MY HOME - COMFORT SOUND SYSTEM

NEW LINE

SECTION CONTENTS

The pleasure of being surrounded by pure sound

The new stereo sound system lets you choose and control the sound playing it in several rooms at the same time with high sound quality.

The system technology uses amplifiers and loudspeakers perfectly integrated in the electrical system which allow you to listen both to an external sound source, like a Hi-Fi system, and an internal source, like the integrated FM radio.

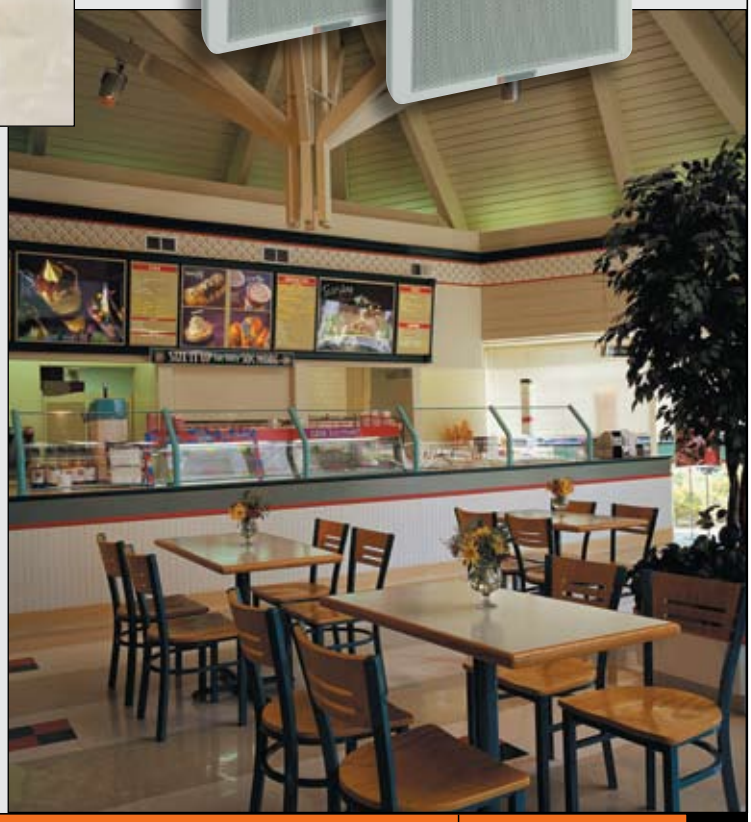
Flush-mounted amplifier

TOUCH SCREEN

Music wherever you want it

Thanks to its complete range and its many functions it is the ideal solution for applications which range from the residential to the service sector. The performance, possibility of extending the system and its sound quality mean that it can be used in both the classical home environment and in service rooms such as doctors' or dentists' surgeries, shops, cafes, restaurants and supermarkets.

Wall-mounted loudspeakers



MUSIC IN THE HOME WHERE AND WHEN YOU WANT IT
The sound sources can be controlled from every room, for example changing the radio stations or altering the volume.

A complete range for all needs

Flush-mounted, wall-mounted and ceiling-mounted loudspeakers solve every installation need in both the residential and service sectors. Complete control of the sound source from every room: for example the stereo can be switched on or off, CD track changed or your favourite radio station chosen from any control point.

The new sound system can be commanded either via TOUCH SCREEN, or by flush-mounted controls which fit in perfectly with the LIVING INTERNATIONAL, LIGHT and LIGHT TECH lines.

In the residential sector
In the service sector

The BTicino stereo sound system is recommended not only to anyone who wants to hear quality sound in his home, but also to anyone working in the service sector, professionals who always need a system which not only plays music but also lets them communicate with their co-workers and with customers.

Wall-mounted loudspeakers for applications in the home

Flush-mounted amplifiers in just two modules and slim wall-mounted loudspeakers (only 37 mm) allow a discreet installation.

Ceiling-mounted loudspeakers for applications in the service sector

Loudspeakers dedicated to the service sector and DIN amplifiers directly supplied at 230V to expand the system up to 80 loudspeakers.

A MY HOME solution

The new stereo sound system has been studied and designed to fit into MY HOME solutions, such as the video door entry system or automation.

TWO APPLICATIONS

1. It is morning. Press just one pushbutton to raise the rolling shutters and switch on the radio or stereo, playing the music desired in the background.

2. The music goes quiet automatically to let you hear any calls from the video door entry system. Also voice messages from the video handset can be sent through the loudspeakers.

2 TWO WIRES OF SIMPLICITY

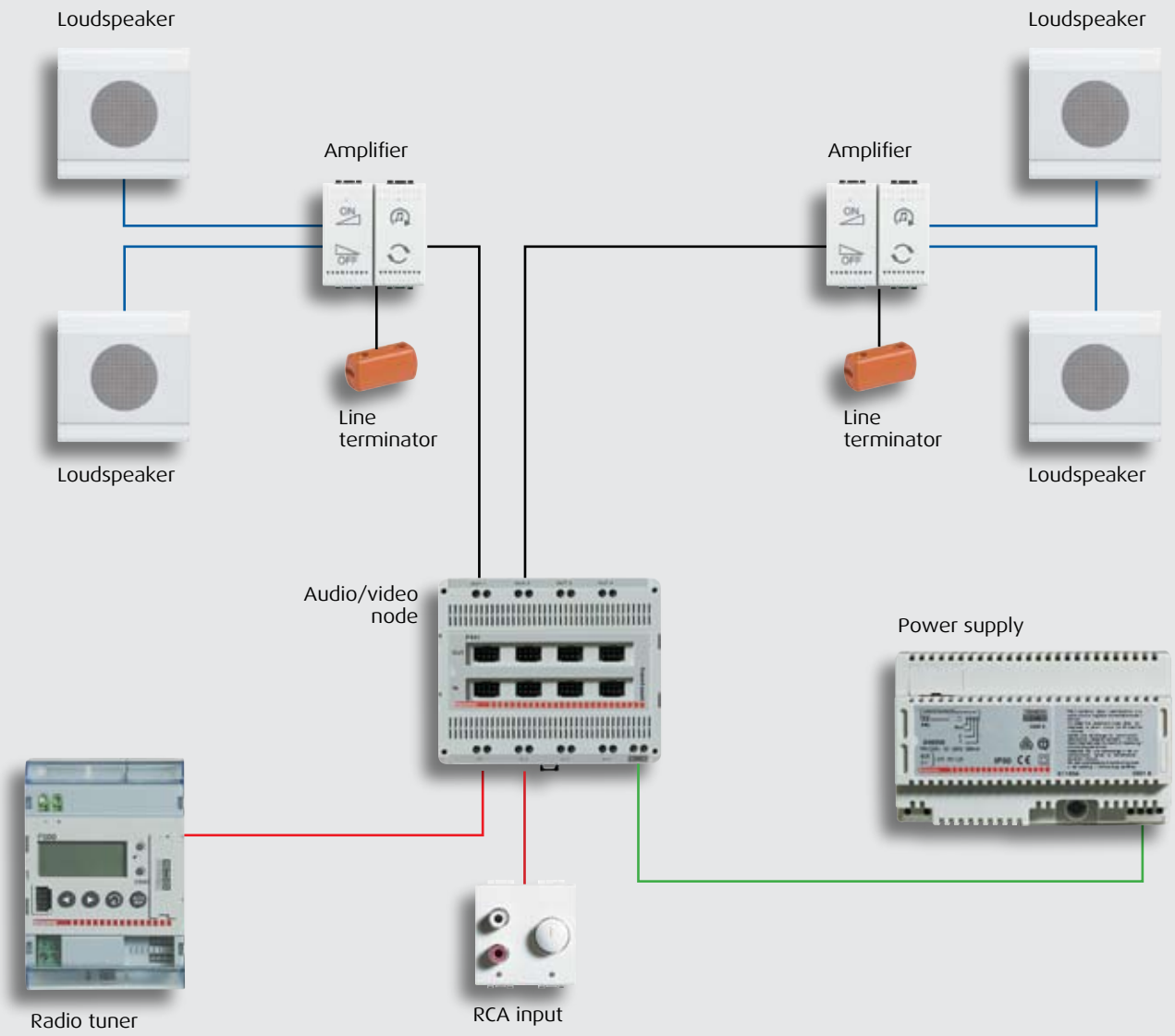
Installation of the system is simple and flexible because it uses the MY HOME two wire system. Like all the MY HOME solutions this can be simply expanded and altered later. The new sound system uses the same power supply and cable as the 2 wire video door entry system.

TOUCH SCREEN, the multifunction control for MY HOME

A complete system

The components to make the sound system can be divided into the following families:

- **AUDIO/VIDEO NODE**
- **SOUND SOURCES**
- **CONTROL DEVICES**
- **SOUND AMPLIFIERS**
- **LOUDSPEAKERS**



The sound system components

AUDIO/VIDEO NODE (ITEM F441)

The audio/video node mixes high-frequency stereo signals from several external sources (home stereo, radio tuner ...), towards the amplifiers positioned inside the home.
The device also integrates between the sound system and the two wire video door entry system without using SCS/SCS interfaces (item F422).

Audio/video node

SOUND SOURCES

The sound sources are devices which generate a stereo audio signal. BTicino proposes a modular radio tuner and interfaces for the connection of external sound sources (e.g. Hi-Fi system).

FM RADIO TUNER (ITEM F500)

The BTicino radio tuner is a device to be installed on DIN35 rail to receive FM stereo radio programmes, which can display RDS messages.

Radio tuner

RCA INPUT (ITEM L/N/NT4560)

This device is an interface which can connect an external stereo source (CD reader, DVD...) to the sound system.

RCA input

STEREO CONTROL (ITEM L4561)

It can manage an external stereo source which has infrared remote control. This device saves the commands given by the source remote control to make them available on the amplifiers, special controls and TOUCH SCREEN.

Stereo control

CONTROLS

These devices can manage the amplifiers from different rooms.

■ SPECIAL CONTROL (ITEM L4651/2)

Correctly configured it can manage the operation of a single amplifier, several amplifiers, or all the system amplifiers.

■ TOUCH SCREEN (ITEM L/N/NT4683)

A simple touch on the display can control all the functions of the MY HOME system, including the sound system applications.

Special control

TOUCH SCREEN

SOUND AMPLIFIERS

Devices which amplifier the audio signal from the BUS on the loudspeakers in the system.

■ STEREO AMPLIFIER (ITEM L4652)

Switches loudspeakers on/off, manages the volume, cycles the sources available and changes the CD track or selects the favourite radio station from those saved.

■ DIN AMPLIFIER (ITEM F502)

Supplied directly at 230V a.c., allows installations in large systems (up to 80 loudspeakers). Suitable in service rooms such as offices, restaurants, supermarkets...

Flush-mounted amplifier

DIN amplifier

LOUDSPEAKERS

The new sound system can be used with all the loudspeakers from 8Ω to 16Ω normally available on the market. The BTicino loudspeakers are:

■ FLUSH-MOUNTED LOUDSPEAKERS (ITEM L/N/NT4565)

Loudspeakers with 16Ω impedance and 12W power, for installation in flush-mounted boxes item 506E.

■ WALL-MOUNTED LOUDSPEAKERS (ITEM L4567)

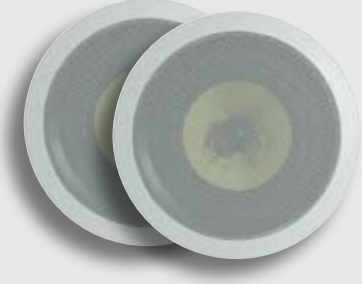
Loudspeakers with 37 mm thickness, 40W power and 8Ω impedance.

■ CEILING-MOUNTED LOUDSPEAKERS (ITEM L4566)

100W loudspeaker with 8Ω impedance, for installation in large rooms.


Wall-mounted loudspeakers


Flush-mounted loudspeakers


Ceiling-mounted loudspeakers

Audio/video node, sound sources

F441

AUDIO/VIDEO NODE

Item	Description
F441	Audio/Video node to mix audio signals (Max 4 sources) towards 4 outputs – 6 DIN modules – complete with depth compensator for DIN rail

F500

SOUND SOURCES

Item	Description
F500	RDS stereo radio tuner – 4 DIN modules – complete with depth compensator for DIN rail
L4560	Flush-mounted RCA input – two LIVING INTERNATIONAL modules to control a stereo source
N4560	Flush-mounted RCA input – two LIGHT modules to control a stereo source
NT4560	Flush-mounted RCA input – two LIGHT TECH modules to control a stereo source
L4561	Device to control stereo sources with infrared remote control – the source can be managed by the amplifiers or the special controls – 4 DIN modules – complete with RCA/RCA cable and cable with jack to connect the IR transmitter

L4560

N4560

NT4560

L4561

Amplifiers, controls, loudspeakers

F502

L4562

AMPLIFIERS

Item	Description
F502	4 DIN module amplifier to be installed in units
L4562	Flush-mounted amplifier – two modules – to be completed with LIVING INTERNATIONAL, LIGHT or LIGHT TECH button covers

L4683
N4683
NT4683

L4651/2

CONTROLS

Item	Description
L4683	TOUCH SCREEN LIVING INTERNATIONAL
N4683	TOUCH SCREEN LIGHT
NT4683	TOUCH SCREEN LIGHT TECH
L4651/2	Special control to manage amplifiers to be completed with LIVING INTERNATIONAL, LIGHT or LIGHT TECH button covers to switch on/ off, control volume, change source and change programmed radio stations – two modules

L4565

N4565

NT4565

LOUDSPEAKERS

Item	Description
L4565	Flush-mounted loudspeaker for box 506E LIVING INTERNATIONAL 16Ω series
N4565	Flush-mounted loudspeaker for box 506E LIGHT 16Ω series
NT4565	Flush-mounted loudspeaker for box 506E LIGHT TECH 16Ω series
L4566	Ceiling-mounted loudspeaker 8Ω
L4567	Wall-mounted loudspeaker 8Ω

L4566

L4567

Button covers, connectors, configurators

L4911BF

N4911BF

NT4911BF

L4911AF
N4911AF
NT4911AF

L4911AI
N4911AI
NT4911AI

L4911BE
N4911BE
NT4911BE

336983

336982

336984

LIGHTABLE BUTTON COVERS

With silk-screen printing – 2 functions – 1 module

Item			Silk-screen description
LIVING INTERNATIONAL	LIGHT	LIGHT TECH	
L4911BF	**N4911BF**	**NT4911BF**	sound system functions
L4911AF	**N4911AF**	**NT4911AF**	ON-OFF-GEN
L4911AI	**N4911AI**	**NT4911AI**	ON-OFF-adjustment
L4911BE	**N4911BE**	**NT4911BE**	treble clef symbol

CONNECTORS FOR STEREO CONTROL BUS CABLE INTERFACE

Item	Description
336983	LIVING INTERNATIONAL 8-contact connector to connect interface item L4685 to the BUS
336982	as above – LIGHT series
336984	as above – LIGHT TECH series

3501/1 3501/2 3501/3 3501/4 3501/5 3501/6

3501/7 3501/8 3501/9 3501/GEN 3501/AMB 3501/SLA

CONFIGURATORS – ONE-TYPE PACKAGE OF 10 PIECES

Item	Description
3501/0	configurator 0
3501/1	configurator 1
3501/2	configurator 2
3501/3	configurator 3
3501/4	configurator 4
3501/5	configurator 5
3501/6	configurator 6
3501/7	configurator 7
3501/8	configurator 8
3501/9	configurator 9
3501/GEN	configurator GEN
3501/AMB	configurator AMB
3501/SLA	configurator SLA

CONFIGURATOR KIT

Item	Description
3501K	Kit of configurators from 0 to 9
3501K/1	Kit of AUX, GEN, GR, AMB,ON, OFF, O/I, PUL, SLA, CEN, ↑↓ , ↑↓ M configurators

3501K

3501K/1

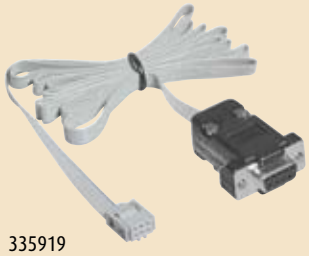
Various accessories

346000
346001

336904

3515

3499



335919

POWER SUPPLY

Item	Description
346000	power supply for sound system – input 230Va.c. output 27Vd.c. – maximum current supplied 1200 mA – fastening on DIN rail with size 8 modules
346001	as above – input 127Va.c. – maximum current supplied 1A

CABLE FOR SYSTEMS

Item	Description
336904	twisted 2-conductor cable which can be buried in piping – corresponds to standards IEC 20-13 and IEC 20-14 – coil length 200 m

LINE TERMINATOR

Item	Description
3499	line terminator – to be installed on the used outputs of the audio/video node

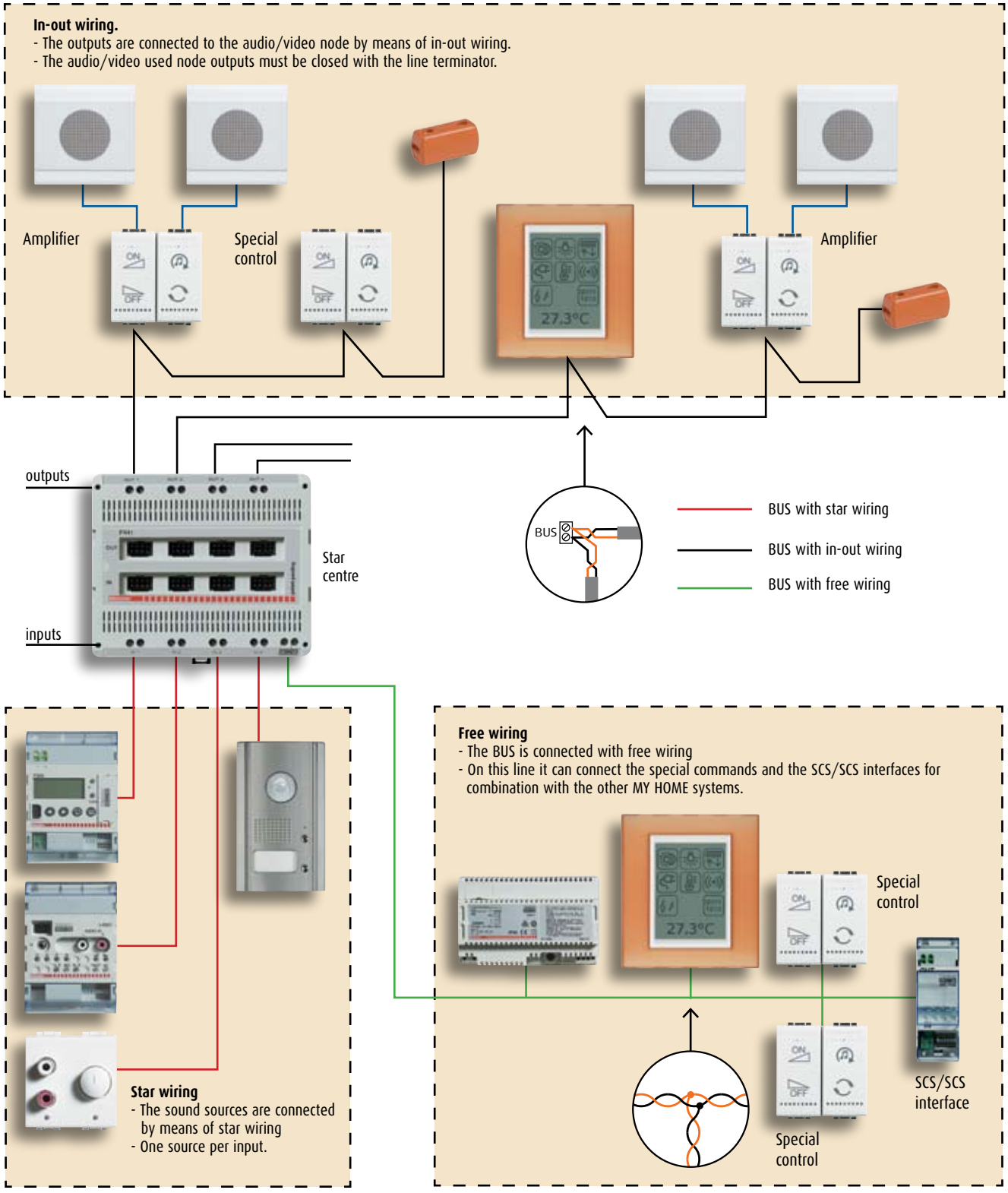
VARIOUS ACCESSORIES

Item	Description
3515	spare pull-out terminal
335919	cable to connect the TOUCH SCREEN to the PC to program the device

GENERAL RULES FOR INSTALLATION
Sound system wiring

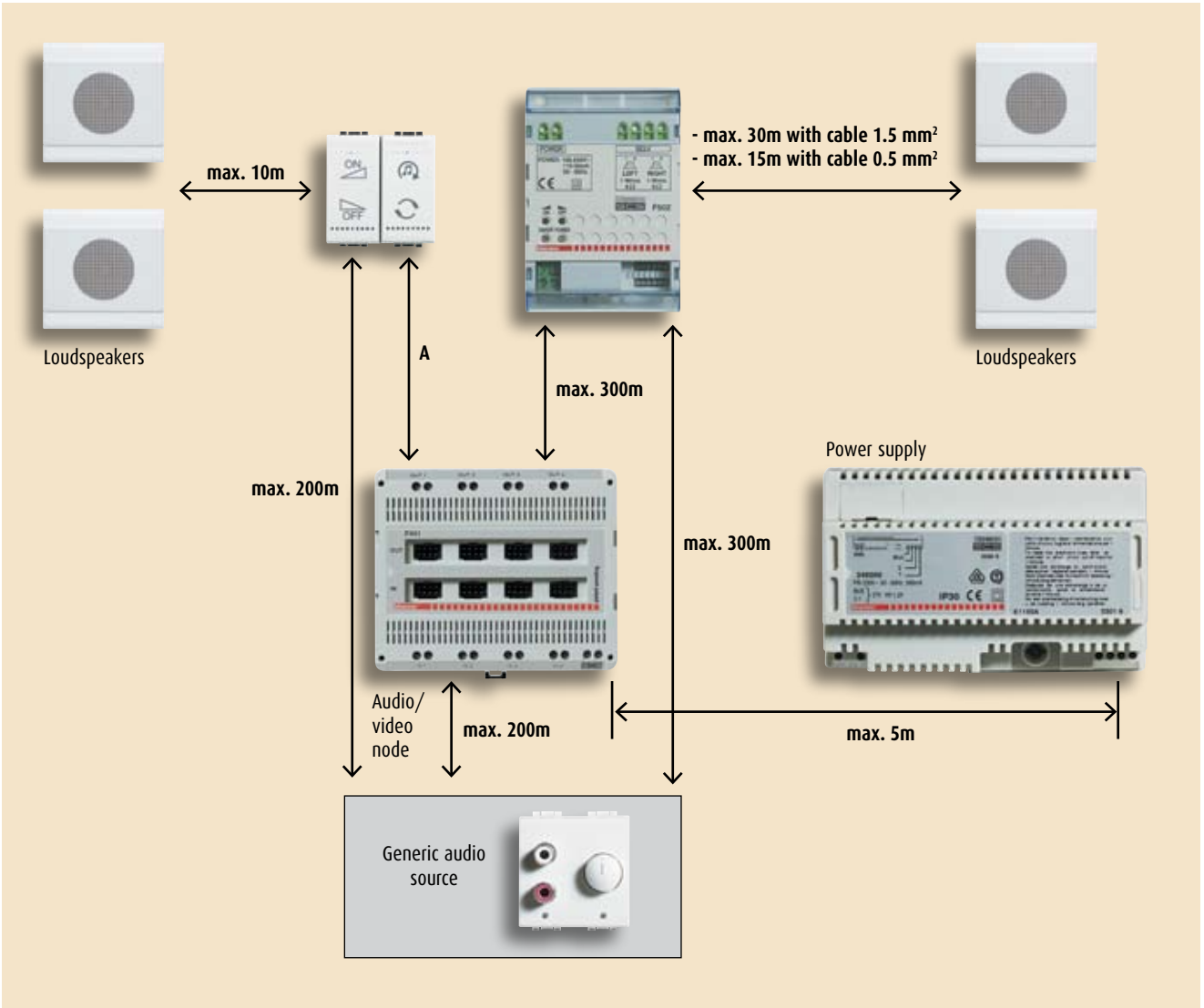
When wiring the Sound System remember some installation general rules: the distribution system is made by means of star wiring, where the signals from the external stereo sources and the wirings from the command devices and amplifiers converge.

The following diagram shows the type of wiring to be made to make a Sound System.



GENERAL RULES FOR INSTALLATION
Max. distances and cable features

When sizing the system remember the following system limits as a function of the type of amplifier installed and the impedance features of the loudspeaker used.
To keep the fidelity of the audio signal reproduced unaltered, lay the wiring of the BUS 2 wire Sound /Video door entry System and the accessory wirings (cables for loudspeakers etc.) in separate piping from the power cables (230V line). The above wirings can only share inside junction boxes using cables with suitable insulation (e.g. Item 336904).
Failure to respect the above provisions may affect the quality of the audio signal reproduced.



Max. distance between the devices (A)

Maximum cable length on the basis of the number of amplifiers item L4562 installed along an output of the audio/video Node

	Loudspeaker impedance	With No. 1 amplifier	With No. 2 amplifiers	With No. 3 amplifiers	Con N°4 amplificatori
Using cable Item 336904	8Ω	160m	60m	-	-
	16Ω	200m	160m	100m	60m
Using cable UTP cat.5E	8Ω	80m	30m	-	-
	16Ω	160m	80m	50m	30m

NOTE: - using amplifiers DIN item F502, a maximum of 10 amplifiers can be cabled for each audio/video node output
- for the lengths of the Video door entry wirings, refer to the Technical Communication Guide
- total stretched cable max 800m.

GENERAL RULES FOR INSTALLATION
Calculation of the current absorption

The system absorption is always calculated whenever the diagrams in the guide are not followed.
When calculating the current absorbed by the components, remember that the maximum current which can be supplied by the power supply must not be exceeded.
To calculate the current absorbed by the sources, consider the source with greatest absorption in "ON" and all the others in "stand-by".
While for the flush-mounting amplifiers L4562 consider the ON absorption relative to the type of load connected (loudspeaker impedance and number of outputs connected to the loudspeakers).

There must be at most 100 SCS devices.
There must be at most 8 L4562 amplifiers.
There must be at most 40 F502 amplifiers
(maximum 10 for output of node F441).
The maximum current of each individual Node audio/video output F441 must be less than 600mA continuous. This limit translates as a maximum of 2 flush-mounting amplifiers L4562 with 8 ohm loudspeakers or 4 flush-mounting amplifiers L4562 with 16 ohm loudspeakers.

Table of absorptions

Description	Item	Stand-By	ON
Power supply:	**346000**		1200mA (max. suppliable current)
	346001		1000mA (max. suppliable current)
Audio Video Node:	**F441**	-	20mA
RCA input source:	**L/N/NT4560**	12mA	30mA
Radio Tuner:	**F500**	12mA	50mA
Stereo control source:	**L4561**	12mA	40mA
Flush-mounted stereo amplifier:	**L4562**	6mA	250mA with 8ohm loudspeakers on the 2 L-R outputs. 130mA with a 8ohm loudspeaker on 1 L-R output. 130mA with 16ohm loudspeakers on the 2 L-R outputs. 90mA with a 16ohm loudspeaker on 1 L-R output. 40mA (MUTE)
Service sector amplifier:	**F502**	-	5mA (from BUS)
Special control:	**L4651/2**	-	7.5mA
TOUCH SCREEN:	**L/N/NT4683**	-	20mA
Scenario module:	**F420**	-	20mA
SCS/SCS interface (on OUT):	**F422**	-	3mA
SFERA B/W 2 wire camera	**342510**	12mA	250mA
Sfera 2 wire speaker module	**342170**	25mA	75mA
PIVOT B/W 2 wire video handset	**344102**	5mA	505mA

EXAMPLE 1

A calculation example considering the diagram called **Small house** is proposed below.

Material list	Quantity	Absorption (mA)
F500 Tuner	1	1 x 50
L4561 Stereo control	1	1 x 12
L4562 Flush-mounted amplifiers	8 (loaded with 2 loudspeakers, 16ohm each)	8 x 130
F441 A/V Node	1	1 x 20
TOTAL		**1122**

EXAMPLE 2

A calculation example considering the diagram called **House** with integrated 2 wire Video door entry is proposed below. To calculate the current absorbed during the video door entry call, consider the MUTE absorption of the flush-mounting amplifiers.

Material list	Quantity	Absorption with sound system	Absorption in video door entry conversation
F441 A/V Node	1	1 x 20mA	1 x 20mA
F500 Tuner	1	1 x 50mA	1 x 50mA
L4561 Stereo Control	1	1 x 12mA	1 x 12mA
L/N/NT4560 RCA input	1	1 x 12mA	1 x 12mA
L4562 Flush-mounted amplifiers	6 (with 2 16 ohm loudspeakers)	6 x 130mA	6 x 40mA
L/N/NT4683 TOUCH-SCREEN	1	1 x 20mA	1 x 20mA
32510 SFERA B/W 2 wire camera	1	1 x 2mA	1 x 250mA
342170 SFERA 2 wire Speaker Module	1	1 x 25mA	1 x 75mA
344102 PIVOT B/W video handset	2	2 x 5mA	1 x 505mA
TOTAL		**941mA**	**1184mA**

To calculate the current margin consider the higher absorption, thus 1200 - 1184 = 16mA

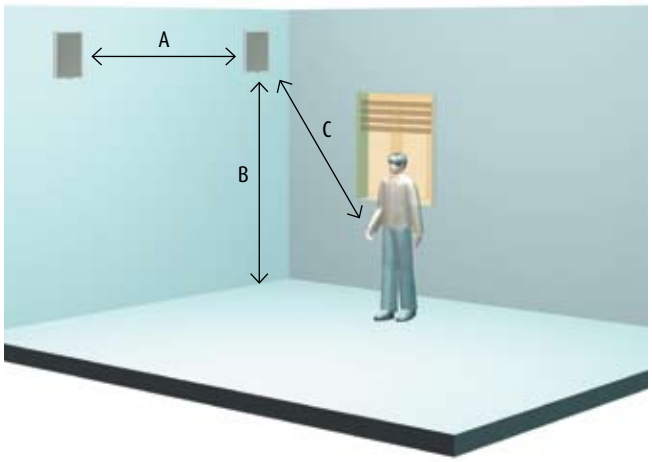
GENERAL RULES FOR INSTALLATION
Positioning the loudspeakers

When designing the Sound System the correct positioning of the listening points must be identified.
A precise layout of the loudspeakers in fact guarantees better sound quality and balance in the whole room.
Rules to be applied to identify the number of loudspeakers to install are given below.

ROOM IN THE HOME AND SMALL SERVICE SECTOR

The distances to adopt to position loudspeakers and the areas which BTicino loudspeakers cover are given below, as a function of the sound quality for a room in the home. For rooms in the small service sector, the sound level required is on average lower than in the home. In this case it is assumed that a loudspeaker covers double the area.

The loudspeakers should be at a height of 1m near to listening points where people are seated. Instead use a height of 2.5m near to listening points where people are standing (e.g. waiting room.).



Positioning the loudspeakers

Description	Distance (m)
Distance between loudspeakers (A)	2-4
Distance from the floor (B)	1-2.5
Distance between loudspeaker and listener (C)	2-4

Loudspeaker coverage

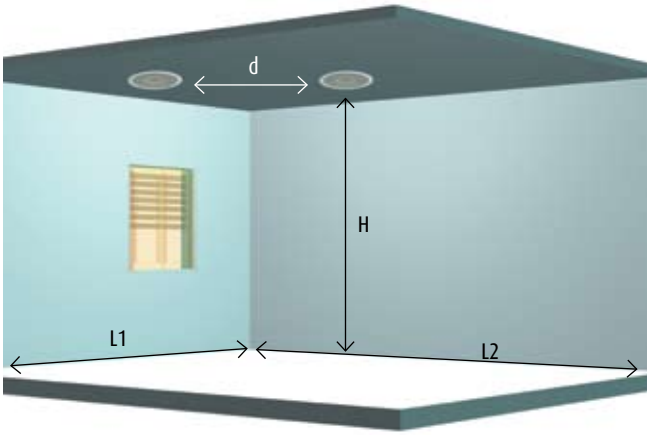
Type of loudspeaker	Area covered by the loudspeakers			
	In the home		In the small service sector	
	GOOD	SUFFICIENT	GOOD	SUFFICIENT
L4565 (flush-mounted box item 506E)	3m²	7m²	-	-
L4567 (wall-mounted)	5m²	12m²	10m²	24m²
L4566 (ceiling-mounted)	6m²	15m²	12m²	30m²

GENERAL RULES FOR INSTALLATION
Positioning the loudspeakers

ROOM IN THE SMALL SERVICE SECTOR

If a Sound System is to be installed in a room of the small service sector, the type of room where the system is to be installed must be identified. When positioning playing points remember:
- The height from the playing point (H)
- The area to be covered (S)
- The distance between the playing points (d)
- The distance between the listener and the playing point (D)

Identifying the room and calculating the playing points



The table gives the recommended distances between the ceiling-mounted loudspeakers referring to the room height.

Location of the loudspeakers Item L4566

H (m)	2.5	3	3.5	4	4.5
d (m)	3	4	5	6	7

Level of room sound coverage

Type of room	Sound coverage value (dBA)	Type of surroundings (dBA)	Sound coverage value
Mechanical industry	80	Shopping centre	60
Mechanical workshop	75	Café	60
Gymnasium	70	Shop	60
Conference room	70	Restaurant	55
Electronics industry	70	Meeting room	55
Supermarket	65	Hotel corridors	55
Fast-food outlets	65	Offices	55
Warehouses	65	Museums	50
Places of prayer	65	Hotel rooms	40

The formula to apply to obtain the number of loudspeakers to be installed in a room on the basis of its total area is given below.

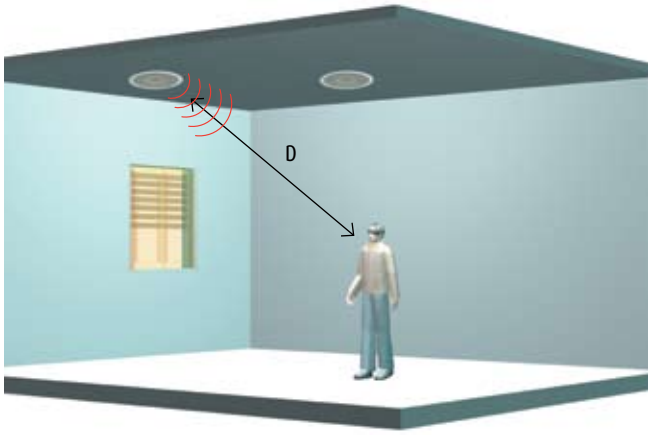
$$N = \frac{L_1 \times L_2 - [(L_1 \times d) + (L_2 - d) \times d]}{d^2}$$

Legend:
N: playing points
L1 e L2: length of the sides of the room to be covered
d: distance between the loudspeakers referring to the room height (see table above)

Example: $N = \frac{20 \times 40 - [(20 \times 7) + (40-7) \times 7]}{7^2} = 8.8$ consider **N=10**

Legend: **L1:** 20m^2 - **L2:** 40m^2 - **H:** 4.5m from the table one obtains **d:** 7

Calculating the attenuation and checking the sound level
Another feature to be considered to cover a room correctly is the sound level. In fact the sound level of a loudspeaker decreases as the distance between loudspeaker and listener increases. When calculating the attenuation leave a margin of 10dB with respect to the values indicated above (e.g. electronic industry 80dB + 10dB).
If distance **D** is known the attenuation can be obtained:



Attenuation

D (m)	Attenuation (dB)
1	0
2	-4
4	-8
8	-12
16	-16

Checking the sound level

LSA + 10dB > S + A

Legend:

LSA = room sound level (see "sound coverage level" table)
10dB = margin to be added
S = sensitivity of the loudspeakers (dB)
A= attenuation as a function of the distance between the loudspeaker and the listener (see "attenuation" table)

Note: When there are metal iodide lamps or sodium vapour lamps at high and low pressure (loads A) lay the wiring respecting the following rules:
1. to supply Loads A use power cables with minimum insulation 300/500V;
2. provide a dedicated power line for amplifiers F502;
3. keep "power line Loads A" and "BUS line or power line F502" separate by at least 1 m;
4. wire the loudspeakers with twisted cables (e.g. Item 336904);
5. keep the wiring to the loudspeakers as short as possible positioning the F502 amplifiers near the loudspeakers.

Failure to respect the above rules may affect correct operation of the devices.

EXAMPLE OF THE SOUND LEVEL CALCULATION

Some examples for identifying the sound level are given below.
If when calculating the sound level the value obtained is greater by a small margin (2 – 4dB) we have sufficient sound coverage for the room. If it is smaller the possibilities are as follows:

1. put two loudspeakers close together at each playing point (this gives an equivalent loudspeaker with sensitivity +6dB greater than that of the single loudspeaker);
2. put four loudspeakers close together at each playing point (this gives an equivalent loudspeaker with sensitivity +12dB greater than that of the single loudspeaker).

1st example

The first example refers to a shop showroom with the following features:

H = 3.5m thus d = 5m
L1 = 10m²
L2 = 20m²
shop showroom = 60dBA + 10dB = 70dBA

From the data one obtains:
N = 3
d = 5
locating 3 loudspeakers one obtains D = 12

Attenuation (D = 12m) = -14dB
Loudspeaker sensitivity = 88dB
Sound level required = 74dBA (perfect sound coverage)

2nd example

The second example refers to a electronics industrial site with the following features:

H = 4.5m thus d = 7m
L1 = 20m²
L2 = 40m²
electronics industry = 70dBA + 10dB = 80dBA

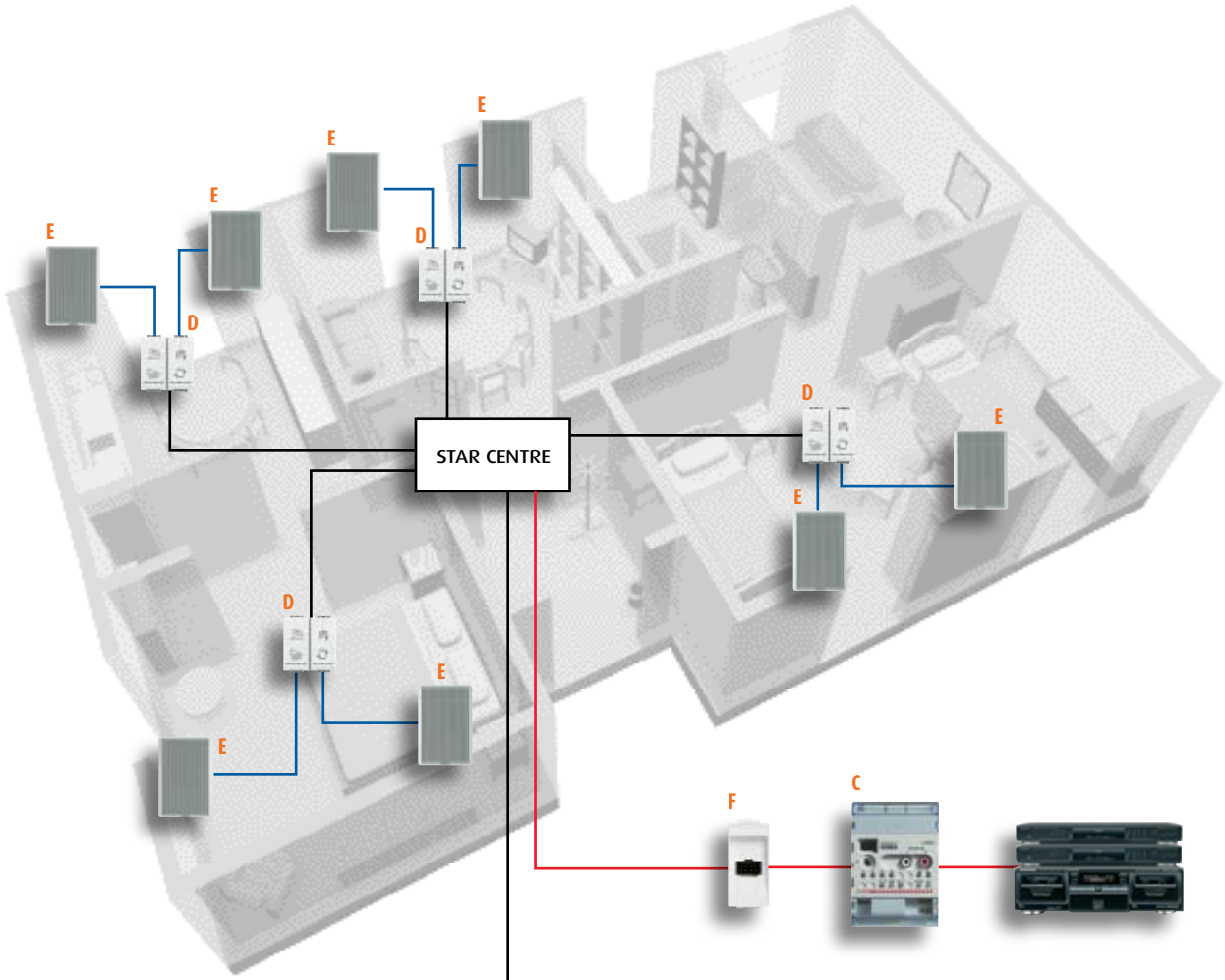
From the data one obtains:
N = 10
d = 7
locating 10 loudspeakers one obtains D = 6

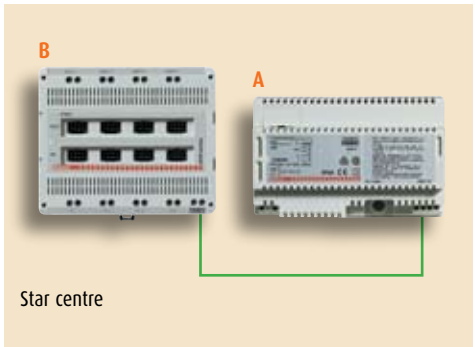
Attenuation (D = 6m) = -10dB
Loudspeaker sensitivity = 88dB
Sound level required = 78dBA (insufficient sound coverage)

As the sound level calculated is insufficient, just put two loudspeakers close together at each playing point (giving an equivalent loudspeaker with sensitivity +6dB greater than that of the single loudspeaker) and the sound coverage is found to be sufficient.

WIRING DIAGRAMS
Flat

Below is shown a flat, on a single floor, with four rooms (living room, kitchen and 2 bedrooms). The stereo control can play the music from the Hi-Fi stereo inside the flat. An amplifier with 4 pushbuttons is installed in each room. This amplifier can switch the loudspeakers on and off, adjust the volume, cycle the sound sources available (if there is more than one) and change the CD track or choose the favourite radio station from those saved. Two flush-mounted loudspeakers with 8Ω impedance are connected to the amplifier.

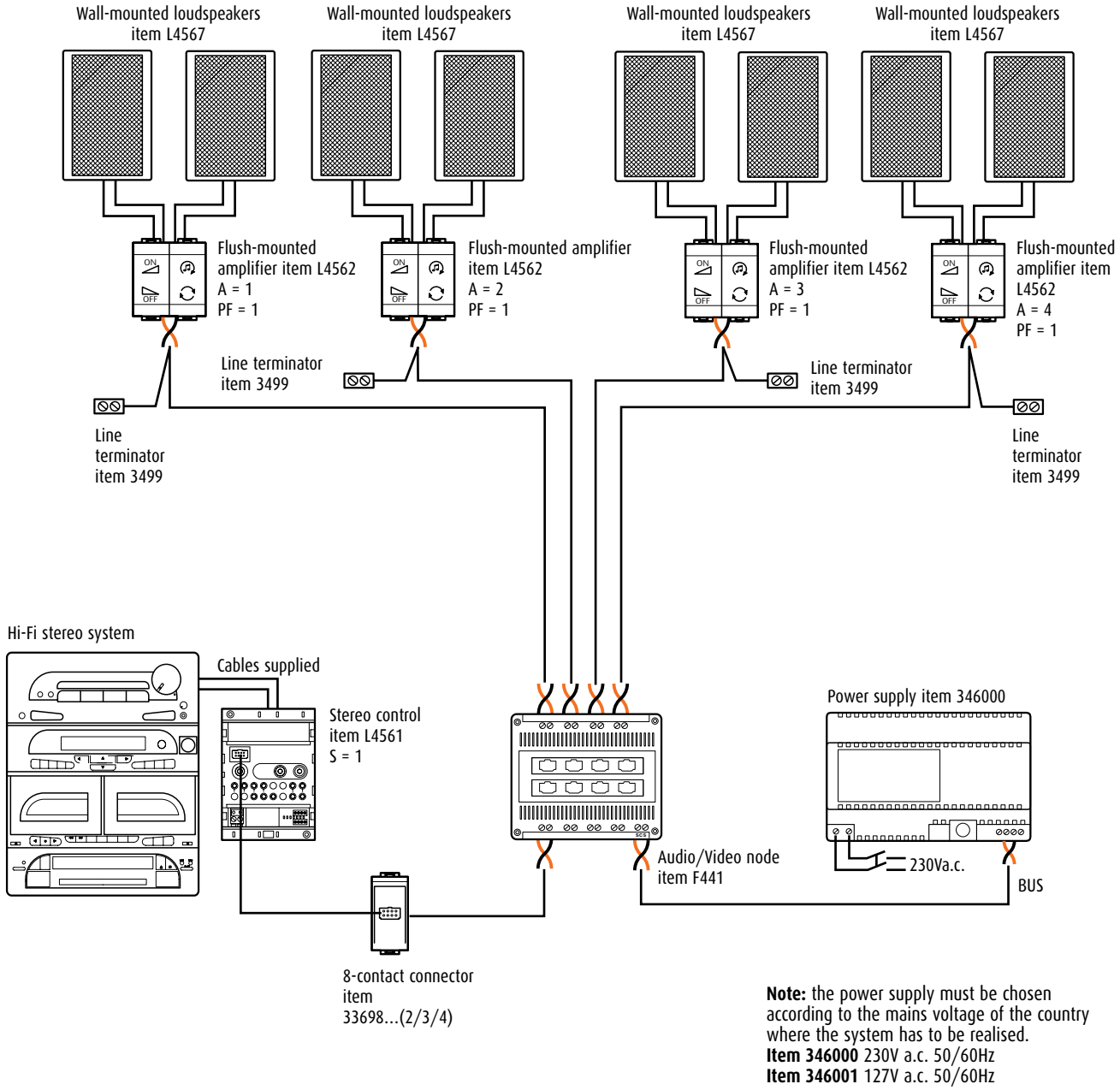




List of material needed to make the system

Item	Description	Quantity	Reference
346000	Power supply	1	A
F441	Audio/Video node	1	B
L4561	Stereo control	1	C
L4562	Flush-mounted amplifiers	4	D
L4567	Wall-mounted loudspeakers	8	E
L/N/NT4911BF	Right button cover	4	
L/N/NT4911AI	Left button cover	4	
3499	Line terminators	4	
33698...(2/3/4)	8-contact connector	1	F
336904	Twisted cable with 2 conductors	1	

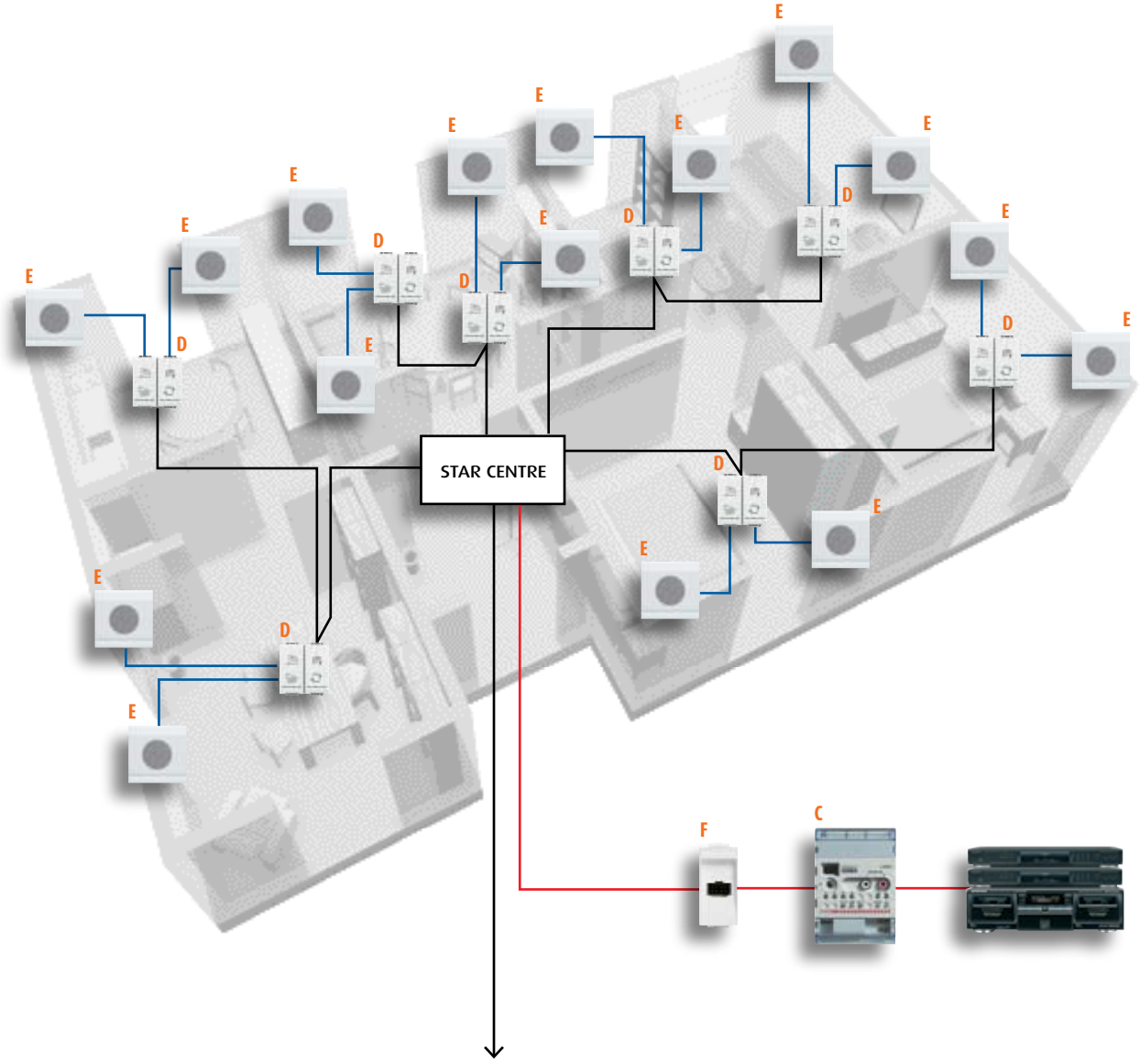
DIAGRAM 1 FLAT – 4 FLUSH-MOUNTED AMPLIFIERS – 8 8 OHM LOUDSPEAKERS

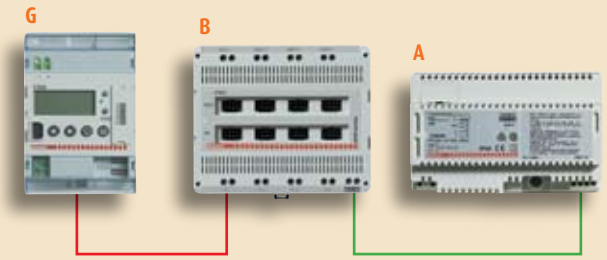


Note: the power supply must be chosen according to the mains voltage of the country where the system has to be realised.
Item 346000 230V a.c. 50/60Hz
Item 346001 127V a.c. 50/60Hz

WIRING DIAGRAMS
Small house

The following diagram refers to a small house with two sound sources: a stereo control to manage the Hi-Fi system and an FM radio tuner with RDS. In this case 16 flush-mounted loudspeakers are installed to play music in up to 8 rooms. The radio tuner must be installed in a zone with sufficient signal to receive the radio emitters.



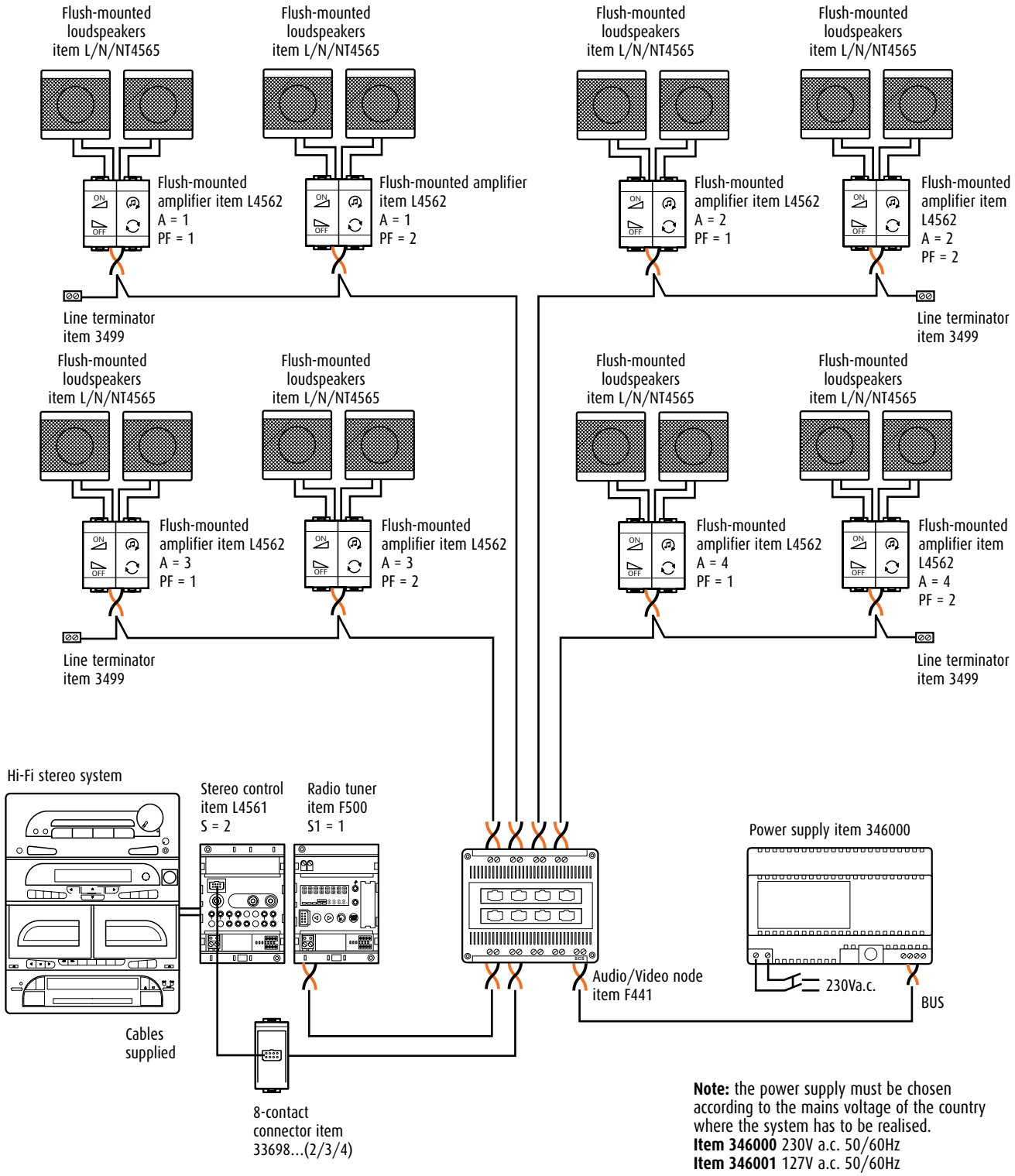


Star centre

List of material needed to make the system

Item	Description	Quantity	Reference
346000	Power supply	1	A
F441	Audio/Video node	1	B
F500	Radio tuner	1	G
L4561	Stereo control	1	C
L4562	Flush-mounted amplifiers	8	D
L/N/NT4565	Wall-mounted loudspeakers	16	E
L/N/NT4911BF	Right button cover	8	
L/N/NT4911AI	Left button cover	8	
3499	Line terminator	4	
33698...(2/3/4)	8-contact connector	1	F
336904	Twisted cable with 2 conductors	1	

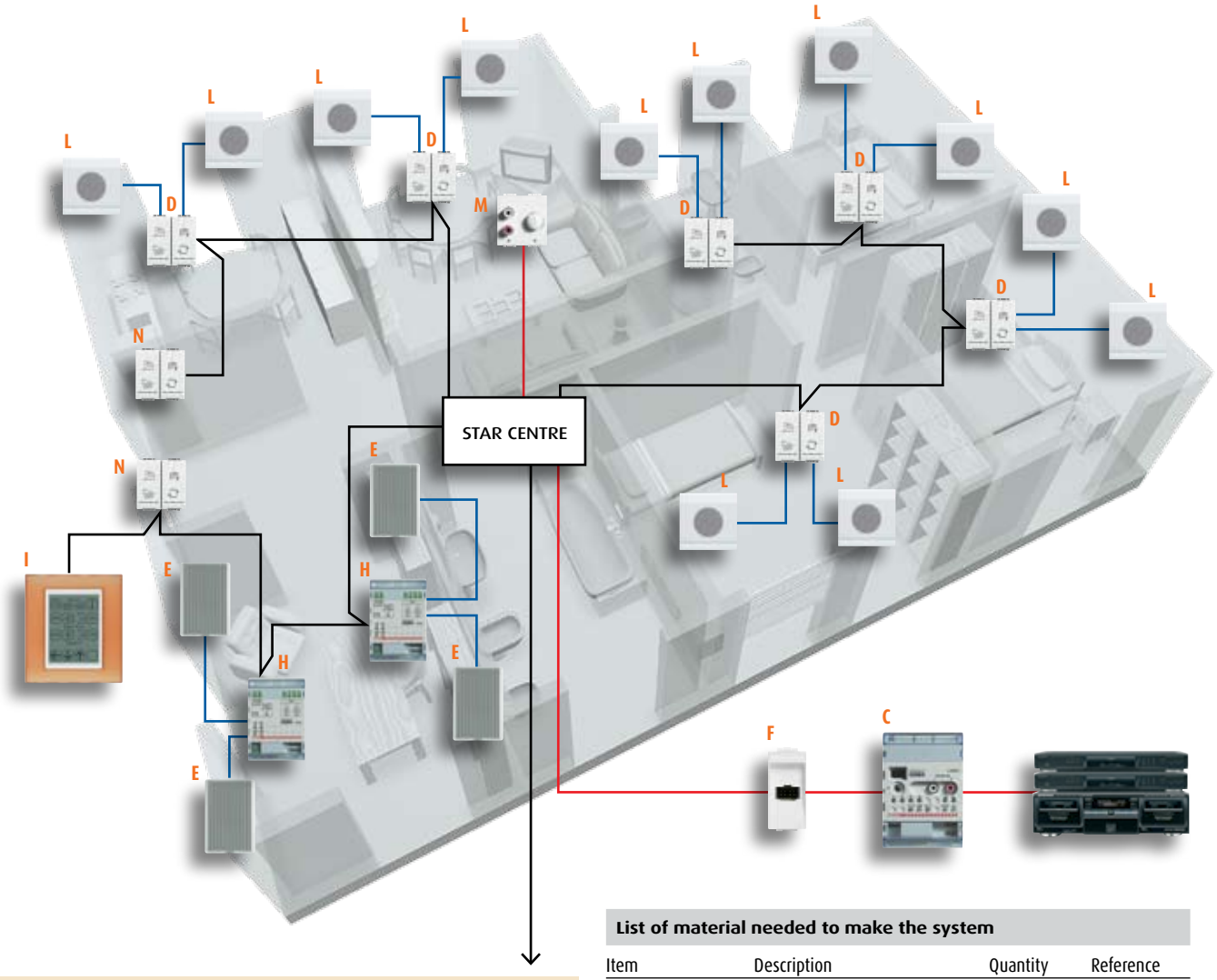
DIAGRAM 2 SMALL HOUSE – 8 FLUSH-MOUNTED AMPLIFIERS – 16 16 OHM LOUDSPEAKERS

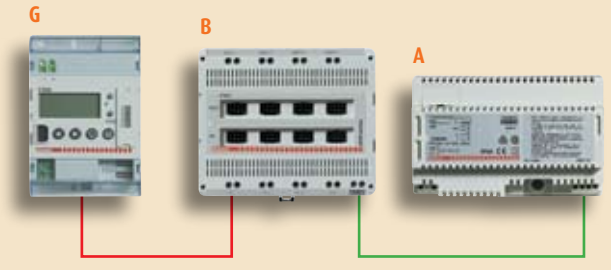


Note: the power supply must be chosen according to the mains voltage of the country where the system has to be realised.
Item 346000 230V a.c. 50/60Hz
Item 346001 127V a.c. 50/60Hz

WIRING DIAGRAMS
Large house

The sound system inside a large house uses 16 loudspeakers and can control up to four external sound sources. Flush-mounted amplifiers and a DIN rail are used to make up the system. The system is managed by a TOUCH SCREEN and two special configured controls: one to activate the complete sound system (main control) and the other to activate all the amplifiers inside a room (room control), such as the amplifiers of the whole living room. Thanks to a TOUCH SCREEN function, the sound system can be used as an alarm clock. In fact, on setting the time on TOUCH SCREEN, the sound source set will switch on at the time set and the loudspeakers will switch on, first at a low sound level and then at a higher level. The alarm clock is switched off by touching the TOUCH SCREEN or the "OFF" pushbutton.



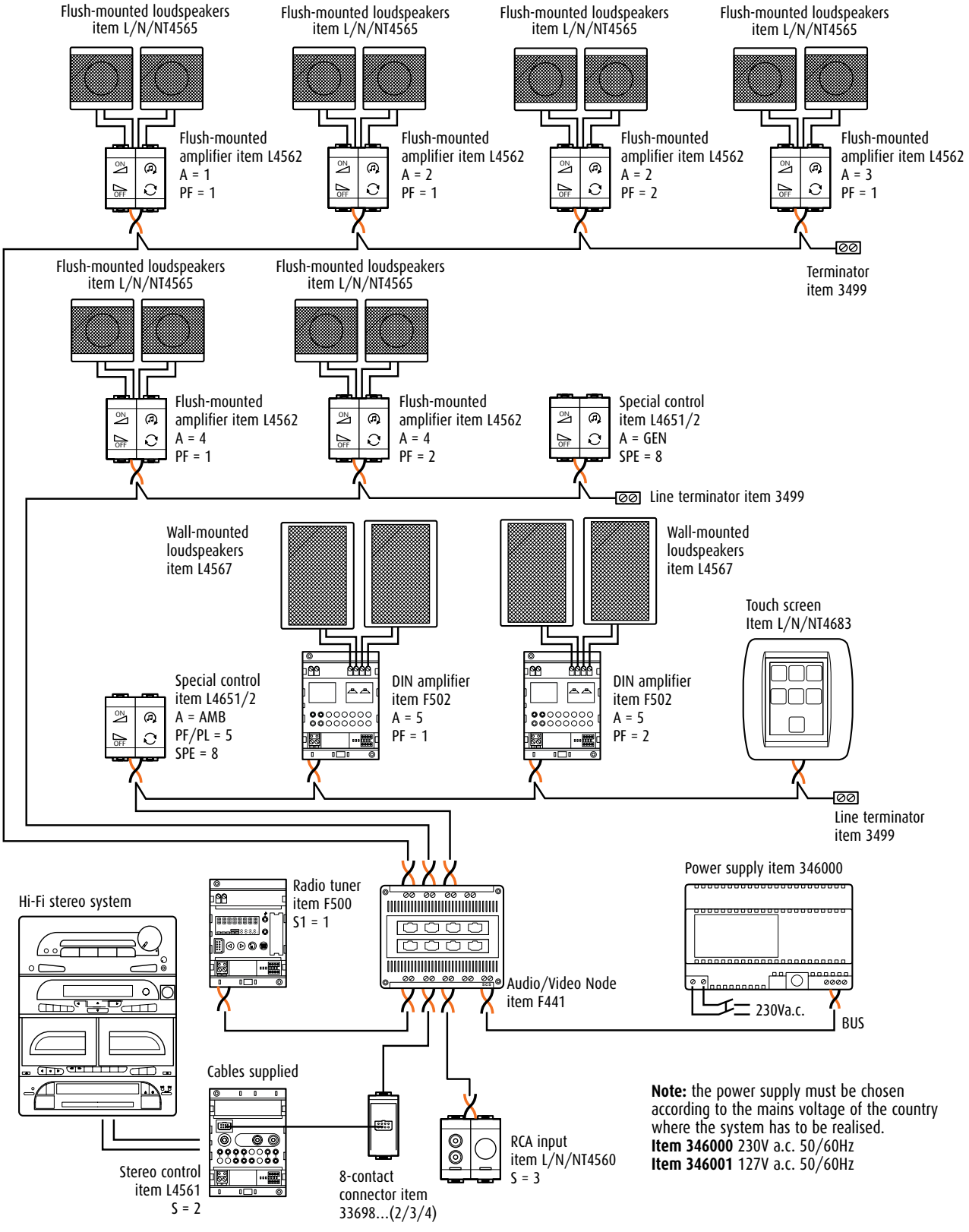


Star centre

List of material needed to make the system

Item	Description	Quantity	Reference
346000	Power supply	1	A
F441	Audio/Video node	1	B
F500	Radio tuner	1	G
L4561	Stereo control	1	C
L/N/NT4560	RCA input	1	M
L4562	Flush-mounted amplifiers	6	D
L4651/2	Special control	2	N
F502	DIN amplifier	2	H
L/N/NT4683	TOUCH SCREEN	1	I
L/N/NT4565	Flush-mounted loudspeakers	12	L
L4567	Wall-mounted loudspeakers	4	E
L/N/NT4911BF	Right button cover	8	
L/N/NT4911AI	Left button cover	8	
3499	Line terminator	3	
33698...(2/3/4)	8-contact connector	1	F
336904	Twisted cable with 2 conductors	1	

DIAGRAM 3 LARGE HOUSE – 6 FLUSH-MOUNTED AMPLIFIERS AND 2 ON DIN RAIL – 12 16 OHM AND 4 8 OHM LOUDSPEAKERS



Note: the power supply must be chosen according to the mains voltage of the country where the system has to be realised.
Item 346000 230V a.c. 50/60Hz
Item 346001 127V a.c. 50/60Hz