

K.O. PRECIOUS

RADIO REVIEW

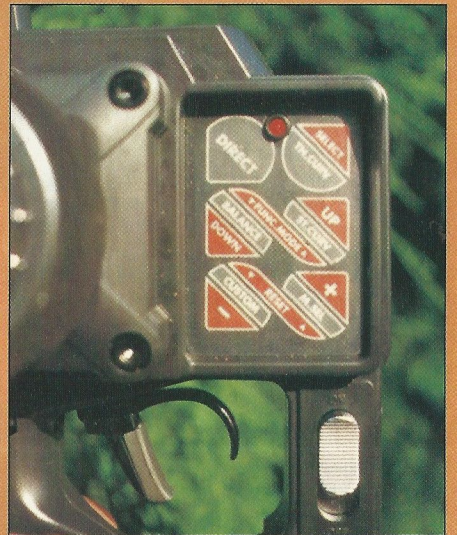
My Precious by Smeagol
(It burns,
it bites,
it freezes)

With more gadgets than the Star Trek "ENTERPRISE" the EXI Precious is sure to be at the top of many Christmas lists, so Santa (I happen to know he reads this magazine regularly) had better requisition some extra sacks this year.

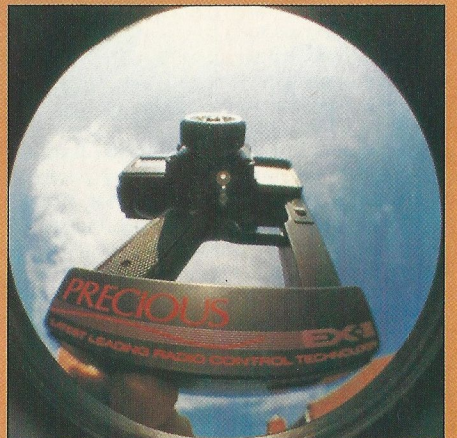
PART ONE

Just falls in the hand.

With a well set up car that turns equally well left and right and easily lasts race distance you may ask "why do I need anything more than a basic two channel tranny?" How good are your thumbs at adapting to changing conditions, tyres that go off, running at a different track every week or running two, even three cars at one meeting?



The key pad is touch sensitive.



Beam me up Scotty

A six model memory computerised Tx that offers all the options you can think of, plus a couple of blinders thrown in as a bonus, can offer you the option of setting a car up to your favourite six tracks or allow you to set up all six of your cars to a nominal setting so you need only take one transmitter with you wherever you go, whatever you race. The only transmitter that will out do the Precious is the one that wakes you up race morning, makes breakfast, drives you to the circuit then changes its own crystals and links up to the national grid when it feels like recharging.

Uncluttered

The small LCD screen manages to stay uncluttered because unlike some computer trannies it doesn't show all your options all the time and flash a cursor above the one you are changing. The display shows only the adjustments you are making during set-up then a voltage monitor and model name's visible during normal operation. A six button touch keypad is your only interface and different sequences and multiple contacts let you into only one of the three multi layer menus at a time. The less often you will need a menu the more buttons you require and the simplest operations are reserved for the most common applications.

Good old U.S. of A.

You may say "it's a combo and I only use sticks", but in the good old U.S. of A. steerwheel sets are as common as apple pie, while what we use in Blighty are referred to as CHOPSTICKS - used only in Japan. Europe has been slowest of all to catch

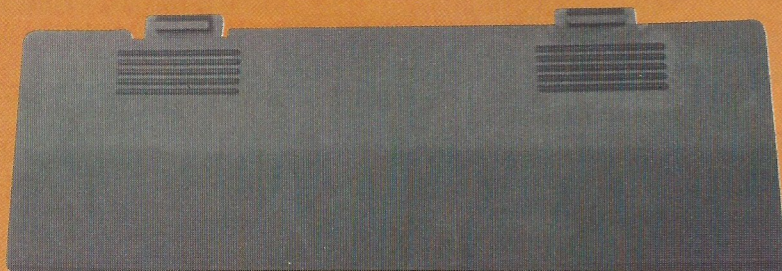
on (we haven't had the directive from Brussels yet) but over the last four years I have noticed more and more steerwheels appearing at race meetings and less people asking me in all seriousness "how DO you use one of those things?"

Japan is catching up fast by virtue of the fact that several manufacturers are taking the American market seriously enough to offer most of their new top of the line kit in both sticks and steerwheel guises. If you have never considered

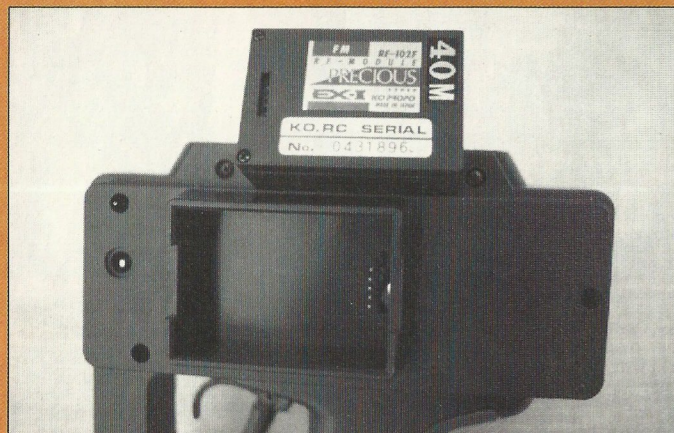
dropping the sticks for even one meeting, let me tell you what you are missing.

Holding a combo in your left hand is naturally balanced (ever have a scalextric?) and the throttle trigger moves in an arc that your index finger is thrice jointed to move through. The steerwheel itself is held with the digits of your free hand and

The large receiver is what comes with the combo. The other is K.O.'s latest mini receiver.



The module clips neatly in to the back of the main case. The crystal is loaded elsewhere.



The batteries fit in a cassette held in the transmitter base.

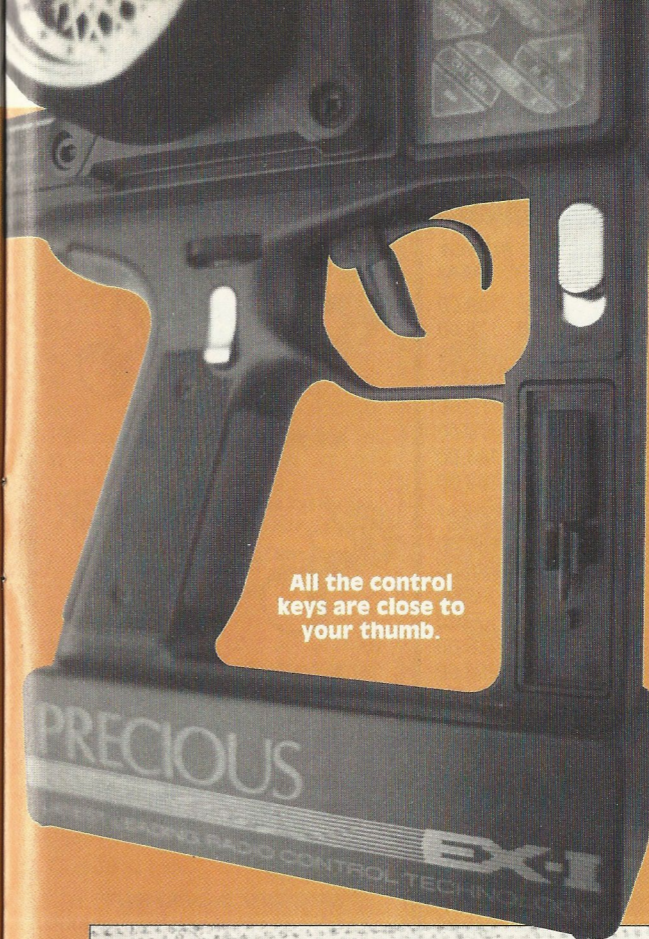
is moved by all the muscle groups from your fingers and wrist all the way back up to the elbow for precise untiring control. Next to your otherwise dormant thumb are a button and a rotary dial that can translate tiny push and slide movements into a variety of consequences, while digital trims sit within easy reach yet remain out of range to the finger tips on the wheel. Compare this to holding a square box with both hands and having to push and pull two opposing sticks through two perpendicular arcs neither of which feel like nature intended your thumbs to achieve with such little muscles.

Ergonomics

It's called Ergonomics and you can tell that K.O. Propo have been doing a range of combos for some years now by the way it feels invisible to the touch. It's just like you have a jack plug socket in the back of your neck linked to an aerial on your forehead because you only have to think to make it happen. The first time you grip a steen heel and imagine a lap of your favourite circuit you will understand why the laziest country in the world are so keen on them.

The soft touch coloured hand grips are replaceable and come in a variety of colours to make yours easily identifiable in the paddock, but you will have to super glue the finger tip pad onto the throttle trigger otherwise it will slide out of its mounting grooves during exuberant exercises shall we say. For similar reasons you should make good and sure that the "tyre" is glued securely to the steerwheel itself unless you intend changing it for a different compound to suite the weather conditions!

My Precious by Smeagol
(It burns, it bites, it freezes)



the rear next to the pod. After recharging overnight with one of the mains units designed for the job that are available at the moment, the longest run time I have seen recorded on the elapsed time recorder built in to the EX1 Precious is 2hrs and 15 mins with no trouble at all, so I guess this would put the maximum somewhere near three hours. There is a voltage displayed during operation backed up by an alarm signal should the voltage ever drop to the fall off point around 9.2 Volts. If the alarm does sound during a race you should have enough power to finish the run you are on, but I certainly wouldn't go out again without recharging because I like my cars the shape they are and it takes me ages to paint a bodysell.

There are three main multi layer menus.

1) SYSTEM MODE

By holding down the "+" "-" and "Select" buttons together using three different fingers is a little tricky but then this is the least used menu as it contains all the transmitter set-up options. "VL Select" cycles through the three options of "GDA" (thumb wheel), "BT1" (thumb button) and "CST" or custom (bottom left of the keypad). You can assign a function that you require to each of the three from separate limited sub menus.

For "GDA" you can have "TRVE" steering rate, "BRKE" brakes, "TRIM" steering

Mini receiver fitted to Smeagol's Predator

The aerial retracts fully into the main body leaving no opportunity to bend the last couple of inches and the base is not screwed to the electronics within, instead mounted in a sliding contact that cleans itself each time the aerial is retracted or extended. By not being screwed in, the chances of a loose connection ever causing an intermittent transmission signal are negated and another potential failure mode eliminated.

No interference please

The module is plugged in from the rear but unlike a lot of 40Mhz sets it does not have to be removed to change the crystal yet remains simple to remove for when you want to adjust your transmitter settings without causing anyone interference.

The battery compartment contains a non-reversible cassette holding eight pen cell AA rechargeables that should not see the light of day for many years thanks to the recharging jack situated at

trim or "SAVE" (the amount of traction control - see later) or simply "OFF". Steering rate is by far the most popular use of the thumbwheel allowing constant adjustment for how much steering your car generates as the level of grip changes during a race without taking your eyes off the track. Altering the amount of braking power available at full stick is something you might consider during a race to take the guess work out of your hands and maintain a constant and reliable level throughout the run. Having the steering neutral trim on the thumb wheel is a less likely choice as it is not something you would consider changing mid race unless a shunt had caused your tie rods to bend and it had affected your straight running settings. If this was the case then surely you have lost sufficient time to use the digital trims provided for the purpose, and just limp round because you are bound to have done some major damage. Changing the amount of traction control is another factor that can require adjustment during a race when, for example, it starts to rain or inversely the track begins to dry.

Three options

To "BT1" three options can be delegated and the choice will come down to whether you are practising or racing and which one of the three

suits your style the best. The Stop watch can be stopped, started and split times for each lap acknowledged, a throttle pre-set anywhere from full speed to full brakes is available and traction control can be turned on or off with the push of this button. The stopwatch would only really be used during private test sessions so that you can accurately assess run times and monitor your progress while you set up the car. Many people like to use a throttle pre-set at full power as a boost button and limit the throttle to a maximum figure around 80% so that they can over gear and drive soft without really trying, but still have access to the last portion of WHOOSH when the need arises. Others prefer to pre-set a brake limit so that they can reliably charge up the inside into corners and brake confident of the outcome time and time again. A throttle pre-set could also be set to a level where it would give you a pre-determined level of acceleration from a standing start. This will help you, with practice, make much better starts by not wasting your time wheel spinning off the grid and stay just this side of the maximum acceleration to suite the grip level available on the day. The amount of pre-set dialled in will take some setting up but you will soon be able to best guess the level and any amount of added traction has got to help especially on a wet or dusty track. With this feature you could save a little extra power by limiting current drain from a standing start because a motor at stall can take an instantaneous peak of over 250 amps to get going. The less you give it to play with at the beginning means more capacity to use later on.

Using the button as a simple on off switch for the traction control will allow you to limit the power consumption at the beginning of the race when you are suffering from grid induced brain fade, then switch to full manual control once you have calmed down further into the race and your batteries are less eager to burn your commuter. Here is another method where you should find that you have saved enough capacity when the cells were fresh to see you through that last lap when everyone else is slowing and take back a couple of places. Now doesn't that sound good? During practice sessions you could use this function to assess the advantages of driving soft and maintaining a cleaner racing line by leaving the traction control on for a couple of laps then switching it off to see whether in fact brute force and ignorance could win the day for a change.

To the custom button you can assign one of the major functions for a quick recall and adjust without having to delve into the main menu that normally hides the one you are looking for. "DISP" shows you if any of the trims have moved since you last saved the set-up to memory, i.e. changes of steering rate during a race. "TRVE" will let you adjust the steering rate at a glance, using the "+" and "-" keys to change the figures, when you have reserved the thumb wheel for something you have decided takes a higher priority. "BRKE" lets you adjust the braking level "SAVE" the traction control level, "POS" the traction control change point and "HIGH" the throttle high point in a similar fashion to what "TRAV" did.

Also under this System Mode menu you will find the more usual sub trims, servo reversing, trim rate adjustment (how far one click of the thumb wheel actually moves the servo when using it as the steering trim) plus model name input, even in Japanese characters if you are feeling flash, and finally the LCD screen contrast adjustment to suite the level of ambient lighting. Well thats it for this month, next month I'll uncover more of my Precious.