

Primare CDI10 User Guide

Copyright and acknowledgments

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The information in this guide is believed to be correct as of the date of publication. However, our policy is one of continuous development and so the information is subject to change without notice, and does not represent a commitment on the part of Primare Systems AB.

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This guide was produced by Human-Computer Interface Ltd, http://www.interface.co.uk

Safety compliance

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



CAUTIONRISK OF ELECTRIC SHOCK DO NOT OPEN

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.

ATTENTION RISQUE DE CHOC ELECTRIQUE NE PAS OUVRIR





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.

Important safety instructions

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 and 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.

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

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.

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.

Welcome

Welcome to the Primare CDI10! Your CDI10 is a combined CD player, FM/DAB receiver, and power amplifier in a single convenient unit. Here is how to set up your CDI10 in four simple steps:



1 Unpack the CDI10

Your CDI10 is supplied with the following components:

- Mains cable.
- CDI10 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 CDI10 is designed to be connected directly to a pair of loudspeakers of 8Ω impedance. The terminals can accept speaker cables terminated with spade terminals or bare wires.

For more information see Speakers, page 3.

3 Connect power

- Plug one end of the mains cable supplied with the CDI10 into the power connector on the back panel, and connect the other end to a wall socket.
- Switch on the CDI10, using the switch under the front panel below the CDI10 logo at the right-hand end of the front panel.

The display will show:

Warming up...

The display will then go blank apart from a standby indicator next to the rightmost button on the top edge of the front panel.

Press this button to switch on the CDI10.

The button indicators will light up.

These show the function of each of the six buttons along the top edge of the front panel.

4 Play a CD

 Press the **Open** button to the right of the CD tray in the centre of the front panel.

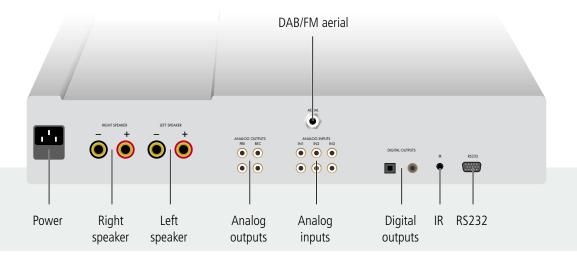
The CD source will automatically be selected, and the CD tray will open to allow you to insert a CD.

- Place a CD in the tray, label uppermost, and gently press the tray to close it, or press the Open button again.
- Press the ■/► button on the top right-hand edge of the CDI10 to start playing the CD.
- Use theIll volume buttons to increase or decrease the volume.

For more information about playing a CD, see *Using the CDI10*, page 4.

Connecting the CDI10

This page shows how to connect your CDI10 to other equipment in your system.



Power

Connect the power connector on the back panel to your power outlet using the mains cable supplied with the CDI10.

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



WARNING: Always disconnect the CDI10 from the mains power before connecting or disconnecting any cables.

Speakers

The CDI10 is designed to be connected directly to a pair of speakers, rated 8Ω impedance.

Connect the left and right loudspeakers to the corresponding terminals on the back panel. The terminals can accept speaker cables terminated with spade terminals or bare wires.

For the best sound quality connect the red wire from each speaker to the red terminal marked + and the black wire from each speaker to the black terminal marked –.

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.

Advice on positioning your speakers

For best results your speakers should be positioned about 2-3m apart, at least 20cm from the rear wall and at least 50cm from any side wall. The tweeter or high frequency unit in the speaker should be at head height when you are seated, listening to the speaker.

Analogue inputs

Connect up to three sources to the analog input sockets IN1, IN2, and IN3, using RCA leads.

When the FRONT source is selected, the socket on the front panel allows you to connect a fourth source, such as an MP3 player, using a 3.5mm jack plug.



WARNING: Disconnect your MP3 player before selecting a source other than FRONT or it may be damaged.

Analogue outputs

The CDI10 provides a 3.5mm headphone output on the front panel, for use with all sources except FRONT.

It also provides two pairs of analogue outputs.

The TAPE output gives a fixed-level output. Use this to record from the CDI10.

The PRE output gives a variable-level output. Use this if you want to connect to a second preamplifier or power amplifier.

Connect using a pair of analogue RCA leads.

Digital outputs

The CDI10 also provides both optical and coax digital outputs, to allow you to record from the CDI10 to a digital recorder. The CDI10 includes an analogue to digital converter, so every source is available on the digital output.

Connect using an optical cable or coax digital cable as appropriate.

Radio aerial

The CDI10 includes a combined FM/DAB (Digital Audio Broadcasting) radio receiver, and to receive stations on either of the DAB or FM wavebands you need to connect a suitable aerial to the aerial connector on the back panel. The FM/DAB aerial connector is an F-type screw connector.

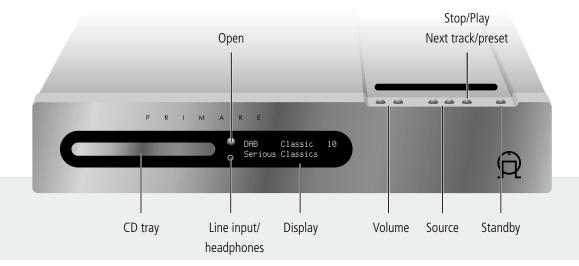
Connect the aerial by pushing the pin into the hole in the center of the connector, then screwing the sleeve onto the outside. For more information about connecting and positioning the aerial for best reception see *Using the radio*, page 7.

IR input and RS232

For advanced applications; see *Additional information*, page 8.

Using the CDI10

This page explains how to operate your CDI10, with an explanation of the function of each of the front panel controls.



Front panel controls

VolumeIll

Increase or decrease the volume.

The front panel display shows the current volume, from 0 to 79.

Previous/Next source ▲/▼

Step through the sources in the following sequence: CD, DAB, FM, LINE1, LINE2, and LINE3 and FRONT.

Stop/Play **■**/▶

CD: Press to play a CD or skip to the next track. Hold down to stop a CD.

DAB/FM: Press to step to the next preset.

Standby &

Press briefly to put the CDI10 into standby.

The display will show:

Standby

In standby all the audio circuits remain powered for best performance when you next switch on.

Hold down to switch the CDI10 off.

The display shows:

-OFF-

Press to switch the CDI10 on.

Playing a CD

To select the CD player

- Press ▲ or ▼ until the display shows CD, or press CD on the remote control.
- Press the **Open** button to open the tray.
- Insert a CD and press the **Open** button again to close the tray, or gently push the front of the tray to close it.
- Press ■/►.

For more information about playing CDs see *Playing a CD*, page 6.

Listening to FM radio

To select the FM Tuner

Press ▲ or ▼, or press the DAB/FM button on the remote control, until the display shows:

FΜ

For more information see FM, page 7.

Listening to DAB radio

To select the DAB tuner

Press ▲ or ▼, or press the DAB/FM button on the remote control, until the display shows:

DAB

When you first select the DAB tuner, the tuner scans to locate all the stations in your neighbourhood, and the display shows:

DAB autoscan full...

with a progress bar showing the number of stations found.

For more information see DAB, page 7.

Connecting an MP3 player

Press ▲ or ▼, or press the IN4 button on the remote control, until the display shows:

FRONT

- Connect one end of the audio lead to the mini jack socket on the front panel of the CDI10.
- Connect the other end of the audio lead to the headphone socket or line output socket on your iPod or MP3 player.

For best results turn your MP3 player to maximum volume, and use the CDI10 volume control to adjust the volume to your preferred listening level.



WARNING: Disconnect your MP3 player before selecting a source other than FRONT or it may be damaged.

Changing the display

The CDI10 allows you to adjust the display brightness between four options: off, dim, medium, or bright.

 Press the **DIM** button on the remote control to step between the options.

If you turn the display off, it will light up for a short time each time you change a setting.

Using the CDI10 remote control

This page explains how to use the CDI10 remote control to operate the CDI10, and how to fit the batteries into the remote control.



Fitting the batteries

Before using the remote control you need to insert the two button cells supplied with the CDI10.

 Gently slide open the cover on the back of the remote control:



 Insert the two button cells face downwards into the two circular recesses, making sure that the + side of each button cell is uppermost, and push them so that they slot gently in place under the lip at the top of each recess:



Slide back the cover until it clips into place:





Note: Replace only with Lithium batteries type CR2025 or equivalent. Dispose of old batteries considerately.

Playing a CD

This page gives information about using the CDI10 to play CDs, including information about locating what you want to play, and programming a selection of tracks.



Playing and stopping

To select the CD player

- Press ▲ or ▼ until the display shows CD, or
 CD the remote control.
- Press the **Open** button to open the tray.
- Insert a CD and press the **Open** button again to close the tray, or gently push the front of the tray to close it.

The display shows the total number of tracks and total duration of the CD; for example:

13 57:15

To play a CD

 Press ■/➤ on the front panel or ➤ on the remote control.

To pause the CD

Press ► on the remote control.

The display will show:

PAUSE

Press ► again to resume playing.

To stop playing a CD

 Hold down ■/➤ on the front panel, or press ■ on the remote control.

Locating a track

To skip to the next track

 Press ■/► on the front panel or ►I on the remote control.

You can also skip to the previous track by pressing ${f I}{f M}$ on the remote control.

To play from a specific track

 Type the track number on the remote control, or press +10 first to enter a number greater than 10.

To scan through a disc

● Press ►► or ◀◀ on the remote control.

You can switch between FF (fast forward) or FR (fast reverse) at speeds of 2x, 4x, 8x, and 16x, as shown on the front panel display.

Press ► to resume playing at normal speed.

Repeating play

To repeat the current track

 While the disc is playing press REPEAT on the remote control.

The display shows:

REPEAT TRK

To repeat the whole disc

Press REPEAT again.

The display shows:

REPEAT DSC

To turn repeat mode off

Press REPEAT until the display shows:

REPEAT OFF

Programming

To program a selection of tracks

 While the disc is stopped press **MEM** on the remote control.

The display shows:

PGM SEQ

 Type the track number of the first track you want to play, or press +10 first to enter a number greater than 10.

The display shows the first selection, and its position in the sequence; for example:

07 P-01

Repeat for the other tracks you want to play.

To play a program

When you have programmed the sequence:

Press ► to start playing the sequence you have programmed.

You can skip or scan between tracks in the sequence in the same way as for a disc.

To clear the program

- Press ■.
- Press MEM followed by C on the remote control.

Using the radio

This page gives information about using the DAB and FM tuners, including scanning for stations, stepping between stations, and defining presets.

DAB

The DAB tuner covers the main Digital Audio Broadcasting bands, Band III (174-240MHz) and L-Band (1452-1492MHz).

DAB broadcasts provide the benefits of a wide choice of stations, high-quality digital audio (depending on the station), and a range of associated text information.

The display shows the name of the station on the first line and the genre on the second line. For example:

Classic FM Serious Classics

To select a station by name

Press ▶ or ◀ on the remote control to step through the stations in alphabetical order.

The second line of the display shows each station name; for example:

Classic FM

Press SELECT to select the station.

To tune manually

- Press MODE on the remote control. The display shows:
- < Manual tune >>
- Press SELECT to select Manual tune.

You can then step between the predefined DAB frequencies using \blacktriangleleft and \blacktriangleright on the remote control.

At each step the display shows the channel number and frequency; for example:

128 225.64MHz

When you have displayed the channel you want to select:

Press SELECT to select it.

The display shows the frequency and signal quality (SQ) for the channel, between 0 and 100 (maximum); for example:

225.648 SQ: 64

 Press SELECT to tune the CDI10 to that channel.

The display shows:

NOW TUNING...

It will then start playing.

To perform an autoscan

You may wish to autoscan periodically to locate new stations.

- Press MODE on the remote control. The display shows:
- < Manual tune >>
- Press ► to select Autoscan local or Autoscan full.

Autoscan local rescans the current suite of stations.

Autoscan full rescans the entire waveband to find any new stations.

Press SELECT to start scanning.

A progress bar shows the progress of the scan, together with the number of stations found.

The tuner then selects the first station found in alphabetical order.

To change the text display

Press the DISP button.

The display steps between the following options:

- Genre
- Station name
- Time and date
- Channel and frequency
- Bit rate and stereo/mono
- Blank
- Scrolling text display
- Signal meter
- Quality meter

FM

The FM tuner covers the FM Waveband, 87.5-108MHZ. It includes RDS (Radio Data System) to display text associated with many FM stations.

To select the FM tuner

Press ▲ or ▼ until the display shows FM, or press DAB FM on the remote control.

To scan for a station

 Press ► to scan up in frequency or ► to scan down in frequency.

The FM tuner will stop when it finds a station.

To tune manually

Press ► or ◀.

The display shows the current frequency; for example:

89.10MHz

To select mono

You can reduce the noise on weak stations by selecting mono mode.

 Press the MODE button to switch between AUTO, which automatically selects stereo for strong signals, or MONO.

To change the text display

Press the DISP button.

The display steps between the following options:

- Programme type
- Radio text
- Clock time
- Blank
- Frequency and mono/stereo

Using presets (DAB or FM)

You can define up to 10 preset stations on DAB and 40 preset stations on FM.

To save the current station as a preset

Press **MEM** on the remote control.

The display shows the next available preset number and station name or frequency; for example:

DAB P04 Classic 10 Save?

 Press MEM or SELECT to save the preset with the next available number.

Alternatively, press ▲ or ▼ to select a preset number, or type the preset number on the remote control, and press **MEM** or **SELECT** to save it.

To select a preset

Press ▲ or ▼ to display the preset number, or type the preset number on the remote control pressing +10 first to enter a number greater than 10.

After a short delay the preset will be selected.

To delete a preset (FM only)

When listening to the preset:

Hold down C on the remote.

The display shows:

Delete?

Press SELECT to delete the preset.

Technical specification

Additional information

Preamplifier

Analogue inputs

Line inputs: RCA connector, 2.5V RMS, $50K\Omega$.

Front panel input: 3.5mm stereo mini jack plug, 2.5V RMS, 50K $\!\Omega.$

Analogue outputs

PRE output: RCA connector, variable output, 100Ω .

TAPE output: RCA connector, 2.5V RMS, 100Ω .

Digital outputs

Optical output: TOSlink connector.

Coax output: SPDIF (RCA connector), 75Ω .

Sample Rate 44.1kHz with CD playback, 48kHz with DAB receiver or line inputs.

Amplifier

Power output: 2x75 W into an 8Ω load.

Class: Class D amplifier

Distortion: 20Hz to 20kHz 10W below 0.1%

Frequency response: 20Hz to 20kHz ±0.3dB

CD player

Drive: DSL710

Formats supported: CD, CD-R, CD-RW.

DAB receiver

Tuning range: Band III 174-240MHz, L-Band 1452-1492MHz

Usable sensitivity: Band III 29dBuV, L-Band 30dBuV.

Number of presets: 10

FM tuner

Frequency range: 87.5-108MHz

Usable sensitivity: FM Mono 10dBuV, FM stereo 20dBuV

Number of presets: 40

Antenna: 50Ω

General

Supply voltage: 100/120 or 230V AC (must be set internally).

Power consumption: Standby 16W, operational 210W

Size: 385 x 480 x 110mm (WxDxH)

Weight: 8kg

Performing a factory reset

If the CDI10 is moved to another location you may need to clear the DAB memory and presets in order to receive any new local stations. In this case perform a factory reset as follows:

- Switch the CDI10 to standby.
- While holding down the volume ▼ button press STANDBY.

The display shows:

Set Factory Default? SEL UP yes.SEL DN no

 Press SELECT ▲ to proceed or SELECT ▼ to cancel the reset.

WARNING: This will delete all the DAB and FM presets and settings.

IR input

The CDI10 normally receives remote control commands from an infra-red eye on the front panel. If you want to control the CDI10 remotely you can connect the IR socket on the back panel to an infra-red eye or multi-room system infra-red output.

To enable the IR socket

 Turn on the main power switch while holding down the ■/► button on the front panel.

The display will show:

BACK IR

RS232

The RS232 connector allows your dealer to upgrade the firmware on your CDI10, or control the CDI10 as part of a multi-room system. Do not connect anything to this socket unless instructed by your dealer.

Connecting an aerial

The type of aerial you need for DAB and/or FM reception depends on the quality of the signal in your area and your listening preferences.

For best results from both DAB and FM reception you will need separate DAB and FM aerials, with an aerial combiner to combine the signals from both aerials into the connector on the back panel of the CDI10.

DAB

In an area with good reception you should get good results with a simple dipole aerial, with two elements or wires arranged in a T. The aerial should be mounted with the elements pointing vertically as the transmissions are vertically polarised.

FΜ

In an area of strong FM reception a dipole aerial should also give good results with FM. Arrange the elements horizontally as FM receptions are horizontally polarised.

In an area of poor reception you will need a roof or loft mounted FM aerial; contact your local dealer for information and advice.