### Commander 950 Base Maps

The following maps will be installed to the directory that the Commander 950 Pro software is installed in. Select the one that best fits your application. If one map does not initially work well, try another.

Also installed to the same directory is an Excel spreadsheet program that will create a wide-open throttle map when the proper parameters are entered. This can be VERY helpful in creating a base program that is safe and close at wide-open throttle. If you have an engine dyno sheet for your combination, these numbers can be entered in to it. Instructions are included in the spreadsheet. The tabs on the bottom of the spreadsheet have different calculators. Use the "Map Builder" tab to create the wide-open throttle map.

**NOTE:** The following descriptions are just general guidelines. Every engine is different and may work well with a map that does not exactly fit the description. The customer is responsible for additional tuning that will be required.

#### **TBI Maps**

**NOTE:** It is possible to use a multi-port map for a TBI system, if the combinations are close and the injector sizes are similar (meaning a map for a multi-port with (8) 36 lb./hr injectors will be close to a TBI map with (4) 75 lb./hr injectors). Just make sure all of the setup parameters are properly changed to TBI in the engine parameters screen.

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TBI6501	350 small block Chevy, 700 CFM 4 bbl TBI unit, 65 lb./hr. injectors, stock late model iron heads, Lunati 30110 cam (230/236 @ .050, .468/.468, 110 LC), 8.5:1 compression, 21 PSI fuel pressure
<u>TBI6502</u>	355 small block Chevy, 700 CFM 4 bbl TBI, 65 lb./hr injectors, Lunati 30140 cam (225/235 @ .050, .477/.507, 112 LC), 9.5:1 compression, 21 PSI fuel pressure, 389 HP @ 5400 RPM, 419 ft./lbs. @ 4300 RPM
TBI6503	355 small block Chevy, 700 CFM 4 bbl TBI, 65 lb./hr injectors, Lunati 30142 cam (235/245 @ .050, .507/.534, 112 LC), 9.5:1 compression, 21 PSI fuel pressure, 401 HP @ 5400 RPM, 410 ft./lbs. @ 4600 RPM
<u>TBI7503</u>	355 small block Chevy, 900 CFM 4 bbl TBI, 75 lb./hr injectors, Lunati 30142 cam (235/245 @ .050, .507/.534, 112 LC), 9.5:1 compression, 21 PSI fuel pressure, 403 HP @ 5600 RPM, 413 ft./lbs. @ 4900 RPM
<u>TBIBLOWN</u>	TBI injection. Uses twin 4 bbl TBI units with 65 lb./hr injectors. Large cubic inch engines with 6-71 style roots blowers with up to 7 PSI of boost
<u>454tbi</u>	Throttle body injection map generated on stock 230 hp 454 GM engine. 650 CFM throttle body. 45 lb./hr. injectors

112 LC), 9.5:1 Compression, 21 PSI fuel pressure, 380 HP @5700 RPM

5500 RPM, 428 ft./lbs. @ 4600 RPM

Stock 350 small block Chevy, 210 HP, 700 CFM, 65 lb./hr. injectors, 19 PSI fuel pressure

350 small block Chevy, 900 CFM 4 bbl TBI, 85 lb./hr. injectors, Lunati 07104 cam (235/240 @ .050, .490/.490,

#### Multi-port Mans

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Multi-port maps		
<u>M</u>	PI1901	350 small block Chevy, 19 lb./hr injectors, single plane MPFI manifold, 1000 CFM 4 bbl throttle body, stock late model iron heads, Lunati 30110 cam (230/236 @ .050, .468/.468, 110 LC), 8.5:1 compression, 43 PSI fuel pressure
<u>M</u>	PI2402	350 small block Chevy, 24 lb./hr injectors, single plane MPFI manifold, 1000 CFM 4 bbl throttle body, stock late model iron heads, Lunati 30110 cam (230/236 @ .050, .468/.468, 110 LC), 8.5:1 compression, 43 PSI fuel pressure
<u>M</u>	PI2403	355 small block Chevy, 24 lb./hr injectors, single plane MPFI manifold, 1000 CFM 4 bbl throttle body, 20 degree Holley heads, Lunati 30140 cam (225/235 @ .050, .477/.507, 112 LC), 9.5:1 compression, 43 PSI fuel pressure, 397 HP @ 5500 RPM, 418 ft./lbs. @ 4400 RPM
<u>M</u>	PI3004	355 small block Chevy, 24 lb./hr injectors, single plane MPFI manifold, 1000 CFM 4 bbl throttle body, 20 degree Holley heads, Lunati 30140 cam (225/235 @ .050, .477/.507, 112 LC), 9.5:1 compression, 43 PSI fuel pressure, 396 HP @ 5500 RPM, 417 ft./lbs. @ 4500 RPM
<u>M</u>	PI2405	355 small block Chevy, 24 lb./hr injectors, Stealth Ram intake, 58mm throttle body, 20 degree Holley heads, Lunati 30140 cam (225/235 @ .050, .477/.507, 112 LC), 9.5:1 compression, 43 PSI fuel pressure, 405 HP @

MPI3006 355 small block Chevy, 30 lb./hr injectors, Stealth Ram intake, 58mm throttle body, 20 degree Holley heads, Lunati 30140 cam (225/235 @ .050, .477/.507, 112 LC), 9.5:1 compression, 43 PSI fuel pressure, 405 HP @ 5500 RPM, 428 ft./lbs. @ 4600 RPM MPI3007 355 small block Chevy, 30 lb./hr injectors, single plane MPFI manifold, 1000 CFM 4 bbl throttle body, 58mm throttle body, 20 degree Holley heads, Lunati 30142 cam (235/245 @ .050, .507/.534, 112 LC), 9.5:1 compression, 43 PSI fuel pressure, 421 HP @ 5700 RPM, 415 ft./lbs. @ 4800 RPM MPI3008 355 small block Chevy, 30 lb./hr injectors, Stealth Ram intake, 58mm throttle body, 20 degree Holley heads, Lunati 30142 cam (235/245 @ .050, .507/.534, 112 LC), 9.5:1 compression, 43 PSI fuel pressure, 418 HP @ 5500 RPM, 422 ft./lbs. @ 4700 RPM STLTHZZ4 GM ZZ4 engine with Stealth Ram system. 30 lb./hr. injectors Multi-port EFI. Engines that are close to stock. Idle vacuum 16-20". 14-24 lb./hr. injectors. Engine power range Mpi1 idle-5000 rpm Multi-port EFI. Engines with mild cams. Idle vacuum 14-18". 24-36 lb./hr. injectors. Engine power range 1500-Mpi2 6000 rpm 4 bbl multi-port map generated on a 350 cubic inch small block Chevy with the Holley SysteMax aluminum 350sbc30 cylinder heads and cam. Injector size is 30 lb./hr. Good baseline for 400 hp 350 with approximately 230 degrees duration at .050" lift cam and 112 lobe separation Multi-port map generated on stock non-Vortec 4.3L GM V6 with manual transmission. Injector size is 19 lb./hr. 43lv619 Multi-port map generated on stock non-vortec 4.3L GM V6 boat engine. Injector size is 19 lb./hr. Open loop 43lv6bt calibration 4 bbl multi-port map generated on 502 cubic inch GM engine with Holley SysteMax cylinder heads and cam. 502sysmx Injector size is 36 lb./hr. Good for big block engines with approximately 550 hp and cams with around 235 degrees duration at .050" lift and 112-114 lobe separation 50242pph 4 bbl multi-port map generated on 502 cubic inch GM engine with Holley Systemax cylinder heads and cam. Injector size is 42 lb./hr. Use with engines that produce 550-600 HP 5lgt40 Use with 5.0L Ford engines that have similar configuration as Ford GT40 package. 24 lb./hr. injectors Base map for 347 Ford. 30 lb./hr. injectors. 224-230 @ .050 cam. 420-450 horsepower. Manual transmission 347ford Alphan General base map for engines that use Alpha-N operation ZZ4MPI30 ZZ4 Crate engine with 30 lb./hr. injectors, Holley Multi-port EFI 383 Small Block Chevy. 30 lb./hr. injectors. 50 PSI fuel pressure. 242/248 @ .050, 110 LC solid roller cam. 450 383sbc HP 383 Small Block Chevy. 30 lb./hr. injectors. 45 PSI fuel pressure. 215-225 @ .050 110-112 LC cam. 410 HP 383sbc30 383SBC36 383 Small Block Chevy. 36 lb./hr. injectors. 43 PSI fuel pressure. 235 @ .050 hydraulic roller cam. 450 HP bbc50pph Large cubic inch (540) street engines. 650 HP. 45 PSI fuel pressure. 50 lb./hr. injectors. Speed density

### Race Maps

It is highly advised to use the "Map Builder" Excel program included with the base maps to create the wide-open throttle curve if any engine dyno numbers are available. Any Alpha-N maps should have the TPS position verified so that it is around 32 at idle and enters into the WOT portion of the map at full throttle travel.

R42600	Parameters set for use with wide-band O2 sensor.	Alpha-N. 42 lb./hr. injectors.	43 PSI fuel pressure. Set up for

the following HP curve with a .42 BSFC:

6000 RPM – 580 HP 6500 RPM – 600 HP 7000 RPM – 570 HP

R42700 Parameters set for use with wide band O2 sensor. Alpha-N. 42 lb./hr. injectors. 43 PSI fuel pressure. Set up for

the following HP curve with a .42 BSFC:

6000 RPM - 650 HP 6500 RPM - 700 HP 7000 RPM - 680 HP

R50700 Parameters set for use with wide band O2 sensor. Alpha-N. 50 lb./hr. injectors. 43 PSI fuel pressure. Set up for

the following HP curve with a .42 BSFC:

6000 RPM – 650 HP 6500 RPM – 700 HP 7000 RPM – 680 HP

R50800 For use with wideband O2 sensor. 50 lb./hr. injectors. Alpha-N. 50 PSI fuel pressure. Set up for the following HP

curve with a .42 BSFC: 6000 RPM – 750 HP 6500 RPM – 790 HP 7000 RPM – 800 HP

302stock Base map for 5.0L Ford Stock Eliminator. Speed density. 24 lb./hr. injectors. Use 55 PSI fuel pressure for initial

tuning.

305stock Base map for 305 TPI Chevy Stock Eliminator. Alpha-N. 19 lb./hr. injectors. Use 50 PSI fuel pressure for initial

tuning.

350stock Base map for 350 TPI Chevy Stock Eliminator. Alpha-N. 22 lb./hr. injectors. Use 50 PSI fuel pressure for initial

tuning.

<u>Ls1stock</u> Base map for LS1 Chevy Stock Eliminator. 24 lb./hr. injectors. Use 55 PSI fuel pressure for initial tuning.

Lt1stock Base map for LT1 Chevy Stock Eliminator. 24 lb./hr. injectors. Use 54 PSI fuel pressure for initial tuning.

## Supercharged/Turbo Maps

SC14PSI Multi-port EFI. Engines with centrifugal supercharger. Up to 14 PSI of boost. 42-50 lb./hr. injectors. Use 2 bar

MAP sensor. 55 PSI fuel pressure.

TBIBLOWN TBI injection. Uses twin 4 bbl TBI units with 65 lb./hr. injectors. Large cubic inch engines with 6-71 style roots

blowers with up to 7 PSI of boost. Uses 2 bar MAP sensor. 21 PSI fuel pressure.

383SC Multi-port EFI. 383 small block Chevy. 8 PSI 36 lb./hr injectors. Approximately 500 HP. 50 PSI fuel pressure.

302SC Multi-port EFI. 302 Ford. 25 PSI. 85 lb./hr injectors. 45 PSI fuel pressure. Requires auxiliary injector driver box

(PN 534-122). Approximately 900 HP.

4 cyl Base map for up to 29 PSI of boost. HP depends on injector size

# Wide Band O2 Maps

These maps have proper parameters entered for use with a Holley wide band oxygen sensor. All of the maps above can be used with a wide band oxygen sensor, but must have the parameters entered properly. See the following maps for examples.

Wb383sb	383 Small Block Chevy. 30 lb./hr. injectors. 50 PSI fuel pressure. 242/248 @.050, 110 LC cam solid roller cam. 450 HP
Wb502sys	4 bbl multi-port map generated on 502 cubic inch GM engine with Holley SysteMax cylinder heads and cam. Injector size is 36 lb./hr. Good for big block engines with approximately 550 HP and cams with around 235 degrees duration at .050" lift and 112-114 lobe separation
Wbmp2405	355 small block Chevy, 24 lb./hr. injectors, Stealth Ram intake, 58mm throttle body, 20 degree Holley heads, Lunati 30140 cam (225/235 @ .050, .477/.507, 112 LC), 9.5:1 compression, 43 PSI fuel pressure, 405 HP @ 5500 RPM, 428 ft./lbs. @ 4600 RPM
Wbmp3008	355 small block Chevy, 30 lb./hr. injectors, Stealth Ram intake, 58mm throttle body, 20 degree Holley heads, Lunati 30142 cam (235/245 @ .050, .507/.534, 112 LC), 9.5:1 compression, 43 PSI fuel pressure, 418 HP @ 5500 RPM, 422 ft./lbs. @ 4700 RPM
Wbsc14sc	Multi-port EFI. Engines with centrifugal supercharger. Up to 14 PSI of boost. 42-50 lb./hr. injectors. Use 2 bar MAP sensor. 55 PSI fuel pressure
Wbtb7503	355 small block Chevy, 900 CFM 4 bbl TBI, 75 lb./hr. injectors, Lunati 30142 cam (235/245 @ .050, .507/.534, 112 LC), 9.5:1 compression, 21 PSI fuel pressure, 402 HP @ 5600 RPM, 412 ft./lbs. @ 4900 RPM
Wbtbblwn	TBI injection. Uses twin 4 bbl TBI units with 65 lb./hr. injectors. Large cubic inch engines with 6-71 style roots blowers with up to 7 PSI of boost. Uses 2 bar MAP sensor. 21 PSI fuel pressure.

Base map for up to 29 PSI of boost. HP depends on injector size

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Wbtc4cyl