

# User's Guide for amplifiers

FD 130c2 FD 75c4



#### **FEATURES**

#### FD 130c2

- \* 2-Channel high power class-AB amplifier
- \* MOS-FET power supply
- \* Stable into 2 ohm stereo per channel and 4 ohm bridged mode
- \* 12dB octave crossover slope
- \* Variable switchable Low Pass Filter from 50 to 300 Hz
- \* Variable switchable High Pass Filter from 25 to 175 Hz
- \* High/Low and auto sense function
- \* Input Sensitivity: variable 200 mV maximum to 8 V minimum
- \* Protection for overhead, over current, short circuitry and speaker DC protection
- \* RCA line input
- \* Operating voltage : DC10V~16V
- \* Wired Remote Controller *RTC* (Optional)

#### FD 75c4

- \* 4-Channel high power class-AB amplifier
- \* MOS-FET Power Supply
- \* Stable into 2 ohm stereo per channel and 4 ohm bridged mode
- \* 12dB octave crossover slope
- \* Variable switchable Low Pass Filter from 50 to 300 Hz(CH3/4)
- \* Variable switchable High Pass Filter from 25 to 175 Hz(CH1~4)
- \* High/Low and auto sense function
- \* 2/4 input mode selectable switch
- \* Input Sensitivity: variable 200 mV maximum to 8 V minimum
- \* Protection for overhead, over current, short circuitry and speaker DC protection
- \* RCA line input
- \* Operating voltage : DC10V~16V
- \* Wired Remote Controller *RTC* (Optional)

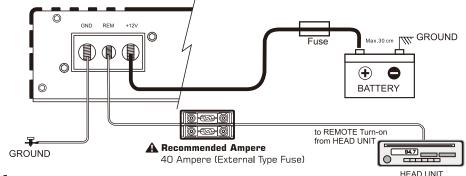
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#### POWER CONNECTION

#### FD 130c2 / FD 75c4



#### 1. Battery disconnection

First, disconnect the power supply of the vehicle by removing the ground cable of the battery.

#### 2. Ground connection

Connect the GND (ground) connection of the amplifier with the car chassis. Keep this cable as short as possible (not longer than 50 cm) and use a suitable cross section (AWG size 6 - 4). Make sure, that the connection with the vehicle chassis is free of paint, dirt and dust.

#### 3. +12V Power connection

Connect the  $\pm 12$  V contact of the amplifier with the supply cable via a fuse directly to the vehicle battery. Keep in mind, that the length of the cable from fuseholder to vehicle battery has to be maximum 30cm..

For the amplifier to function at its best, use a high quality fuse holder and suitable cable preferably AWG 6-4 cable.

This fuse protects the amplifier and the vehicle against the possibility of a short circuit in the power cable.

#### 4. Remote connection

Connect the REM-terminal of the amplifier to the remote-output (automatic  $12\ V$  antenna-output) ofthe head unit. Use a 0.5 - 1.5 mm power cable.

## A Caution A

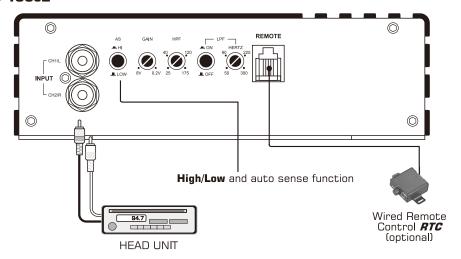
#### $\label{lem:please take the following precautions when installing your amplifier: \\$

- a) Take extra care when making the connections. Make sure that no electrical cable, gas tank, hydraulic brakes or other components get damaged.
- **b)** Allow enough cooling and air circulation and avoid installing the unit in small closed boxes or close to parts that heats up easily.
- c) Keep the amplifier away from liquid, moisture, heat and foreign materials.
- d) This amplifier can only be used in vehicles with 12V DC power supply.
- e) Never install the power supply cable with other original vehicle wires (gas cables), fan motors, control modules etc.
- f) Install the signal cable (cinch cable) as well as speaker cable far away from the power cables to avoid interference with music signals.
- g) To avoid dangers of cables binding, squeezing or breaking, use the cables supplied with your amplifier.

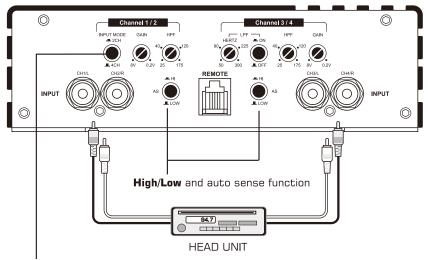


# **RCA CONNECTION**

#### FD 130c2



#### FD 75c4



#### **INPUT MODE BUTTON**

If it's placed to 4-IN ( ■ 4-IN ), input RCA cables must be used for CH3 & CH4 to operate 4CH stereo mode. If it's placed to 2-IN ( ■ 2-IN ), it allows 4 channel stereo mode even though you don't use input RCA cables for CH3/CH4.

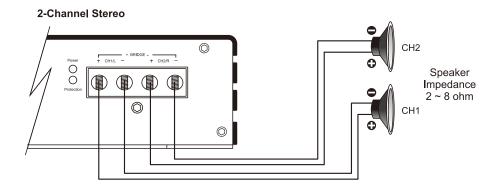


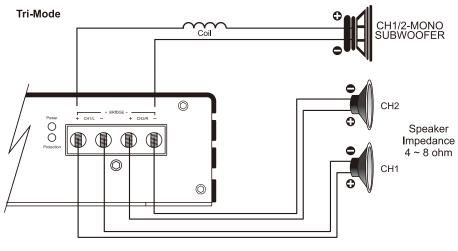
# **SPEAKER CONNECTION**

#### FD 130c2

# 1-Channel Bridged CH1/2-MONO SUBWOOFER Speaker Impedance 4 ~ 8 ohm

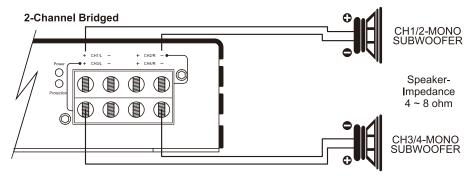
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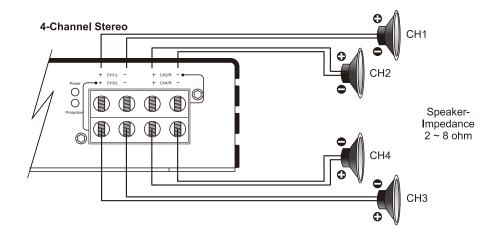


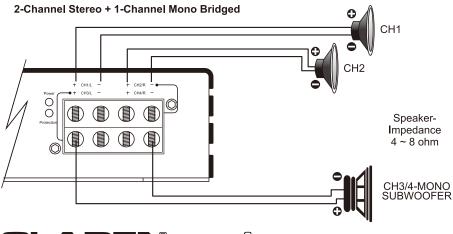


# **SPEAKER CONNECTION**

#### FD 75c4







### **SPECIFICATIONS**

#### FD 130c2

Rated power output ----- 130W x 2CH -RMS power, 4 ohms stereo -------- 200W x 2CH -RMS power, 2 ohms stereo ------RMS power, 4 ohms bridged ----400W x 1CH Signal to noise ratio ---->90dB Low pass crossover 50Hz ~ 300Hz High pass crossover ---25Hz ~ 175Hz Frequency response --- 10Hz ~ 30KHz (+/-1dB) THD@RMS watts 0.1% Channel separation -- 75dB ----- 40A (External Type Fuse) Fuse rating ----- 200mV ~ 8V (+/- 5%) Input sensitivity -----Dimensions [50(H) x 170(W)]mm ----- 170(L)

#### FD 75c4

Rated power output -RMS power, 4 ohms stereo  $\,$  75W x 4CH  $\,$ -RMS power, 2 ohms stereo ------ 120W x 4CH -RMS power, 4 ohms bridged ----- 240W x 2CH Signal to noise ratio ---->90dB Low pass crossover 50Hz ~ 300Hz(CH3/4) 25Hz ~ 175Hz High pass crossover -----Frequency response  $10Hz \sim 30KHz (+/-1dB)$ 0.1% THD@RMS watts Channel separation -----75dB Fuse rating ----- 400A (External Type Fuse) 200mV ~ 8V (+/- 5%) Input sensitivity Dimensions [50(H) x 170(W)]mm ----- 170(L)





# **TROUBLESHOOTING**

This power amplifier is featured with an efficient protection system to prevent any damages such as over-heating, over-voltage, short-circuit and DC at the loudspeaker output. If the amplifier senses such errors, Protection LED will light up red. Prior to checking the problem(s), first turn down all levels of the head unit and then turn it off.

head unit and then turn it off.	
AMPLIFIER IS NOT POWERED UP, NO LED IS LIGHTENING	- ground connection professional connected ? - +12V power cable well connected ? - remote cable professional connected ? - fuses inserted and alright ? - analyze voltage on the amplifier.
PROTECTION LED ILLUMINATES GREEN WHILE AMPLIFIER IS SOUNDLESS	- cinch cable alright and professional connected ? - loudspeaker professional connected ? - head unit alright ?
PROTECTION LED ILLUMINATES RED WHEN AMPLIFIER IS POWERED UP	- amplifier too hot ? - short-circuit at the loudspeaker output ? - short-circuit caused by loudspeaker cable with vehicle chassis (ground) ? - input voltage too high (e.g.faulty lighting dynamo) ?
OVERHEATING (PROTECTION LED ILLUMINATES RED WHEN AMPLIFIER IS POWERED UP)	- impedance alright? - loudspeaker error? - adequate ventilation around the amplifier?  ! CAUTION!  After cooling down, the amplifier turns on autumatically
ERROR IN AMPLIFIER FUSE	- ground professional connected ? - loudspeaker impedance alright ?
SOUND TOO LOW OR LOW-DISTORTED SOUND	- input level control "GAIN" is set to match the head unit? - output level control of the head unit alright? - loudspeaker error? - loudspeaker cable checked? - crossover frequencies have been properly set? (Check head unit, amplifier, DSP, sound processor, equalizer frequency bandpass filter)
HIGH HISS-ENGINE NOISE IN SPEAKERS	- ground connectionp rofessional connected ? - short-circuit caused by loudspeaker cable with vehicle chassis ground ? - cinch cable (RCA) and/or loudspeaker cable installed too close to the power connection cable ? - cinch ground (RCA) of head unit alright ?

#### A CAUTION A

Please contact your specialist dealer if the amplifier still does not work even after the above troubleshooting list had been checked.

For warranty adjustment / repairs, the original invoice has to be presented!

Opening or disassembling the amplifier void warranty!

