I22

AUDIOPHILE
INTEGRATED AMPLIFIER

USER GUIDE

WELCOME!

Welcome to the Primare I22! Your I22 is a high-quality integrated amplifier, designed as the ideal centrepiece of a home hi-fi system.

Optional DAC board
Digital inputs

TOSlink   SPDIF   USB   On/off

IR in/out   Trigger   RS232   Not   Analogue inputs   Record Preamp   Speaker (R)   Speaker (L)   Power
             out   active   Analogue outputs

GETTING STARTED

Set up your I22 in four simple steps:

1 UNPACK THE I22

Your I22 is supplied with the following components:

- Mains cable.
- IR cable.
- Trigger cable.
- C23 remote control.
- Two batteries for the remote control.

If any of these items are missing please contact your supplier. We recommend you retain the packaging in case you need to transport the unit at a later date.

2 CONNECT SPEAKERS

The I22 is designed to be connected directly to a pair of loudspeakers.

- Connect the red wire from each speaker to the red terminal marked + and the black wire from each speaker to the black terminal marked –.

The terminals can accept speaker cables terminated with spade terminals, banana plugs, or bare wires.

To connect bare wires unscrew the terminal, pass the bare wire through the hole in the terminal bolt, and clamp the wire in place by screwing the terminal back down hand tight.

3 CONNECT INPUTS

You can connect up to four sources to the inputs on the back panel.

- Connect the inputs IN1 to IN4 to suitable sources, using high quality RCA cables.

Optional DAC board
The optional DAC board provides three additional digital inputs:

- IN5: optical (TOSlink)
- IN6: digital coax (SPDIF)
- IN7: USB

The USB input allows you to connect the I22 to a PC or Mac and use it as a digital output from the computer.

For more information see the documentation supplied with the upgrade.

4 CONNECT POWER

- Plug one end of the mains cable supplied with the I22 into the power connector on the back panel, and connect the other end to a wall socket.

If this cable is not suitable for your power outlets please contact your supplier for an alternative cable.

Note: See *Phase*, page 8, for information about getting the best sound from your I22.

⚠️ **WARNING:** Always disconnect the I22 from the mains power before connecting or disconnecting any cables.

- Switch on the I22, using the switch on the back panel.

The standby indicator will light up on the front panel.

To switch on from standby
- Press ⏻ on the front panel or remote control.

The display shows:

```
PRIMARE
```

followed by the currently selected source and volume setting.

Press ⏻ again to switch to standby.

USING THE I22

This page explains how to operate your I22, using the functions available from the front panel or C23 remote control.

FRONT PANEL CONTROLS

Volume
Changes the volume.

Standby ⏻
Switches the I22 to standby, or switches it on from standby.

SELECTOR
Selects the previous or next input.

Hold down the lower **SELECTOR** button to change the balance.

VOLUME
Changes the volume.

SELECTING A SOURCE

The I22 provides a choice of four inputs. Initially these are labelled IN1 to IN4, but you can give them your own aliases to suit the sources in your system; see *Renaming an input*, page 6.

To select a source
- Press the **SELECTOR** buttons to step between inputs until the source is indicated on the left of the front panel display; for example:

```
01          23
```

- Alternatively, press the ▲ or ▼ buttons on the remote control to step between inputs, or press one of the buttons **1** to **4** on the remote control to select the corresponding input directly.

CHANGING THE VOLUME

The I22 allows you to vary the volume from 0 (silence) to 79 (maximum).

To change the volume
- Rotate the VOLUME control on the front panel, or press the **+** or **–** buttons (or the ◄ or ► buttons) on the remote control.

The current volume setting is shown on the right of the front panel display; for example:

```
01          24
```

To mute the sound
- Press the **MUTE** button on the remote control.

The display shows:

```
01          --
```

CHANGING THE DISPLAY BRIGHTNESS

To change the front panel display brightness
- Press the **DIM** button on the remote control to step through the three levels of illumination and blank.

CHANGING THE BALANCE

You can change the balance of the sound between the left and right channels to shift the position of the stereo image.

To change the balance
- Press and hold down the lower **SELECTOR** button on the front panel, or press the **BAL/ST** button on the remote control.

The front panel display shows the current balance setting:

```
00 LR 00
```

00 LR -9 corresponds to the leftmost position, **00 LR 00** corresponds to centre, and **-9 LR 00** corresponds to the rightmost position.

- Rotate the VOLUME control on the front panel, or press the ◄ or ► buttons on the remote control.

The current balance setting is shown on the front panel display; for example:

```
-7 LR 00
```

To exit from changing the balance press the **BAL/ST** button again, or wait a few seconds.

USING THE REMOTE CONTROL
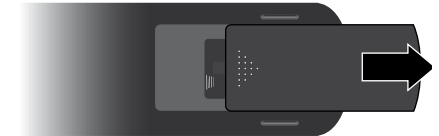
This page explains how to use the C23 remote control to operate the I22, and how to fit the batteries into the remote control.

Mute the sound

Change the display brightness
Switch on/off

Select an input
(5 to 7 with optional DAC board)

Select I22 mode

Decrease the volume

Increase the volume

Select next input or
move up on settings menu

Decrease the volume, or
change item on settings menu

Increase the volume, or
change item on settings menu

Select previous input or
move down on settings menu

Control the CD player

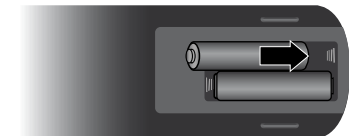Display the settings menu

Change the balance

FITTING THE BATTERIES

Before using the remote control you need to insert the two AAA batteries supplied with the C23.
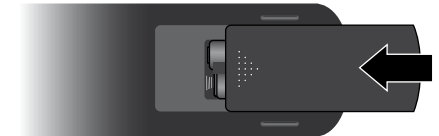
- Gently slide open the cover on the back of the remote control:

- Insert the two batteries, observing the polarity printed on the bottom of battery compartment:

- Slide back the cover until it clips into place:

⚠️ **Note:** Replace only with alkaline batteries type AAA, LR03, or equivalent.

When disposing of old batteries please be considerate to the environment.

5

CONFIGURING THE I22

The I22 allows you to rename the inputs and change the offset and balance of each input to suit the sources in your system.

RENAMING AN INPUT

You can give any input a name of your choice of up to six characters.

To rename an input

- Select the input you want to rename.

- Press and hold down both **SELECTOR** buttons for three seconds until the first character starts flashing.

> ```
> 01      23
> ```

- Select the character you want to edit using the **SELECTOR** buttons.

The selected character is shown flashing.

- Edit the character using the VOLUME control.

You can step through the sequence A to Z, 0 to 9, _, -, and blank. For example:

> ```
> BLURAY  23
> ```

When you've finished editing the name:

- Press and hold down both **SELECTOR** buttons for three seconds until the selected character stops flashing.

CHANGING THE INPUT OFFSET

You can adjust the relative volume of each input, between +9 and -9.

To change the input offset

- Select the input you want to change.

- Press and hold down the upper **SELECTOR** button for three seconds until the display shows the current offset.

> ```
> OFFSET  00
> ```

- Adjust the offset using the VOLUME control.

- Press the lower **SELECTOR** button to exit.

CHANGING THE INPUT BALANCE

You can adjust the initial balance of each input, between 0 and -9 in either direction.

To change the input balance

- Select the input you want to change.

- Press and hold down the upper **SELECTOR** button for three seconds until the display shows **OFFSET**.

- Press the upper **SELECTOR** button again until the display shows the current balance offset.

> ```
> BAL 00LR00
> ```

- Adjust the balance offset using the VOLUME control.

- Press the lower **SELECTOR** button to exit.

GENERAL SETTINGS

The I22 General Settings menu allows you to configure general aspects of the I22's operation.

USING THE GENERAL SETTINGS MENU

To display the General Settings menu from the front panel

● Press and hold down the ⏻ button until the display shows the version number:

```
VI-00
```

● Keeping the the ⏻ button held down press the lower **SELECTOR** button.

The first settings option is shown:

```
IR    FRONT
```

● Release the ⏻ button, then change the settings as described below

To display the General Settings menu from the remote control

● Press the **MENU** button.

The first settings option is shown:

```
IR    FRONT
```

● Change the settings as described below

To step between options

● Press the **SELECTOR** buttons, or press the ▲ or ▼ buttons on the remote control.

To change the value of the current option

● Rotate the VOLUME control on the front panel, or press the **+** or **–** buttons (or the ◀ or ▶ buttons) on the remote control.

To exit from the General Settings menu

● Press the ⏻ button on the front panel, or the **MENU** button on the remote control.

SETTING THE IR INPUT

● Set the **IR** option to **FRONT** to control the I22 using a remote control pointed at the front panel, or **BACK** to control it via the IR-input on the back panel:

```
IR    FRONT
```

After setting it to **Back** you can reset it to **Front** by operating the settings menu from the front panel controls.

CUSTOMISING THE VOLUME AND BALANCE

You can customise the start-up volume, set when you turn the I22 on from standby, and the maximum volume.

To set the start-up volume
Set the **DEFAULT** setting to the volume you want to use:

```
DEFAULT 25
```

To set the maximum volume
Set the **MAX** setting to the highest volume you want to allow:

```
MAX      60
```

ADVANCED SETTINGS

To set input 4 to fixed level
Input 4 can be configured to provide high-quality amplification of the main channels of a surround-sound processor, with volume control provided by the processor.

Note: This will give full-volume output.

● Configure the **IN4** option on the settings menu to **SSP**.

```
IN4     SSP
```

To use the I22 DAC board
Can be set to **NONE** or **DAC** to specify whether the I22 DAC board is installed:

```
MOD   NONE
```

If set to **NONE** only IN1 to IN4 will be available.

To reset the I22
Set the FACTORY option to Y to reset the I22 to the factory default settings.

Warning: this will reset any source settings and aliases you have defined.

```
FACTORY  Y
```

TECHNICAL SPECIFICATION

The I22 uses proprietary UFPD power technology to provide high power output with very low distortion, with an ecologically-friendly low standby power.

FEATURES

Ultra Fast Power Device (UFPD) Class-D Amplifier

26dB constant loop gain in the entire audio range

Power Factor Control (PFC) power supply

SPEAKER OUTPUTS

Power
2 × 80W into 8Ω, 2 × 160W into 4Ω

ANALOGUE OUTPUTS

Preamplifier output
RCA, 94Ω impedance.

Record output
RCA, 94Ω impedance.

INPUTS

4 × RCA, 15kΩ impedance.

OPTIONAL DAC BOARD

1× Digital Optical input (TOSlink)

1× Digital Coaxial input (RCA)

1× USB-B input

PERFORMANCE

Frequency response
10Hz – 20kHz, -0.5dB

THD
<0.05%, 20Hz – 20kHz, 10W into 8Ω

Signal to noise ratio
-95 dBv

GENERAL

Control
1 × 12V trigger output
1 × RS232

Power supply
90V -5% to 240V +5%

Power consumption
Standby: 0.3W
Operating: 19W

Size
430 × 420 × 106mm (WxDxH)

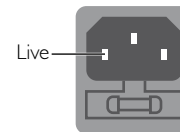**Weight**
10kg

Colour
Black or titanium

ADDITIONAL INFORMATION

These instructions help you get the best possible sound from your I22, and give information about using it with a CD22.

PHASE

The phase of the AC supply can make a significant difference to the sound.

Ensure that the live pin of the AC power cable is connected to the left-hand pin of the power connector, viewed from the back panel:

Live

BURN-IN

Your Primare will start to sound best after an initial burn-in of approximately 24 hours.

You will notice a further smaller improvement in sound quality for at least another 3 days' playing.

RS232 AND TRIGGER

The RS232 input allows you to connect the I22 to a controller system. For more information please contact Primare or visit www.primare.net.

The Trigger output allows the I22 to switch on other devices, such as a CD22.

USING THE I22 WITH A CD22

Your I22 is an ideal companion to the Primare CD22 CD Player. For best results link the two products together as follows using the two cables supplied with the I22:

To connect the trigger cable
The Trigger cable ensures that the CD22 switches on, or to standby, when you operate the ⏻ button on the front panel of the I22.

● Connect the Trigger cable from the I22 TRIG OUT to the CD22 TRIG IN.

● Configure the CD22 to **TRIG ON**.

To connect the IR cable
The IR cable ensures that the remote control **DIM** and ⏻ buttons operate both units in synchrony.

● Set the I22 and CD22 to the same display brightness setting.

● Connect the IR cable from the I22 IR OUT to the CD22 IR IN.

● Configure the CD22 to **IR BACK**.

Refer to the *CD22 User Guide* for details of how to configure the **TRIG ON** and **IR BACK** settings.

Safety compliance
This product has been designed to meet the IEC 60065 international electrical safety standard.

CAUTION
RISK OF ELECTRIC SHOCK DO NOT OPEN

ATTENTION
RISQUE DE CHOC ELECTRIQUE NE PAS OUVRIR

CAUTION: To reduce the risk of electrical shock do not remove cover (or back). No user serviceable parts inside. Refer servicing to qualified service personnel.

WARNING: To reduce the risk of fire or electrical shock, do not expose this apparatus to rain or moisture.

CAUTION: In Canada and the USA, to prevent electric shock, match the wide blade of the plug to the wide slot in the socket and insert the plug fully into the socket.

This product is designed and manufactured to meet strict quality and safety standards. However, you should be aware of the following installation and operation precautions.

1. Take heed of warnings & instructions
You should read all the safety and operating instructions before operating this appliance. Retain this handbook for future reference and adhere to all warnings in the handbook or on the appliance.

2. Water and moisture
The presence of electricity near water can be dangerous. Do not use the appliance near water – for example next to a bathtub, washbowl, kitchen sink, in a wet basement or near a swimming pool, etc.

3. Object or liquid entry
Take care that objects do not fall and liquids are not spilled into the enclosure through any openings. Liquid-filled objects such as vases should not be placed on the equipment.

4. Ventilation
Do not place the equipment on a bed, sofa, rug or similar soft surface, or in an enclosed bookcase or cabinet, since ventilation may be impeded. We recommend a minimum distance of 50mm around the sides and top of the appliance to provide adequate ventilation.

The lightning flash with an arrowhead symbol within an equilateral triangle, is intended to alert the user 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 the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

5. Heat
Locate the appliance away from naked flames or heat producing equipment such as radiators, stoves or other appliances (including other amplifiers) that produce heat.

6. Climate
The appliance has been designed for use in moderate climates.

7. Racks and stands
Only use a rack or stand that is recommended for use with audio equipment. If the equipment is on a portable rack it should be moved with great care, to avoid overturning the combination.

8. Cleaning
Unplug the unit from the mains supply before cleaning.

The case should normally only require a wipe with a soft, damp, lint-free cloth. Do not use paint thinners or other chemical solvents for cleaning.

We do not advise the use of furniture cleaning sprays or polishes as they can cause indelible white marks if the unit is subsequently wiped with a damp cloth.

9. Power sources
This appliance must be connected to a mains socket outlet using the supplied power cord. To disconnect this apparatus from power, you must disconnect the power cord. Make sure the power cord is always easily accessible.

Only connect the appliance to a power supply of the type described in the operating instructions or as marked on the appliance.

This is a Class 1 device and **must** be earthed.

The power switch is a single-pole switch. When the switch is in the "Off" position, the appliance is not completely disconnected from the main power.

10. Power-cord protection
Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords and plugs, and the point where they exit from the appliance.

11. Grounding
Ensure that the grounding means of the appliance is not defeated.

12. Power lines
Locate any outdoor antenna/aerial away from power lines.

13. Non-use periods
If the unit has a stand-by function, a small amount of current will continue to flow into the equipment in this mode. Unplug the power cord of the appliance from the outlet if left unused for a long period of time.

14. Abnormal smell
If an abnormal smell or smoke is detected from the appliance, turn the power off immediately and unplug the unit from the wall outlet. Contact your dealer immediately.

15. Servicing
You should not attempt to service the appliance beyond that described in this handbook. All other servicing should be referred to qualified service personnel.

16. Damage requiring service
The appliance should be serviced by qualified service personnel when:

A. the power-supply cord or the plug has been damaged, or
B. objects have fallen, or liquid has spilled into the appliance, or
C. the appliance has been exposed to rain, or
D. the appliance does not appear to operate normally or exhibits a marked change in performance, or
E. the appliance has been dropped or the enclosure damaged.

PLEASE VISIT **PRIMARE.NET** FOR MORE
INFORMATION ABOUT OUR PRODUCTS