

# AT YOUR COMMAND

In keeping with current R/C car manufacturers, Japanese radio equipment producers are also intent on providing new competition features for the Model Cars racer.

Lewis Eckett assesses two new systems for the race-driver.

## ACOMS Technisport AW-27 'Pistolgrip'

**A**coms' symbiotic relationship with Tamiya has meant that at some point or another a vast majority of car owners have had their thumbs poised over the sticks of an Acoms transmitter.

The sheer volume of Tamiya sales has given their recommended radio producer a very healthy share of the airwaves. So healthy in fact that we suspect the prime reasons for Acoms' 'Techniplus' facelift for the 'MKII' was that the injection moulding tool for the case had worn out!

Back to the future however, and in keeping with the other big four Japanese radio makers Acoms have introduced their version of the 'pistolgrip' R/C system. To the majority of those weaned on conventional twin-stick transmitters the thought of reverting to a throttle trigger and steering wheel set-up is frankly unthinkable. Old dogs, new tricks and all that.

However, there is no denying

that to the uninitiated the gun-toting feel of a pistolgrip transmitter is far more natural, the finger loosely coiled round the trigger ready to fire (from the hip, of course) at the speeding vehicle. Equally so the mechanics of steering through the rotary movement of the wheel is far easier to assimilate.

The 'Technisport' therefore is undoubtedly Acoms' racing control package complete with the sort of features competition drivers require. Nevertheless Acoms' user friendly approach to R/C is apparent with identical in-car equipment and subsequent correlation with all Tamiya kits. Kicking off the transmitter features list is the servo reversing facility housed under a protective cover situated at the rear of the head. Two mini switches will reverse throttle or steering direction according to servo installation.

Between the servo reversing switches and the wheel are two trim knobs to adjust throttle servo rate and neutral position.

The former allows you to determine how much servo arm movement is required to operate the speed controller. The latter sets the neutral point.

The steering wheel itself is clad in soft foam rubber, presumably to give improved finger grip. Directly above sits the steering servo neutral point trim whilst below and conveniently sited for easy thumb adjustment, is the steering rate trim. Drivers can increase or lessen the amount of steering movement during the race simply by 'thumbing' this trim.

The 'Technisport' transmitter even has the provision for either right-hand and left-hand operation by removing two phillips screws and turning the head through 180°.

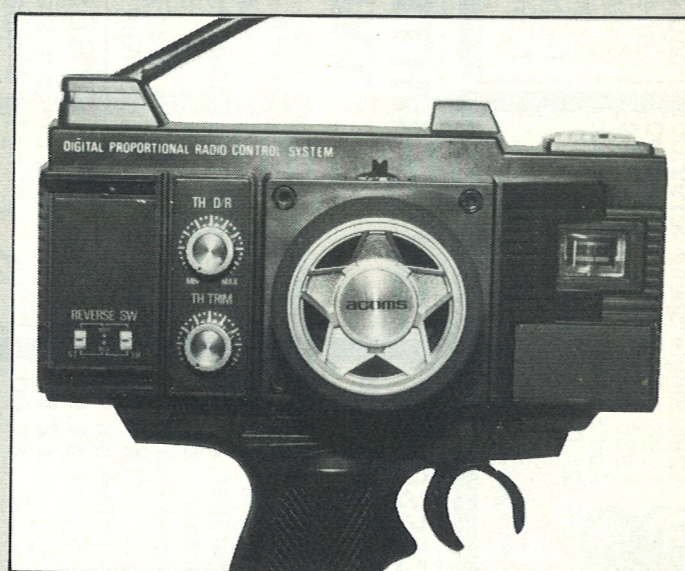
The base of the transmitter provides the most obvious placement for the power batteries, mainly to keep the unit from tipping over. Eight pen-cells are needed and held in a clip-in battery holder.

The 'Technisport' is also the first Acoms R/C set to incorporate a Ni-Cad charging system. A jack socket allows the Ni-cads (not supplied), to be charged without removing the batteries. Acoms manufacture the necessary charger.

### In the hand

To be honest, users of conventional twin-stick radio will have little problem changing over to a pistolgrip system. The transmitter falls easily to the hand and the steering wheel operation feels neat and tidy. Just as with normal stick units the trigger and wheel are self-centering for 'hands-off' neutral operation.

The trigger provides both the most natural and unnatural operation in that it is squeezed for forward and pushed away for braking and reverse. This latter action is the most difficult to get to grips with.



### Technisport AW-27

**Manufacturers:** Acoms — Tokyo, Japan.  
**UK Distributor:** Richard Kohnstam, Hemel Hempstead, Herts.  
**Price:** £80.00 (approximate retail price)  
**Complete system includes:** Transmitter: Receiver (ARC-227); 2 x AS-7 servos: Receiver battery box: Frequency pennant: Servo mounts and output horns.

## Futaba "Attack - BFR" incorporating BEC and ASP

**T**he continuing performance developments of competition R/C cars has led to just as many improvements in the facilities of the radio equipment itself.

Futaba from Japan are as close to the forefront of R/C equipment development as can be possible, continually seeking to give the user the features necessary for competition racing.

The current trend in running the in-car R/C equipment directly from the main drive Ni-Cad battery has its advantages and disadvantages. On the plus side this eliminates the receiver Ni-Cad pack which can weigh as much as 6oz. Conversely as the Ni-Cad pack becomes progressively drained during operation it approaches the minimum voltage threshold for

the receiver (3.6 volts). If the pack voltage passes below this point then R/C equipment will cease to operate but the car will not.

It is no use having a car travelling out of your control toward the end of a race, which is where Futaba and their latest "Attack-BFR" 2-channel system steps in.

This latest "Attack" radio incorporates two new features: Battery Eliminator Circuit (BEC) and Adjustable Safety Position (ASP).

The BEC side of the system is contained within the receiver itself through a voltage regulator set on the PCB board. If the speed controller in your car already has a voltage regulating set-up for the receiver then this must be dis-

connected otherwise the operating voltage will be too low.

If your speed controller is standard then it is a simple matter to connect the switch harness to the controller and plug the other end directly into the receiver.

The Adjustable Safety Position aspect is set at the transmitter end of the system through a switch and a preset set in the bottom of the case.

The ASP is simply set by positioning the steering and throttle controls at neutral and then setting the ASP switch. The ASP can be used to trim the throttle servo so that it rests at neutral. Remember to re-set the ASP switch otherwise nothing will happen when you come to run the car.

Now the system is operational and will 'fail safe' to throttle neutral as soon as the receiver detects that the Ni-Cad pack voltage has reached the lowest possible level for continued operation.

To regain control, once the Ni-Cad pack has recovered, simply switch the transmitter off and then on. The car will then become operational again until the receiver senses the minimum voltage threshold. You can continue to do this until there is hardly anything left in the Ni-Cads at all.

Obviously the ASP system can be used even if your receiver is being powered by a separate battery pack. The ASP facility will chop the throttle to neutral if the receiver batteries fall to too low a level.



### Attack BFR

**Manufacturer:** Futaba — Japan.  
**UK Distributor:** Ripmax Models, Enfield, Middx.  
**Price:** £69.95 (approximate retail price)  
**Complete system includes:** Transmitter: Receiver (FP-R102GF); 2 x FP-S128 servos: Receiver battery box: Servo mounts and output horns.

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