

I've been building, testing, and using RC gear over forty years and have seen many milestones - RC licences !! - six channels on 27megs - splits - proportional functions - 40megs etc., etc., come and go. However there is no doubt in my mind that the most significant progress has occurred over the last few years.

Safety first

The Futaba MEGATECH 3PJ under review reinforces this opinion with authority and makes me wonder how much more can the designers 'pull out of the hat'. The 3PJ will not transform you into a champion overnight but it will significantly hone your driving skills so that a more consistent 'drive' should result each time out. The gear at first sight may seem dear at £399-99 for TX, RX, Nicads, charger and one high quality servo, however the value is in its potential to create a very tight link between driver and car which must result virtually akin to being in the 'seat' yourself.

The gear arrives boxed in the usual custom moulded foam tray and lid complete with a seventy two page "Instruction Manual". One of the 'spin offs' of this new generation of RC gear is that at long last a manufacturer has addressed the need for comprehensive info on use and what is most important the safety aspects of RC working. The first seven pages deals in depth with this aspect and the user is strongly recommended to read and reread before even thinking of 'working' the gear. I sincerely hope that Futaba incorporate something similar in ALL their RC kits. Its long overdue and badly needed. I was particularly pleased to find a para on using only manufacturers approved xtals - a practice all too often ignored these days in trying to save cost. Using non approved xtals could result in an accident with much greater financial penalties. One word of caution however. The manual has been written for the American market so this must be borne in mind by applying the principles to our 'scene' and ignoring the obvious American detail.

A strong family resemblance

The 3PJ TX is a three function steerwheel system and from the pics one can see the MEGATECH family resemblance design. However this appearance belies the programmable potential of this gear but before

megatech muscle power

THE LATEST MEGATECH 3PJ COMPUTER GEAR FROM FUTABA.

Both the digital trim buttons can be seen above the wheel. The two knobs to the right are for the third function and the throttle control.



The 3PJ TX Steerwheel side.

From the rear, showing the RX module and DSC & Charging Sockets to its right.



aerial is to the left of the steer-wheel. The black antenna demonstrates the thought that has gone into the design in making the gear user friendly by eliminating annoying reflections in use. The TX rear houses the RF module, DSC jack socket and the charging socket. Crystal change can be done without removing the RF module. Another thoughtful design feature is the two semi circular 'feet' either side of the module to protect it if the TX is laid down on this side. To the left of the steerwheel is the "MULTI FUNCTION DISPLAY

screen with the Display and Master ON-OFF switches on the end and behind the screen. The review TX is for right handed operation however the design offers conversion to left handed use with full instructions in

the Manual. With the aerial extended and the Body Rest fitted the TX is beautifully balanced. The index finger falls naturally into the trigger and the thumb can be used to adjust the two steering dials - Dual Rate and ATL. The steerwheel tension can be adjusted using a small 'Philips' screwdriver via an access hole underneath the steerwheel and to the right of the Push Button Switch. This PBS is a programming option covered in Part Two.

Micro receiver

The PCM 1024 RX supplied is micro, weighing 20gms and measuring 42mm X 28mm X 22mm high over the xtal. The supplied P-S9304 servo is a high torque servo with coreless motor and ball raced output at 5-0Kg/cm in 0-22secs over 60°. It weighs in at 50gms with dimensions of 40-5X20X35-5mm. It is a high quality servo which is priced, if bought separately, at £69-99. The need for a high quality servo is mandatory if you seriously want to get the maximum benefits from the system. It follows that linkages to

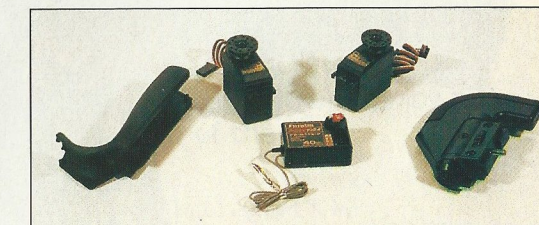
we get into that lets first examine the basic functions. The base houses the nicads accessed via a sliding bottom cover. One end of the base has a small metal threaded hole for the body rest option. (see the pic) which is itself adjustable to suit the user. The moulded comfortable handle is fitted with a removable soft palm grip which can be replaced with one of two alternative larger size 'soft grips', available as extras, to suit different size hands. Located at the top of the grip are two 'dial

wheels' for steering adjustments - ATL and Dual Rate. The index finger operated throttle trigger can be adjusted mechanically via an access hole in the finger guard end. (see pic) The foam padded steerwheel has the first of the radical changes with 'true' electronic trim. Those of you with TV's which have volume adjustment from the remote with a 'stepped' display on the screen will know that the volume can be adjusted in steps by one push of the button. This is what happen with this TX. Prior to ini-

"May your RC force never leave you"

tial programming the steering trim can be adjusted using either the left or right buttons with the setting shown on the LCD screen. Just like the TV screen one button push will move neutral right or left in steps. For slightly faster operation the centre 'switch' can be used. Identical throttle trim adjustment is located on the left of the steerwheel. To the right of the steerwheel are the programming buttons which we will examine in detail in Part Two of the Review. Above these buttons and on the top can be seen the third function knob and the throttle idle knob. The top mounted black finished TX

From left to right this pic shows one of the two optional palm grips, the alternative P-S 9402 servo, the micro RX, the supplied P-S 9304 servo and the body rest.



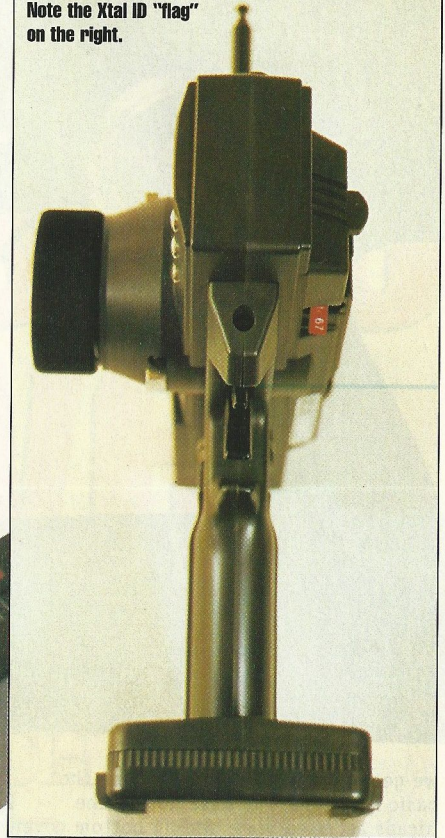


The optional body rest fitted.

This pic shows the two steering dials above the grip, the throttle digital trim to the left of the steering wheel and the wheel tension access to the right of the PSB.



TX end view, the trigger travel adjustment hole can be clearly seen at the front of the handle. Note the Xtal ID "flag" on the right.



servos must also be of high quality and free from binding and excessive travel. The manual does make this point. Slackness must also be avoided as all the benefits of the precise settings can be lost. An alternative servo, P-S9402 priced £99-99 is available if you require higher torque - 8-0Kg/cm - and speed 0-10secs/60°. Body size the same as the 9304. Make no mistake this gear is of high quality all round and is for serious racing. It follows then that the car must be of compatible quality to achieve the maximum benefit from a serious investment in RC gear as the programming will show in Part Two of the review. The set contents include TX nicads and standard charger, switch harness, P-S9304 servo and PCM1024 RX. Set of Xtals to your choice. Note that RX nicads are not included. Nor the leads for Direct Servo Operation. This is a pity as with DSC you can operate the functions without RF output which if at a meeting must surely be a worthwhile advantage. The argument against is that TX's are quite properly impounded to prevent accidents. With this set there is no reason why the RF module cannot be removed and 'impounded' at a race meeting leaving the then 'safe' TX available for fine tuning the system via a DSC lead. And come to think of it there are other makes of gear with separate modules and a DSC feature. Food for thought and comment.

Part Two will look at the finer points of the system and the separate programming of up to eight models. To whet the appetite steering speed, traction control, anti-skid brake system etc. plus comprehensive timer functions are available plus audible warnings if required. In the meantime the Futaba 3PJ set is available from your local model shop @ £399-99 and is imported by Ripmax Plc, Ripmax Corner, Green Street, Enfield, EN3 7SJ. tele: 0181 804 8272. or FAX 0181 804 1217. So until Part Two May Your RC Force Never Leave You. **RRCI**