DSP520/640
DSP Loudspeaker
User Guide

MERIDIAN

Important safety instructions

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with a dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 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.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- 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.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.

The DSP520/640 is designed to be installed using the Meridian RF500/600 wall box only.

This apparatus has been designed with Class 1 construction and must be connected to a AC supply socket outlet with a protective earthing connection (the third grounding pin).

The DSP520/640 must be connected to an earthed AC supply socket outlet.

An all pole AC supply switch with a contact separation of at least 3mm in each pole shall be incorporated into the electrical installation on the building.

Safety warnings

- Do not expose the unit to dripping or splashing.
- Do not place any object filled with liquid, such as a vase, on the unit.
- Do not place naked flame sources, such as lighted candles, on the unit.
- To avoid overheating leave at least 10cm around the equipment to ensure sufficient ventilation.
- Do not position the unit in direct sunlight, near heat sources such as a radiator, or directly on top of heat producing equipment, such as a power amplifier.
- To avoid interference do not position the unit near strong electrical or magnetic radiation, such as near a power amplifier.

Radio interference

FCC Warning: This equipment generates and can radiate radio frequency energy and if not installed and used correctly in accordance with our instructions may cause interference to radio communications or radio and television reception. It has been type-tested and complies with the limits set out in Subpart J, Part 15 of FCC rules for a Class B computing device. These limits are intended to provide reasonable protection against such interference in home installations.

EEC: This product has been designed and type-tested to comply with the limits set out in EN55013 and EN55020.   CE

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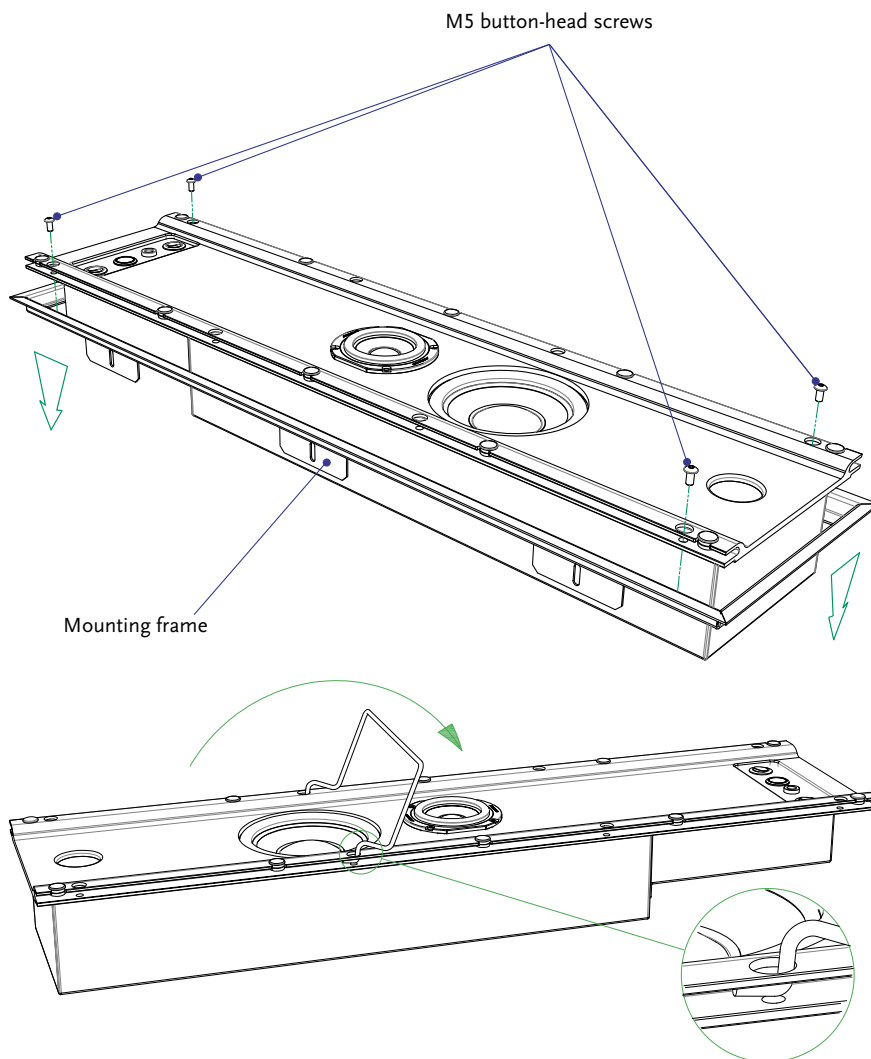PE29 6YE
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Installation

These instructions assume that a Meridian wall box type RF500/600 has already been mounted in the wall ready to accept the loudspeaker. If necessary, refer to the *RF500/600 Wall Box Installation Instructions* as appropriate.

M5 button-head screws

Mounting frame

Contents

Each DSP520/640 loudspeaker is supplied with the following components:

- Mounting frame.
- M5 x 25 screws (DSP520 8 pieces, DSP640 12 pieces).
- M5 x 10 screws (DSP520 14 pieces, DSP640 20 pieces).
- Scrim.
- Grille.
- Grab handle.
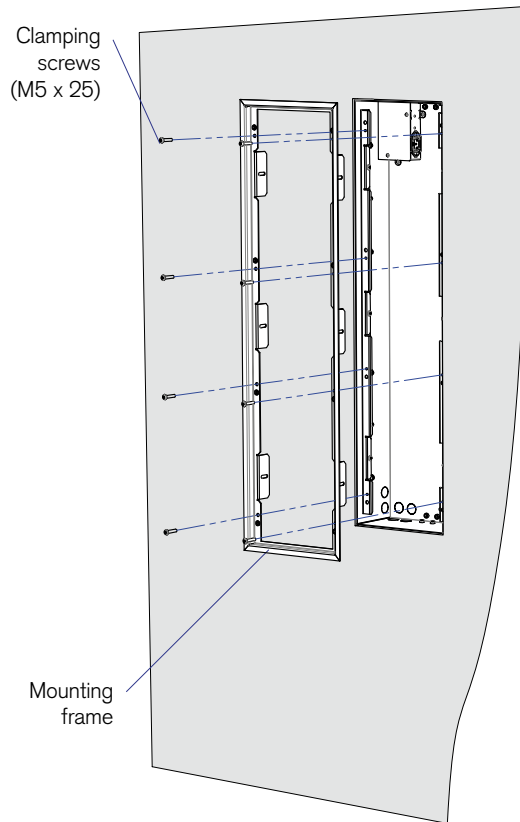- M3 Allen Key.
- M3 hexagonal driver.

To prepare for installation

- Remove the M5 button-head screws (DSP520 4 pieces, DSP640 6 pieces) to release the mounting frame, using the supplied hexagonal driver.

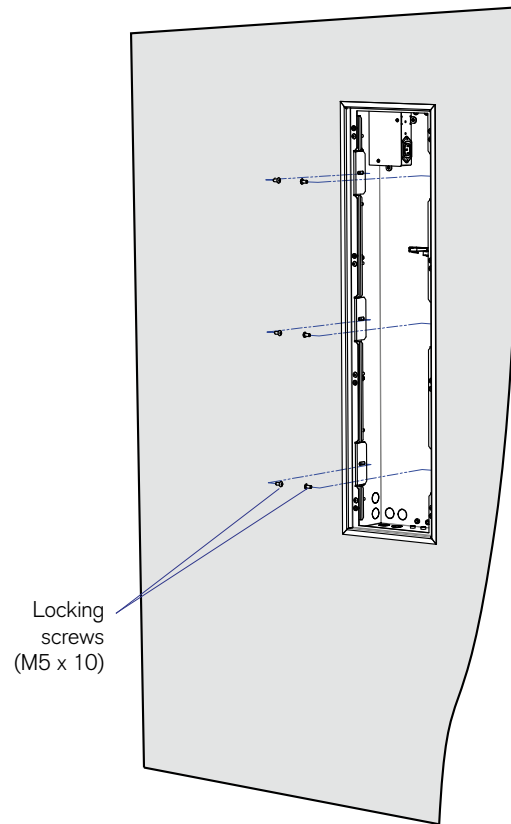- Remove the mounting frame.

To fit the grab handle

- Insert the grab handle into the available holes either side of the bass unit.

- Rotate it so it locks into position (see insert).

To fit the mounting frame

Clamping
screws
(M5 x 25)

Mounting
frame

Locking
screws
(M5 x 10)

- Slide the mounting frame into the wall box.

- Clamp the frame to the wall with the M5 x 25 button-head screws (DSP520 8 pieces, DSP640 12 pieces).
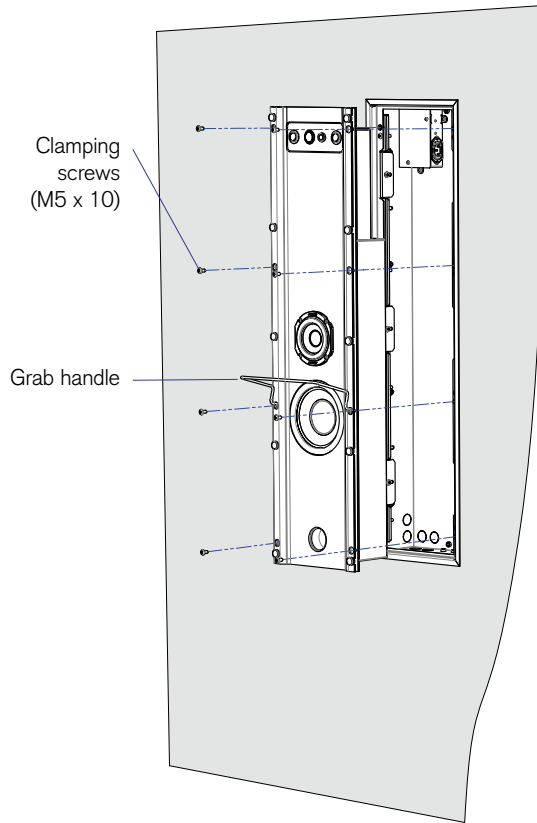
Tighten just enough to clamp the frame to the wall. Do not overtighten as this may distort the frame.
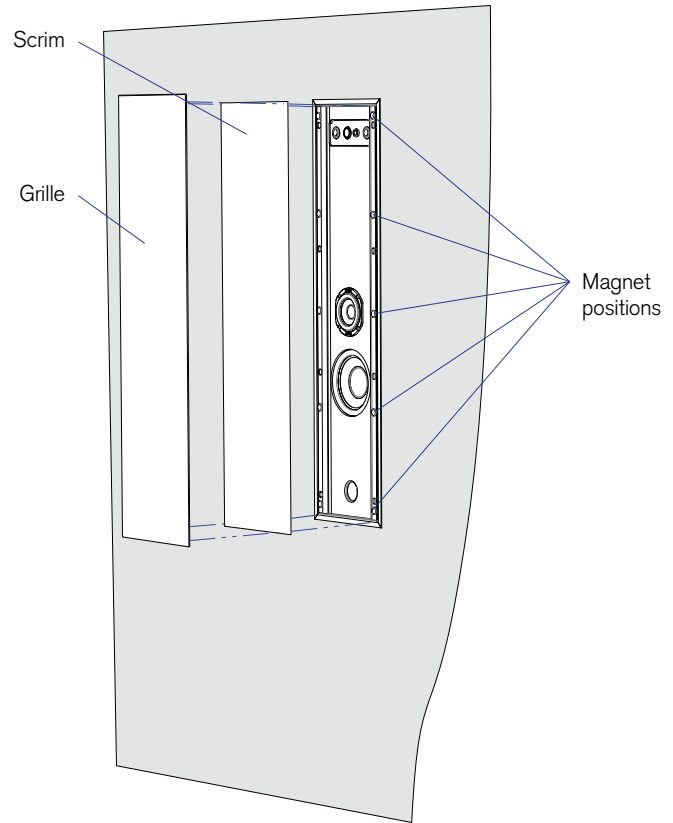
Once the frame is tight against the wall:

- Lock into place with M5 x 10 button-head screws (DSP520 6 pieces, DSP640 8 pieces).

- Lock tight.

To fit the loudspeaker

Clamping
screws
(M5 x 10)

Grab handle

To fit the scrim and grille

Scrim

Grille

Magnet
positions

- Using the grab handle, sit the loudspeaker on the lower edge of the wall box.

- Plug in the RJ45 cable(s) and AC supply.

- With the aid of the grab handle, slide the loudspeaker into position, inserting the top of the loudspeaker into the wall box first.

- Fix with M5 x 10 button-head screws (DSP520 8 pieces, DSP640 12 pieces).

- Remove the grab handle to fit the last pair of screws. This is no longer required.
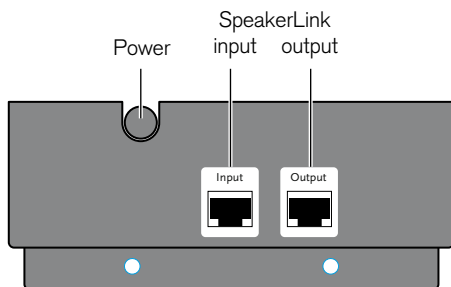
- Lay the scrim into the back of the grille.

- Carefully hold the grille with your fingers at the top, also holding the scrim in place.

- Locate the lower edge of the grille at the bottom edge of the mounting frame for alignment.

- Lay the grille gently down onto the magnets, which will hold it in place.
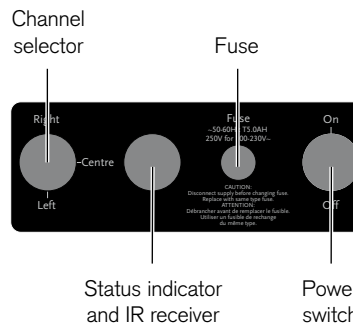
Front and back panel

Connections

The following diagram gives details of the connections on the back of the loudspeaker:

Power   SpeakerLink input   output

Input   Output

Use this connection	To connect to this
SpeakerLink input	The SpeakerLink output of a Meridian Audio Core or Digital Surround Controller.
SpeakerLink output	The SpeakerLink input of a second DSP520/640 digital loudspeaker, when connecting in a daisy-chain.
Power	A captive power cord to connect to the RF500/600 wall box power outlet.

Front panel

The following diagram gives details of the front of the loudspeaker:

Channel selector   Fuse

Right   Fuse ~50-60Hz T5.0AH 250V for 100-230V~   On

—Centre

Left   CAUTION: Disconnect supply before changing fuse. Replace with same type fuse. ATTENTION: Débrancher avant de remplacer le fusible. Utiliser un fusible de rechange du même type.   Off

Status indicator and IR receiver   Power switch

Switch	Description
Channel selector	Set to Left, Right, or Centre to specify the position of each loudspeaker.

Standby indicator

Status	Description
Blue	Loudspeaker in standby.
White	Loudspeaker operating. At power-up flashes once if IR is off and twice if IR is on.

The loudspeakers are switched on or into standby as appropriate via the SpeakerLink connections by the Meridian system they are connected to.

To configure the IR receiver

Hold down one of the following keys on an MSR remote (not supplied) while powering up the speaker:

Next: Turns on IR; white LED flashes twice.
Previous: Turns off IR; white LED flashes once.
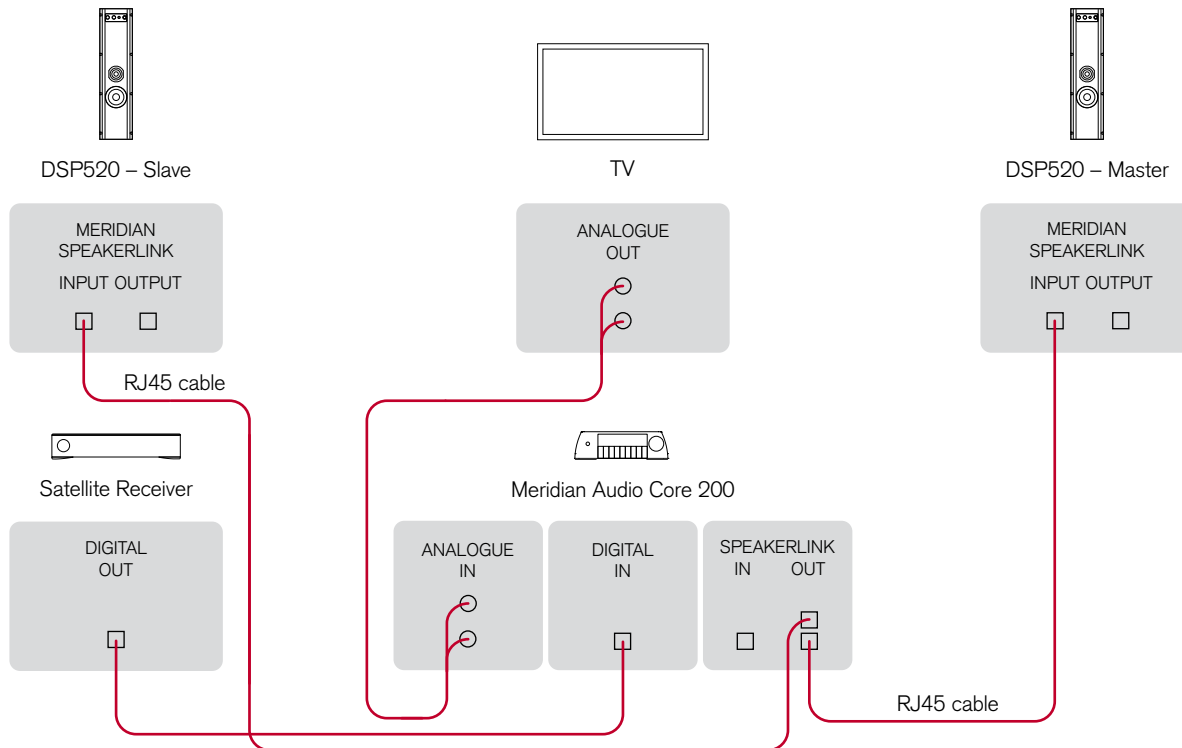**Stop**: Resets all to factory settings; white LED flashes 3 times.

Applications

To connect a pair of DSP520/640 loudspeakers to a Meridian Audio Core 200

The DSP520/640 loudspeakers are ideal for a compact Audio Core 200 based home entertainment system.

- Connect analogue and digital sources, such as a TV and satellite receiver, to the appropriate inputs on the AC200.

- Connect the lower SpeakerLink output on the AC200 to the Master DSP520/640, using an RJ45 cable.

- Connect the upper SpeakerLink output on the AC200 to the Slave DSP520/640, using an RJ45 cable.

- Make sure the Channel selector is set to the Left position on the front of the left loudspeaker and to the Right position on the front of the right loudspeaker.

DSP520 – Slave   TV   DSP520 – Master

MERIDIAN
SPEAKERLINK

INPUT OUTPUT

ANALOGUE
OUT

MERIDIAN
SPEAKERLINK

INPUT OUTPUT

RJ45 cable

Satellite Receiver

Meridian Audio Core 200

DIGITAL
OUT

ANALOGUE
IN

DIGITAL
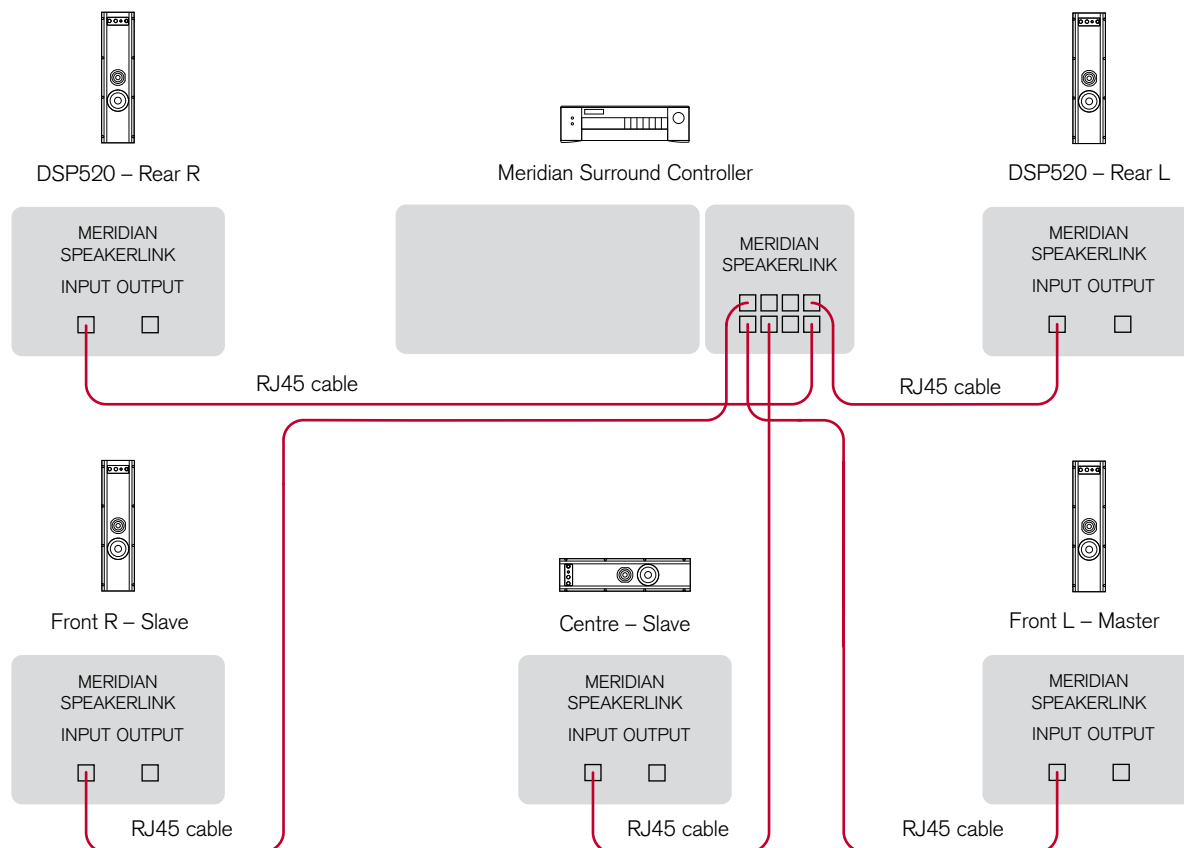IN

SPEAKERLINK
IN   OUT

RJ45 cable

To use DSP520/640 loudspeakers in a Meridian Digital Theatre

DSP520/640 loudspeakers are ideal as the front, rear, and centre loudspeakers in a Meridian Digital Theatre, in conjunction with a Meridian Digital Surround Controller such as the G68. The following diagram shows how to connect the loudspeakers using "home run" wiring.

• Connect the L+R SpeakerLink output on the lower row of the G68 to the Master digital loudspeaker (here the front left loudspeaker), using an RJ45 cable.

• Connect the appropriate SpeakerLink outputs on the G68 to each of the remaining loudspeakers, using RJ45 cables.

• Make sure the Channel selector on each DSP520/640 is set to the Left, Right, or Centre position as appropriate.

Alternatively you can connect the loudspeakers using "daisy chain" wiring: connect the front and rear L loudspeakers to the G68, and then link each pair of loudspeakers together by connecting the output from the L loudspeaker to the input of the R loudspeaker.

DSP520 – Rear R   Meridian Surround Controller   DSP520 – Rear L

MERIDIAN SPEAKERLINK
INPUT OUTPUT

MERIDIAN SPEAKERLINK

MERIDIAN SPEAKERLINK
INPUT OUTPUT

RJ45 cable   RJ45 cable

Front R – Slave   Centre – Slave   Front L – Master

MERIDIAN SPEAKERLINK
INPUT OUTPUT

MERIDIAN SPEAKERLINK
INPUT OUTPUT

MERIDIAN SPEAKERLINK
INPUT OUTPUT

RJ45 cable   RJ45 cable   RJ45 cable

To create a Sooloos system

The DSP520/640 loudspeakers can be used in conjunction with an 818 Reference Audio Core to make a superb Sooloos system.

You can control music from the 818 Reference Audio Core, or browse and control music using the Sooloos application on an iPad, iPhone, or iPod Touch, or the Control:PC/Control:Mac application on a computer.

• Connect the Network sockets from the Media Core 200 and the 818 Reference Audio Core to LAN network connections on your Router, using network cables.

• Make sure the WAN/Internet port on the Router is connected

to the rest of your network, or to your Cable/DSL Modem.

• Connect the upper SpeakerLink output from the 818 Reference Audio Core to the Master DSP520/640 SpeakerLink input, using an RJ45 cable.

• Connect the lower SpeakerLink output from the 818 Reference Audio Core to the SpeakerLink input of the Slave DSP520/640, using an RJ45 cable.

• Make sure the Channel selector on each DSP520/640 is set to the Left position on the front of the left loudspeaker and to the Right position on the front of the right loudspeaker.

For information on configuring your Media Core 200 please refer to the *Media Core 200 User Guide*.

Router   Media Core 200

Internet

NETWORK

DSP520 – Slave   Meridian 818 Reference Audio Core   DSP520 – Master

| MERIDIAN SPEAKERLINK | | MERIDIAN SPEAKERLINK | SOOLOOS NETWORK | SPEAKERLINK OUT | MERIDIAN SPEAKERLINK |
| INPUT OUTPUT | | | | | INPUT OUTPUT |

RJ45 cable   RJ45 cable