# TACOTUNES.COM



# ReCurve EZQ Owner's Manual

Toyota Factory Stereo Integration and sound optimization made easy.

Tacotunes.com has gone green . . . documentation is now online.

FOR 12V NEGATIVE GROUND USE ONLY

# TACOTUNES.COM

Tacotunes.com would like to thank you for purchasing the ReCurve EZQ. We truly appreciate your business. This manual is intended to give you a broad overview on how to install, setup and tune your ReCurve EZQ. Please be sure to review installation videos and read this manual before you begin your installation. A little planning will go a long way!

After years of customers asking us how to keep their stock head unit and add an amp(s), the EZQ was developed over a 3 year period to work with Toyota's head units and their internal digital signal processor (DSP). Each vehicle manufacturer has a little "twist" to their DSP and how they will "tune" the factory stereo. This product was developed with your Toyota in mind. Additionally the turn key plug and play installation for your Toyota makes this the easiest and fastest way to add an amp(s) to your stock head unit.

#### Before you begin your install you want to:

- 1. Plan the mounting location of your EZQ
- 2. Plan the mounting location(s) of your AMP(s).
- 3. Plan for the speakers and subs you will be using in your installation.
- 4. Routing your signal / power wire coming from your stock head unit to the Recurve EZQ.
- 5. How to wire up the ReCurve EZQ
- 6. Register your EZQ within 30 days of purchase to extend your warranty. http://www.tactounes.com/warranty

### Tools you will need to setup the ReCurve EZQ.

- 1. Inexpensive Voltmeter
- 2. Wire strippers
- 3. CD with test tones, you can download them for free from our website or purchase a disk from our website.
- 4. Small screwdriver
- 5. Drill / screwdriver to mount the recurve.

# **ReCurve EZQ quick setup**

- 1. Disconnect your car battery before performing any electrical upgrades.
- 2. Remove your stock stereo / head unit.
- 3. Install ReCurve EZQ wire harness system to your stock stereo. (if available see video for your Toyota)
- 4. Mount the ReCurve EZQ in an accessible location. (see example installs for some ideas on where to mount your ReCurve EZQ and amp(s)
- 5. Set ALL adjustment knobs to 12:00 O, clock (straight up)
- 6. Set the sub input slider to F/R input.
- 7. Connect ALL wires coming from the ReCurve EZQ harness. REGARDLESS of your configuration ALL signal wires coming from the head unit via the ReCurve EZQ wire harness MUST BE CONNECTED. Simply match the colors on the harness to the labels on the ReCurve EZQ.
- 8. DO NOT, connect the ReCurve EZQ to your amp(s) until you have performed the initial setup on the ReCurve EZQ. This includes the remote turn on wire (blue in most cases) or the RCA cables.
- 9. Download the test tones from the ReCurve site at <a href="http://tacotunes.com/recurve">http://tacotunes.com/recurve</a>.

  Create a CD of WAV files do not convert to MP3 or AAC. MP3 will introduce noise into the system we do not want during the initial setup phase.
- 10.Play test tone and adjust input / output gain knobs to obtain 4.0 volts from front, rear and subwoofer outputs. Regardless if you are going to do speakers and or sub, you will want to set the output on all 6 channels.

The ReCurve is now ready to be connected to your amp(s). Keep in mind some amps may require lower or higher input sensitivity. You can easily adjust the ReCurve EZQ for more / less voltage. Most of your higher end after market head units will provide 2 – 4 volt RCA (signal) output to your amps. The ReCurve EZQ will provide a user definable output. However, 4 volts is pretty common output that seems to work with a majority of amps.

#### **ReCurve EZQ** TACOTUNES RIGHT FRONT - GRAY GROUND - BLACK RIGHT FRONT - GRAY / BLACK 12V+ - YELLOW 0 REMOTE OUT (AMP) - BLUE □ LEFT FRONT • WHITE **POWER** REMOTE IN - RED ■ LEFT FRONT - WHITE / BLACK RIGHT REAR - PURPLE ReCurve EZQ RIGHT REAR - PURPLE / BLACK ♠ LEFT REAR • GREEN ● LEFT REAR - GREEN / BLACK SPEAKER LEVEL INPUTS 000 0 0 SUBWOOFER INPUT SUBWOOFER OUTPUT SUBWOOFER LEVEL OUT SUBWOOFER 0 0 31.5 Hz 40 Hz 50 Hz 63 Hz 80 Hz 100 Hz 0 0 0 0 INPUT GAIN 120 Hz 160 Hz 250 Hz 500 Hz 1 kHz 2 kHz 10 kHz 0 FRONT OUTPUT FRONT INPUT www. tacotunes. com

# Mounting the Recurve in your Toyota:

Mounting your ReCurve EZ and amp(s) should be planned ahead. You will want to be sure you can gain access to the knobs on your ReCurve EZQ and amp(s). In most cases we try to install the amp(s) under the driver side seat and then the passenger side seat. We have some example installations online for your particular Toyota. In the Toyota Tacoma and Tundra we generally recommend mounting the ReCurve ON the seat if it folds down or under the rear seat if it folds up. Cars & SUVs depend on your accessories and options. Example third row seats or covers.

The ReCurve is NOT water resistant so be sure to mount it in a dry place . . keep in mind that drinks are often spilled in vehicles. Also, try to keep it away from hot or confined areas that trap heat.

NOTE: 5 channel amps (Speaker and subwoofer amp) have come a long way in recent years. The days are two amps are becoming a thing of the past for most installations. Don't get us wrong, there are still plenty of multiple amp setups that make sense. Just depends on the amount of power you are looking for  $\odot$ .

Speakers and subs, be sure to check out our vids on how to select speakers and subs for your Toyota. For some Toyotas we have VERY detailed information on what fits along with detailed installation videos. We are always offering give always to folks that provide DETAILED installation pictures of Toyotas we have not yet documented a FULL install.

# **Installing and Routing the ReCurve Wiring System:**

Routing the ReCurve wiring system from the head unit to your ReCurve EZQ is fairly simple. Again, refer to installation videos and pictures of ideas. Just be sure the wires are not going to interfere with any moving parts. i.e., brake, gas pedal, steering wheel, glove boxes etc.. in most cases we recommend that you DO NOT run any of the ReCurve wires near the driver side area. If necessary just be sure to route wiring away from all moving parts.

# Wiring up the ReCurve EZQ:

Wiring up the EZQ is very simple. We have color coded every wire to insure you do not have any problems. In addition, the ReCurve EZQ is clearly labeled to match each wire coming from the stock head unit. You will strip away roughly ¼" of wiring and then insert into the supplied wiring connectors. You can watch this video for more information on how to make the connections:

You will notice after you connect all the ReCurve wires coming from the head unit, that the Remote Out (AMP) – BLUE is going to be unpopulated. Generally your amp installation / wiring kit will included at least 17 feet of blue wire. This blue wire will run from the ReCurve EZQ to the amp(s). This blue wire sends a signal and tells the amp(s) to turn on.  NOTE: Be sure to check out our installation kits. They include WAY more than a standard install kit and makes your install go much faster and easier.
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Online Audio Solutions, LLC – www.tacotunes.com

# Eine Out Speaker Inputs Power Input / Output Power Input / Output

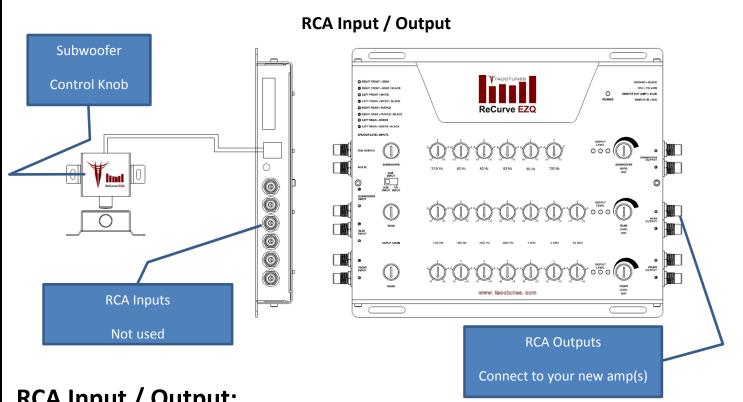
#### **Line Out - Speaker Connections:**

- + Right Front Gray Wire (Passenger Side)
- Right Front Gray / Black Wire (Passenger Side)
- + Left Front White Wire (Driver Side)
- Left Front White / Black Wire (Driver Side
- + Right Rear Purple Wire (Passenger Side)
- Right Rear Purple / Black Wire (Passenger Side)
- + Left Rear Green Wire (Passenger Side)
- Left Rear Green / Black Wire (Passenger Side)

Power Connections Ground – Black Wire 12V+ - Yellow Wire Remote In - Red

NOTE: All the wires ABOVE are included in the ReCurve EZQ wiring system. The blue wire below is USUALLY included with an amp installation kit.

Remote Out (Amp) – Blue Wire – This wire will run to your aftermarket amp(s). Most amps have a "remote" input. This signal will tell the amp to "turn on" when the ReCurve powers up.



**RCA Input / Output:** 

The ReCurve EZQ is setup with a total of 3 RCA inputs (left hand side of Recurve EZQ) and 3 RCA outputs (right hand side of ReCurve EZQ). The majority of our applications will NOT use the RCA inputs. The RCA inputs will be covered in another user manual /stereo configuration (JBL equipped Toyota's). The 3 RCA outputs will be used to connect your stereo to your aftermarket amplifier(s).

The ReCurve EZQ is labeled with Front, Rear and Subwoofer Output. You will need to run RCA wires from your ReCurve EZQ to your new amp. Be sure to pay close attention to the **RIGHT and LEFT outputs.** 

Watch this video on selecting an amp for your Toyota:

www.youtube.com

## **Subwoofer Control Knob:**

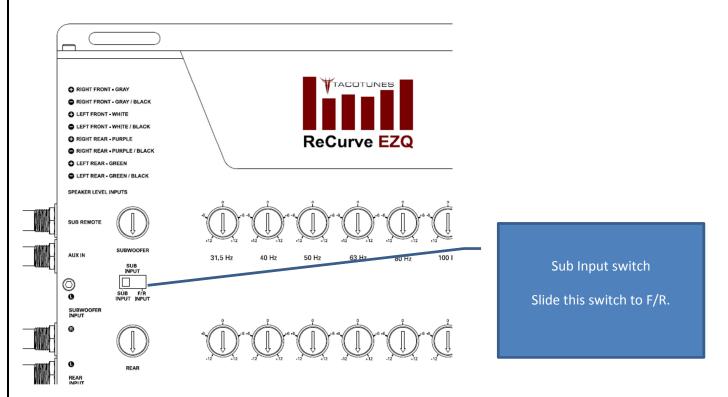
The ReCurve EZQ is equipped with a unique feature not often found in aftermarket amplifiers. Most 5 channel & subwoofer amps offer a bass boost knob. The problem with bass boost knob is they usually only boost the signal at around 45Hz. This leaves the rest of the subwoofer frequency range LOWER than the 45Hz boosted frequency. The ReCurve EZQ acts like a remote gain and will lower and raise the entire subwoofer frequency range. This

will allow you to match your sub to your speakers. You have heard some songs with way more bass than the next song on your playlist. This allows you to quickly and easily adjust.

In our experience, most users find a "cruising" volume and then a "rock out" volume. Cruising volume is usually where you are driving and enjoying your music say at level 20. However your JAM comes on and now you want to CRANK it! The subwoofer control knob lets you quickly adjust to your EXACT level of bass. So be sure to place this in an easy to reach spot.

# **Subwoofer Input Control Switch:**

Below the speaker inputs on the left hand side of the ReCurve EZQ, you will see a switch labeled: SUB INPUT, you will need to switch this to F/R (slide to right) input for your installation. If you are NOT getting subwoofer output, flip this switch back and forth. If the switch is not fully engaged you will get LOW or NO subwoofer output.



# How to adjust the EZQ:

So far you know what all the connections are for and how to get the ReCurve physically connected to your stock stereo. But now you want to know how to make it work. Well the great news is that 90% of the ReCurve EZQ setup has been completed.

There are 26 adjustable knobs on the ReCurve EZQ, AND at first glance it can be somewhat intimidating. But don't stress, after a few minutes of playing with the knobs you will be able to adjust the music to your desired "taste".

The first step in setting up the ReCurve EZQ is to set the OUTPUT voltage level that will be delivered to your amplifier. You will want to have a digital multi-meter for this step. You don't' need an expensive unit. You can use a \$30 unit from just about any electronics store or order one from amazon.com. We will have some on our website for about \$25. If you hunt around on amazon, can probably find them for as low as \$15.



You will also need to download some test tones from our site (available here on this page). The test tones need to be burned to a CD and played on your stereo. You can view this video to see how to make it all work.

NOTE: WE prefer to use the CD to set up the voltage output. Phones and USB interfaces sometimes introduce variables that we don't' want to deal with during this phase.

We will be looking to provide around 4 – 6 volts of output to your amplifier. The ReCurve EZQ can provide up to 12 volts of output. However, most amps are not setup to handle more than 8 volts. There are some rare cases with older amps where you might need additional output so we built that into the ReCurve.

The rest of the steps can be seen here on this video:

#### www.youtube.com

After you have completed the recurve output, you will need to set the gain on your amp.

We have another video here on how to set the gain properly on your amp.

#### www.youtube.com

#### Adjusting the EZQ EQ knobs:

Before you attempt to adjust the equalization knobs on the ReCurve EZQ, you should watch this video to understand the audio frequency range.

www.youtube.com

Subwoofer Output Control Knobs: 31.5Hz, 40Hz, 50Hz, 63Hz, 80Hz, 100Hz

Front Output Control Knobs: 120Hz, 160Hz, 250Hz, 500Hz, 1kHz, 2kHz, 10kHz

Front Output Control Knobs: 120Hz, 160Hz, 250Hz, 500Hz, 1kHz, 2kHz, 10kHz

#### Things to Remember:

Left refers to DRIVER side of vehicle Right refers to PASSENGER side of vehicle.

Try to avoid cutting the extra length on your ReCurve. It is not uncommon for folks new to car audio to make changes to their system. Try to hide the extra wiring somewhere to allow for future changes. Keep in mind we offer turn key systems to help you design your system right the first time.

**Common Questions:** 

### **User Manual / Tech Support:**

The user and installation guide(s) can be found online at:

http://www.tacotunes.com/recurve

## **Warranty / Registration:**

http://www.tactounes.com/warranty

Registration MUST be completed with 30 days of purchase for the FREE extended warranty coverage. NO EXCEPTIONS!!!!

THE RECRUVE EZQ IS WARRANTED FOR 90 DAYS FROM DATE OF PURCHASE.

An additional 12 month warranty (15 months total) is provided at NO COST to users that register the ReCurve EZQ within 30 days of purchase. \*\*\*\*\*\* NO EXCEPTIONS\*\*\*\*\*
Extended warranties are available for purchase.

All ReCurve EZQs are warranted for period of 90 days from the date of purchase against defects in materials and workmanship. The warranty is for repair or replacement at the sole discretion of Online Audio Solutions LLC / authorized dealer. We may replace with a

new or reconditioned one of the same or similar design. Customer will be responsible for freight charges incurred to return the product and will include a Cashier's check or Money order in the amount of \$20 for continental U.S or \$35 for Hawaii, Alaska, Canada and Puerto Rico, payable to Online Audio Solutions, LLC to cover return shipping and handling. To obtain warranty service, the warranty registration MUST have been completed within 30 days of purchase

Before shipping the unit back to Online Audio Solutions, LLC. You must obtain an RMA# (Return Merchandize Authorization) Please submit an RMA request online at <a href="https://www.tacotunes.com/rma">www.tacotunes.com/rma</a>.

This warranty does not cover any unit subjected to abuse, neglect, incorrect wiring, water damage, repair or modifications. Any damages resulting from legal action for breach or express or implied warranties shall be limited to the cost of the original purchase price of the unit. As a condition of this warranty, it is agreed that the remedy provided by this document is the sole remedy under this warranty. All liability for coincidental damages is excluded. The purchaser agrees to retain the original proof of purchase for establishing the effective date of this warranty. Should Online Audio Solutions or authorized dealer replace your product under warranty, this replacement shall be considered a transaction under the original warranty and does not extend the original warranty period. This warranty is non-transferable.

# ReCurve EZQ Last update: 7/22/2014