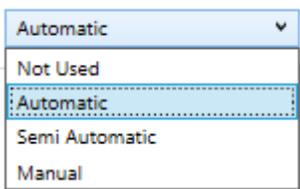
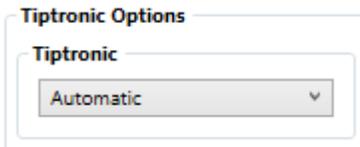


Tiptronic Settings

Each TCU has the ability to wire 2 push button switches for Tiptronic functions. When the Map is set to operate in Tiptronic mode, these buttons will give the driver the option to shift the transmission manually to his command. These 2 inputs can also be changed to function as overdrive and 2nd gear start buttons.

Settings



This setting gives the tuner options on how he would like to set up the tiptronic operation and LED indication for each Map. This is useful for modes like towing, racing and low range. If it is used as automatic only without buttons, select Not used. These modes may be set up differently for each of the 4 maps.

Automatic

This is a standard feature on most cars today. The driver uses the tiptronic buttons to set the desired gear for the TCU. This does not control the shift directly but merely the indication to the TCU which gear should not be exceeded during driving. This is useful in a pass where you go uphill and need a lower gear. If you release the throttle in a corner the TCU will select a higher gear only to gear down again when you press the throttle after the corner. There is no different tuning on the gear profiles for automatic.



This desired gear is indicated as MAX GEAR on the software. When you press the downshift button the TCU will downshift one gear if it is allowed. The max indicator will then indicate the current gear that you are in. Another press will downshift one gear again if it is allowed and the max indicator will follow. If a gearshift is not allowed, then the TCU will do nothing. This may be the case when the speed for the lower gear is too high. If you slow down the TCU will shift down but leave the max indicator where it is, then it will upshift to that indicator value but will not shift higher. Should the driver press upshift button the max indicator will increment one gear per push till highest gear is reached.

So in short explanation you can tell the TCU what is the highest gear that it is allowed to shift to. With the downshift feature when the engine labor or you want to preselect lower gear for an upcoming hill.

Should he however accelerate to maximum revs where the marker passes the blue top dot on its right side, the transmission will select a higher gear to prevent over revving. It will also set the Tiptronic Max to the current gear.



If the driver is stationary and press the down button, the desired gear select will be 1st.



Then he can dictate up gears at higher rpms with the upshift button.

Semi-automatic

This feature is more direct and will shift the transmission directly if a legal shift can be performed. This mode is used for towing where it is difficult to set the transmission up for different loads. Here there are changes on the profile maps to move the up and down shift points further from normal automatic mode. This means the middle dot of the blue line moves more to the right and the middle dot of the brown line move more to the left. This will cause the engine to go higher in revs before upshifting and lower in revs before down shifting. Then the driver can decide when a shift is required and shift the transmission with the buttons. The TCU will shift up and down when low speed or high RPM's is achieved, making the transmission still semi-automatic and drivable.

Manual

This mode is completely manual. It is used for off-road driving or Dyno tuning. The driver can select the gear while standing still and then the transmission will pull off in that gear. This is useful in sand and snow when the driver need to pull off in 2nd gear. The transmission will stay in that gear even if the engine over-rev. This is useful in 4x4 mode where a steep slippery hill must be crossed. The lockup clutch remains in automatic mode and will only engage under low load conditions. Remember that when driving in loose sand or on the Dyno. The transmission may over-heat due to the lockup that is not engaged and creating heat in the circulating oil. You may need to back off the power to engage the lockup and then put the power back on.