



## Owner's manual

# FLS 10 Balanced Stereo Integrated Amplifier



Dear Customer,

Audia Flight congratulates you and thanks you for choosing one of its products to set up your sound system.

The FLS 10 balanced stereo integrated amplifier has been patiently designed with the intention of being one of the best equipment available and capable of driving any loudspeaker system on the market today. This goal has been achived using all the know-how of the brand, the application of the most powerful techniques and the use of the best components. Its production does not suffer any compromise and it has been made with extreme attention and care.

The FLS 10 is an unrivalled integrated power amplifier on its category where speed, driving capability and control ability are elements close to perfection and capable of powering any speaker available on the market. You can be assured of having a device that will serve you and give you many years of musical enjoyment.

The FLS 10 balanced stereo integrated amplifier is very flexible too; it is possible to install optional boards including MM/MC phono stage, DAC, analog inputs and more. Please visit our website to see the latest news about your product.

This manual is intended to advise you and help you to get from your amp the best possible.

## Safety instructions

Before you start using your FLS 10 balanced stereo integrated amplifier, please read the operating instructions and safety precautions outlined below.

- 1. Always make sure the unit is unplugged before connecting or disconnecting any other device of the audio system in case of intervention on these devices.
- 2. Your device comes with a three-wire power cord (AC voltage of 100 115 V or 230 245V). To prevent electrical shock, all three wires must be used. If your outlet does not accept the plug type fitted to the cord, you need an adapter and, if so, make sure it meets the required safety standards and, above all, establishes a connection to earth. If in doubt about the integrity of your electrical system call in the assistance of a qualified professional.
- 3. The use of an extension cord is not recommended for this product. If an extension is required, ensure its compliance with safety rules and its ability to withstand the intensity of current required to power your device.
- 4. Never use flammable or combustible chemicals for cleaning.
- 5. Do not attempt to open the device, in under no circumstances use it without removing all the packing materials or elements covering the unit.
- 6. Do not spill nor spray any liquids directly on the device.
- 7. Never push objects through openings in the unit.
- Never remove a fuse.
- 9. Never replace a fuse with one of size or type than those specified.
- 10. Never attempt to repair the unit yourself. In case of problems, contact your dealer.
- 11. Never expose your device to temperatures too high or too low.
- 12. Do not leave electrical appliances within the reach of children.
- 13. Do not insert any object into the ventilation slots.

## Transport and unpacking

Because of the significant weight of the unit, the assistance of one or two other people, for moving and placing it, is highly recommended. Do not turn the package upside down. Before opening the package, place it near the planned installing location.

To open wooden package, remove all the 16 screws.

The package contains the FLS 10 balanced stereo integrated amplifier, a detailed instruction manual, a power cord and a remote control with screwdriver.

We recommend you to keep packaging for future shipping. If unit will be packed again, be sure to locate again all internal packing components. Audia Flight will be not considered responsible for any accident or damage to things or persons, resulting from future poor packaging.

#### Location

Choose a location that can support the heavy weight of your device. In order to dissipate heat, let free a space of at least 10 cm around the amplifier, so that ventilation could happen naturally. Move it away from sources of heat or vibration, do not expose it to direct sunlight. Do not locate the unit close to electroluminescent light sources because they can cause troubles with the remote control working. Make sure it is close to the source components so that the length of connecting cables is as short as possible. In the case sources are not close to the FLS 10, it is preferable to use balanced interconnection cables.

## **Output connections**

Connect each speaker by appropriate cables to output terminals, at the rear of FLS 10 balanced stereo integrated amplifier, ensuring that the polarities are the same on both channels. Terminals are colored to assist in polarity identification.

The insulated terminals accept all the endings: banana plugs, bare wires or forks.

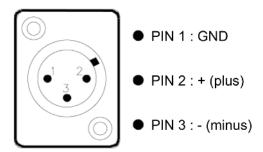
The use of speaker cables of the highest quality is strongly recommended.

Warning: as the amplifier is fully balanced, never connect the negative output binding post (black) to the ground. Also never connect together the left negative output binding post with the right negative output binding post.

Preamplifier section has two outputs: one balanced XLR pair, and one unbalanced RCA pair. Outputs can be used simultaneously.

The use of interconnect cables of the highest quality is strongly recommended.

The polarity of the XLR connector output pins is shown on the diagram below:



Moreover, it is available also a pair of RCA output labeled "REC". It is a fixed level output, so the signal of the selected input, can be connected to a recording device.

Do not short-circuit the REC output, as the pre outputs, balanced and unbalanced. Never connect the left and right outputs together, it can damage the circuitry of the Class A output stage.

It is also possible to connect dynamic headphones to the connector located on the front panel. To listen to music on the headphones only, push the "SPK" button. The close blue led, after pushing button, will be lighter.

Do not short-circuit the output of the headphones, never connect the left and right outputs together, it can damage the circuitry of the output stage.

## Input connections

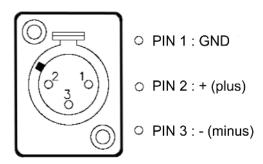
Before connecting any device, make sure that are all turned off.

FLS 10 balanced stereo integrated amplifier has 5 stereo inputs, high-level and variable gain:

- 3 inputs (INPUT 1, INPUT 2 and INPUT 3) are unbalanced RCA format.
- 2 inputs (INPUT 4 and INPUT 5) are balanced XLR format.

Highest quality cables are recommended for these connections.

The polarity of the pin XLR input is shown on the diagram below:



#### Communications between Audia Flight and other brands

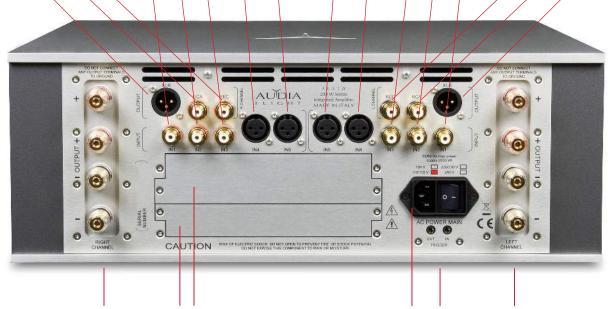
On the rear of FLS 10 balanced stereo integrated amplifier you find a pair (output/input) of 3.5 mm jack plug for trigger use.

This connection allows devices from different manufacturers have adopted this mode of communication to control on/off or standby function simultaneously.

## Right channel

## Left channel

Outputs RCA Inputs XLR Inputs | XLR Inputs RCA Inputs Outputs XLR RCA Rec 1 2 3 4 5 5 4 3 2 1 Rec RCA XLR



Output Right Removable covers for AC power main In-Out Output Left loudspeakers optional input cards and switch on trigger loudspeakers



#### AC mains connection

Make sure that mains voltage of your unit is suitable to mains voltage of your home. You can find this value on the rear of the unit. Plug the power cord supplied on the rear socket of FLS 10 and then switch on in "I" position. The led in center of front panel now lights in amber color, indicating the standby state. The device is ready for operating after pressing the "ON" key (located on front panel or on remote control).



First line on display shows selected input (# 1 by default), second line shows volume level in dB of output signal (- 90 dB, by default, the lowest possible).

Light in center of front panel lights in blue color, indicating operating state.



For proper functioning and safety of persons and things, it is essential that your system to be fitted with an effective earth connection, whose absence may cause malfunction.

#### **Protections**

For your and amplifier safety, FLS 10 balanced stereo integrated amplifier is provided with electronic protection systems that may be involved in following circumstances:

- excessive temperature of output stage
- excessive output current (in case of short circuit or load impedance too low)
- · detection of a DC voltage on the output
- detection of power supplies fault

Protection intervention has a protective effect of stopping amplifier and its nature is indicated on display.

In any case, turn power off by rear switch, wait few minutes and switch on unit again. If problem persists, contact your dealer or distributor.

#### Functions and controls

The display shows on the first line selected input and on the second line output level. Knob on the front panel adjusts the volume by 0.5 dB steps for each action on a range from - 90 dB (minimum level) to + 10 dB (maximum). It is also used to navigate through menus that can be accessed by different modes of front buttons.

#### · On / Off

By pressing "ON" button, FLS 10 changes status, from ON to OFF (stand-by) or vice versa. Led on front panel is amber when stand-by status, blue when active status.

To turn unit off completely it is necessary to commutate the rear switch in "O" position.

## Input selector

By pressing "IN" button on front panel, input selection is activated. By turning volume knob, input changes and it is displayed.

After few seconds, state goes back to main. Key and function are available on the remote.



#### Mute

By pressing "MUTE" button, volume gradually decreases to - 90 dB or -30 dB (please see SET > MUTE) and is shown on the display. Pressing again the button, volume gradually returns to previous value.

Key and function are available on the remote.



#### Phase

By pressing "PHASE" button, overall phase will be changed. Selected entry is displayed. For each input selected phase will be saved. Function is NOT available on the remote.



#### • SPK

By pressing "SPK" button, output will be activated or deactivated. If output is deactivated the blue led, close with the "SPK" button, will be lighter.

This function is NOT available on the remote.

#### Balance control

By pressing "BAL" button on remote control, display shows, in percentage, output level for each channel.

By using « + », left channel level and corresponding percentage decreases.

By using « - », right channel level and corresponding percentage decreases.

Settings are saved.

The case of balance level is more on right channel, it is showed here.





The case of balance level is more on left channel, it is showed here.

## Brightness of the display

By pressing « DIM » on remote control, display shows 1. By using « - » display shows 0 and screen brightness is off. Any action will activate screen for few seconds.



ANALOG 1 < 0.0dB VOL

#### Set

This button provides access to several modes of use of amplifier. First action of this key gives access to first mode **SET GAIN INPUT**, other choices are accessible by rotating the volume knob or pushing « + » or « - » button on remote.

Here is a chart of the various modes and their meanings summary:

Keys actions	Display on screen	Function
SET	SET GAIN INPUT	Setting input gain
1 x (+)	SET NAME INPUT	Renaming input
2 x (+)	SET ACTIVE INPUT	Enabling/disabling input
3 x (+)	SET DIRECT INPUT	Setting direct connection to source
4 x (+)	SET IR	Enabling/disabling IR receiver
5 x (+)	SET MUTE	Setting mute level
6 x (+)	SET LOAD DEFAULT	Resetting configuration
7 x (+)	SOFTWARE RELEASE	Software version management

Entry into a mode is done by pressing « SET » button, navigation button or volume keys « + » or « - » on the remote. Confirmation of choice is made by a new action on SET.

Validation of choices is effective after few moments when display returns to first mode and then to normal screen.

All settings are stored.

## Mode SET GAIN INPUT

By this function you can change gain of each input between +/-6 dB.

By pressing « SET » mode, access SET GAIN INPUT is given. On second raw is shown the selected input. By turning volume knob, input changes and it is displayed.



Further confirming SET, gain of selected input flashes and it can be increased or decreased, by 1 dB steps, up to 6 dB maximum, in order to equalize levels.

Waiting for few seconds, menu is back in previous status (input selection for gain input). Waiting for more seconds, menu is back to initial SET menu. Waiting more time, configurations are stored and exit from SET menu.



#### Mode SET NAME INPUT

By this function you can rename each input using up to 8 alphanumeric characters.

By pressing « SET » mode, access SET NAME INPUT is given. On second raw is shown the selected input. By turning volume knob, input changes and it is displayed.

Further confirming SET, first character flashes,. Acting on volume button « + » or « - », characters scroll until the choice is validated by the SET action. This action makes next character flashing. Validation of this selection is as previous one.

Once all 8 characters (or spaces) have been selected and validated, display returns to choice of entry. In absence of any instruction, configuration is back to normal.



By this function you can activate or deactivate each input except the one selected before to come in set menu.

By pressing « SET » mode, access SET ACTIVE INPUT is given. On second raw is shown the selected input. By turning volume knob, input changes and it is displayed.

Further confirming SET, YES (active status) is shown flashing. Status can be changed as inactive (NO) by rotating knob.

Waiting for few seconds, menu is back in previous status (input selection for active input). Waiting for more seconds, menu is back to initial SET menu. Waiting more time, configurations are stored and exit from SET menu.

We suggest you to deactivate all not connected inputs.









## Mode SET DIRECT INPUT

By this function you can configure one or more input in direct connection to power amp.

CAUTION: the signal level of this input is no longer attenuated by the preamplifier; level could be excessive to speakers or listener!



By pressing « SET » mode, access SET DIRECT INPUT is given. On second raw is shown the selected input. By turning volume knob, input changes and it is displayed.

Further confirming SET, NO (direct status inactive) is shown flashing. Status can be changed as active (YES) by rotating knob.

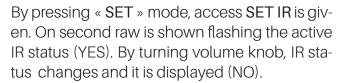
Waiting for few seconds, menu is back in previous status (input selection for direct input). Waiting for more seconds, menu is back to initial SET menu. Waiting more time, configurations are stored and exit from SET menu.



#### Mode SET IR

By this function you can activate or deactivate IR receiver.

CAUTION: if IR is deactivated, remote control will not work, you can use the front panel command only.



Waiting for few seconds, menu is back to initial SET menu. Waiting more time, configurations are stored and exit from SET menu.





## Mode SET MUTE

By this function you can configure if mute function decreases to a minimum of - 90 dB or reduces volume of 30 dB.



By pressing « SET » mode, access SET MUTE is given. On second raw TOTAL is shown flashing (-90 dB). By turning volume knob, MUTE status changes and it is displayed (-30 dB).

Waiting for few seconds, menu is back to initial SET menu. Waiting more time, configurations are stored and exit from SET menu.



#### Mode SET LOAD DEFAULT

This mode allows you to undo any configuration selected by the **SET** menu and so to reset device back in its original state from factory.



By pressing « SET » mode, access SET LOAD DEFAULT is given. On second raw is shown flashing NO. By turning volume knob, status changes and it is displayed YES.

In this case, waiting for few seconds, COPY..., is shown and all parameters are now in its original state from factory.



#### Mode SOFTWARE RELEASE

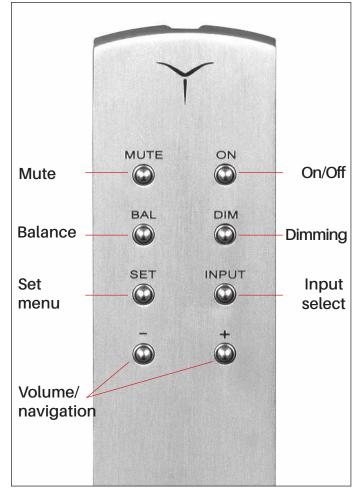
The last mode in **SET** menu is about software version management.



#### Remote control

You will find on remote control the most important functions present on front panel of amplifier. Menu navigation is done with « + » button, corresponding to rotate volume knob clockwise, or « - » button corresponding to volume knob counterclockwise rotation. A reduction in the efficiency of remote is a sign of low battery. To replace it (1 x 3V, CR2032), open remote control bottom by loosening screws, using the tool provided. Check correct polarity for the new battery and insert it in compartment: + pole upside.





## Optional boards

The FLS 10 balanced stereo amplifier has two small removable panels on the back where it is possible to insert several optional boards including phono MM/MC, DAC, analog input and more. Please visit our website to see latest news and optional cards for your product.



#### Listening tips

Even if the device has already been run for fifty hours, during which operations and tests have been successfully passed, we advise you to continue for two hundred hours, provided that the running occurs in the presence of a signal.

During a long period of disuse, the complete powering off by the switch on the rear panel is recommended. The FLS10 balanced stereo integrated amplifier is able to reveal nuances and extremely subtle details present in the recordings, we recommend to combine it judiciously and in synergy with other elements of your system, including connections.

#### Care and maintenance

To remove dust on the box, use a feather duster. Do not attempt to clean the surfaces brushed with alcohol or any other similar solvent, using a simple wet microfiber cloth possibly to remove stains. Do not install the amplifier in a place subject to direct sunlight or close to electroluminescent light sources because they can cause troubles with the remote control working.

#### Technical data

Output power per channel: 200/380/700 Wrms (8/4/2 Ohm)

Inputs: 3 unbalanced RCA + 2 balanced XLR

Outputs: 1 balanced XLR + 1 unbalanced RCA

Gain range: from -90 dB to +10 dB, step 0,5 dB Frequency response:  $1 \text{ Hz} \div 0,7 \text{ MHz} (1 \text{ Wrms, } -3 \text{ dB})$ 

Slew-rate: > 100 V/us (on 8 Ohm)

THD: < 0,05 %

S/N ratio: 98 dB

Input impedance: balanced or unbalanced 47 kOhm

Damping factor: > 650 (on 8 Ohm)

Main voltage: AC 100, 110/115, 220/230, 240 V , 50/60 Hz

Stand-by power consumption: less than 1 W
Nominal power consumption (no signal): 170 W

Power consumption: 840 W (200W RMS @ 8 Ohm both channels)
Dimensions and weigth: 450 x 177 x 440 mm (W x H x D) - 36 kg

Shipping dimensions and weigth: 575 x 300 x 545 mm (W x H x D) - 44 kg





Made in Italy