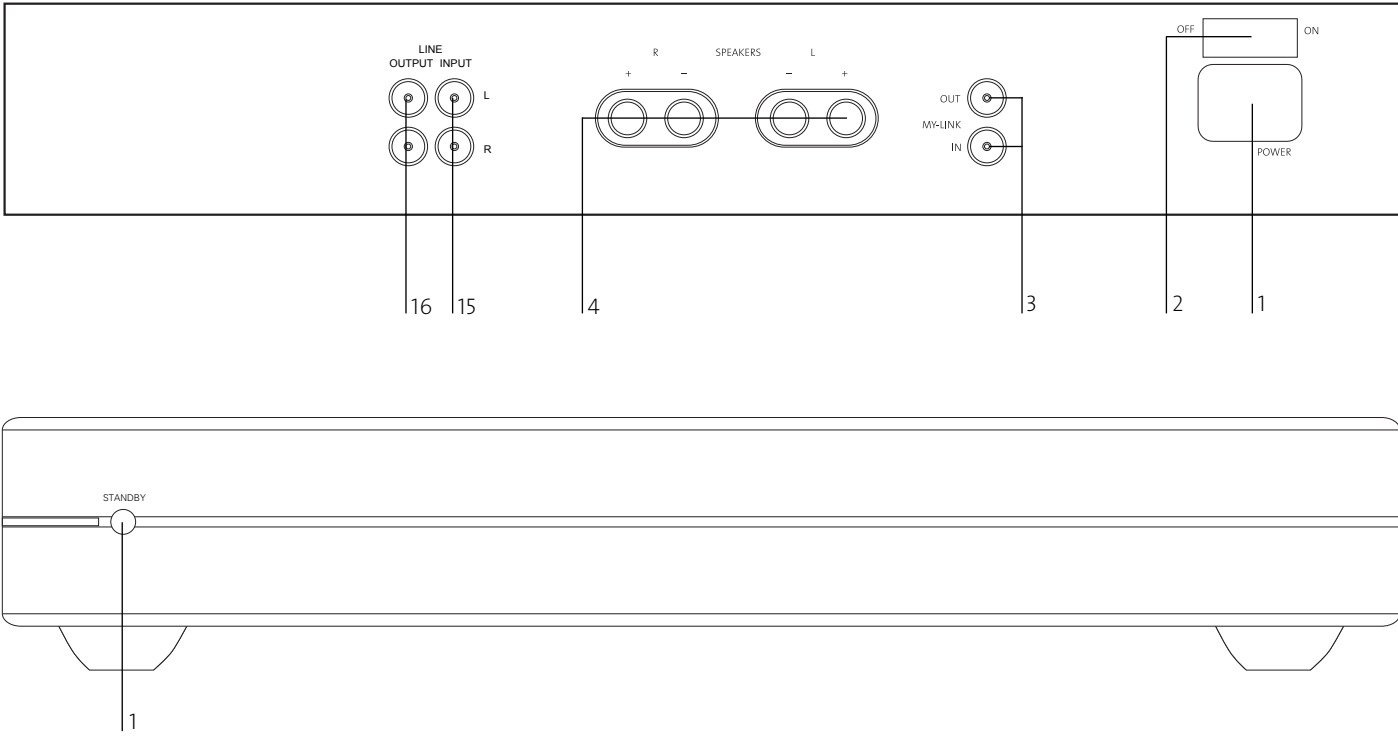


# SETTING UP YOUR SYSTEM

## Z140 Integrated Amplifier



## Z160 Power Amplifier





# REAR PANEL CONNECTIONS

## 1 Power inlet

Before making any connection, check that the mains voltage setting printed on the rear panel is the same as your local mains supply.

Plug the female (socket) end of one of the power cords supplied into the power inlet on the rear of each component. Plug the male (plug) end of each cord into a “live” wall socket or a suitable heavy duty extension cable.

UK version: The mains plug is supplied fitted with a 5A fuse. It should only be replaced with a fuse of the same rating (5A) which complies with BS1362.

## 2 Power switch

Press one side of this rocker switch (the side nearer the edge of the rear panel) to switch the amplifier ON and the other side to switch it OFF. When the POWER switch is in the OFF position all power is disconnected from the amplifier and it cannot be powered up from the front panel or the remote control. When the POWER switch is in the ON position (and the power cord correctly inserted and plugged in to a live wall socket) the amplifier will power up in standby mode (see FRONT PANEL CONTROLS, STANDBY, page 5).

It is recommended that the POWER switch is turned OFF if the amplifier is not going to be used for an extended period of time.

## 3 My-Link input/output

When the Z140 or Z160 is used in a system with other Z-Series (or Myryad M-Series, or Cameo) products, all may be joined together via My-Link. The My-Link is a communications bus that allows all the linked components to operate together as a system and distributes the remote commands received by any one to each of the others. The simplest function provided by the My-Link bus is that all linked units will switch into or out of standby mode when the integrated amplifier or remote control standby key is pressed.

Use a short RCA-to-RCA (phono-to-phono) interconnect cable to connect from the MY-LINK OUT socket on the amplifier to the MY-LINK IN socket on the CD player and a second cable from the MY-LINK OUT socket on the CD player to the MY-LINK IN socket on the tuner. Further Myryad Z-Series (e.g

Z160), Cameo or M-Series products can be linked in the same way, running from the MY-LINK OUT socket on the tuner. Inexpensive interconnects may be used as the Smart My-Link bus carries only control signals, not audio, so these cables have no effect on sound quality.

When Z-Series units are connected via the Smart My-Link bus many more powerful system features are available (see page 7).

## 4 Loudspeaker outputs

The loudspeaker outputs are capable of driving all loudspeakers with rated impedances in the range 4Ω to 16Ω. The loudspeaker terminals are high-current binding-posts, coded red or black. The terminals on the left side of the amplifier (viewed from the front) and marked “L” should be wired to the left –hand loudspeaker. Those on the right, marked “R”, should be wired to the right-hand loudspeaker.

For correct stereo imaging it is important that the two loudspeakers are wired “in phase”. To ensure correct phasing wire the black (–) terminal on the amplifier to the black or “–” terminal on the loudspeaker. The red (+) terminal on the amplifier should be wired to the red or “+” terminal on the loudspeaker.

The loudspeakers should be positioned as recommended by the loudspeaker manufacturer. The two loudspeakers should always be placed at equal distances from the main listening position and usually spaced a similar distance apart. It is generally best to keep the loudspeakers away from room corners and many loudspeakers work best away from all walls.

## 5 Bi-amp output (Z140)

Many loudspeakers today are made so that the bass and treble sections can be separated and fed from two sets of speaker cables. This is known as “bi-wiring” and can yield a significant improvement in sound quality. A further sound quality gain may be made by “bi-amplifying” the loudspeaker – using two separate power amplifiers to drive the bass and treble sections.

The Z140 makes provision for this with its “BI-AMP” output, which can be used to feed a separate Myryad Power Amplifier. The Z140’s loudspeaker outputs should be connected to the bass sections of the loudspeakers (left and right) while the separate power amplifier drives the treble. The diagram on page 7 illustrates bi-amp connection.

## 6 Tape 1 input/output (Z140)

These connectors are suited to any type of tape recorder, including high-quality “3-head” types which allow you to monitor the signal off the tape whilst it is being recorded. Connect a stereo cable from the TAPE 1 REC output sockets of the amplifier to the LINE IN or RECORD IN sockets on your tape deck. Connect a second stereo cable from the TAPE 1 PLAY input sockets of the amplifier to the LINE OUT or PLAY OUT sockets on your tape deck.

Any source selected for listening on the amplifier will automatically be fed to the TAPE 1 REC output sockets for recording. If the TAPE 2 input is selected then tape copies may be made from TAPE 2 to TAPE 1. It is NOT possible to copy from TAPE 1 to TAPE 2.

## 7 Tape 2 input/output (Z140)

These connectors are suited to any type of tape recorder, but “off-tape” monitoring is not possible using TAPE 2. The wiring from TAPE 2 to your tape deck is identical to the TAPE 1 wiring described above.

Any source selected for listening, except TAPE 1, will automatically be fed to the TAPE 2 REC output sockets for recording. It is NOT possible to record from TAPE 1 to TAPE 2.

## 8 CD input (Z140)

Connect the audio output cables from a CD player to these sockets. If you do not have a CD player then any other line level source may be connected to this input.

**NOTE: THIS INPUT IS FOR AN AUDIO SIGNAL, NOT FOR THE DIGITAL OUTPUT FROM YOUR PLAYER.**

## 9 DVD input (Z140)

Connect the audio signal output cables from a DVD player to these sockets. Use the outputs marked L and R or LF and RF (if the player has a built-in 5.1 channel decoder). Alternatively, any other line level source may be connected to this input.

**NOTE: THIS INPUT IS FOR AN AUDIO SIGNAL, NOT FOR THE DIGITAL OUTPUT FROM YOUR PLAYER.**

## 10 Tuner input (Z140)

Connect the audio output cables from a radio tuner to these sockets. If you do not have a tuner then any other line level source may be connected to this input.

## 11 Phono/Aux switch (Z140)

This switch is used to select between the PHONO and AUX inputs described below. With the switch released (button protruding) the signals from a record player connected to the PHONO input will be heard when the PHONO input is selected via the front panel switch or remote control. When the switch is pressed in, signals from the AUX input will be heard when PHONO is selected.

Sources can be left permanently connected to both the PHONO and AUX inputs and the PHONO/AUX switch used to select between them if desired.

## 12 AUX input (Z140)

The audio output from any line level source may be connected to this input.

## 13 Phono input (Z140)

Connect the audio output cables from a record player to these sockets. The input is designed for use with moving-magnet or “high-output” moving-coil phono cartridges. Consult your dealer if you are in any doubt what type of phono cartridge you have.

## 14 Ground terminal (Z140)

This terminal (marked GND) is provided for grounding a record player connected to the PHONO input. Some record players do not have a separate ground wire, in which case make no connection to this terminal.

## 15 Line input (Z160)

The line inputs may be connected to the line outputs of any quality preamplifier, or to the bi-amp outputs of an integrated amplifier such as the Myryad Z140.

## 16 Line output (Z160)

The line outputs are directly connected to the line inputs, without buffering. The line outputs allow further power amps to be “daisy-chained” so more complex systems may be built.

# FRONT PANEL CONTROLS

## 1 Standby

When amplifier is plugged into a live wall socket and the POWER switch is turned ON, it will power up in “standby” mode and the LED (Light Emitting Diode) by the STANDBY button will glow red. In this mode the internal circuitry is powered up, but disabled

so that it consumes very little power and the loudspeaker outputs are muted by a relay.

When the STANDBY button is pressed the circuitry is activated and, after a few seconds delay, the audio outputs will be enabled. During this delay period while the internal circuitry is settling the STANDBY LED will flash green. When the outputs are de-muted it will glow green continuously. When the STANDBY button is pressed again the amplifier will be returned to standby mode, the STANDBY LED will glow red again and all other LEDs and displays will be extinguished.

When the Z140 is switched out of standby, the input used last is automatically selected and, after a few seconds settling delay, the loudspeaker outputs will be connected. When first switched out of standby after POWER ON, the CD input will be selected by default.

**CAUTION: WHEN IN STANDBY MODE THE INTERNAL CIRCUITRY IS STILL LIVE, SO ALL SAFETY PRECAUTIONS MUST BE FOLLOWED.**

## 2 Infra-red receiver (Z140)

The infra-red (IR) remote control receiver is mounted behind this window in the position indicated. It must therefore not be obscured when the component is to be operated using the remote control handset. Where possible it is best to arrange that the IR window is in “line-of-sight” of the remote handset. When components are connected via the My-Link bus, only one needs to receive the IR command signals in order to control any of the linked units.

## 3 Volume control (Z140)

The volume control adjusts the sound level for both loudspeakers and headphones. It does not affect the signals fed to the TAPE 1 and TAPE 2 REC sockets so it can safely be adjusted whilst making a recording.

When the MUTE mode is engaged using the remote control, the STANDBY LED will flash repeatedly to indicate this condition. Always press MUTE on the remote handset again to disengage MUTE before advancing the volume control setting.

## 4 Headphone socket (Z140)

The headphones socket will accept a standard 3.5mm stereo jack plug or adapter. All types of headphones of any impedance may be used, with one exception: electrostatic headphones are usually supplied with an adapter unit which must be connected directly to the loudspeaker terminals. Insertion of a plug into the headphones

socket automatically disconnects the loudspeakers, silencing them. In order to resume listening to loudspeakers you must unplug the headphones from this socket. The headphones output is not muted when switching in and out of STANDBY mode, so it is recommended that headphones are unplugged from the amplifier before switching to standby mode and plugged in again after switch-on.

## 5 Tape 1 (Monitor) (Z140)

When you press the TAPE 1 button you can hear the output signal from a tape deck connected to the TAPE 1 PLAY sockets on the rear panel. This is a “toggle” function switch: you press it once to engage and press again to disengage. The green LED next to the TAPE 1 button illuminates to indicate that TAPE 1 is engaged.

Pressing the TAPE 1 button has no effect on any other input selected. The signal source selected by the SOURCE button will be fed to the TAPE 1 REC output sockets, irrespective of whether the TAPE 1 button is engaged or not. Thus, if you have a “three-head” tape deck that permits off-tape monitoring you can use the TAPE 1 button to switch back and forth between the source signal and the off-tape signal, to check its quality, whilst the recording is in progress.

**NOTE: IF THE TAPE 1 BUTTON IS ENGAGED WITH NO SIGNAL SOURCE CONNECTED TO THE TAPE 1 PLAY SOCKETS, OR WITH NO TAPE RUNNING, THEN YOU WILL HEAR ONLY SILENCE, REGARDLESS OF THE SETTINGS OF ANY OF THE OTHER CONTROLS.**

## 6 Source select button and LEDs (Tape 2, CD, DVD, Tuner and Phono inputs) (Z140)

The SOURCE select button is used to choose which of the signal sources you want to listen to (apart from TAPE 1 – see above). The chosen signal source is indicated by one of the green LEDs to the left of the source select button. When the button is pressed the next source is chosen, moving left to right (TAPE 2 → CD → DVD → TUNER → PHONO). If the button is pressed with PHONO selected the TAPE 2 input is selected next.

Whichever source is selected will be sent both to the loudspeakers and to the TAPE 1 REC and TAPE 2 REC output sockets for recording. The only exception is TAPE 2 which will not be fed to the TAPE 2 REC output sockets as this could cause dangerous oscillation. Recordings may be made from TAPE 2 to TAPE 1, but not from TAPE 1 to TAPE 2.