

Tuner App Guide v2

Section 1: Connecting

- Install the Progression Ignition Tuner v2 app on your phone or tablet. It is available for iPhone/iPad on the App Store and for Android devices on the Google Play Store. Your device must have Bluetooth 4.0 or higher. To use Bluetooth, you must give permission to access Location when asked and Location MUST be enabled. Don't use your phone settings to try to connect to the distributor. Use only our app to connect.
- **2.** Open the app. Power to the distributor must be **ON** to connect to the app.
- **3.** The Bluetooth status bar tells you about your Bluetooth connection and lets you control it.

a. STATUS - Bluetooth Off

Go to your phone settings and turn Bluetooth ON.



b. *STATUS* - Disconnected

Press CONNECT to go to the scan screen. Press SCAN to scan for any distributors within range. Press CONNECT next to the name of your distributor to connect to it. If you want to work without connecting to a distributor, you can still use the table generator and access your saved tables. You can save tables to phone memory for use later.

c. STATUS - Connected

App is connected to the distributor. All buttons are enabled.

c. **STATUS** - Searching

The app will automatically reconnect to the distributor it was last connected to whenever it is detected. Press STOP to prevent this.

Section 2: Main Screen

- **1. GENERATE TABLE** Press to create a new timing table from scratch. See Section 3.
- **2. SAVED TABLES** Press to open the folder where all saved timing tables are stored. See Section 5.
- **3.** *GAUGES* Press to open a screen that displays ignition timing, RPM, MAP, vacuum, speedometer in real time when engine is running.
- **4.** ACTIVE TABLE This button sends the timing table from the distributor to the phone and displays it.
 THIS IS IMPORTANT! This button ALWAYS displays the table that is currently running the engine. The editor can edit all aspects of the table as well as Rev Limit. See Section 4.
- **5. Ignition Lock** this is a theft prevention feature that prevents the engine from starting.
 - **a.** LOCK- This button begins the lock process. You have 20 seconds to turn off the ignition in order for the lock to be complete. Once the ignition is turned off within 20 seconds, the lock is complete, THE ENGINE WILL NOT START AGAIN. If the ignition is not turned off within 20 seconds, the engine will continue to run and start normally.
 - **b. UNLOCK** This button sends the unlock command to the distributor. After pressing, you will see a confirmation message and the engine can start normally.
- **6. Settings Menu-** The menu icon in the upper right corner of the screen.
 - **a. Profile** create an account to access the cloud backup features. When signed in, all tables and PIN numbers will be backed up to cloud storage. You can restore tables from cloud storage so all of your devices can access your tables. Also, you can share tables with other users. Also you can view your PIN if you forget it or need to unlock the ignition with another phone. YOU MUST CREATE AN ACCOUNT



AND BE SIGNED IN FOR CLOUD BACKUP TO WORK!!

- **b.** Online Manuals- View the instruction manuals
- c. Table Background- choose the color of the table background
- **d.** Gauge Style- customize the Gauges screen to look how you want.



Section 3: Generate Table

The generator allows you to enter some basic information and create a custom timing table. The default values are typical for a mild performance V8. Keep in mind that the distributor has a range from 10 deg. BTDC to 50 deg. BTDC. Cranking is always at 10 deg. BTDC and is not adjustable.

- **1. Number of cylinders** Select the number of cylinders in the engine. 4, 6 or 8. This MUST match the cylinder count of the distributor you are using.
- Fix Timing at- Select the checkbox and enter a value between 10-50 degrees. This will generate a table with all timing cells having the same value. This is like "locked out" timing.
- **3. Idle Speed** Enter the RPM that your engine typically idles at.
- **4. Idle Timing** Enter the desired timing at the idle speed you entered in the previous step.
- **5. Max RPM-Based Timing** This is roughly equivalent to "centrifugal" advance in a traditional distributor. Enter the desired max timing.
- **6. All In RPM** This is the RPM at which the Max RPM Based Advance will be reached.
- **7. Aggressive Mode** This uses the Idle Timing entry as the starting point for "centrifugal" advance curve. Use for big cams that have low vacuum and need lots of timing at low RPM.



- 8. Max Vacuum Advance- Enter how many degrees of vacuum advance will be ADDED to the RPM-Based Timing value at high vacuum.
- **9. Start Vacuum Advance at** Enter the MAP value at which vacuum advance begins to be added. **See note on next page about vacuum.*
- **10. Max Vacuum Advance at** Enter the MAP value at which the Max Vacuum Advance value is added to rpm based. **See note on next page about vacuum.*
- **11. Rev Limit** The rev limiter will cut the spark at the specified RPM. Range is 2000-9990 RPM.
- 12. GENERATE TABLE- Press to generate the table and view it. The table will NOT be sent to the distributor until you press the Send or Save button. See Section 4.

*This distributor has a manifold absolute pressure (MAP) sensor to measure engine vacuum or pressure in the intake manifold. The unit of measurement is kiloPascals (kPa). Here is a comparison of traditional vacuum readings at sea level:

WOT	0 i	n/hg	101	kPa
Part Throttle	8 i	n/hg	72	kPa
Idle	17 ir	n/hg	44	kPa
Deceleration	24 ii	n/hg	20	kPa

Why use kPa of pressure instead of the traditional in/hg of vacuum? Vacuum is always relative to atmospheric pressure. It doesn't measure the ACTUAL pressure in the intake manifold. The MAP sensor must also be able to measure pressures above atmospheric in turbo and supercharged applications. The Gauges screen can display BOTH kPa and in/Hg.

Section 4: Table Editor

1. The table editor allows you to change the ignition timing, and also lets you change the RPM and MAP breakpoints. Changes happen instantly and can be made with the engine running or not. Pressing the button in the lower left corner brings up a menu.



2. Pressing a timing cell brings up the Selection Menu at the top of the screen as shown below. To select more than one cell, press another

cell in any direction. The app will select all cells in between, as if the two selected cells were the corners of a rectangle.

<	U	+		-		EDIT		SEND	C	ANCEL	080	000
101	10	10	14	17	21	25	29	32	36	36	36	36
94	10	16	14	17	21	25	29	32	36	36	36	36
86	10	16	14	17	21	25	29	32	36	36	36	36
79	10	16	14	17	21	25	29	32	36	36	36	36
71	10	16	16	19	23	27	31	34	38	38	38	38
64	21	16	17	20	24	28	32	35	39	39	39	39
57	21	16	18	21	25	29	33	36	40	40	40	40
49	21	16	19	22	26	30	34	37	41	41	41	41
42	21	16	20	23	27	31	35	38	42	42	42	42
34	21	16	22	25	29	33	37	40	44	44	44	44
27	21	16	23	26	30	34	38	41	45	45	45	45
20	21	16	24	27	31	35	39	42	46	46	46	46
	400	600	940	1290	1630	1970	2310	2660	3000	3830	4670	5500

- a. Pressing the + or button increments the selected cells up or down by one degree.
- **b.** The **Edit** button allows you to type in a value.
- c. The Send button transmits the edited table to the distributor. IMPORTANT- The table is not saved until you press the Save button in the corner Menu. If the key is turned off you will lose your changes.
- **3.** To change a RPM or MAP breakpoint, simply press the desired breakpoint to bring up the edit window as shown below.



a. Pressing the + or - button increments the value up or down.
 Double tap the number field to bring up a keyboard to type in a new value.

 b. The Send button transmits the edited table to the distributor.
 IMPORTANT- The table is not saved until you press the Save button in the corner Menu. If the key is turned off you will lose your changes.

4. Pressing the button in the lower left corner brings up the corner Menu as shown below.

<	Unn	amed	Table	R	ev Lim	it: 550	0			8	Pro80	000
101	10	10	14	17	21	25	29	32	36	36	36	36
94	10	16	14	17	21	25	29	32	36	36	36	36
86	10	16	14	17	21	25	29	32	36	36	36	36
79	10	16	14	17	21	25	29	32	36	36	36	36
_ 71	10	16	16	19	23	27	31	34	38	38	38	38
- Send						28	32	35	39	39	39	39
						29	33	36	40	40	40	40
_ Save						30	34	37	41	41	41	41
						31	35	38	42	42	42	42
Set Rev Limit						33	37	40	44	44	44	44
						34	38	41	45	45	45	45
Load Last Saved Table						35	39	42	46	46	46	46
					;0	1970	2310	2660	3000	3830	4670	5500

- **a.** The **Send** button transmits the table to the distributor. The distributor will IMMEDIATELY use this table to run the engine. However, if you turn off power to the distributor, the table will be lost from distributor memory.
- b. The Save button transmits the table to the distributor AND saves it in distributor permanent memory AND saves it to phone memory. If you want to keep the changes you have made you must press Save!!! The distributor can only store ONE table in its permanent memory. The app will store all saved tables in the Saved Tables folder accessible from the Main screen. See Section 5.
- c. Pressing the Save button allows you to name the table as well. If you wish to save changes to a table but also keep the table you started with, you must give the new table a different name.
- d. The Set Rev Limit button allows you to change the RPM at which the rev limiter cuts spark. Press Save if you want to permanently keep this change!
- **c.** The **Load Last Saved Table** button gives you a way to revert to the table that was last saved in permanent memory. For example, you are running the engine and you make a change and press **Send**. Then, if you decide that you don't like the

change, press **Load Last Saved Table** to revert to the table that you saved last.

Section 5: Saved Tables

- 1. Pressing the **SAVED TABLES** button on the Main screen brings up the list of tables that you have saved.
 - a. Each table is time stamped with the date and time that it was saved.
 - b. **IMPORTANT** When a table is saved repeatedly, the old version is overwritten with the new one. If you don't want to overwrite the old version, you must change the name when you save it.
 - c. If you press a table name, it will open but it will NOT transmit to the distributor until you press **Send** or **Save** in the corner menu.
 - d. To delete a table, press the trashcan icon.
 - e. Press the Share icon to send a table to another user. The recipient must have the app and have created an account.
 - f. Press the cloud icon to see tables that have been shared with you from other users.



Section 6: Gauges

The Gauges screen displays the real time data stream from the distributor. You can customize the gauges using the settings menu on the main screen.