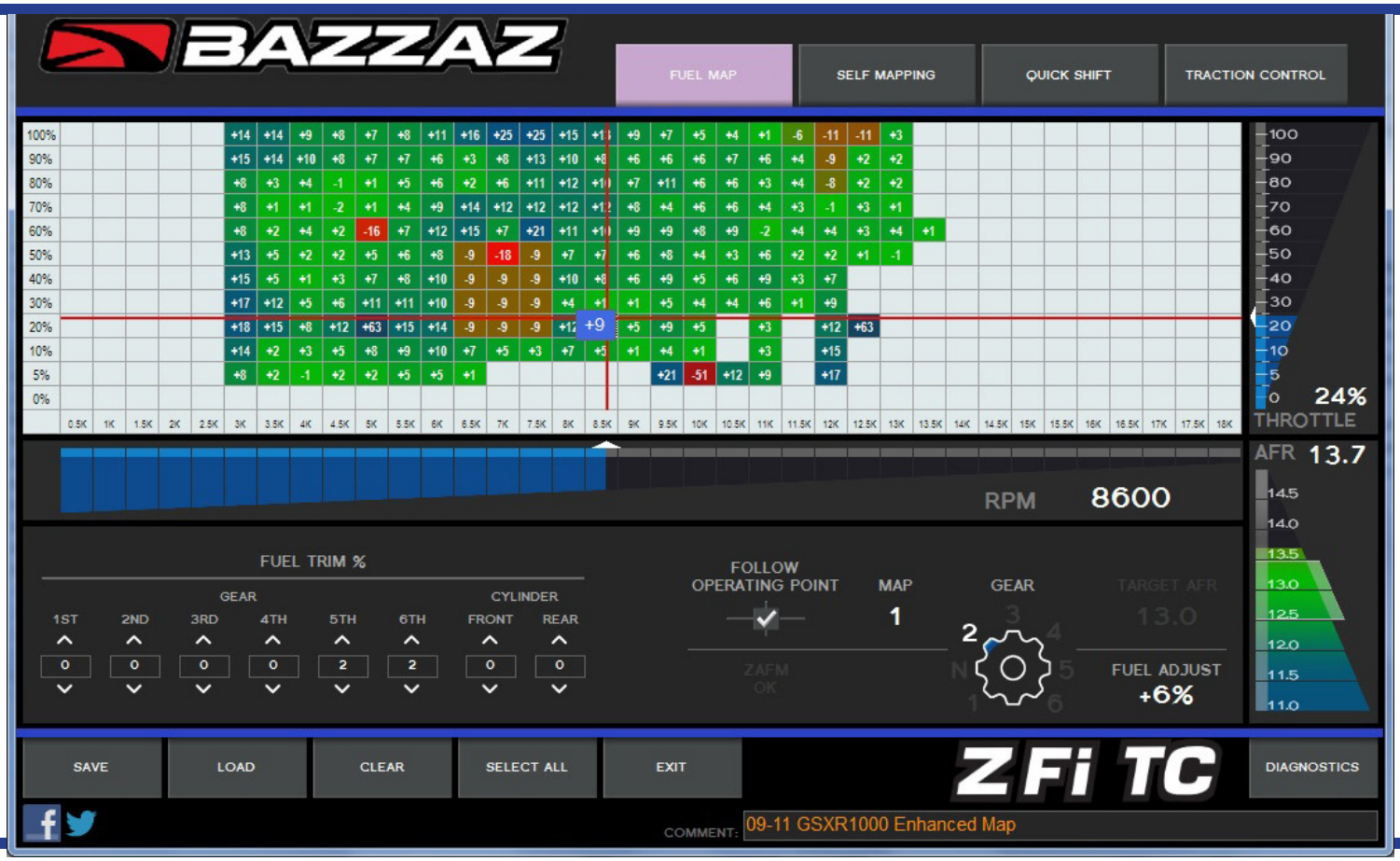
Z-MAPPER SOFTWARE GUIDE



BAZZAZ®

VER 1.0.200.0

BAZZAZ.NET

ABOUT >

ADVANCED MADE EASY

A good tool makes work easier

The latest version of the Bazzaz Z-Mapper software is powerful in its simplicity. An intuitive, fun interface gets new users tuning quickly and easily.

New features include:
Multiple language support
Automatic updates
Improved display
Operating point crosshairs
Aligned throttle, RPM, and AFR indicators
Color-coded fuel adjustment cells
Default traction control maps
Resizable design to fit any screen

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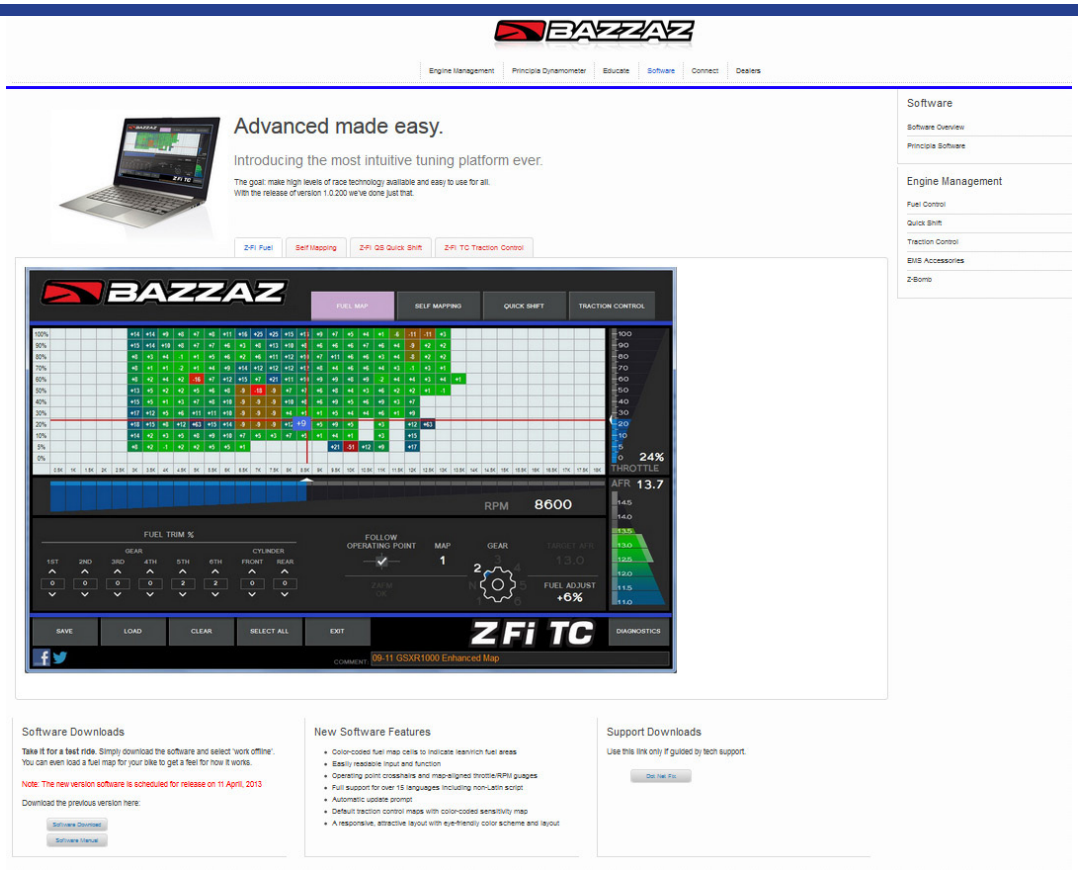
FREE DOWNLOAD >

GO TO BAZZAZ.NET

Click the download button on the Software page
Follow the prompts for easy installation



CONNECT

Plug in your Bazzaz control unit with the USB cord and open software application
Vehicle does not need to be turned on
Software will connect automatically
If not connected to a control box, you can select to run software in offline mode for viewing and editing

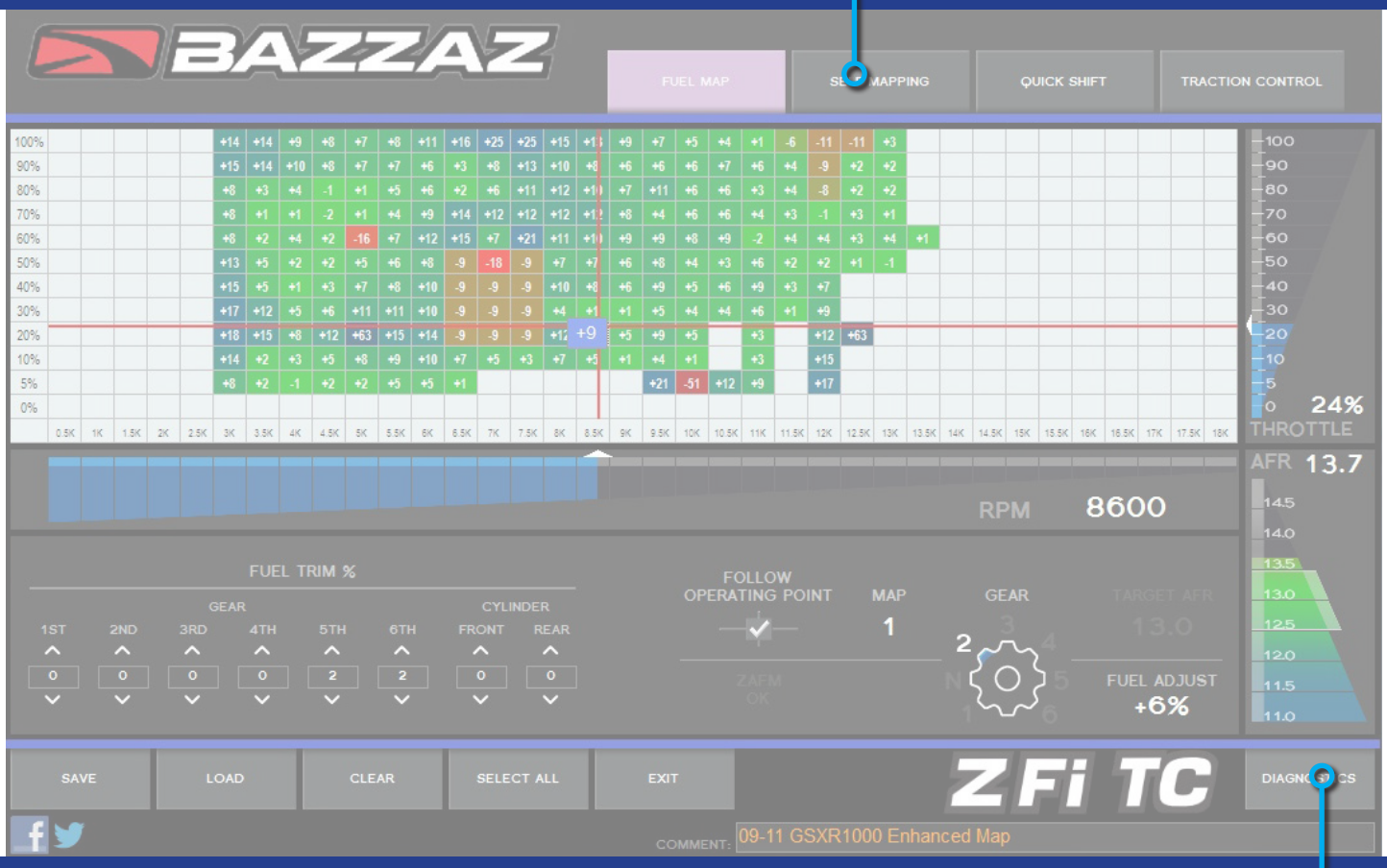
U.S. SUPPORT: **(909) 597-8300**
INTERNATIONAL SUPPORT: find local dealers at **bazzaz.net**

NAVIGATION >

PAGE TABS

Switch between page displays

Only tabs applicable to your product will be visible



DIAGNOSTICS

Opens new page for troubleshooting or recalibration of gear and throttle position

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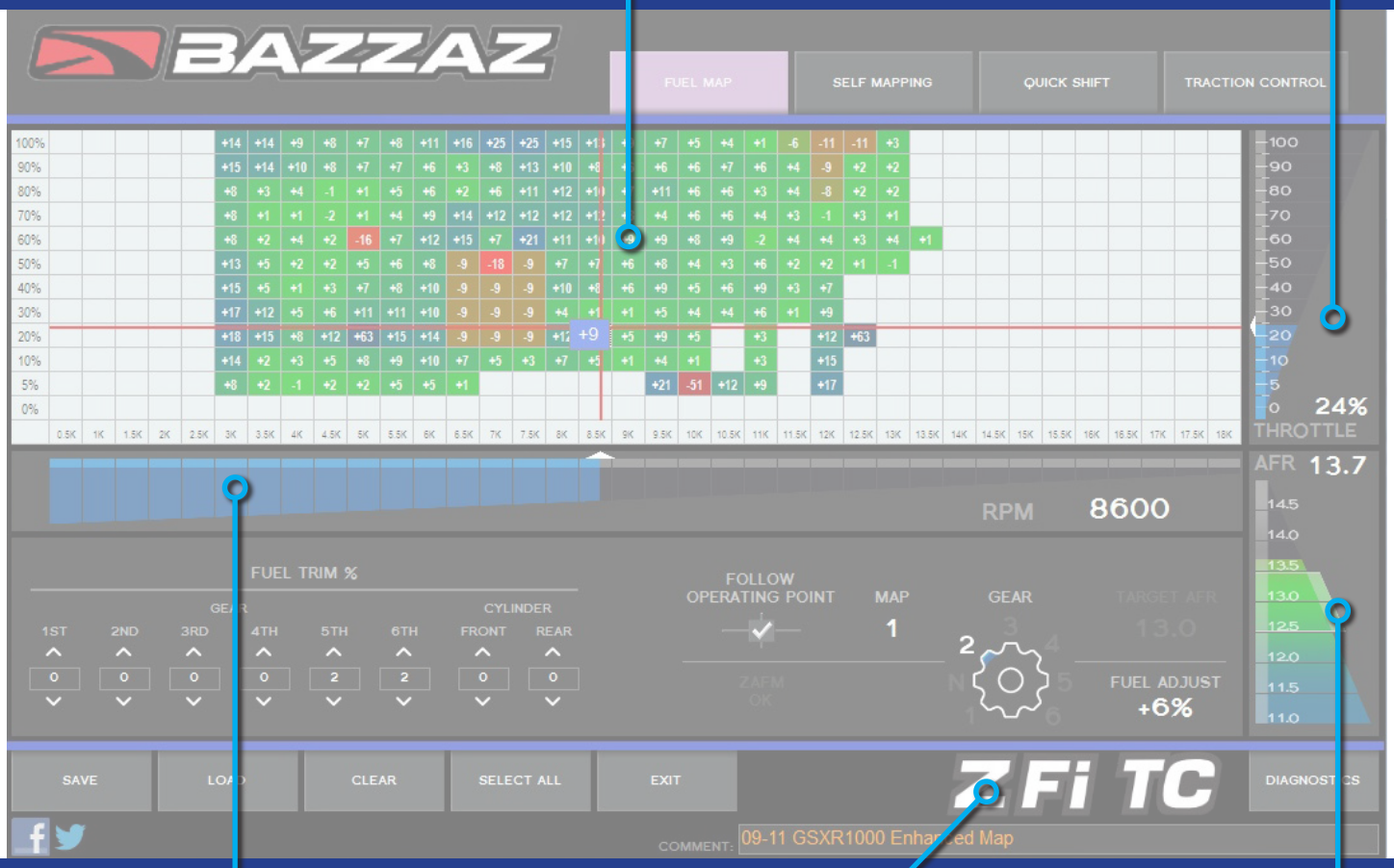
GENERAL DISPLAY >

MAP DISPLAY
Displays present map (fuel or traction control)

THROTTLE POSITION
Displays real-time throttle position
For use on the dyno or when testing/ calibrating throttle position sensor (TPS)



PRODUCT ID
Identifies product programmed

RPM POSITION
Displays real-time RPM
For use on the dyno or when testing/ calibrating throttle position sensor (TPS)

AIR:FUEL INDICATOR
Displays real-time air:fuel ratio (AFR) when used with Z-AFM
For use on the dyno

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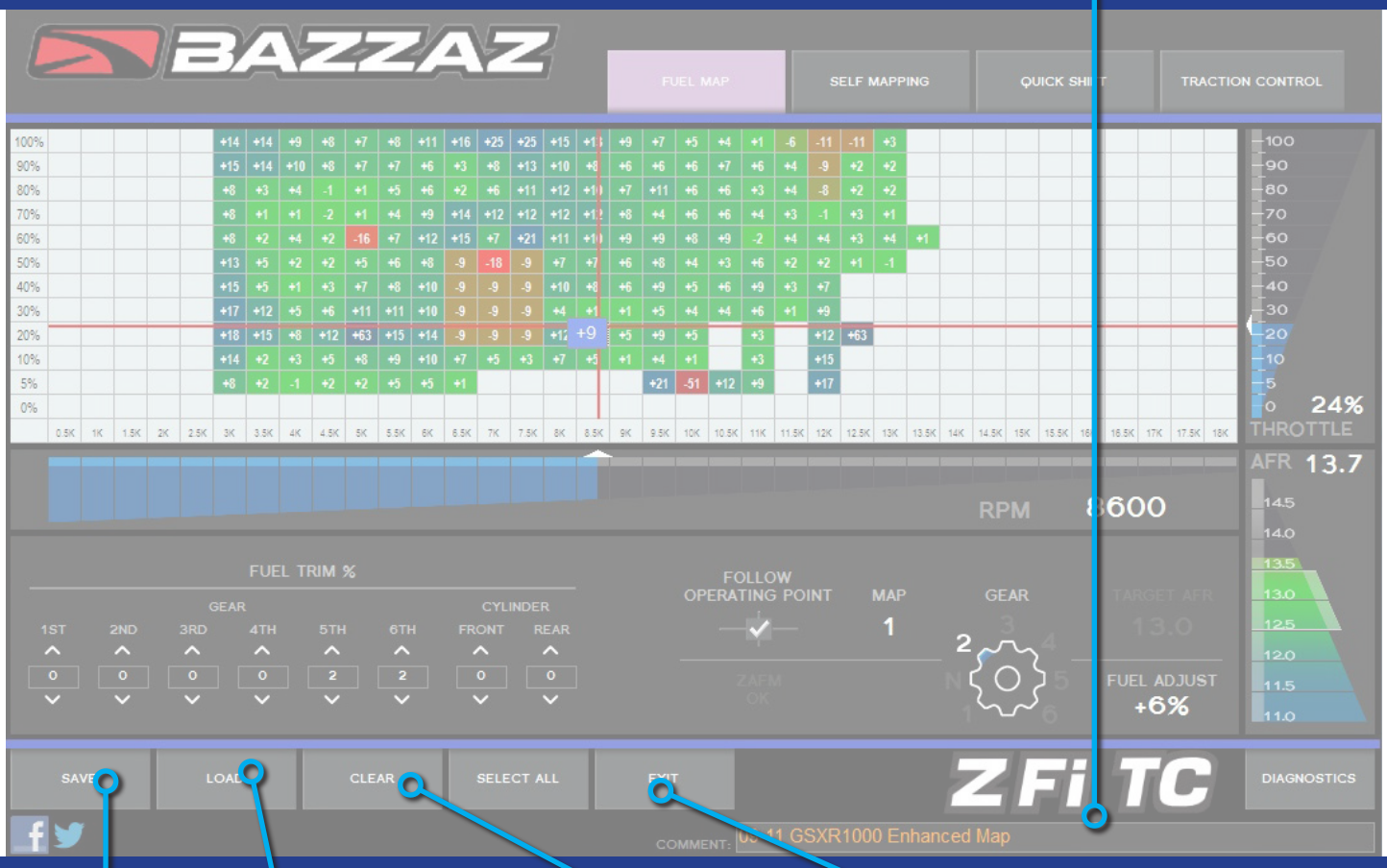
FILE MANAGEMENT >

COMMENTS
Make notations to identify maps such as location, fuel type, or atmospheric information (28 characters max)



LOAD
Load a map from hard drive

EXIT
Exits the Z-Mapper program

SAVE
Save presently displayed map

CLEAR
Clears out displayed map (including trims)

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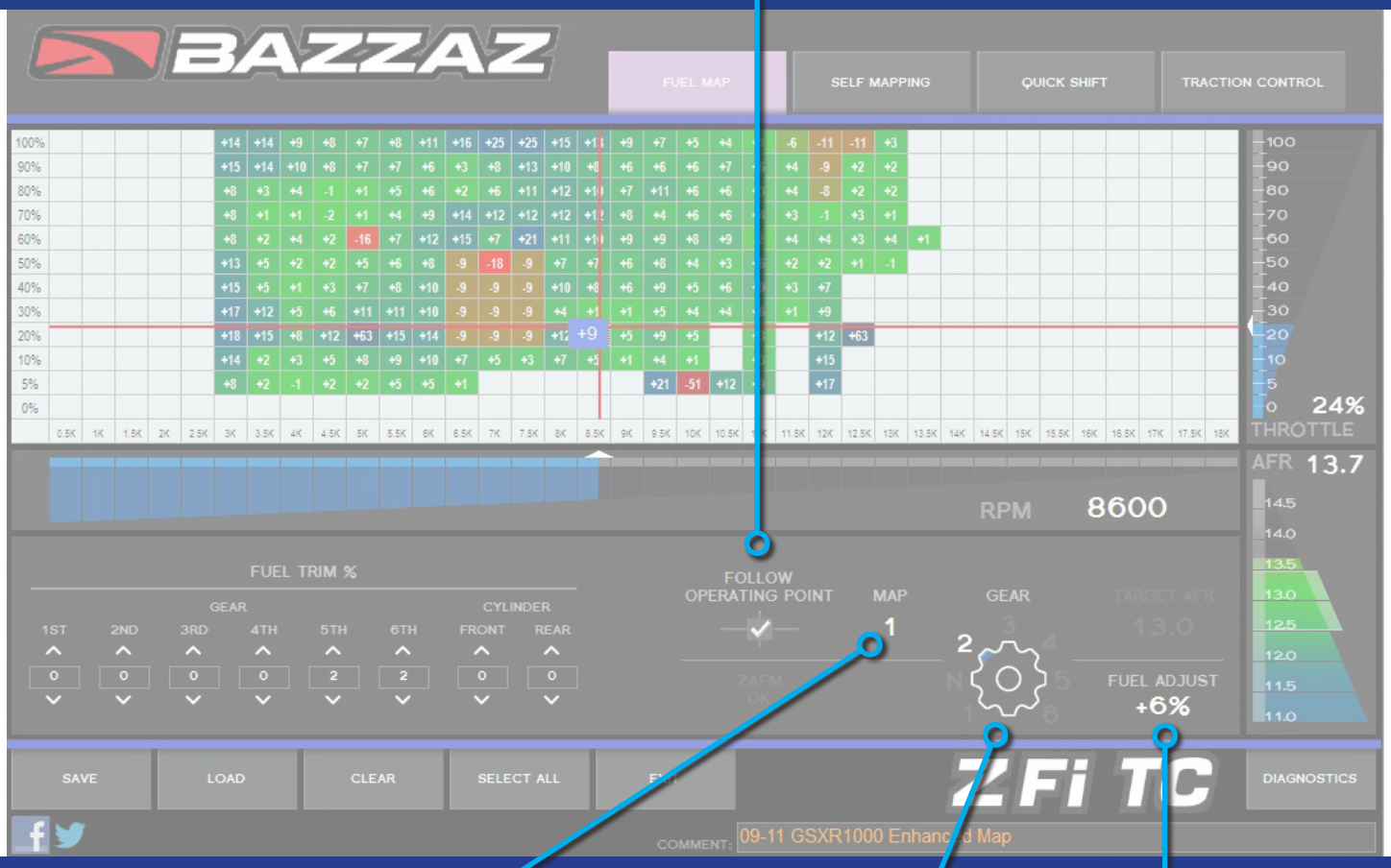
OPERATING POINT DISPLAYS >

FOLLOW OPERATING POINT
Allows real time tracking of throttle/RPM operating point



MAP
Identifies which map is being run and edited (map 1 or 2)

GEAR POSITION
Identifies present gear

FUEL ADJUST
Identifies total adjustments at the present operating point. Does not include cylinder trim.

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SYSTEMS CHECK >

1. MAP CHECK

Check that the name of the pre-programmed map matches the model of your bike in the COMMENT section

Note: You can switch from map 1 to map 2 by unplugging the map select jumper on the Bazzaz fuel harness. Map 1 is pre-programmed; depending on your model, there may be a pre-programmed map in the map 2 slot. If map 2 is blank, stock ECU settings are used. Make sure that the jumper is left plugged in or unplugged, depending on which map you choose.

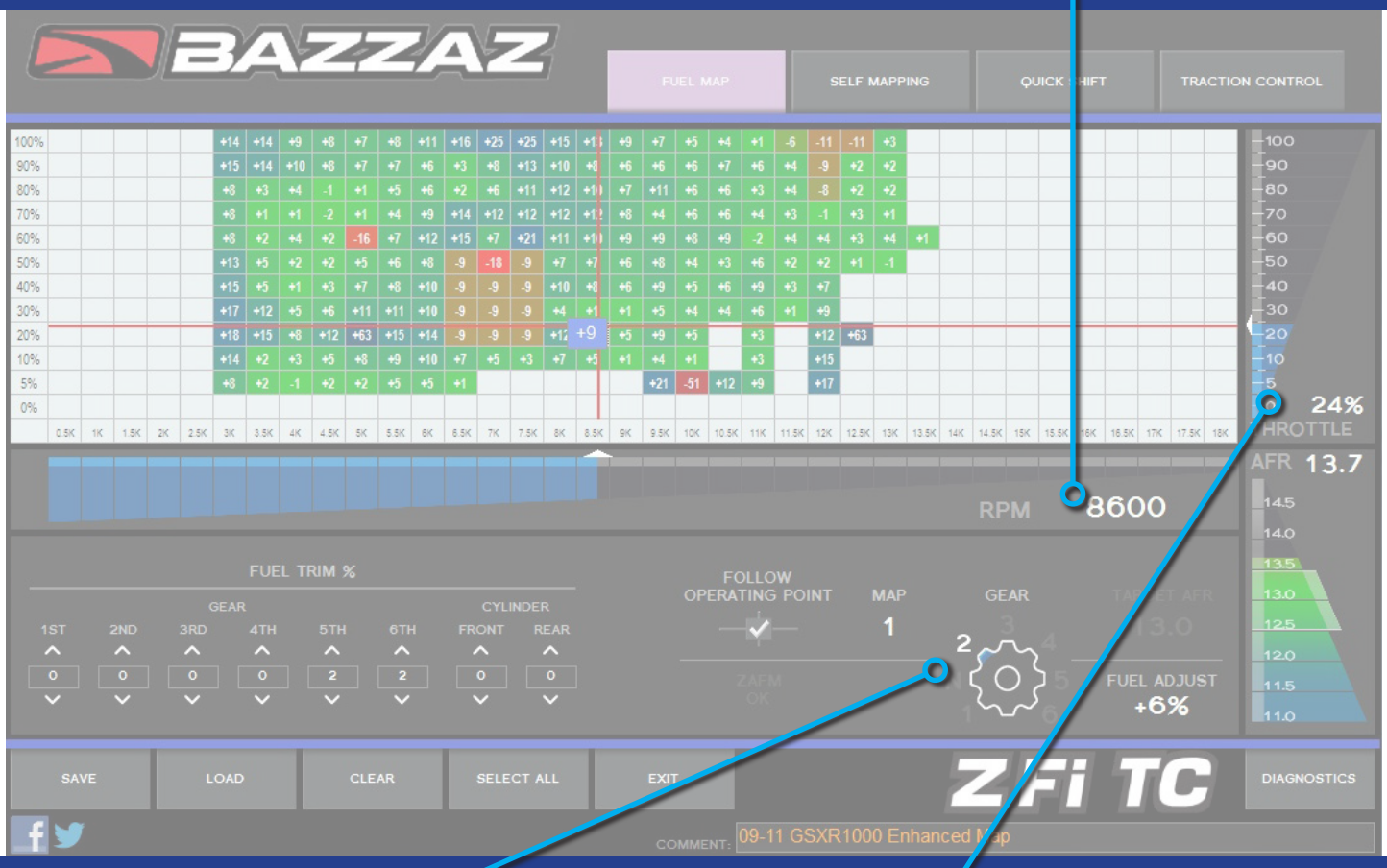
2. START

Start the vehicle

Begin to check that the following inputs read correctly on the fuel map page

3. RPM

Make sure that the RPM is reading near what the vehicle is idling at.



4. GPS

The vehicle should read neutral (or whichever gear it is in)

For motorcycles that use a Gear Position Sensor, the bike does not need to be running to do this. For motorcycles that use a speed sensor, the wheel must be spinning to read gear properly. This can be checked on a dynamometer or by using a rear stand. Use extreme caution when testing componentry.

5. TPS

When throttle is applied, the TPS should read accordingly

For motorcycles that use a Gear Position Sensor, the bike does not need to be running. For motorcycles that use a speed sensor, the wheel must be spinning to read gear properly. This can be checked on a dynamometer or by using a rear stand. Use extreme caution when testing componentry.

Z-AFM AIR FUEL MAPPER

02 Sensor - Light should cycle from WARM UP to OK

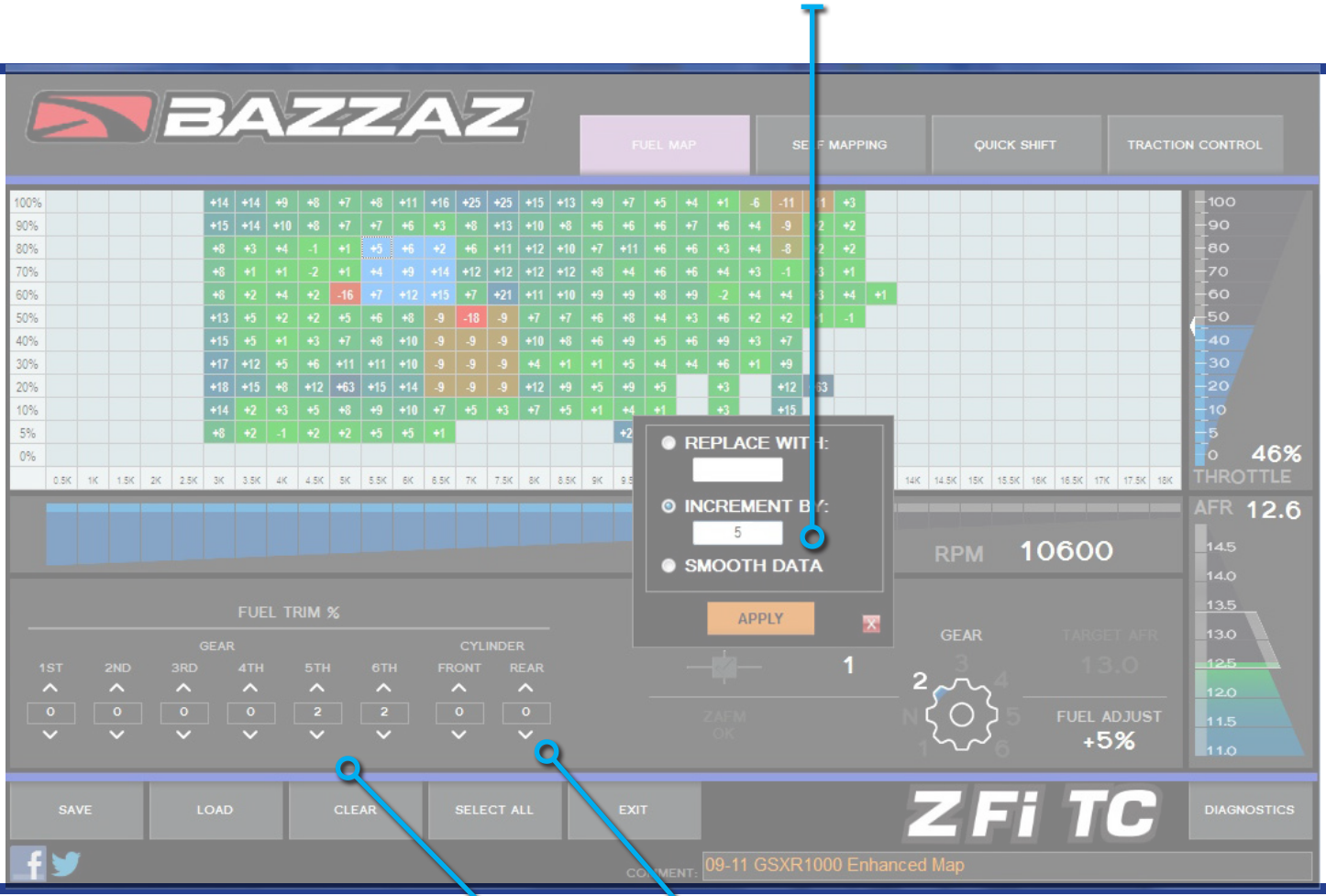
AFR - Check that the AFR gauge is active and fluctuating as you increase/ decrease throttle

MAP MODIFICATIONS >

POP UP DIALOGUE

Appears when any cell or group of cells is highlighted
For Fuel Map and Traction Control map

- REPLACE WITH - replace the highlighted cell(s) with a new value
- INCREMENT BY - add or subract to the values in the highlighted cell(s)
- SMOOTH DATA - using the value of adjacent cells, will replace any potentially erroneous values, allowing for smoother fuel delivery when transitioning from cell to cell



FUEL TRIM>

Only visible when applicable for your model
Changes will not be visible directly in the map display

BY CYLINDER

Cylinder-specific settings that add or subtract fuel (%) to the entire fuel map
Click arrow up or down for each cylinder you wish to modify

BY GEAR

Gear-specific settings that add or subtract fuel (%) to the entire fuel map
Click arrow up or down for each gear you wish to modify

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SELF FUEL MAPPING >

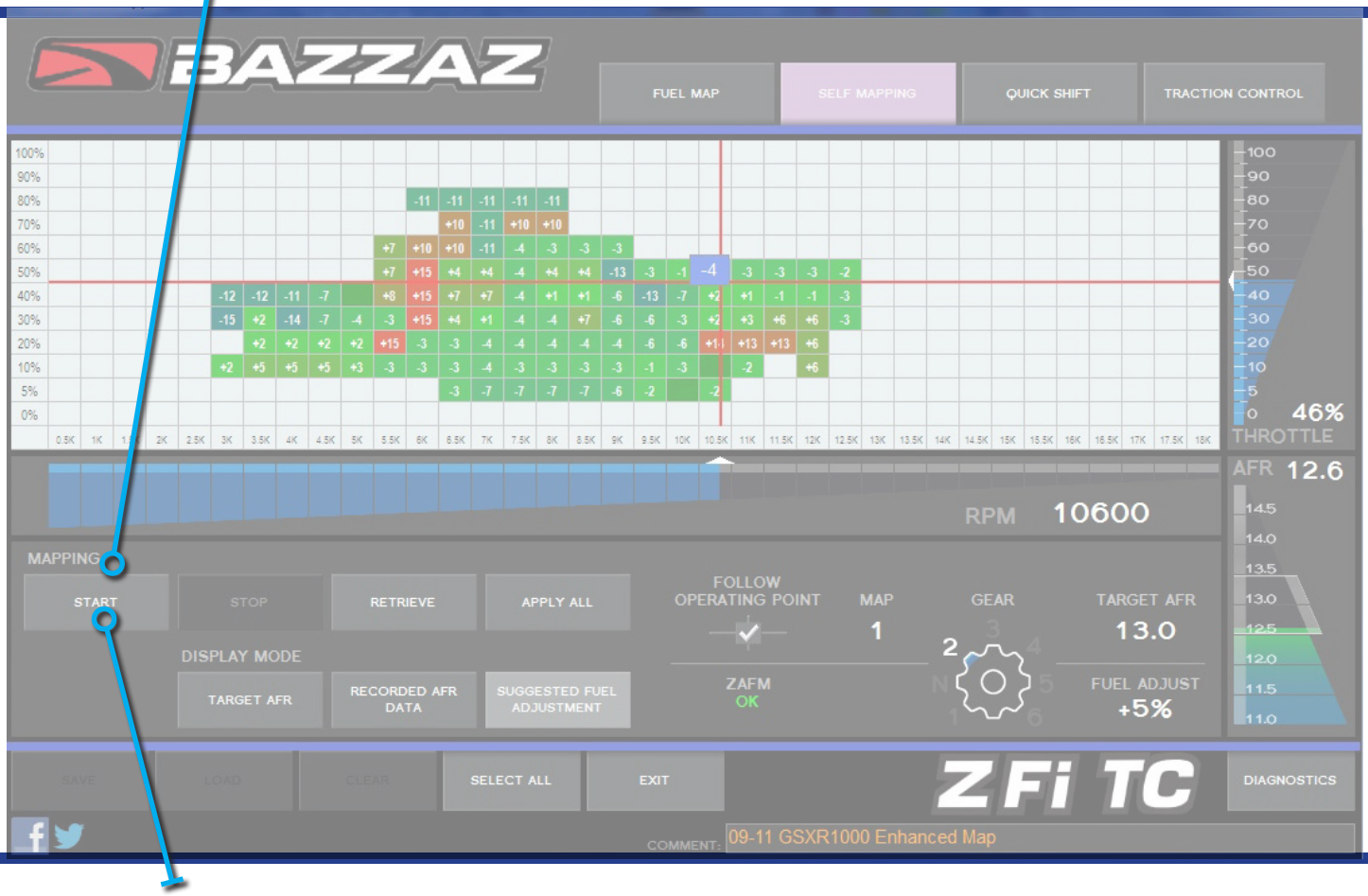
Z-AFM MAPPING IN 4 EASY STEPS (ON DYNO)

Follow buttons from left to right to build a complete map at track or on dyno

Plug USB lead from control unit into computer

- START - Activates data collection (suggested changes to the active fuel map)
- STOP - Ends data collection process
- RETRIEVE - Shows collected data / suggested changes to fuel map
- APPLY ALL- Applies newly collected data onto the active fuel map

NOTE: Data will automatically clear when new run is started



MAPPING IN 5 EASY STEPS (ON TRACK)

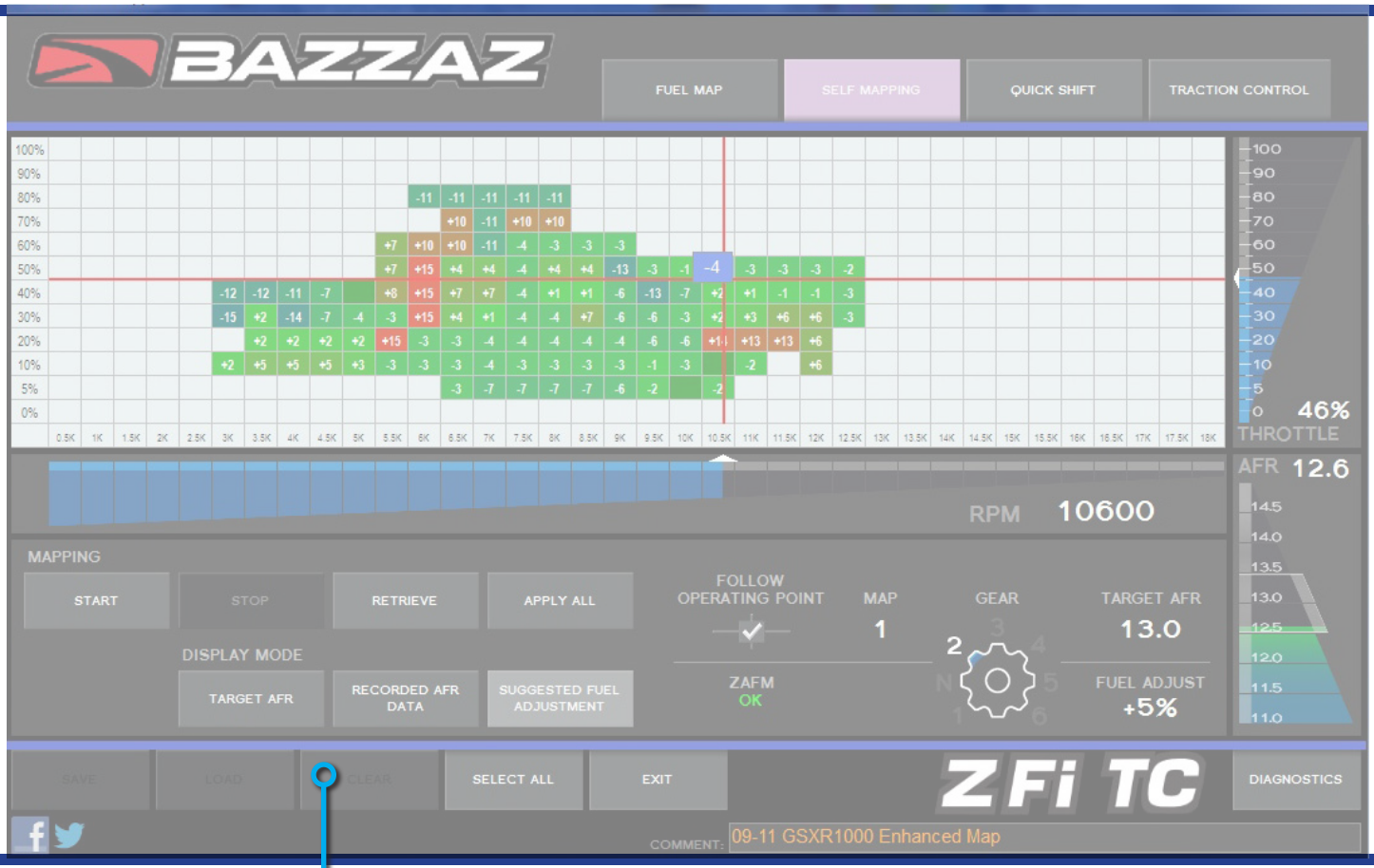
Follow buttons from left to right to build a complete map at track or on dyno

Plug USB lead from control unit into computer

- START - Activates data collection to create suggested changes to the active fuel map
- *EXIT - Close software*
  Unplug USB and begin on-track session.
  The Z-AFM will remain in data collection mode until STOP is clicked in the software.
  Bike can be powered on and off during this process without affecting map results
  When complete with the data collection process, plug USB lead from control unit into computer and re-open software.
- STOP - Ends data collection process
- RETRIEVE - Shows collected data / suggested changes to fuel map
- APPLY ALL- Applies newly collected data onto the active fuel map

NOTE: Previously recorded data will be automatically cleared when new run is started

SELF FUEL MAPPING CONT>



MAPPING DISPLAY

Alternates data displayed in mapping area

- RECORDED AFR DATA
- SUGGESTED FUEL ADJUSTMENT - Fuel adjustment required to reach target AFR
- TARGET AFR - Values can be changed by selecting a single cell or range of cell

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QUICK SHIFT >

CUT TIME ADJUSTMENT

The ignition cut time is the amount of time in milliseconds that the ignition is cut off to allow the shift
Cut times are longer in lower gears and are set at the factory to recommended starting values. Adjustments can easily be made if shifting is not perfectly seamless. Use the sliders to lengthen or shorten cut times; it is suggested you test changes in 5ms increments.

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QUICK SHIFT (QS4 USB) >

QS4 USB SHIFT LIGHT OPTIONS

For use with the QS4 USB Shift Light accessory only.
Set shift light RPM for each gear

QS4 USB SHIFT LIGHT

Sold separately
Illuminates white to identify pre-determined, optimal shift points.

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INTERNATIONAL SUPPORT: find local dealers at **bazzaz.net**

TRACTION CONTROL >

TC ADJUSTMENT OPTIONS

Every user will adjust traction control (TC) to accommodate their own riding style by trial and error using SENSITIVITY, CUT LEVELS or both

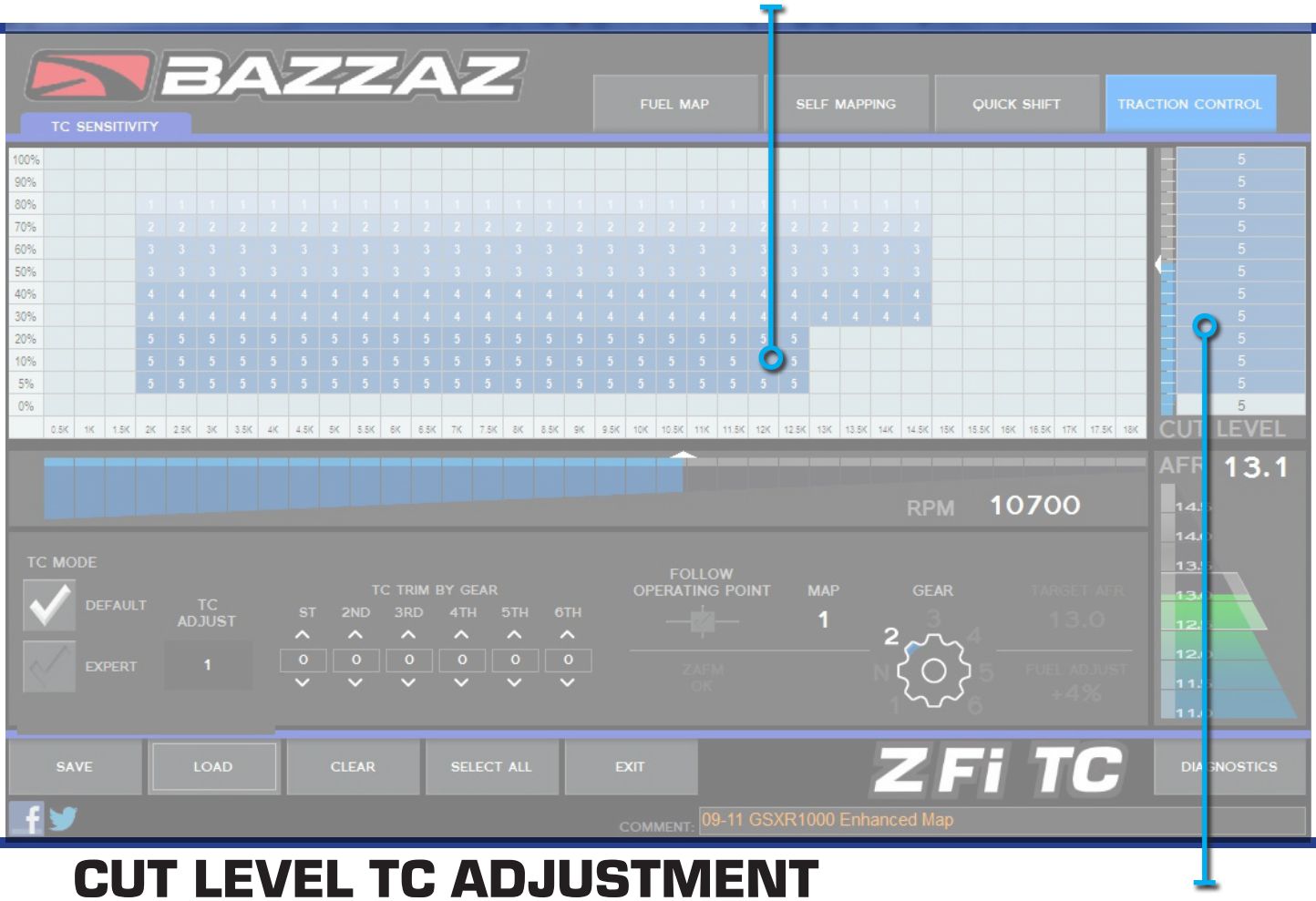
SENSITIVITY ADJUSTMENT

Sensitivity is how much wheel spin is required to activate traction control intervention

Higher numbers indicate more sensitivity. Ten is maximum; zero indicates no traction control

Use cells to adjust sensitivity by throttle/RPM position with values from 0-10

Select individual cells or click/drag to select a range of cells (dialogue box will appear) and edit value



CUT LEVEL TC ADJUSTMENT

Cut Level designates how much ignition cut takes place during traction control intervention

Higher numbers indicate more power reduction. Use cells to adjust cut level by throttle position with values from 0-10

Select individual cells or click/drag to select a range of cells (dialogue box will appear) and edit value

TC ADJUST SWITCH *Sold separately*

Make adjustments while riding with this handlebar-mounted switch and dial

-Tune traction control faster

-Switch between two sets of fuel/TC maps

-Dial traction control sensitivity up, down, or off

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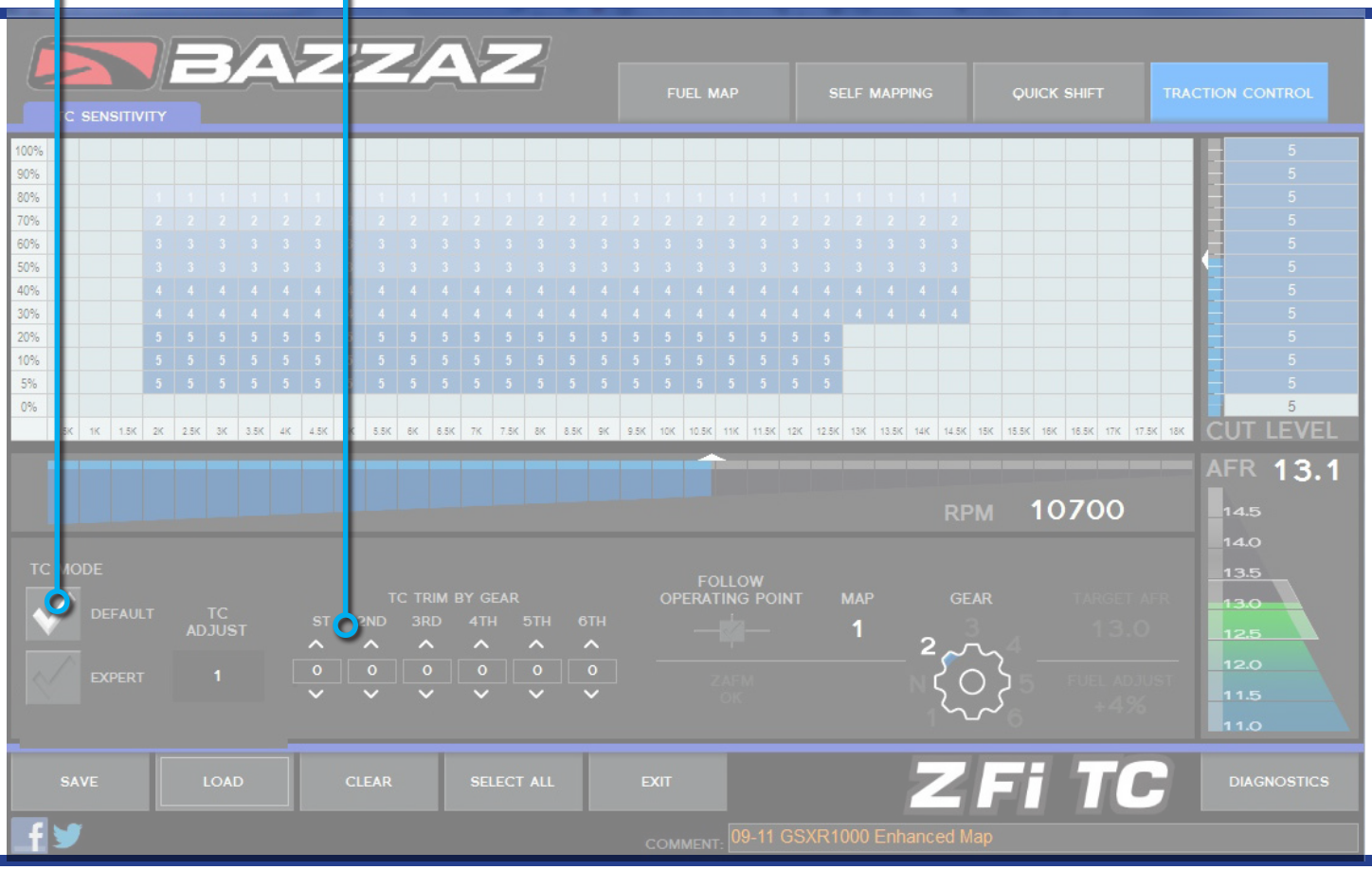
DEFAULT TC MAPS

Every rider will have different preferences; these maps will be a good starting point
Begin with the map that most closely describes your skill level
Make note of the settings and make any changes you feel are suitable
Continue to fine tune the settings after testing on track
A handlebar-mounted TC Adjust Switch and dash-mounted TC Active Light will make the tuning faster and easier

TRIM BY GEAR

Gear-specific settings that add or subtract sensitivity to the entire TC map
Click arrow up or down for each gear you wish to modify
Can also be used to turn TC off in specified gears
Changes will not be visible directly in the map display



FINAL CALCULATIONS

Overall sensitivity is a sum of map + gear trim + handlebar trim (w/TC adjust switch)
Settings max out at 10
Example: map is 5, trim by gear is 5, handlebar switch is 5 and, the overall sensitivity will be 10 (not 5+5+5=15)
Note: Zero in the sensitivity map implies TC is off at that point, regardless of trim by gear and TC switch.
Example: map is 0, trim by gear is 5, handlebar switch is 5 and, the overall sensitivity will be OFF (not 0+5+5=10)

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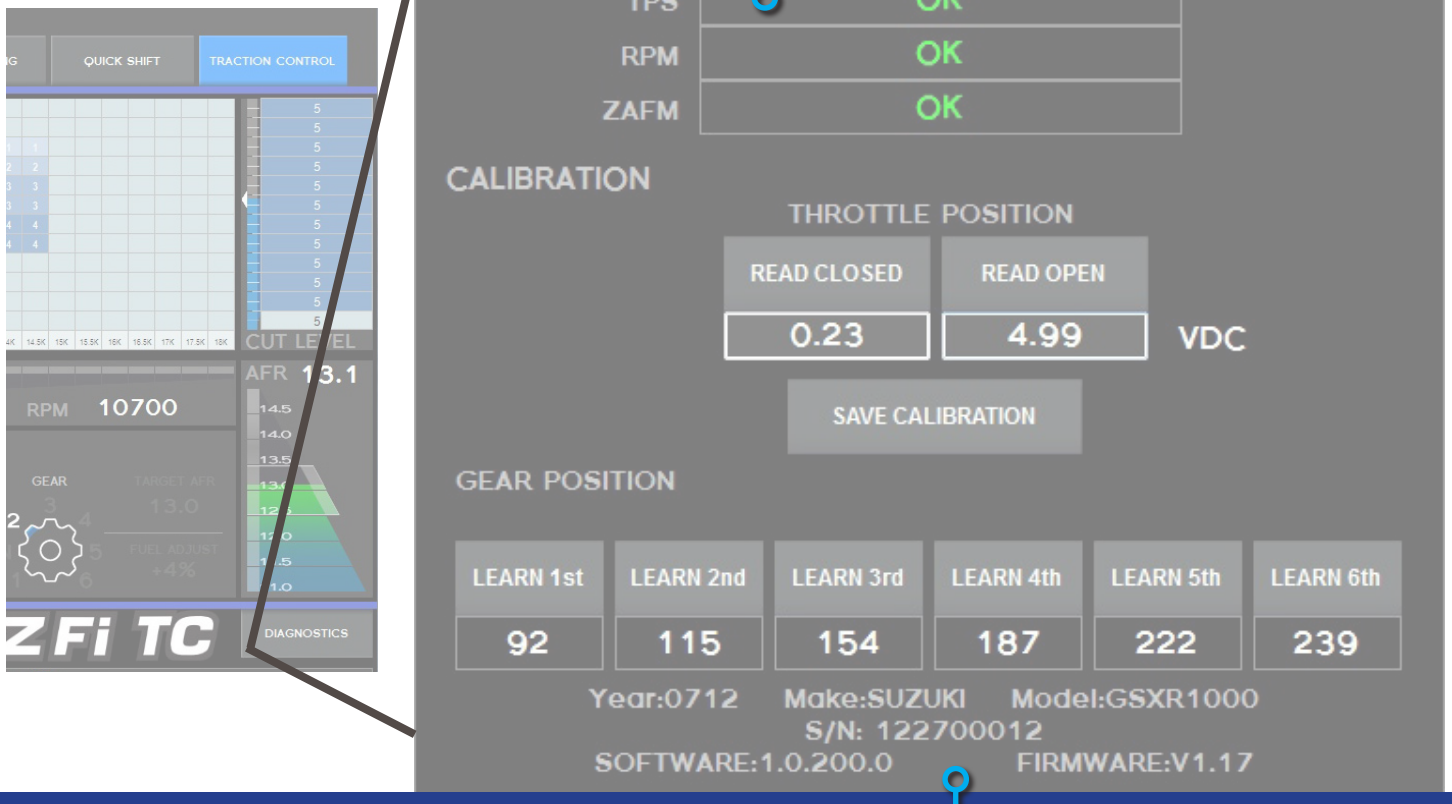
DIAGNOSTICS >

SIGNAL SOURCE CHECK

Check signal for Throttle Position Sensor (TPS), RPM, and Bazzaz Z-AFM
Will read ‘OK’ if signal reads properly
TPS: Will indicate an error with installation, faulty or out of range sensor, or faulty control unit
RPM: Will indicate an error with Crank Position Sensor (CKPS) installation, faulty or out of range sensor, or faulty control unit
Z-AFM: Will indicate if not connected or if sensor/control unit is faulty



IDENTIFICATION

Used to verify correct model/year application
Identifies firmware and software version for troubleshooting

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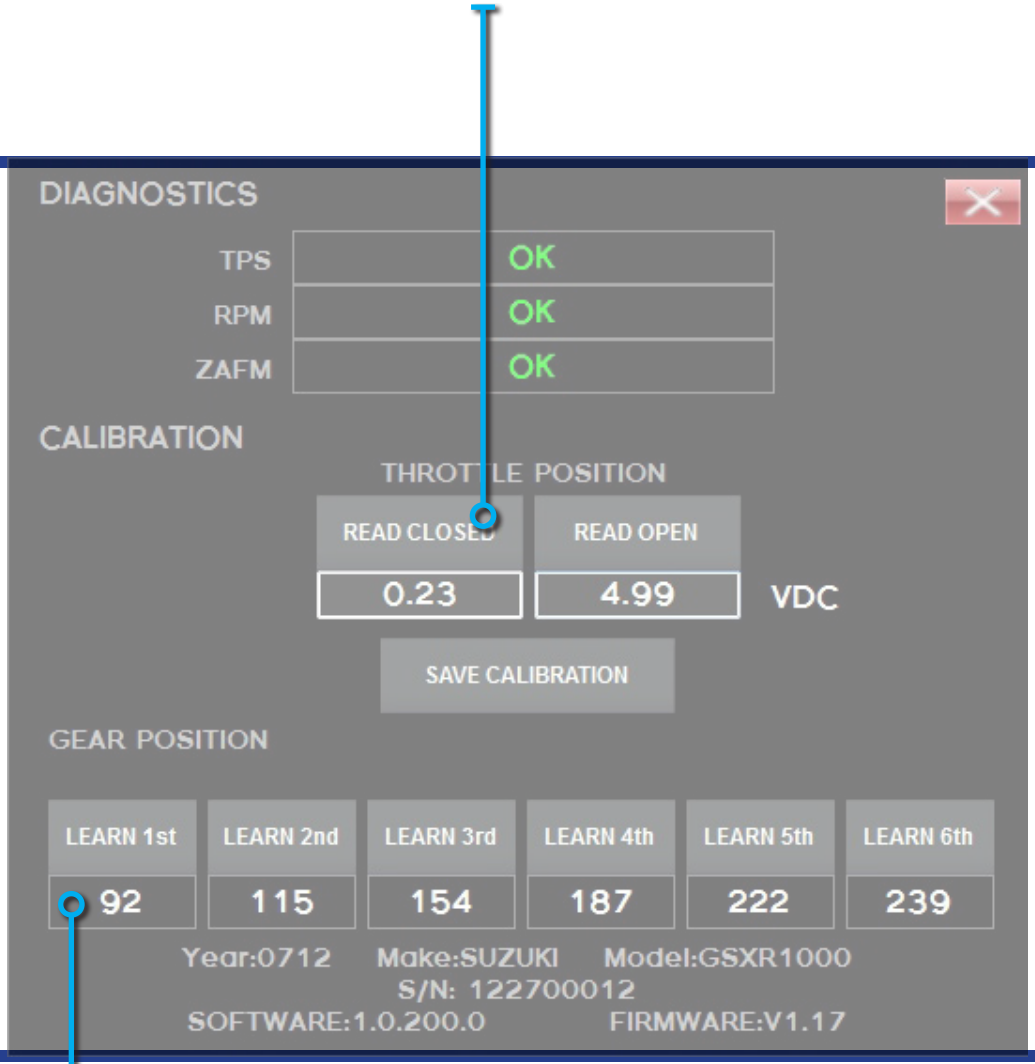
THROTTLE CALIBRATION

Only to be used for diagnosing TPS if not reading correctly

With vehicle powered on and USB connected, close throttle and click ‘read closed’
Then open throttle 100% and click ‘read open’
Click ‘save calibration’
Fly-by-wire models must be running to check TPS. Normal cable operated throttles can be checked with just the key on, not running.



INTERNAL GEAR CALIBRATION

Only to be used after changing internal transmission ratios with the guidance of Bazzaz professional tech support

Determine if your vehicle uses a Speed or Gear Position signal. Refer to the Bazzaz installation instructions for your model and move onto next page.

INTERNAL GEAR CALIBRATION (SPEED)

Only to be used after changing internal transmission ratios with the guidance of Bazzaz professional tech support

Use extreme caution when operating bike on a rear stand

Connect control unit with USB and launch software

With the engine above 3000 RPM (use a dyno or rear stand), place the bike in 1st gear

Release the clutch, hold the RPM steady at 3000 RPM or greater

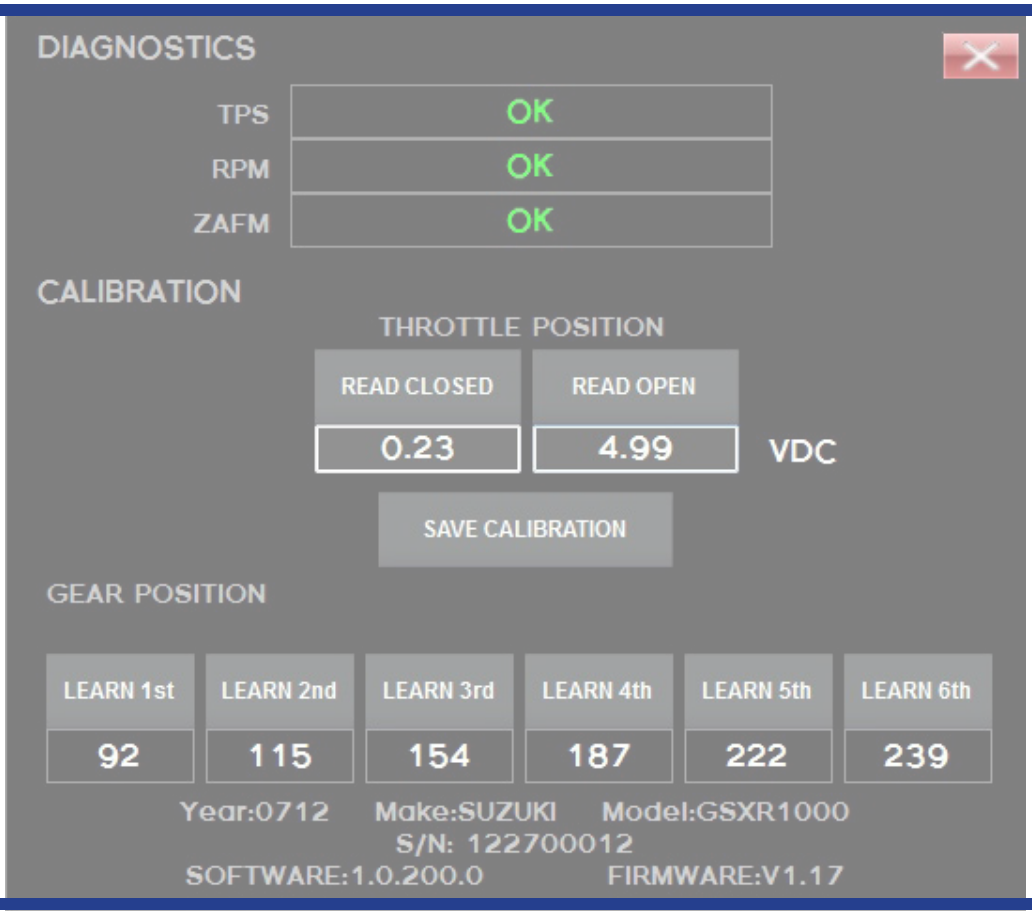
Click the LEARN 1 BUTTON and wait momentarily while the mapper calibrates for 1st gear

Once the value above the LEARN 1 BUTTON changes, place the bike into second gear and repeat the process

Repeat these steps for gears 3 through 6

After completing calibration of 6th gear, your bike should read all 6 gears correctly

You MUST calibrate all 6 gears in order for the calibration to be correct



INTERNAL GEAR CALIBRATION (GEAR)

Only to be used after changing internal transmission ratios with the guidance of Bazzaz professional tech support

Connect control unit with USB and launch software

With the ignition on (bike does not have to be running), place the bike in 1st gear

Click the LEARN 1 BUTTON and wait momentarily while the mapper calibrates for 1st gear

Once the value above the LEARN 1 BUTTON changes, place the bike into second gear and repeat the process

Repeat these steps for gears 3 through 6

After completing calibration of 6th gear, your bike should read all 6 gears correctly

You MUST calibrate all 6 gears in order for the calibration to be correct

ACCESSORIES >

MAP SELECT SWITCH
Handlebar-mounted toggle will switch between fuel/TC maps on the fly

TC ADJUST SWITCH
Make adjustments on the fly with this handlebar-mounted switch and dial
Switch between two sets of fuel/TC maps
Dial traction sensitivity up, down, or off to tune TC faster or account for changing conditions

TC ACTIVE LIGHT
Illuminates when traction control is activated
Helpful in determining when and where traction control is being actuated

QS4 USB SHIFT LIGHT
Illuminates at user-determined points for optimal shifting
For use with QS4 USB product

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SUPPORT

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