



# BlueJay Tercel User Guide

## WARNING

- **Modifying the Motor Controller parameters can damage equipment, property and cause INJURY/DEATH to yourself/others.**
- **Modifications may VOID your WARRANTY**
- **Factory/Dealer settings should only be performed by trained technicians**

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Questions? Feedback? Send email to: [support@bluejaytuning.com](mailto:support@bluejaytuning.com)

## Table of Contents

WARNING.....	1
What BlueJay Does.....	4
Getting Started.....	5
Settings.....	5
Trouble Shooting.....	6
BlueJay can't identify controller.....	6
Can't edit a parameter.....	6
Won't load backup.....	6
Won't load profile.....	6
Something Else.....	6
FAQs.....	7
Why isn't BlueJay free?.....	7
Where can I find the latest BlueJay version?.....	7
Where can I find a list of reported bugs?.....	7
Will you give me personal support to tune my controller?.....	7
Tercel/LVTong Tuning.....	8
Speed.....	10
But first - Adjust your controller's maximum RPM.....	10
Acceleration / Deceleration (Regen).....	11
Simple.....	11
Complex.....	12
Torque.....	13
Tercel Parameters.....	14
2.01.09 : Motor Maximum RPM.....	14
3.02.01 : High Speed – Forward Max KM/H.....	15
3.02.02 : High Speed – Reverse Max KM/H.....	15
3.02.05 : Low Speed – Forward Max KM/H.....	15
3.02.06 : Low Speed – Reverse Max KM/H.....	16
3.03.01 : Forward Motor Configuration.....	16
3.03.03 : Gear Ratio.....	17
3.03.04 : Tire Diameter.....	17
6.01.01 : High Speed - Forward Max RPM.....	17
6.01.02 : High Speed - Reverse Max RPM.....	17
6.01.05 : Low Speed - Forward Max RPM.....	17
6.01.06 : Low Speed - Reverse Max RPM.....	18
6.02.01 : Speed Response Mode.....	18
6.02.02 : High Speed Point.....	18
6.02.03 : Low Speed Point.....	19
6.02.04 : High Speed Pt – Forward Acceleration Time – Full Pedal.....	19
6.02.05 : Low Speed Pt – Forward Acceleration Time – Full Pedal.....	19
6.02.06 : Forward Acceleration Time.....	20
6.02.07 : High Speed Pt – Forward Deceleration Time – Full Pedal.....	20
6.02.08 : Low Speed Pt – Forward Deceleration Time – Full Pedal.....	20
6.02.09 : Forward Deceleration Time.....	20
6.02.10 : High Speed Pt – Reverse Acceleration Time – Full Pedal.....	21
6.02.11 : Low Speed Pt – Reverse Acceleration Time – Full Pedal.....	21
6.02.12 : Reverse Acceleration Time.....	21

## BlueJay Tuning User Guide – v20250808

6.02.15 : Reverse Deceleration Time.....	22
8.03.01 : Regen Soft Stop Enable.....	22
10.01.01 : Driving Current Limit Enable.....	22
10.01.02 : Driving Base Speed 0 RPM.....	22
10.01.03 : Driving Base Speed 1 RPM.....	23
10.01.04 : Driving Base Speed 2 RPM.....	23
10.01.05 : Driving Base Speed 3 RPM.....	23
10.01.06 : Driving Base Speed 4 RPM.....	24
10.01.07 : Driving Base Speed 5 RPM.....	24
10.01.08 : Current Limit @ 0 RPM to Base Speed 0.....	24
10.01.09 : Current Limit @ Base Speed 0 to 1.....	24
10.01.10 : Current Limit @ Base Speed 1 to 2.....	24
10.01.11 : Current Limit @ Base Speed 2 to 3.....	25
10.01.12 : Current Limit @ Base Speed 3 to 4.....	25
10.01.13 : Current Limit @ Base Speed 4 to 5.....	25
10.02.01 : Regen Current Limit Enable.....	25
10.02.02 : Regen Base Speed 0 RPM.....	25
10.02.03 : Regen Base Speed 1 RPM.....	26
10.02.04 : Regen Base Speed 2 RPM.....	26
10.02.05 : Regen Base Speed 3 RPM.....	26
10.02.06 : Regen Base Speed 4 RPM.....	27
10.02.07 : Regen Base Speed 5 RPM.....	27
10.02.08 : Regen Current Limit @ 0 RPM to Base Speed 0.....	27
10.02.09 : Regen Current Limit @ Base Speed 0 to 1.....	27
10.02.10 : Regen Current Limit @ Base Speed 1 to 2.....	27
10.02.11 : Regen Current Limit @ Base Speed 2 to 3.....	28
10.02.12 : Regen Current Limit @ Base Speed 3 to 4.....	28
10.02.13 : Regen Current Limit @ Base Speed 4 to 5.....	28

# What BlueJay Does

BlueJay is a simplified performance tuning application for the motor controllers used in electric golf carts and utility vehicles.

BlueJay automatically detects your controller, saves and restores settings, and makes motor tuning simple - even for beginners.

Get the latest version: <https://bluejaytuning.com>

- **Automatic controller detection:** BlueJay queries your connected controller to detect the brand/model/type
- **One application for many controllers.** No manual guesswork of which Chinese OEM tuning application to use
- **Highlights the most important and commonly adjusted tuning parameters**, making them quick and intuitive to edit.
- **Save and Restore:** Snapshot your current configuration or roll back to a known-good one
- **Supports tuning profiles**, including:
  - Sporty and Fast
  - Casual About Town
  - Hill Climber
  - Many other community supported
- Fully **English interface** with simple and clear parameter descriptions

BlueJay works with a wide range of vehicles using compatible AC motor controllers, including Advanced EV, Bintelli, Coleman, Denago, Evolution / HDK, ExCar, EZKruiser, Gotraxx, Gorilla, Moto Electric, Icon, PDG, Racka, Royal, Spartan, Star, Tao, Many others with FJ, EV48-400-C and Tercel/LVTong/JHL controllers!

# Getting Started

Look at the BlueJay Quick Start Guide PDF to get up and running fast.

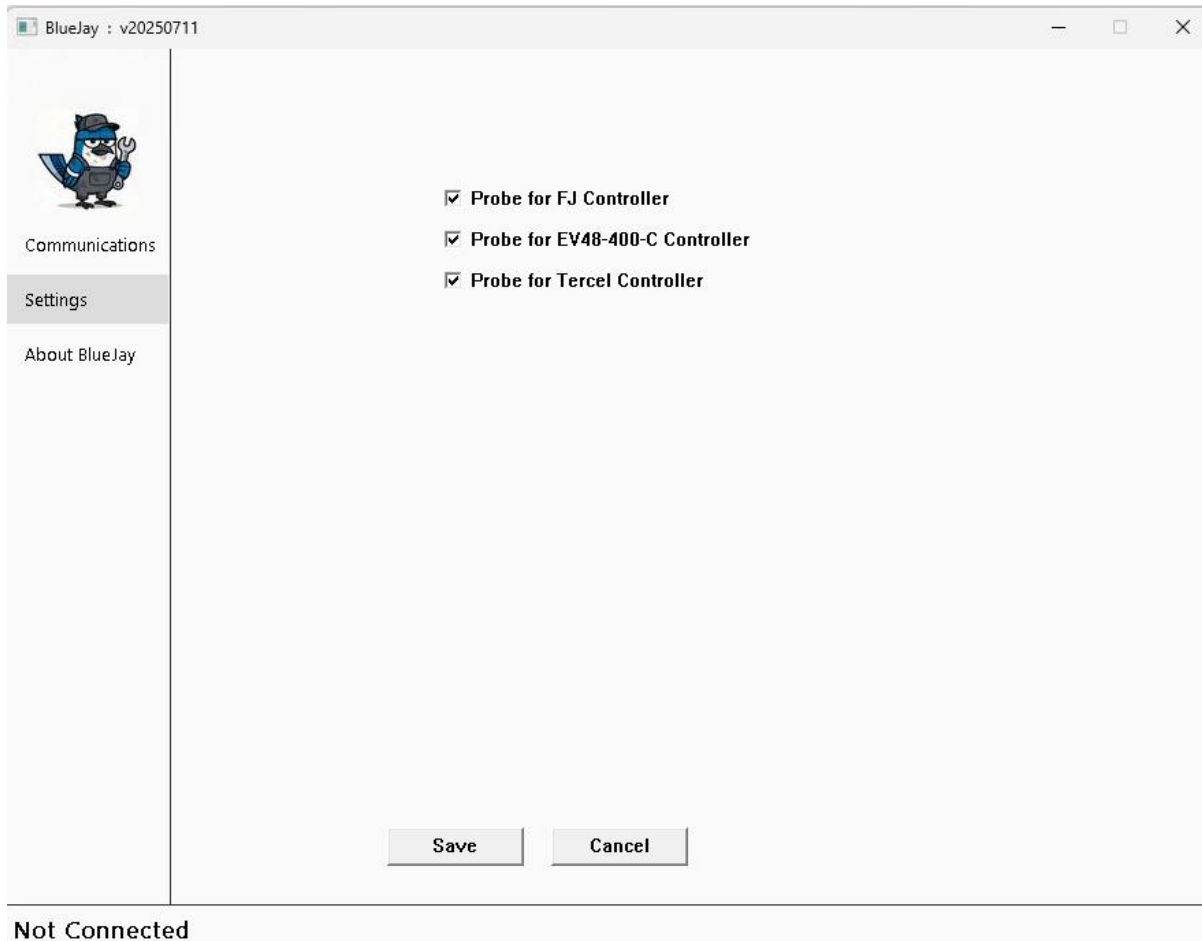
## Settings

By default, BlueJay is configured to probe for all supported controllers.

To save time, you may want it look for just your controller brand.

Click the Setting selection on the left side and then check/uncheck the controllers that you want.

Be sure to click Save if you make changes to the settings.



# Trouble Shooting

## BlueJay can't identify controller

- Make sure your cart is powered on. The controller must have power in order to communicate
- Make sure that you installed your cable's device driver
  - Most cables require a Windows Device Driver to be installed. If you purchased from Cart Cables, go here to find the appropriate driver:
    - <https://www.cartcables.com/pages/drivers>
- Make sure your controller is supported by BlueJay.
  - Identify your controller brand/model/type here:
    - <https://www.cartcables.com/pages/controller-id-guides>

## Can't edit a parameter

- Make sure you are double-clicking the “set” cell of the parameter row.
- Grey Parameter rows are read-only and can not be edited.

## Won't load backup

- Make sure you are loading the correct controller brand/model/type
- Make sure you haven't hand edited the backup file

## Won't load profile

- Make sure you are loading the correct controller brand/model/type
- Make sure you have the parameter named spelled correctly
- Make sure the parameter value is within min/max range

## Something Else

- Send email describing issue to: [support@bluejaytuning.com](mailto:support@bluejaytuning.com)

## FAQs

An updated list of FAQs can be found at: <https://bluejaytuning.com/faqs.html>

### Why isn't BlueJay free?

Since the OEM controller programs like GEF12Host or Fj Programming tool are free, why isn't BlueJay also free?

- Actually those OEMs programs are NOT free. They are licensed applications that have been pirated and copied onto various download sites.
- BlueJay is supported multi-controller application that provides many features that the OEMs applications do not, such as:
  - Save/Restore
  - Profiles
  - User Guide
  - Every common tuning parameter defined and described in the User Guide
  - Email application support, bug fixes, new versions

### Where can I find the latest BlueJay version?

- Go to: <https://bluejaytuning.com>

### Where can I find a list of reported bugs?

- Go to: <https://bluejaytuning.com/downloads.html#issues>
- Report bugs to: [support@bluejaytuning.com](mailto:support@bluejaytuning.com)

### Will you give me personal support to tune my controller?

- No, we offer application support via email and bug fix support but we cannot tell you what parameter values to use for tuning your controller.
- Read the user manual for general guidance
  - There is NOT a one size fits all. Use caution and intelligence
- Get community support by posting tuning questions for the various Golf / Utility Cart forums and sites.

## Tercel/LVTong Tuning

BlueJay can auto-detect a Tercel/LVTong controller. Tercel is an AC motor controller used in Icon Electric Vehicles starting in late 2021/early 2022, some Bintelli, ExCar, Advanced EV and others.



A 4-pin square programming port allows for customization and tuning of vehicle settings.

To connect and program the Tercel controller, you'll need:

- a programming cable such as the [CartCables](#) CC-CBL-ICONSE





Tuning is not complicated but it does come with risks that **MUST** be understood and accepted:

- **Modifying the Motor Controller parameters can damage equipment, property and cause INJURY/DEATH to yourself/others.**
- **Modifications may VOID your WARRANTY**
- **Factory/Dealer settings should only be performed by trained technicians**

This section discusses an approach to performance tuning. What values do you want to tune your cart? It depends on what you want. There is not a one size fits all.

- Don't just enter numbers that someone told you about
- Look at your existing values
- Determine your goals
- Make small changes
- Test with caution

**Before you make any changes, you should make a backup of the current parameters by clicking the Save button.**

To change a parameter, double-click on the the “set” cell of the parameter row. Make sure your change is between the valid min and max for that parameter. After editing, the “set” cell will highlight in yellow to show that it has changed.

**Changes are not written to the connected controller until you click the Write button.**

**If you want to discard changes before writing, click the Reset button.**

You can return to a previous saved state by clicking the Load button and choosing a previously saved file for the connected controller. After loading, differences from the current state and the loaded files will be highlighted in yellow. Be sure to review both the Tuning and Sink tables to see changes. Changes are not actually written to the controller until you click the Write button.

Common tuning areas are:

- Speed
- Acceleration
- Regen/Deceleration

**Note:**

- BlueJay's Tercel parameter names might be slightly different than the OEM name in an attempt to simply/clarify the parameter's purpose.
- However the BlueJay Tercel Parameter names are prefaced with a group index (example 6.02.20) that is a reference to the same parameter in the OEM software (such as ICONLive, LvTongLive, ExCarLive, etc.)
  - This is an aid to those tuners that are familiar with the OEM software and/or are following forum guidance.

## Speed

Speed tuning controls how fast the golf cart can travel under various conditions. This involves adjusting the maximum motor RPM, and then the KM/H parameters.

The “km/h” parameters are the correct way to set vehicle speed:

- 3.02.01 : High Speed - Forward Max km/h
- 3.02.05 : Low Speed - Forward Max km/h
- 3.02.02 : High Speed - Reverse Max km/h
- 3.02.06 : Low Speed - Reverse Max km/h

### **But first - Adjust your controller's maximum RPM**

- 2.01.09 : Motor Maximum RPM

Setting that single parameter allows the controller to **automatically adjust** the other important RPM parameters when the corresponding km/h parameter is set.

For example, when you set:

- 3.02.01 : High Speed - Forward Max km/h
  - the controller will calculate and set 6.01.01 : High Speed - Forward Max RPM
- 3.02.05 : Low Speed - Forward Max km/h
  - the controller will calculate and set 6.01.05 : Low Speed - Forward Max RPM
- 3.02.02 : High Speed - Reverse Max km/h
  - the controller will calculate and set 6.01.02 : High Speed - Reverse Max RPM
- 3.02.06 : Low Speed - Reverse Max km/h

- the controller will calculate and set 6.01.06 : Low Speed - Reverse Max RPM

Remember, you'll enter the speed values in kilometers per hour (km/h). To convert from miles per hour to km/h simply multiply mph by 1.61

Here's a quick table to show MPH  $\leftrightarrow$  KM/H common values:

MPH	km/h
5	8.05
10	16.09
15	24.14
20	32.19
25	40.23
30	48.28
35	56.33

## Acceleration / Deceleration (Regen)

Acceleration and deceleration tuning determine how quickly the cart speeds up or slows down. This is managed by ramp rate settings in the controller. A smoother, slower acceleration may be ideal for comfort and safety, while a sharper ramp gives a snappier, sportier feel.

Deceleration tuning can also affect how aggressively the cart slows down when throttle is released - important for both driving feel and regenerative braking behavior.

The “6.02.01 : Speed Response Mode” parameter value determines what parameters you'll adjust for acceleration/deceleration.

### Simple

- Set “6.02.01 : Speed Response Mode” to 0
- Simple mode requires only 4 parameters to be adjusted:
  - Acceleration:
    - 06.02.06 : Forward Acceleration Time
    - 06.02.12 : Reverse Acceleration Time
  - Deceleration

- 06.02.09 : Forward Deceleration Time
- 06.02.15 : Reverse Deceleration Time

## Complex

- Set “6.02.01 : Speed Response Mode” to 1
- Complex mode allows much finer tuning and requires a lot of parameters to be adjusted:
  - 06.02.02 : High Point
  - 06.02.03 : Low Point
  - Acceleration:
    - 06.02.04 : High Speed Pt - Forward Acceleration Time - Full Pedal
    - 06.02.05 : Low Speed Pt - Forward Acceleration Time - Full Pedal
    - 06.02.06 : Forward Acceleration Time
      - Partial Pedal
    - 06.02.10 : High Speed Pt - Reverse Acceleration Time - Full Pedal
    - 06.02.11 : Low Speed Pt - Reverse Acceleration Time - Full Pedal
    - 06.02.12 : Reverse Acceleration Time
      - Partial Pedal
  - Deceleration
    - 06.02.07 : High Speed Pt - Forward Deceleration Time - Full Pedal
    - 06.02.08 : Low Speed Pt - Forward Deceleration Time - Full Pedal
    - 06.02.09 : Forward Deceleration Time
      - Partial Pedal
    - 06.02.13 : High Speed Pt - Reverse Deceleration Time - Full Pedal
    - 06.02.14 : Low Speed Pt - Reverse Deceleration Time Full Pedal
    - 06.02.15 : Reverse Deceleration Time
      - Partial Pedal

## Torque

The torque is the “muscle” behind the acceleration plan. Each torque partition value limits or defines the force the motor can use to achieve the acceleration plan.

Torque is the rotational force that the motor produces to turn the shaft. Think of it like how hard you twist a wrench - torque is that "twisting" force. Torque tuning affects how well the cart can climb hills, carry loads, or launch from a stop. Adjusting torque levels can help balance power, hill climbing, efficiency, and battery life.

There's two types of torque to discuss:

- Driving Torque
  - This refers to the motor operating as a motor, i.e., driving the vehicle forward or backward using electrical energy drawn from the battery.
  - The Driving Torque Factor in this mode limits how much driving torque the motor can produce at specific RPMs.
- Regenerative Torque
  - This is when the motor operates as a generator, i.e., converting kinetic energy back into electrical energy to recharge the battery (regenerative braking).
  - The Regenerative Torque Factor in this mode limits how much braking torque can be applied by regenerative braking at specific RPMs.

## Tercel Parameters

This section describes all Tercel parameters that BlueJay supports. Refer to the above Tercel/LVTong Tuning section for discussion on an approach to performance tuning.

If you feel that there are needed parameters that are missing, send us an email.

BlueJay presents tuning parameters into 4 tuning tabs.

- Just because a parameter is in these tabs does NOT mean you need to adjust.
- Only change what you need to.
- Change in small increments and test. Go slow, be careful, be smart.

The most common tuning parameters are in the Speed, Accel or Regen tabs. The Sink tab (aka ‘the ‘kitchen sink’)

are other important tuning parameters that may be useful to advanced/experienced tuners.

### Note:

- BlueJay’s Tercel parameter names might be slightly different than the OEM name in an attempt to simply/clarify the parameter’s purpose.
- The BlueJay Tercel Parameter names are prefaced with a group index (example 6.02.20) that is a reference to the same parameter in the OEM software (such as ICONLive, LvTongLive, ExCarLive, etc.)
  - This is an aid to those tuners that are familiar with the OEM software and/or are following forum guidance.

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**These are listed in order of the Tercel OEM “#”.**

### **2.01.09 : Motor Maximum RPM**

- Maximum RPM in any direction in any gear
- Located in the Speed tab
- Range: 0-10000 RPM
  - The OEM allowed max for many Tercel variants is 8000 RPM. Use caution if exceeding OEM range.
- Note:

- Setting "Maximum Motor RPM" changes the max range for the KM/H parameters
- Setting "Maximum Motor RPM" changes the max range for the 'sink' Speed Control RPM parameters
- Setting "Maximum Motor RPM" changes the max range for the 'high speed' and 'low speed' acceleration/deceleration parameters
- After an edit to the "Maximum Motor RPM", BlueJay will linearly auto scale 6 Base Speed 'partitions'. You can edit these if you want different values

### **3.02.01 : High Speed – Forward Max KM/H**

- Max KM/H speed for Forward High Gear
- Located in Speed tab
- Range: 0-max KM/H
  - Max is calculated by the controller using Motor Maximum RPM, Gear Ratio and Tire Diameter
- Note:
  - Setting "Maximum Motor RPM" changes the max range for the KM/H parameters

### **3.02.02 : High Speed – Reverse Max KM/H**

- Max KM/H speed for Reverse High Gear
- Located in Speed tab
- Range: 0-max KM/H
  - Max is calculated by the controller using Motor Maximum RPM, Gear Ratio and Tire Diameter
- Note:
  - Setting "Maximum Motor RPM" changes the max range for the KM/H parameters

### **3.02.05 : Low Speed – Forward Max KM/H**

- Max KM/H speed for Forward Low Gear
- Located in Speed tab
- Range: 0-max KM/H
  - Max is calculated by the controller using Motor Maximum RPM, Gear Ratio and Tire Diameter

- Note:
  - Setting "Maximum Motor RPM" changes the max range for the KM/H parameters

### **3.02.06 : Low Speed – Reverse Max KM/H**

- Max KM/H speed for Reverse Low Gear
- Located in Speed tab
- Range: 0-max KM/H
  - Max is calculated by the controller using Motor Maximum RPM, Gear Ratio and Tire Diameter
- Note:
  - Setting "Maximum Motor RPM" changes the max range for the KM/H parameters

### **3.03.01 : Forward Motor Configuration**

- How to interpret “forward” relative to the motor’s actual rotation direction.
- Located in Sink tab
- If you put the cart in forward gear and it moves backwards, you’d flip this setting from 1 to 0 (or vice versa) instead of rewiring the motor phases.
- Range: 0-1
  - 0: Anti
    - The controller considers “forward” to mean the motor should spin in the opposite direction from the vehicle’s physical forward motion.
    - You’d use this if the wiring or gearing causes the motor’s natural positive rotation to push the vehicle backwards.
  - 1: Sync
    - The controller considers “forward” to mean the motor spins in the same direction as the vehicle moves forward.
    - You’d use this if the motor’s positive rotation matches the forward motion of the vehicle.



### **3.03.03 : Gear Ratio**

- This is the final drive ratio between the motor and the wheels, taking into account any gearbox, chain/belt drive, or differential gearing.
  - Example: If the motor spins 16 times for every 1 wheel rotation, your gear ratio is **16.0**
- Located in Sink tab
- The controller uses this number to calculate vehicle speed from motor RPM.
- Range 1.0-100.0

### **3.03.04 : Tire Diameter**

- The outer diameter of the tire, measured in meters (m).
- Located in Sink tab
- Range: 0.01 – 2.0 meters

### **6.01.01 : High Speed - Forward Max RPM**

- Maximum forward RPM when in High Speed
- Located in Sink tab
- This is set by the controller automatically when you set 3.02.01 : High Speed - Forward Max km/h

### **6.01.02 : High Speed - Reverse Max RPM**

- Maximum reverse RPM when in High Speed
- Located in Sink tab
- This is set by the controller automatically when you set 3.02.02 : High Speed - Reverse Max km/h

### **6.01.05 : Low Speed - Forward Max RPM**

- Maximum forward RPM when in Low Speed
- Located in Sink tab
- This is set by the controller automatically when you set 3.02.05 : Low Speed - Forward Max km/h

### 6.01.06 : Low Speed - Reverse Max RPM

- Maximum reverse RPM when in Low Speed
- Located in Sink tab
- This is set by the controller automatically when you set 3.02.06 : Low Speed - Reverse Max km/h

### 6.02.01 : Speed Response Mode

- Determines what other parameters you'll adjust for acceleration/deceleration.
- Located in the Accel tab. Also Read-Only in the Regen tab.
- Range: 0-1 (Simple or Complex)
  - Simple mode requires only 4 parameters to be adjusted.
    - 06.02.06, 06.02.09, 06.02.12, 06.02.15
    - **Setting Simple Mode hides non applicable parameters**
  - Complex mode allows much finer tuning and requires a lot of parameters to be adjusted.
- Note:
  - After an edit to the "Speed Response Mode", write the change to the controller and BlueJay will update to show the appropriate simple or complex parameters in the Accel AND Regen tabs

### 6.02.02 : High Speed Point

- The RPM point at which the “High Speed” acceleration and deceleration parameters take affect.
- Located in the Accel tab. Also Read-Only in the Regen tab.
- **Note:** Applicable when “Speed Response Mode” is set to Complex
- Range: 0-max motor RPM
- Note:
  - Setting "Maximum Motor RPM" changes the max range for the ‘high speed’ acceleration/deceleration parameters

### 6.02.03 : Low Speed Point

- The RPM point at which the “Low Speed” acceleration and deceleration parameters take affect.
- Located in the Accel tab. Also Read-Only in the Regen tab.
- **Note:** Applicable when “Speed Response Mode” is set to Complex
- Range: 0-max motor RPM
- Note:
  - Setting "Maximum Motor RPM" changes the max range for the ‘high speed’ acceleration/deceleration parameters

### 6.02.04 : High Speed Pt – Forward Acceleration Time – Full Pedal

- The time constant for ramping up motor output WHEN the full pedal is pressed AND the speed is higher than the “High Speed Point”
  - This is a rate limiter for how quickly the controller increases torque in that speed range - it spreads the increase over the set time value to make acceleration smoother.
- Located in the Accel tab.
- **Note:** Only applicable when “Speed Response Mode” is set to Complex
- Range: 0.1 – 30.0 seconds
  - If you set it to 0.1 s, torque ramps almost instantly.
  - If you set it to 30.0 s, it will take 30 seconds to ramp from the current torque.

### 6.02.05 : Low Speed Pt – Forward Acceleration Time – Full Pedal

- The time constant for ramping up motor output WHEN the full pedal is pressed AND the speed is higher than the “Low Speed Point” but lower than “High Speed Point”
  - This is a rate limiter for how quickly the controller increases torque in that speed range - it spreads the increase over the set time value to make acceleration smoother.
- Located in the Accel tab.
- **Note:** Only applicable when “Speed Response Mode” is set to Complex
- Range: 0.1 – 30.0 seconds

- if you set it to 0.1 s, torque ramps almost instantly.
- If you set it to 30.0 s, it will take 30 seconds to ramp from the current torque.

#### **6.02.06 : Forward Acceleration Time**

- When “Speed Response Mode” is set to Simple
  - The time constant for ramping up motor output regardless of pedal position or Low/High Speed Points
- When “Speed Response Mode” is set to Complex
  - The time constant for ramping up motor output WHEN the pedal is pressed less than full.
- Located in the Accel tab.
- Range: 0.1 – 30.0 seconds
  - if you set it to 0.1 s, torque ramps almost instantly.
  - If you set it to 30.0 s, it will take 30 seconds to ramp from the current torque to the commanded torque.

#### **6.02.07 : High Speed Pt – Forward Deceleration Time – Full Pedal**

- The forward deceleration time WHEN the pedal is released AND the speed is higher than the “High Speed Point”
- Located in the Regen tab.
- Applicable when “Speed Response Mode” is set to Complex
- Range: 0.1 – 30.0 seconds

#### **6.02.08 : Low Speed Pt – Forward Deceleration Time – Full Pedal**

- The forward deceleration time WHEN the full pedal is release AND the speed is higher than the “Low Speed Point”
- Located in the Regen tab.
- Applicable when “Speed Response Mode” is set to Complex
- Range: 0.1 – 30.0 seconds

#### **6.02.09 : Forward Deceleration Time**

- When “Speed Response Mode” is set to Simple

- Sets the forward deceleration time regardless of pedal position or Low/High Speed Points
- When “Speed Response Mode” is set to Complex
  - Sets the forward deceleration time when the pedal is pressed less than full.
- Located in the Regen tab.
- Range: 0.1 – 30.0 seconds

#### **6.02.10 : High Speed Pt – Reverse Acceleration Time – Full Pedal**

- The time constant for ramping up motor output WHEN the full pedal is pressed AND the speed is higher than the “High Speed Point”
- Applicable when “Speed Response Mode” is set to Complex
- Located in the Accel tab.
- Range: 0.1 – 30.0 seconds

#### **6.02.11 : Low Speed Pt – Reverse Acceleration Time – Full Pedal**

- The time constant for ramping up motor output WHEN the full pedal is pressed AND the speed is higher than the “Low Speed Point”
- Located in the Accel tab.
- Applicable when “Speed Response Mode” is set to Complex
- Range: 0.1 – 30.0 seconds

#### **6.02.12 : Reverse Acceleration Time**

- When “Speed Response Mode” is set to Simple
  - The time constant for ramping up motor output regardless of pedal position or Low/High Speed Points
- When “Speed Response Mode” is set to Complex
  - Sets the reverse acceleration time when the pedal is pressed less than full.
- Located in the Accel tab.
- Range: 0.1 – 30.0 seconds

### **6.02.15 : Reverse Deceleration Time**

- When “Speed Response Mode” is set to Simple
  - Sets the reverse deceleration time regardless of pedal position or Low/High Speed Points
- When “Speed Response Mode” is set to Complex
  - Sets the reverse deceleration time when the pedal is partially released.
- Located in the Regen tab.
- Range: 0.1 – 30.0 seconds

### **8.03.01 : Regen Soft Stop Enable**

- Enables Soft Stop Mode
- Soft Stop Mode is definitely a bit confusing. 0 and 2 are similar but different.
- Located in Regen tab
- Range:
  - 0: Turns off soft stop mode. Unknown how it differs from 2.
  - 1: Motor applies regenerative braking or active deceleration when throttle is released, but no forward torque.
  - 2: Motor disables regen torque

### **10.01.01 : Driving Current Limit Enable**

- Enable of Drive Current Limits. When disabled, the controller will not enforce the configured drive current limits (10.01.08–10.01.13). The motor can deliver torque up to whatever the hardware and other protection parameters allow, so the actual torque will be determined by battery limits, motor capability, and any other active constraints.
- Located in Accel tab
- Range: 0: Disable, 1: Enable

### **10.01.02 : Driving Base Speed 0 RPM**

- Speed point for drive current limit
- Located in Speed tab

- Note: This parameter is only applicable if 10.01.01 is set to 1. However, BlueJay will display and auto scale this parameter regardless of 10.01.01 for consistency.
- Note: After an edit to the "2.01.09 : Maximum Motor RPM", BlueJay will linearly auto scale 6 Base Speed 'partitions'. You can edit these if you want different values
- Range 0- max RPM

### **10.01.03 : Driving Base Speed 1 RPM**

- Speed point for drive current limit
- Located in Speed tab
- Note: This parameter is only applicable if 10.01.01 is set to 1. However, BlueJay will display and auto scale this parameter regardless of 10.01.01 for consistency.
- Note: After an edit to the "2.01.09 : Maximum Motor RPM", BlueJay will linearly auto scale 6 Base Speed 'partitions'. You can edit these if you want different values
- Range 0- max RPM

### **10.01.04 : Driving Base Speed 2 RPM**

- Speed point for drive current limit
- Located in Speed tab
- Note: This parameter is only applicable if 10.01.01 is set to 1. However, BlueJay will display and auto scale this parameter regardless of 10.01.01 for consistency.
- Note: After an edit to the "2.01.09 : Maximum Motor RPM", BlueJay will linearly auto scale 6 Base Speed 'partitions'. You can edit these if you want different values
- Range 0- max RPM

### **10.01.05 : Driving Base Speed 3 RPM**

- Speed point for drive current limit
- Located in Speed tab
- Note: This parameter is only applicable if 10.01.01 is set to 1. However, BlueJay will display and auto scale this parameter regardless of 10.01.01 for consistency.
- Note: After an edit to the "2.01.09 : Maximum Motor RPM", BlueJay will linearly auto scale 6 Base Speed 'partitions'. You can edit these if you want different values
- Range 0- max RPM

#### **10.01.06 : Driving Base Speed 4 RPM**

- Speed point for drive current limit
- Located in Speed tab
- Note: This parameter is only applicable if 10.01.01 is set to 1. However, BlueJay will display and auto scale this parameter regardless of 10.01.01 for consistency.
- Note: After an edit to the "2.01.09 : Maximum Motor RPM", BlueJay will linearly auto scale 6 Base Speed 'partitions'. You can edit these if you want different values
- Range 0- max RPM

#### **10.01.07 : Driving Base Speed 5 RPM**

- Speed point for drive current limit
- Located in Speed tab
- Note: This parameter is only applicable if 10.01.01 is set to 1. However, BlueJay will display and auto scale this parameter regardless of 10.01.01 for consistency.
- Note: After an edit to the "2.01.09 : Maximum Motor RPM", BlueJay will linearly auto scale 6 Base Speed 'partitions'. You can edit these if you want different values
- Range 0- max RPM

#### **10.01.08 : Current Limit @ 0 RPM to Base Speed 0**

- Driving Torque in Amps for the range from 0 RPM to the sink's Base Speed 0 value
- Located in Accel tab
- Range: 0 - Base Speed 0 RPM

#### **10.01.09 : Current Limit @ Base Speed 0 to 1**

- Driving Torque in Amps for the range from sink's Base Speed 0 value to Base Speed 1 value
- Located in Accel tab
- Range: Base Speed 0 – Base Speed 1 RPM

#### **10.01.10 : Current Limit @ Base Speed 1 to 2**

- Driving Torque in Amps for the range from sink's Base Speed 1 value to Base Speed 2 value



- Located in Accel tab
- Range: Base Speed 1 – Base Speed 2 RPM

#### **10.01.11 : Current Limit @ Base Speed 2 to 3**

- Driving Torque in Amps for the range from sink's Base Speed 2 value to Base Speed 3 value
- Located in Accel tab
- Range: Base Speed 2 – Base Speed 3 RPM

#### **10.01.12 : Current Limit @ Base Speed 3 to 4**

- Driving Torque in Amps for the range from sink's Base Speed 3 value to Base Speed 4 value
- Located in Accel tab
- Range: Base Speed 3 – Base Speed 4 RPM

#### **10.01.13 : Current Limit @ Base Speed 4 to 5**

- Driving Torque in Amps for the range from sink's Base Speed 4 value to Base Speed 5 value
- Located in Accel tab
- Range: Base Speed 4 – Base Speed 5 RPM

#### **10.02.01 : Regen Current Limit Enable**

- Enable of Regen (generator) Current Limits. When disabled, the controller will not enforce the configured regeneration current limits (10.02.08–10.02.13). Regenerative braking torque will likewise be unconstrained except by other protections (battery charge current limits, voltage limits, etc.).
- Located in Regen tab
- Range: 0: Disable, 1: Enable

#### **10.02.02 : Regen Base Speed 0 RPM**

- Speed point for generator current limit
- Located in Speed tab

- Note: This parameter is only applicable if 10.02.01 is set to 1. However, BlueJay will display and auto scale this parameter regardless of 10.02.01 for consistency.
- Note: After an edit to the "2.01.09 : Maximum Motor RPM", BlueJay will linearly auto scale 6 Regen Base Speed 'partitions'. You can edit these if you want different values
- Range: 0- max RPM

### **10.02.03 : Regen Base Speed 1 RPM**

- Speed point for generator current limit
- Located in Speed tab
- Note: This parameter is only applicable if 10.02.01 is set to 1. However, BlueJay will display and auto scale this parameter regardless of 10.02.01 for consistency.
- Note: After an edit to the "2.01.09 : Maximum Motor RPM", BlueJay will linearly auto scale 6 Regen Base Speed 'partitions'. You can edit these if you want different values
- Range: 0- max RPM

### **10.02.04 : Regen Base Speed 2 RPM**

- Speed point for generator current limit
- Located in Speed tab
- Note: This parameter is only applicable if 10.02.01 is set to 1. However, BlueJay will display and auto scale this parameter regardless of 10.02.01 for consistency.
- Note: After an edit to the "2.01.09 : Maximum Motor RPM", BlueJay will linearly auto scale 6 Regen Base Speed 'partitions'. You can edit these if you want different values
- Range: 0- max RPM

### **10.02.05 : Regen Base Speed 3 RPM**

- Speed point for generator current limit
- Located in Speed tab
- Note: This parameter is only applicable if 10.02.01 is set to 1. However, BlueJay will display and auto scale this parameter regardless of 10.02.01 for consistency.
- Note: After an edit to the "2.01.09 : Maximum Motor RPM", BlueJay will linearly auto scale 6 Regen Base Speed 'partitions'. You can edit these if you want different values
- Range: 0- max RPM

#### **10.02.06 : Regen Base Speed 4 RPM**

- Speed point for generator current limit
- Located in Speed tab
- Note: This parameter is only applicable if 10.02.01 is set to 1. However, BlueJay will display and auto scale this parameter regardless of 10.02.01 for consistency.
- Note: After an edit to the "2.01.09 : Maximum Motor RPM", BlueJay will linearly auto scale 6 Regen Base Speed 'partitions'. You can edit these if you want different values
- Range: 0- max RPM

#### **10.02.07 : Regen Base Speed 5 RPM**

- Speed point for generator current limit
- Located in Speed tab
- Note: This parameter is only applicable if 10.02.01 is set to 1. However, BlueJay will display and auto scale this parameter regardless of 10.02.01 for consistency.
- Note: After an edit to the "2.01.09 : Maximum Motor RPM", BlueJay will linearly auto scale 6 Regen Base Speed 'partitions'. You can edit these if you want different values
- Range: 0- max RPM

#### **10.02.08 : Regen Current Limit @ 0 RPM to Base Speed 0**

- Driving Torque in Amps for the range from 0 RPM to the Regen Base Speed 0 value
- Located in Regen tab
- Range: 0 - Regen Base Speed 0 RPM

#### **10.02.09 : Regen Current Limit @ Base Speed 0 to 1**

- Generator Torque in Amps for the range from Regen Base Speed 0 value to Regen Base Speed 1 value
- Located in Regen tab
- Range: Regen Base Speed 0 – Regen Base Speed 1 RPM

#### **10.02.10 : Regen Current Limit @ Base Speed 1 to 2**

- Generator Torque in Amps for the range from Regen Base Speed 1 value to Regen Base Speed 2 value

- Located in Regen tab
- Range: Regen Base Speed 1 – Regen Base Speed 2 RPM

#### **10.02.11 : Regen Current Limit @ Base Speed 2 to 3**

- Generator Torque in Amps for the range from Regen Base Speed 2 value to Regen Base Speed 3 value
- Located in Regen tab
- Range: Regen Base Speed 2 – Regen Base Speed 3 RPM

#### **10.02.12 : Regen Current Limit @ Base Speed 3 to 4**

- Generator Torque in Amps for the range from Regen Base Speed 3 value to Regen Base Speed 4 value
- Located in Regen tab
- Range: Regen Base Speed 3 – Regen Base Speed 4 RPM

#### **10.02.13 : Regen Current Limit @ Base Speed 4 to 5**

- Generator Torque in Amps for the range from Regen Base Speed 4 value to Base Speed 5 value
- Located in Regen tab
- Range: Regen Base Speed 4 – Regen Base Speed 5 RPM

Comments, questions, corrections? Send email to: [support@bluejaytuning.com](mailto:support@bluejaytuning.com)

