Instruction manual

TARAMPS ®

T 0602
PLAYER FX
MULTICOLOR
CAR SOUND MIXER

⚠ The installation of this product must be made by a qualified professional.

Index

Term of warranty

TARAMPS, located on Abilio Daguano Street 274, Res. Manoel Martins – Alfredo Marcondes, SP - Brazil, ZIP CODE 19180-000, guarantees this product against any defects on terms of project, making, assembling, and/or with solidarity, due to project vices which cause it improper or inadequate to its original use within 12 months from the date of purchase. In case of defect during the warranty period, TARAMPS responsibility is limited to the repairing or substitution of the device of its own making.

This warranty excludes:

• Damaged products by improper installation, water infiltration, violation by unauthorized individuals;

• Tamper or torn warranty seal;

• Cases in which the product is not used in adequate conditions;

• Defects caused by accessories, modifications or features attached to the product;

• The product with damage from falling, bumps or nature related problems (flooding, lightning, etc.);

• Warranty card is not properly filled or torn;

• Costs involving uninstallation, reinstallation of equipment as well as shipment to the factory;

• Damage of any kind, due to problems in the product, as well as losses caused by discontinued use of the product.

Technical assistance

For international support, check on our website:
www.taramps.com.br/en/rede-de-assistencias-tecnicas or contact direct the factory support:
Phones: +55 18 3266-4050 / +55 18 99749-3391
E-mail: service@taramps.com.br

Introduction

Read this manual before installing the product. In case of questions contact our technical support: **+55 (18) 3266-4050** or **www.taramps.com.br.**

Declaration of Conformity

C E

TARAMPS ELECTRONICS LTDA
Alfredo Marcondes - SP
Brazil

Hereby, Taramps Electronics Ltda declares that the product T 0602 PLAYER FX MULTICOLOR complies with the Directive 2014/30/EU, according with the following harmonized standard:

-EN 50498:2010 *Electromagnetic compatibility (EMC) - Product family standard for aftermarket electronic equipment in vehicles*

The full text of the EU Declaration of Conformity is available at the Product Page on Internet.

At the end of its lifespan, this product must not be disposed of in household waste. Look for an electronic equipment collection or recycling center for proper disposal.

Safety requirements

To ensure proper use, please read through this manual before using the car sound mixer. It is specially important that you know the **CAUTIONS** contained here.

- The installation of this product must be done by a qualified professional.

- Use the correct tools for installing this product.

- This product must be powered by the vehicle's power system or a 12V AC/DC adapter. Always check the voltage before installing.

- Never install the product in places exposed to dust, humidity and water. Pay attention to install it far from fuel tank, fuel lines, heat sources and other parts of vehicle.

- Be sure to install protection fuse or a circuit braker near to battery. Follow the ampere rating as indicated here in this manual. Use of improper fuse could result in overheat, smoke, damage to product, injury or burns.

- Avoid running wires over or through sharp edges. Use rubber or plastic grommets to protect any wires routed through car's body.

- Automotive sound systems may produce high sound pressure levels. Avoid continuous exposure to levels over 85dB to prevent permanent hearing loss.

⚠ Safety

As you read this manual, pay attention to the safety symbols.

⚠ CAUTION	This symbol with **"CAUTION"** is intended to alert the user to the presence of important instructions. Failure to heed the instructions will result in risk of injury to user or product damage.

Taramps reserves the right to modify the contents of this document at any time without prior notice and does not have the obligation to apply the changes in units which were previously produced.

Presentation

The **T 0602 PLAYER FX MULTICOLOR** mixer was designed for sound systems allowing the mixing of several types of audio signals with high fidelity, ensuring the original dynamics of the sound. It has a convenient MP3/WMA player, Bluetooth and FM built-in with long range remote control.

The Player accepts USB DRIVE up to 64GB size, containing MP3 and WMA audio files until 320Kbps bit rate (high quality). Its Bluetooth has the 4.0 version and operates under SBC/A2DP protocol.

It has a 4-band equalizer that allows you to increase or decrease specific ranges of bass, mid-bass, mid-high and treble, allowing professional control in any situation. It also has the Echo FX feature, which allows you to add the Echo effect to your songs or voice. Its outputs with timed MUTE avoid undesirable noises (Pops) when turned on or off, dispensing with the sequencing of activations, facilitating installation.

With a **total of 78 variable lighting effects**, causing a different visual effect for the user. See pages 08 and 09.

The **T 0602 PLAYER FX MULTICOLOR** has 6 input channels. The Channel 1 and 2 are balanced and have 2 input connectors: one XLR and other RTS type. It has a wide gain range, allowing microphones or LINE signal level.

The 3, 4, 5 and 6 CHANNELS have shared RCA-type L+R inputs with a RTS type connector for greater connection flexibility. Built-in Player unit shares channel 6.

All 6 inputs have independent controls for:
  - Gain for adjusting the input signal level.
  - 4 EQ controls HIGH, MID HIGH. MID LOW and LOW with ±15dB boost/attenuation.
  - Level for output control.
 The 2 outputs have great amplitude and can deliver up to +18dBu or 6.3Vac of distortion-free signal.

Important recommendations
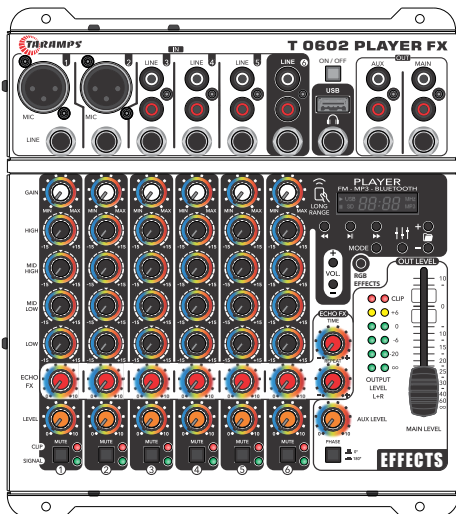
Use the P4 adapter with terminal that comes with the product to connect the power wires to the vehicle's 12V battery. Use 1.5mm^2 gauge wires for both the positive and negative wires. Screw the wires according to the following instruction:
1- Borne ⊕ on the battery positive
2 - Borne ⊖ on the battery negative.
As protection, a fuse must be installed close to the positive pole of the battery **(2A fuse)**. check for more details on pag. 16 of this manual. For the REMOTE connection, use 0.5 mm^2 wire.

The sound mixer must be fixed in an easily accessible and ventilated place. It is not recommended to install the product on the sides of speakers, as vibrations can damage their internal components.

In order to avoid noise captation, use good quality shielded signal cables and connectors.
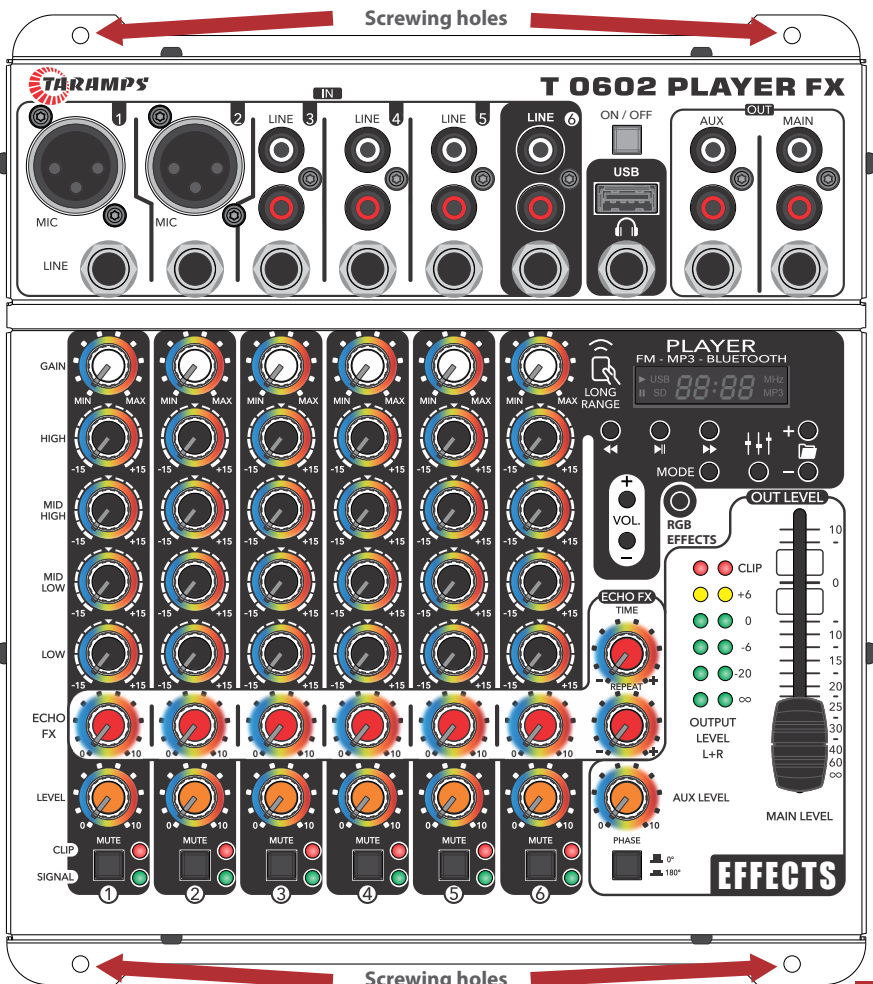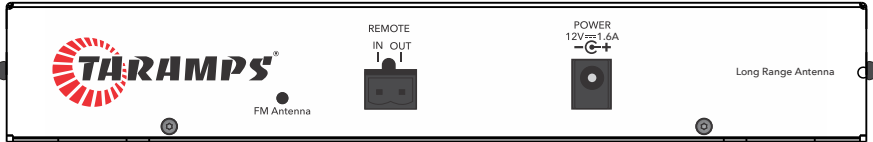
⚠ **CAUTION**   Check power polarity and recommended gauge.
it is recommended to install a 2 Amperes fuse on the positive supply terminal.

Product overview
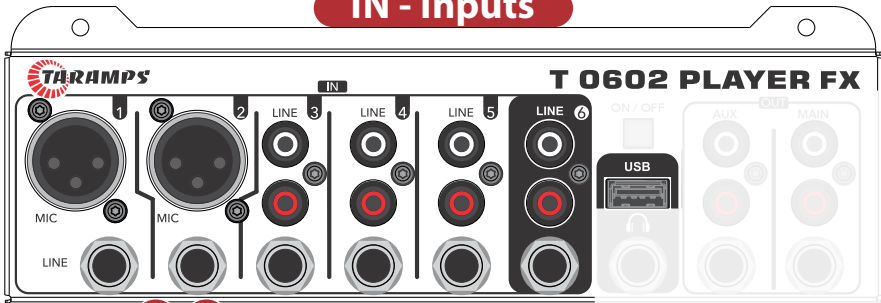
On this page you have an overview of the **T 0602 PLAYER FX MULTICOLOR** sound mixer, you will better understand the commands on the next page. To be able to use all the product commands, carefully read all the commands below.

Install the mixer in an easily accessible place and, if fixing is necessary, use the 4 screwing holes to avoid possible vibrations.

REMOTE
IN   OUT

POWER
12V 1.6A

FM Antenna

Long Range Antenna

Screwing holes

T 0602 PLAYER FX

IN   OUT

MIC   MIC   LINE 3   LINE 4   LINE 5   LINE 6   ON / OFF   AUX   MAIN

LINE   USB

1   2

PLAYER
FM - MP3 - BLUETOOTH

GAIN   MIN MAX

HIGH   -15 +15

MID HIGH   -15 +15

MID LOW   -15 +15

LOW   -15 +15

ECHO FX   0 10

LEVEL   0 10

CLIP
SIGNAL
MUTE

LONG RANGE

USB   MHz
SD   MP3

MODE

VOL.

RGB EFFECTS

ECHO FX
TIME
REPEAT

PHASE   0°   180°

OUT LEVEL

10
0

CLIP
+6
0
-6
-20
∞

OUTPUT LEVEL L+R

AUX LEVEL

10
0
10
15
20
25
30
40
60
∞

MAIN LEVEL

EFFECTS

1   2   3   4   5   6

Screwing holes

04

Connections

IN - Inputs

MIC / LINE 1 2

Balanced inputs: For XLR (Canon) and TRS connectors. ATTENTION: these inputs DO NOT HAVE PHANTON POWER.

LINE 3 4 5 6

Unbalanced inputs: Inputs for RCA or (TRS 1/4") connector. They allow you to receive signals from several types of sound gear such as CD/DVD/MP3-player, audio processors, ... The LINE 6 input shares the same controls as the built-in **PLAYER**, with the signals being downmixed on the input.

USB

Input for USB Drive: USB input for USB DRIVE connection. This input accepts Mp3 and WMA files up to 320Kbps (high quality).

OUT - Outputs
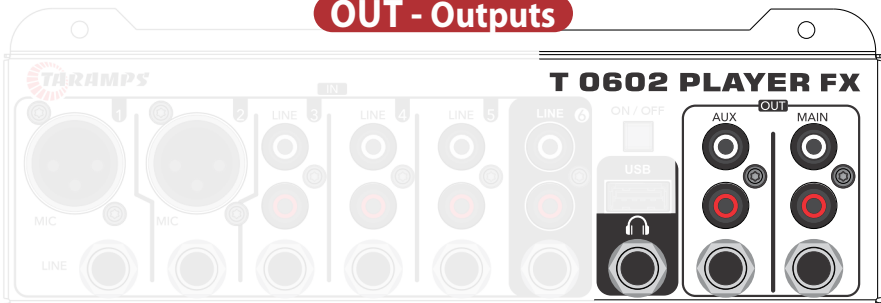
HEADPHONES

Audio output for headphones. Use headphones with P10 standard. This output only plays audio from the built-in PLAYER in stereo.
It is not possible to listen to channels 1, 2, 3, 4, 5 and 6 through this output.

AUX OUT

It features an RCA connector in parallel with a connector for TRS. This output mixes all input signals, including L and R.
This output features a phase inversion button and independent level control, but it also responds to the **MAIN LEVEL** control.

MAIN OUT

It features an RCA connector in parallel with a connector for TRS.
This output mixes all input channels, including R and L.

Functions

Controls

GAIN
Adjusts the input signal level. It must be used in case of input saturation, signaled by the CLIP LEDs.

HIGH
Increases or reduces **treble** by up to ±15dB

MID HIGH
Increases or reduces **mid-high** by up to ±15dB

MID LOW
Increases or reduces **mid-low** by up to ±15dB

LOW
Increases or reduces **low** by up to ±15dB

ECHO FX
Adjusts the amount of effect that will be applied to the channel. 0 being no effect and 10 being maximum effect.

LEVEL CHANNELS
Adjusts the audio level of the channel (channel 1, 2, 3, 4, 5 or 6) that will be mixed at the outputs.

MUTE
Mutes the channel mixing at the outputs. It is useful for quick channel cutting without changing the gain settings. When activated, the red CLIP LED will light regardless of the input signal level.

LED INDICATORS
Red LED shows channel input saturation or MUTE button pressed.
Green LED indicates that the channel is receiving signal at its input.
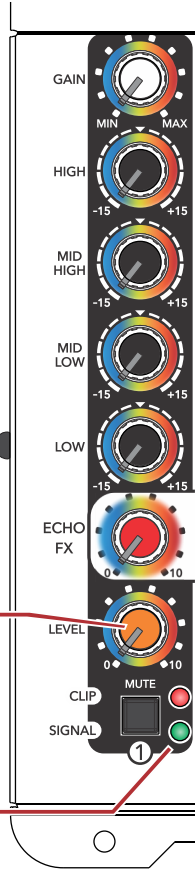
ECHO FX
ECHO FX: The TIME control increases the time between repetitions, ranging from approximately 50ms to 350ms. The REPEAT control increases the number of repetitions from 1 (minimum) to 12, with exponential attenuation.
In a practical way, the TIME control can be compared to the size of an echo room. For a larger room, the sound takes more time to reflect on the walls. For smaller rooms the reflection time is short, some times difficult to realise. The REPEAT control can be compared to the type of wall coating material. Soft material absorbs more sound energy, creating less echo repetition. Hard material reflects more effectively the sound creating more sound reflection.
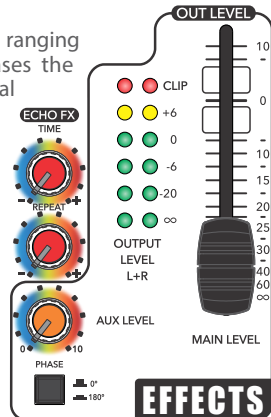
PHASE
Inverts the signal phase of the AUX OUT channel by 180°

AUX LEVEL
Adjusts the audio output level at AUX OUT

VU-METER
Indicates the level of the output signal.

MAIN LEVEL
Controls the signal level at the outputs.

Functions

On / Off

ON/OFF: Turns the T 0602 PLAYER FX MULTICOLOR on or off. When the mixer is on, this key lights up in blue. This key is also used to synchronize the long-distance remote control, allowing the use of up to 3 controls simultaneously.

To sync a new remote, follow the instructions:

1- Make sure the T 0602 PLAYER FX MULTICOLOR is working.

2- With the T 0602 PLAYER FX MULTICOLOR OFF, press and hold the ON/OFF key for 10 seconds.

3- The key will alternately flash blue and red, indicating the synchronization mode between the mixer and the long-distance remote control.

**4-** On the long-distance control, press the synchronism keys ▶‖ and ▲ simultaneously until the ON/OFF key goes off (check if the long-distance control is compatible*).

5- If it doesn't go off, bring the long-distance control closer to the T 0602 PLAYER FX MULTICOLOR with the synchronization keys ▶‖ and ▲ pressed until the synchronization is done and the ON/OFF key goes off.

* The T 0602 PLAYER FX MULTICOLOR only works with a TARAMPS long-distance control operating at a frequency of 433.5MHz, FSK modulation with its own encryption.

All TLC3000 and Connect Control manufactured from 03/2014 to today's date are compatible with Player tables.

Player control
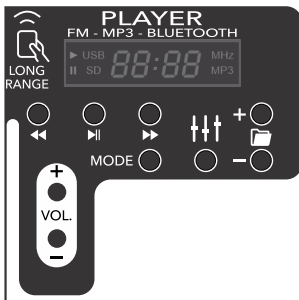
◀◀ goes back to the beginning of the track. Double tap, skip to previous track. Long press, rewinds playing track. ▶‖ stops/continues playback of the current track.

▶▶ skips to the next track. Long press, skips forward in the currently playing track.

EQ.: Changes the preset equalization. It has 5 modes, *nor* is equal FLAT or NATURAL equalization.

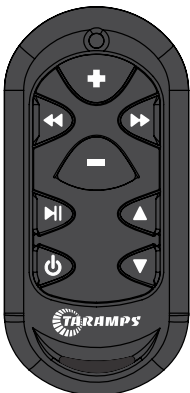**MODE:** Short press: Changes the playback function between Bluetooth, USB and FM.

Long press: Turns off only the player, leaving other functions active.

Folder+: Advances to the next folder.

Folder-: Goes back to the previous folder. The root directory is usually the F001 folder.

Vol+: Increases the player's volume.

Vol-: Decreases the volume of the player.

Long range control

✚ increases the volume of the player.

▬ reduces the volume of the player.

▶‖ stops/continues playback of the current track.

▶▶ skips to the next track.

◀◀ skips to the previous track.

▲ advances to the next folder.

▼ back to the previous folder.

⏻ Short press: turns on the device / changes PLAYER function.
Long press: Turn off the device.

RGB effects

The **T 0302 FX MULTICOLOR** sound mixer has several lighting effects that can be chosen by the user. There are two operating modes that alternate depending on the state of the table:

STANDBY MODE: activated when there is no audio output for 10 seconds. At this moment, the RGB EFFECTS button will set the lighting effect to standby mode.

AUDIO MODE: activated when there is an audio signal output from the table. At this moment, the RGB EFFECTS button will configure the lighting effect for audio mode.

RGB EFFECTS

NOTE: VU-METER effects are only available in AUDIO MODE. This effect works with the output audio level and serves only as a lighting effect. For greater output level accuracy, use the LED VU-METER next to MAIN LEVEL.
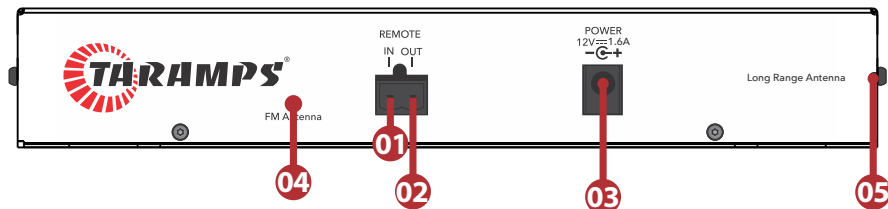
STANDBY EFFECTS TABLE

0	turns off all RGB effect LEDs
1	changes the automatic effect randomly
2	rainbow effect with wave animation
3	horizontal lines falling and accumulating, changes colors automatically
4	vertical back and forth with white background and dots alternating colors
5	vertical fill in red
6	strobe effect in white
7	giroflex effect
8	writing TARAMPS
9	color bomb effect
10	matrix effect
11	game symbols
12	fixed color: red
13	fixed color: orange
14	fixed color: yellow
15	fixed color: green
16	fixed color: green + cyan
17	fixed color: cyan
18	fixed color: blue
19	fixed color: purple
20	fixed color: pink
21	fixed color: pink + red
22	fixed color: faint white
23	fixed color: medium white
24	fixed color: strong white
25	palette per function: white gain / eq. blue / eco red / level orange
26	palette per function: white gain / eq. green / eco red / level orange
27	palette per function: white gain / eq. cyan / eco red / level orange
28	palette per function: white gain / eq. purple / eco green / level orange
29	palette per function: red gain / eq. purple / eco green / level blue
30	green background with white pimball animation
31	red background with white pimball animation
32	blue background with white pimball animation
33	purple background with white pimball animation
34	yellow background with white pimball animation
35	cyan background with white pimball animation
36	rainbow background with pimball (arcade) animation in white

AUDIO EFFECTS TABLE

0	turns off all RGB effect LEDs
1	changes the automatic effect randomly
2	vu-meter: green background, scale from green to red
3	vu-meter: green background, scale from blue to green
4	vu-meter: white background, range from green to purple
5	vu-meter: blue background, scale from blue to red
6	vu-meter: green background, scale from green to red
7	vu-meter: purple background, green/yellow/red scale
8	rainbow effects with wave animation
9	horizontal lines falling and accumulating, changes colors automatically
10	vertical back and forth with white background and dots alternating colors
11	vertical fill in red
12	strobe effect in white
13	giroflex effect
14	writing TARAMPS
15	color bomb effect
16	matrix effect
17	game symbols
18	fixed color: red
19	fixed color: orange
20	fixed color: yellow
21	fixed color: green
22	fixed color: green + cyan
23	fixed color: cyan
24	fixed color: blue
25	fixed color: purple
26	fixed color: pink
27	fixed color: pink + red
28	fixed color: faint white
29	fixed color: medium white
30	fixed color: strong white
31	palette per function: white gain / eq. blue / eco red / level orange
32	palette per function: white gain / eq. green / eco red / level orange
33	palette per function: white gain / eq. cyan / eco red / level orange
34	palette per function: white gain / eq. purple / eco green / level orange
35	palette per function: red gain / eq. purple / eco green / level blue
36	green background with white pimball animation
37	red background with white pimball animation
38	blue background with white pimball animation
39	purple background with pimball (arcade) animation in white
40	yellow background with white pimball animation
41	cyan background with white pimball animation
42	rainbow background with pimball (arcade) animation in white

Installation

Power and activation

REMOTE
IN   OUT

POWER
12V⎓1.6A
−⊙+

Long Range Antenna

TARAMPS®

FM Antenna

01

04   02   03   05

The **T 0602 PLAYER FX MULTICOLOR** was designed to be used in car audio systems with a 12V battery, but it can also be used with an external 12V plug adapter with a current of at least 2A, which must be purchased separately (in this case, the consumer should pay attention to the adapter plug that should be standard P4-2mm) . It has an ON/OFF button that eliminates the REMOTE IN connections.

It can automatically turn on and off by remote activation using the REMOTE IN connection. To do so, keep the ON/OFF key off (unpressed).

The REMOTE OUT connection can be used for powering amplifiers and is timed to minimize transients when turning the system on and off.

REMOTE IN 01

Electrical connection that automatically turns on or off from a remote cable from a CD/MP3 player. Use 0.5 mm² gauge cable. Note: if the ON/OFF button is pressed, the device will not turn off via remote activation.

REMOTE OUT 02

Output for activating other devices. It can be used to turn on amplifiers or other equipment as long as they have a remote input. This output is current limited and not suitable for currents greater than 100mA. Use 0.5 mm² or higher gauge cables.

12V POWER SUPPLY 03

Standard P4 /12V 2mm power connector. Use the TERMINAL/P4 adapter that comes with the product or a 12V adapter source (adapter source doens't come with the product).

Use a 0.75mm² cable for the connections and use a 1A fuse on the positive wire as close as possible to the battery, following the marking on the TERMINAL/P4 adapter:

⊕ to the battery's 12V positive terminal.

⊖ to the battery's negative terminal

⚠ CAUTION   Check power polarity and recommended gauge.
it is recommended to install a 1 Ampere fuse on the positive supply terminal.
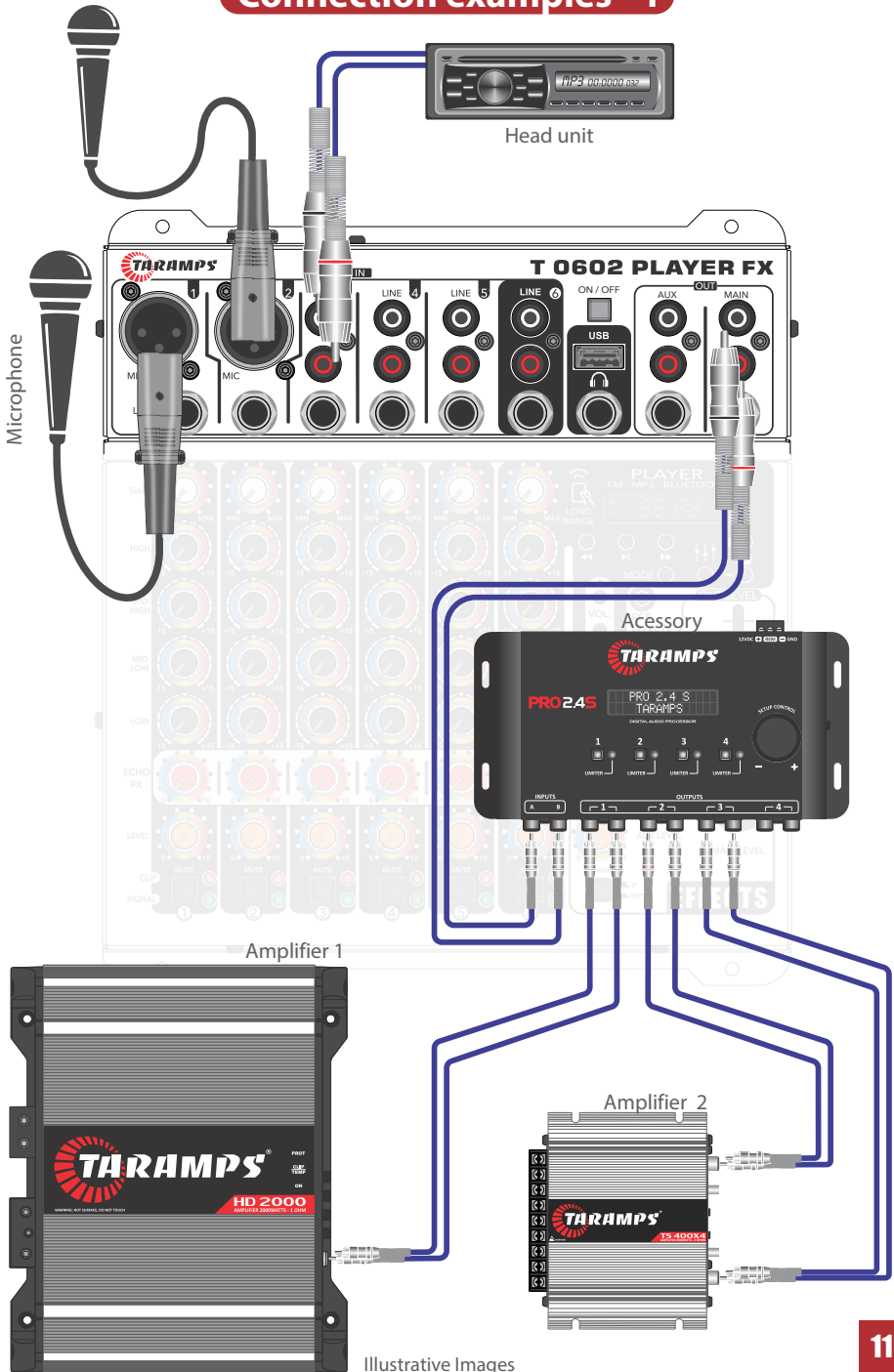
FM ANTENNA 04

Indoor wire antenna for FM radio reception. Position the wire antenna in order to achieve the best FM reception.
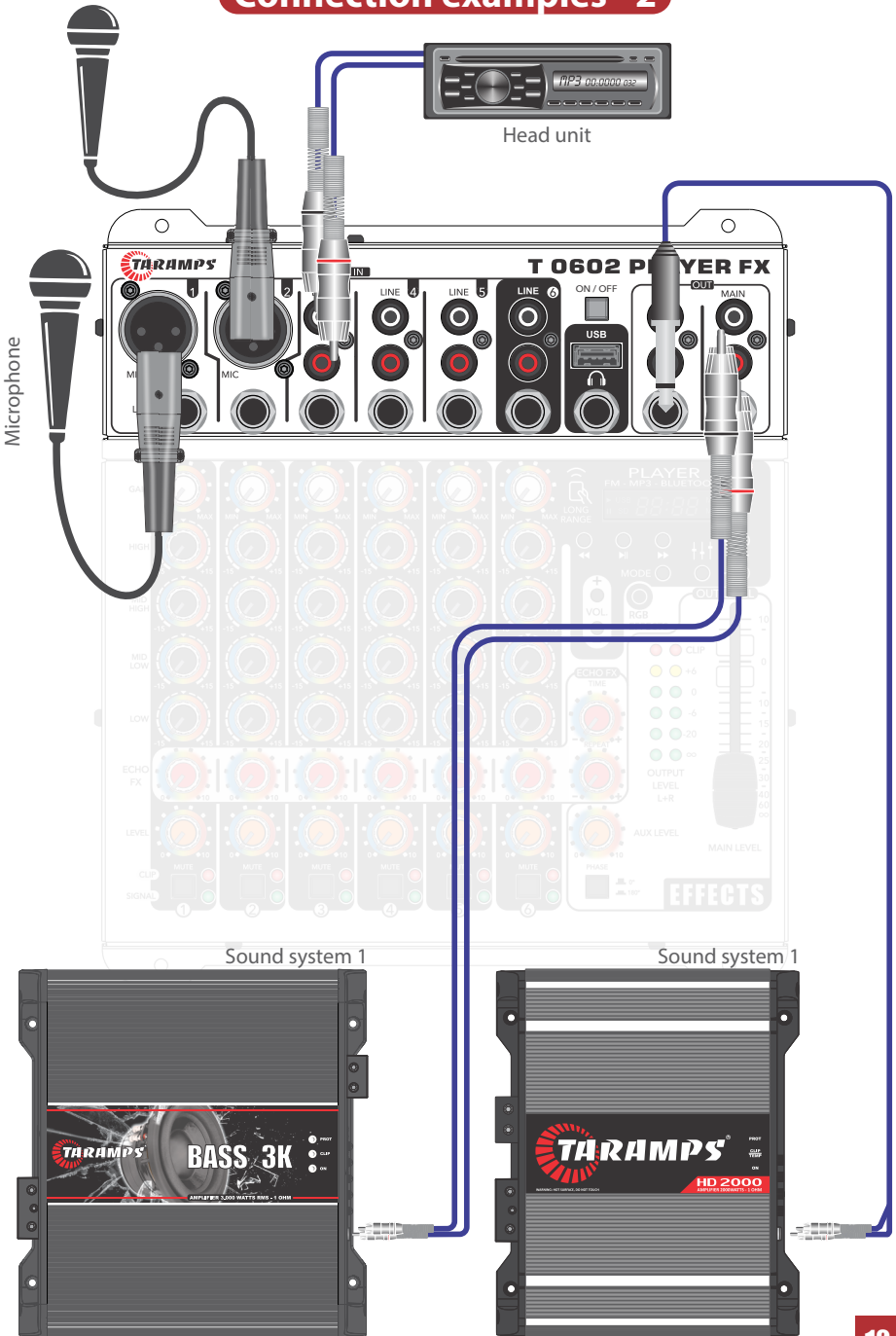
ANTENA DO CONTROLE REMOTO DE LONGA DISTÂNCIA 05

Keep the antenna taut for better reception. Do not cut or connect to earth or power supply as this may damage the device.

Installation

Connection examples - 1

Head unit

Microphone

Microphone

T 0602 PLAYER FX

Acessory

Amplifier 1

Amplifier 2

Illustrative Images

Installation

Connection examples - 2

Head unit

T 0602 PLAYER FX

Microphone

Sound system 1

Sound system 1

BASS 3K

HD 2000

Illustrative Images

Technical features

Frequency Response (-3dB):	2Hz ~ 76Khz
Total Harmonic Distortion:	<0,009% (T.H.D.)
Signal to Noise Ratio (SNR):	112dB
Channel 1and 2 input sensitivity:	Mic (XLR) Min: 500mV ~ Max 7mV Line (TRS) Min: 620mV ~ Max 7.6mV
Channels 3~6 input sensitivity:	Line (TRS/RCA) Min: 2.55V ~ Max: 60mV
4 EQ bands per channel:	High ±15dB (12KHz) Mid High ±15dB (2.5KHz) Mid Low ±15dB (300Hz) Low ±15dB (80Hz)
Channel 1and 2 input impedance:	Mic (XLR): Unbalanced 4K Ohms Balanced 8K Ohms Line (TRS): Unbalanced 8.5K Ohms Balanced 17K Ohms
Channels 3~6 input impedance:	Line (TRS): unbalanced 10K Ohms Line (RCA): unbalanced 10K Ohms
Bluetooth version:	4.0 SBC / A2DP
Audio format:	MP3 / WMA
Maximum bitrate:	320Kbps
FM:	87.5MHz to 108MHz
EQ mode:	POP, ROCK, JAZZ, COUNTRY, FLAT
Echo Fx Time / Echo Fx Repeat:	50 ~ 350ms 1 ~ 12 repetitions
Remote Control:	433.5MHz 10dBm
Output impedance:	Main Out (P10/RCA): 47R Aux Out (P10/RCA): 47R
Max outputs level:	Main Out (P10/RCA): 18 dBu/6.3Vac Aux Out (P10/RCA): 18 dBu/6.3Vac
Power Voltage (POWER):	9 ~ 16 Vdc
Max Consumption:	5mA (stand by) / 670 mA (máx)
Remote Input (REM Connector):	9 ~ 16 Vdc
Remote Output (REM Connector):	100 mA
Dimensions (WxHxD):	215 x 42 x 236mm (8.46"x1.65"x9.29")
Weight:	1.18Kg (2.60lb)

*The consumption of the T 0602 PLAYER FX MULTICOLOR may vary according to the effect used.

Taramps reserves the right to modify the content of this manual without prior notice and without any obligation to apply the modifications to previously produced units.

TARAMPS®