Thank you for purchasing this

ThundrTunes

TT405 Bluetooth Amplifier

Please read through these instructions carefully so you will know how to operate your model properly.

After you have finished reading the instructions, keep this document in a safe place for future reference.

THIS PACKAGE CONTAINS

1-Switch mounting Controller

1-Multi-Function Controller

1-Power Harness

1-User Manual

WARNING: BIG POWER! SPEAKER 4 OHM RMS 50W!!!

BEFORE YOU START

IMPORTANT SAFETY PRECAUTIONS

- BE SURE TO OBSERVE THE FOLLOWING GUIDELINES:
 - Do not turn up the volume so high that you can't hear what's around you.
 - Use caution or temporarily discontinue use in potentially hazardous situations.
- Do not operate mobile video equipment while driving a motorized vehicle safe driving and safety consideration of others should always be your highest priority.
- Set your volume control at a low setting, then slowly increase the sound until you can hear it comfortably without distortion, or ear discomfort.
- In the event you should notice smoke, strange noises or odor from this product, or any other abnormal signs, immediately turn off the power and consult technician.
 Using this product in this condition may result in permanent damage to the system.

INSTALLATION PRECAUTIONS

WARNING Always consult with a professional installer

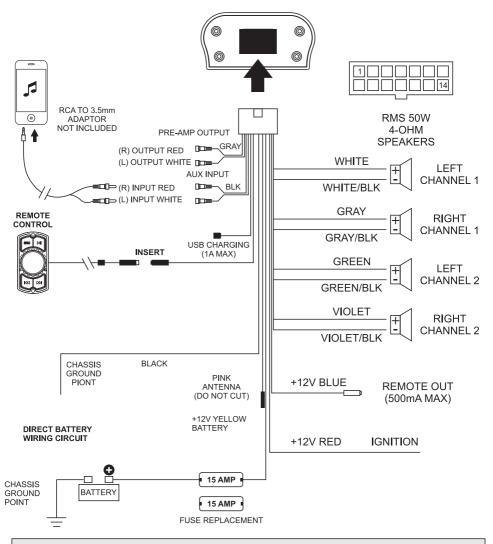
- Do not attempt to install or service this product by yourself. Installation or servicing of this product by persons without professional training and experience in electronic equipment and motorized vehicle accessories may be dangerous and could expose you to the risk of electric shock, injury or other hazards.
- *TT405* should be powered directly to a vehicle battery
- When wiring directly to vehicle battery, be sure to disconnect the batteries negative terminal wire before starting any wiring procedures, if extending the main power wire, it is suggested that an optional fuse and fuse holder (not included) with minimum rating of 15 Amperes be in-line with the positive battery terminal.
- The ground cable length should not exceed 18-inches (See wiring diagram PG 4)
- The *TT405* has a weather resistant design, it should not be submerged in or under water under any circumstances
- Use only the installation parts provided with the TT405



CAUTIONS!! Using other mounting methods may void this warranty

2)

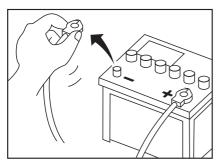
WIRE DIAGRAM



A

CAUTION!! Do not ground or short the PINK antenna wire

BEFORE INSTALLING THIS PRODUCT



To avoid potential shorts in the electrical system, be sure to disconnect the (-) battery cable before installation. Use this unit with a 12-volt battery and negative grounding only. Failure to do so may result in a fire or malfunction.



When replacing the fuse, be sure to only use a fuse of the rating specified on this product.

To avoid short-circuiting, cover any disconnected lead with insulating tape. It is especially important to insulate any unused wires, which if left uncovered may cause a short circuit. When connecting other devices to this product, refer to the manual for the product to be connected. The black cable is ground, make sure to connect the ground wire first.

Ensure that the ground cable is properly connected to metal parts of the vehicles body frame or direct to the battery if your vehicle does not have a grounded chassis frame. The ground cable of this units power amp and a second powered system must be connected to the frame separately with different screws. If the screw for the ground wire loosens or falls out, it could result in fire or malfunction.



TOOLS NEEDED:

- -Wrench and/or Pliers
- -#2 Philips screwdriver
- -Crimp tool
- -Electrical tape



SUGGESTED MOUNTING METHODS

The *TT405* can mounted in three different configurations:

Switch Mount

MOUNTING

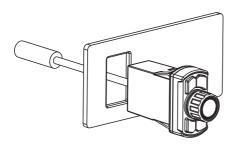
The controller is designed to mount in a standard rocker switch opening for accessories. Do not attempt to remove the unit from the switch housing. The housing is an integral part of the unit.

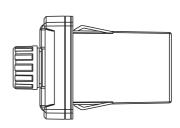
The unit itself requires a 0.83 inch (21mm) wide by 1.4 inch (37mm) high opening with at least 2.5 inches of clearance behind the mounting surface. Before drilling any holes make sure there are no obstructions behind the mounting surface.

Keep enough space around the controller if possible to accommodate the operator's fingers.

RUBBER GASKET

Make sure the included rubber gasket ramains in place during installation. This gasket aides in the unit ramaning water resistant.







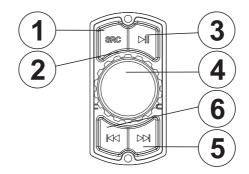
Tips:

To release the **TT405** controller from the mounting bezel, insert a small jewelers screwdriver into the left/right slots of the bezel.



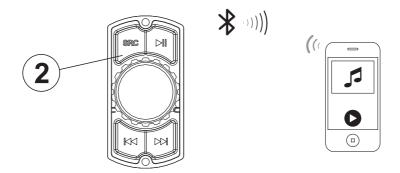
GETTING STARTED

GETTING TO KNOW YOUR LM405 MULTIFUNCTION CONTROLLER (MFC)



- m(1) MFC-MULTIFUNCTIONAL CONTORLLER
- 2 POWER ON/OFF SRC PURPLE = AUX IN / RED = USB / BLUE = BLUETOOTH
- $m{3}$ PLAY / PAUSE, LONG PRESS TO DISCONNECT BT PAIRING
- $oxed{4}$ VOLUME BUTTON (ROTATE), SHORT PRESS FOR MUTE
- 5 NEXT TRACK / FAST FORWARD
- (6) PREVIOUS TRACK / FAST REWIND

BLUETOOTH OPERATION



PAIRING & DISCOVERING A NEW BLUETOOTH CONNECTION

- 1. Power on the TT405 by short press the **SRC** (2) button, the Bluetooth blue LED will be switched on, a confirmation tone will be heard, signaling that TT405 is now ready for Bluetooth pairing.
- 2. Now that the TT405 (LUFTMUSIC) is in pairing mode: Android users:
 - a. Go into the Setting Menu of your device.
 - b. Enter the Bluetooth Menu and press SCAN.
 - c. TT405 (ThundrTunes) will now be display under AVAILABLE DEVICES.
 - d. If prompted, enter passcode: "0000".

IOS users:

- a. Go into the Setting Menu of your device.
- b. Enter the Bluetooth Menu.
- c. TT405 (ThundrTunes) will now be display.
- d. If prompted, enter passcode: "0000".
- 3. If the TT405 is not seen, repeat the above steps to refresh the "Device List".
- 4. When the connection is successful, you are now ready to steam music from your devices favorite media player to the TT405.
- 5. Press and hold **SRC** 2 button to power off TT405.

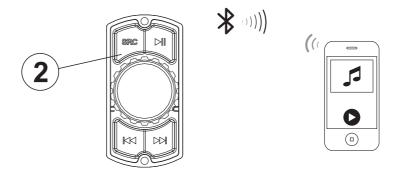


Tips:

To avoid battery exhaustion be sure to run the vehicles engine while using this product. Using this product without running the engine can drain the battery.



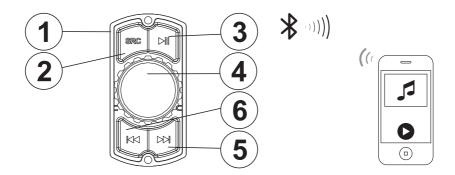
BLUETOOTH OPERATION



RECONNECTION

- 1. Power on the **TT405** and your last paired Bluetooth Device;
- 2. The unit will now automatically reconnect;
- 3. If your device was previous paired with *TT405*, but it wasn't the last paired device:
 - a. Ensure no other devices are currently paired
 - b.Enter the *Bluetooth Menu* on your device being paired
 - c. TT405 will display under AVAILABLE DEVICES
 - d.Choose the *TT405* to reconnect
- 4. If the device is out of range from *TT405*, it will disconnect automatically:
 - a.To reconnect once device is back in range, press the **SRC** button once
 - b.The **TT405** will now reconnect to the device, a confirmation tone will be heard from the speakers.

STREAMING MUSIC



MULTIFUNCTIONAL CONTROLLER BLUETOOTH OPERATION

- 1. Press the 3 **PLAY/PAUSE**, once to start playing music or press the **PLAY** button from your device touch screen, pressing again to **PAUSE**
- 2. To skip songs or advance, press the **NEXT TRACK** (5) button, press and hold to **FAST FORWARD**
- 3. To select the previous song, press the *PREVIOUS TRACK* (6) button, press and hold to *FAST REWIND*

VOLUME CONTROL

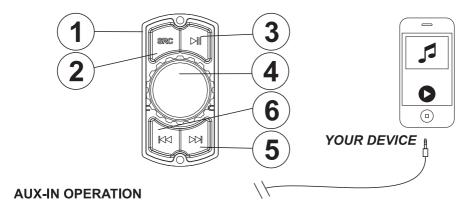
- 1. To raise the *VOLUME*, rotate the *VOLUME KNOB* clockwise;
- 2. To lower the VOLUME, rotate the VOLUME KNOB anti-clockwise;



Tips: Turn the *BLUETOOTH* volume level on your device to its 100% level



AUX-INPUT



TT405 can play audio from any device that has a pair of RCA output

- 1. Power on the *TT405* by short press *SRC* (2) button
- 2. Short press the **SRC**(2) button again once, the controller LED lighting will change to **RURPLE**, indicating the system is in **AUX-IN** mode.
- 3. Bluetooth devices will remain paired even in AUX-IN MODE
- 4. Connect the integrated *RCA AUX-IN* cable on the amplifier (if you have a 3.5mm jack device, please use the 3.5mm to RCA adaptor, 3.5mm to RCA adaptor is not included)
- 5. Route the audio wires back to a convenient storage place, secure your device.

VOLUME CONTROL

- 1. To raise the VOLUME, rotate the VOLUME KNOB clockwise;
- 2. To lower the **VOLUME**, rotate the **VOLUME** KNOB anti-clockwise;
- 3. To *MUTE / UN-MUTE* the *VOLUME*, press the *PLAY / PAUSE* (3) button



Tips: Turn the *HEADPHONE* volume level on your device to its 100% level



TROUBLE SHOOTING GUIDE

TROUBLE	CAUSE	SOLUTION
	The fuse is blown	Check / replace the fuse
Unit will not turn on	Ignition not engaged	Turn ignition to on position
	Blown speaker	Replace faulty speaker
	Volume is low / muted	Press the volume level up
No sound is heard	Device is paused or muted	Check your devices playing / volume status
Can not pair Bluetooth	The Bluetooth function of the device is not enabled	Refer to the user manual of the device for how to enable the Bluetooth function
The audio quality is poor after connection with a Bluetooth enabled device	The Bluetooth reception is poor	Move the device closer to the audio system or remove any obstacle between the device and the systems antenna
Unit has become unresponsive	Power glitch or interference	Disconnect power for 10 seconds to reset

SPECIFICATIONS

BLUETOOTH

• BT: 5.0

BT Range: 33FT / 10 M (CLASS 2)

• BT Profiles: A2DP

AMPLIFIER

· Channels: 2

• MAX Continuous Output: 240W (All channel driven)

• PEAK Power Rating

• RMS Total Power Output: 60W

Class D

• Frequency response: 20-25KHz

• 4 Ohm stable

• Input impedance: 22K Ohm

CHASSIS

Dimension: W x L x H
 99 x 203 x 50 mm

• Controller Dimensions W x L x H

24 x 48 x 12 mm

Controller cable length: 3m
 Quick connect Molex power harness

GENERNAL

• Power source: 14.4VDC (10.8 16V Allowable)

· Grounding System: Negative type

• Maximum Current Consumption: 20A

• 3-way protection circuitry (thermal, overload, and speaker short protection)

• USB output voltage: 5VDC @1A

• Unit weight: 2.08lbs / 0.94kgs

• Storage Temperature: 5 F to 113 F / - 15 to 45 degree

Replacement Fuse: 15A

(Replace with ATO Fuse Type Only).

