

MÄNDÄRIN
SOFTWARE

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Lombard



rally



Driver's Manual



CONTENTS

1	Playing Lombard RAC Rally	Page 2
2	History of the rally	Page 8
3	Technical specification of the Ford Sierra RS Cosworth	Page 10
4	Past champions	Page 15
5	Highlights of the official rules of the rally	Page 17
6	Acknowledgements	Page 19

**Programmed, designed and developed
by Red Rat Software Ltd**

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PLAYING THE LOMBARD RAC RALLY

INTRODUCTION

Lombard RAC Rally is a challenging and realistic simulation of the world famous car rally. Much more than a motor racing game, it will give you many hours of undiluted pleasure while at the same time providing a thrilling and searching test of your driving and strategic skills.

Achieving the ultimate objective – to finish the rally in the fastest time – will not be easy, but then neither is the real thing! Night driving, fog-shrouded roads, forest lanes and twisting mountainous tracks, all stand between you and victory. The chance of laying claim to one of the greatest prizes in world rallying is within your grasp. Are you up to it?

OBJECTIVE

The main objective of Lombard RAC Rally is to take your Ford Sierra RS Cosworth into first place by beating the target times laid down for the competition. There are no points or penalties – just drive like the wind, watch out for other competitors and try to get to the end in one piece!

SELECTING FROM THE MAIN OPTIONS

Following the opening title, the screen will display all the main options. Moving the joystick up or down will highlight each of these options in turn. To select a currently highlighted option, press the joystick fire button.

THE FULL LOMBARD RAC RALLY

The full Lombard RAC Rally compels you to play all five legs of the Rally (15 stages in all) in their predetermined sequence. However, you must first prove your competence to be admitted to this supreme test of driving skills by playing all five legs in any order you wish (see QUALIFYING) and winning at least one prize overall.

When you have thus qualified, you may participate in the full rally by selecting Full Lombard RAC Rally from the options. Each of the prescribed legs must then be played in their proper sequence. The time taken on each stage is accumulated and you will only attain overall first place if you achieve the target time laid down.

QUALIFYING

To qualify for the full Lombard RAC Rally, you must play all of the five legs at least once and must win a minimum of one prize overall (just finish first, second or third in any leg).

The individual legs, listed on the main options screen, are:

Harrogate	-	Telford
Telford	-	Harrogate
Harrogate	-	Carlisle
Carlisle	-	Harrogate
Harrogate	-	Harrogate

You don't have to compete in the full Rally. You may instead prefer to play any or all of the legs in any order and as often as you like, simply for fun or to sharpen up your driving skills.

STAGES

Each of the five legs of the Lombard RAC Rally consists of three separate and consecutive stages. When an individual leg is highlighted, the panel on the right of the screen will display, for that particular stage, the route map, the route type and conditions, the prescribed times, the prize money for achieving those times, and the names and times of the best runs achieved in the current session.

Details of each of the three stages are obtained by moving the joystick left or right when an individual leg is highlighted. The highlighted number (1, 2 or 3) at the top of the panel indicates which of the three stages is currently being referenced.

The Stage Types are road, mountain and forest.

The Stage Conditions are normal, night and fog.

DRIVING YOUR FORD SIERRA RS COSWORTH

To steer, move the joystick left and right.

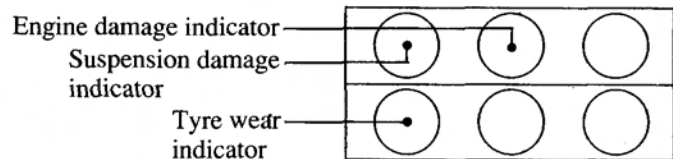
To accelerate, push forward on the joystick. Pull back on the joystick to brake.

To change up a gear, press the fire button while pushing forward on the joystick. To change down, press the fire button while pulling back on the joystick.

One of the secrets to success in Lombard RAC Rally is timely gear changing. The stages are full of twists and turns, hills and valleys, keen and poor visibility – so it's a good idea to be nifty with the gear stick to suit the road conditions. Saving vital seconds is crucial.

Leaving the road surface will slow you down and damage the car. A minor collision will cause the car to decelerate, but hitting an object with more force will cause the car to stop. You'll have to re-select first gear and get going again as quickly as possible. A violent crash may mean the end of the race or, more typically, valuable time being lost while your car is gently repositioned back on the road with first gear selected.

The control gauge panel displayed above the gear box shows vital data about the condition of the Cosworth's engine, suspension and tyre wear.



The other three gauges produce technical data which is analysed by your co-driver. Don't worry about them.

To the right of the screen is the speedometer and the rev counter. These display your current speed and the engine tick over rate respectively.

The timer on the Cosworth's dashboard indicates the cumulative elapsed time for the leg in minutes and seconds. The timer attached to the map

clipboard shows the elapsed time for the stage.

During the full Lombard RAC Rally the dashboard timer will display the lowest target time for the present leg. Failure to equal or beat this time results in a 'Time out' and your rally will end. If this happens press the fire button to return to the main menu where you can decide to try the full rally again or select Start Again

WORKSHOP

You may visit the workshop at any time by selecting the Workshop option from the main options screen or by pressing the W key during a stage. But beware: If you elect to take your car to the workshop while racing the time spent there will be added to your overall time for that stage.

Provided you have the money you can make desired changes or essential repairs to your Cosworth. You may wish to visit the workshop simply to check on the current state of your car. There is no obligation to spend your hard-earned cash!

Any damage done to bodywork, suspension, engine or tyres is shown as a percentage figure (maximum 99%) beside the relevant item on the right of the workshop screen. The repair cost is £1 for each percentage point of damage.

To effect repairs, move the joystick until the appropriate part of the car is highlighted (the respective box at the right hand side of the screen will also be highlighted with a blue surround) and press the fire button. Press the fire button again if you want to halt the repair (you might not want to spend all your cash on that particular item). The cost of the repair will automatically be deducted from your cash in hand.

To effect changes to the car, highlight the Parts box and move the joystick up or down. The available parts will be shown in turn, each with the cost of purchasing that component. Simply press the fire button to buy the part you require and it will be fitted, always assuming you can meet the bill! The panel to the right of the parts box indicates the current specification of your Cosworth.

To leave the workshop, highlight the Exit box and press the fire button.

Please note: Failure to pay due care and attention to the state of your Cosworth and to take necessary remedial action will effect its performance and may even render the car (and you!) unfit for rallying.

EARNING MONEY

There are two ways to earn money. The first is by winning cash prizes during the rally. The second is to indulge your ego in a TV interview. Selecting the TV Interview from the main options allows you to take part in the Lombard RAC Rally Trivia Quiz.

During the 40 seconds allotted you will be presented with a series of questions on all aspects of the Lombard RAC Rally. Each question comes complete with a choice of three answers. Simply select the one you think is correct by highlighting A, B or C (move your joystick up and down) and press the fire button.

The good news is that every question answered correctly wins you £50. The bad news is every question answered incorrectly will cost you £20. If you fail to answer all five questions "Time out" occurs and all winnings are lost. Still, the programmers have not been too unkind. No matter how badly you fare at this option, your cash balance will never fall below zero!

One further thing. You are only permitted one TV Interview before each leg of the rally.

PRACTICE

If you simply wish to practice, select this option from the main options screen. Naturally, no prize money is available during a practice run.

DEMO

To see how it should be done, select this option and sit back and watch. The game will also go into demo mode if left untouched for 50 seconds. You can get back to the game by moving the joystick or pressing the fire button.

OTHER FEATURES

Pressing the spacebar will pause the simulation, enabling you to pop out for a quick oil change or to wipe the mud from your display. To continue, press the spacebar again.

Hitting the Escape key immediately abandons the current activity and returns you to the main option screen with all timings and earnings intact.

Should you wish to begin the simulation again from scratch, selecting the Start Again option from the main menu will let you do just that.



HISTORY OF THE RALLY

The contrast between the Lombard RAC Rally today and the first one held 56 years earlier is remarkable. Although now a major event in what is arguably the most exciting and toughest form of motorsport, the rally began life as little more than a gentle, organised ramble round the English countryside.

The UK economy in 1931 was in a state of emergency. To help the balance of payments situation it was decided to set up a British alternative to the famous Monte Carlo Rally and thereby stem some of the money being spent abroad at this event and perhaps draw the public's attention to the attractions of British coastal resorts.

THE TORQUAY RALLY

As a result of what was to turn out to be a momentous decision, the first British rally took place in March 1932. As Torquay was chosen to be the finishing point, it was officially known as the Torquay Rally. The contestants started their 1,000 mile route from Bath, Buxton, Edinburgh, Harrogate, Leamington, London, Newcastle and Norwich.

The principal aim of those choosing the routes was to try and ensure that everyone got to Torquay where the winner would be determined by a series of tests. Of the 341 contestants, among whom were many peers of the realm as well as racing drivers, 312 made it to the finish. The average speed required on the road sections was between 22 and 25 mph.

There were no overnight halts and among the casualties was one driver

who fell asleep at the wheel and rammed a telegraph pole, another who overturned on the little ice there was on the route, and a further unfortunate who collided with a horse just eight miles from the start.

TO THE SLOWEST THE VICTORY

The first of the three tests to decide the winner involved driving in top gear as slowly as possible along 100 yards of Torquay promenade. This was followed by an acceleration test, at the conclusion of which the distance required to bring the car to a dead stop was measured. The use of a complicated formula to achieve equity between the different cars had a strange side-effect – the slower a motorist travelled in the first test, the more favourable the result! The winner of this bizarre test, with an average speed of 0.66mph, was Colonel Loughborough driving a Lanchester. As it turned out, he was also the overall victor of what motoring history records as the first ever RAC Rally.

THE RALLY CONTINUES

With some changes, the event was held every year thereafter until 1939, after which the Second World War brought it to an end. When the rally returned in June 1951, it was granted international status. Bournemouth was selected as the finish point and four starting locations were used – Brighton, Cheltenham, Harrogate and Skegness. Tests were now conducted throughout the rally. All routes converged on Silverstone, where the final test was to complete a given number of laps at a minimum average speed per class.

Ford stamped their imprint on the 1954 Rally. They took the manufacturer's team prize and a Ford Zephyr finished in third place. The rally was cancelled in 1957, due to the Suez crisis and consequent petrol rationing.

The following year the RAC made every effort to encourage foreign entries by placing the emphasis not on navigation but on speed, and planning to have a starting point at Le Touquet in France. However, only one entry from abroad was received and that was from a Briton living in Sweden! As a result, the Le Touquet control was dropped.

TECHNICAL SPECIFICATION OF THE FORD SIERRA RS COSWORTH

ENGINE

Cylinders	4 in-line
Mounted	Front, north-south
Capacity	1933 cc (x 1.4 = 2790.2 cc)
Bore and Stroke	90.8 x 76.95mm
Compression Ratio	12:1
Valves/camshafts	16 valve/DOHC
Fuel System	Weber Magnet Marelli
Turbocharger	Garrett T3
	6500 rpm
	4500 rpm

TRANSMISSION


Gearbox	5 speed Gelrag close ratio
Drive type	2WD (rear)
Clutch/differentials	Single-plate/rear viscous diff.

CHASSIS

Steering	Rack & pinion, assisted
Front suspension	McPherson strut
Rear suspension	Semi-trailing arm
Wheel rim widths	5.0-8.75 x 16 in
Tyres	Pirelli
Front brakes	315 x 32 mm ventilated discs, AP calipers
Rear brakes	285 x 28 mm ventilated discs, AP calipers

DIMENSIONS

Overall length	4460 mm
Overall width	1920 mm
Height	1359 mm
Wheelbase	2609 mm



2.0i
Double
Over-head
Cam

ENGINE


£930

TYRES:.....ROAD

ENGINE:.....STANDARD

SUSPENSION:.....HARD

DRIVE:.....REAR WHEEL



100% £2000

ENGINE

10% £17

SUSPENSION

53% £2200

600 x 100R

Workshop

COSWORTH

FORD TRIUMPHANT

By changing the date to November and devising a testing route, a higher overseas contingent was attracted to the 1959 Rally. There were 16 foreign entries, including the winner of the Monte Carlo Rally. The tough route took the contestants from Blackpool to the Scottish Highlands and back through Wales to finish at the Crystal Palace. Unfortunately, appalling weather in the Highlands – snow, floods and fog – all but ruined the event.

Even so, it was to be a vintage year for Ford – they not only won the manufacturer's team prize again but also finished in first position, again with a Zephyr. Ford were to go on to win the team prize in 1963, 1964 and then in the three consecutive years from 1977-1979, a hat-trick never since emulated by any other company. In fact Ford have won the manufacturer's team prize more times than anyone else in the rally's history.

TULIPS FROM HOLLAND

The 1960 Rally saw some movement away from public to private roads and there was less navigational content. The contestants had use of a comprehensive Tulip Road Book – a manual which, by the use of signs and symbols, gave accurate directions linked to the distance from the previous control. The book was based and named after a scheme successfully used by the methodical Dutch in their own Tulip Rally.

In fourth place in the 1963 Rally was a BMC Mini-Cooper driven by Paddy Hopkirk. This was to be the beginning of the rise of the Mini.

In 1964, Ford were again making their mark with a Cortina finishing in third position. But in 1965 BMC cars led almost from the start to the finish. That rally was won by the Finn, Rauno Aaltonen, driving a Mini-Cooper-S. BMC Minis again dominated the rally in 1966 but Ford struck back and a Lotus-Cortina finished first. Other noteworthy facts about the 1966 Rally were that this was the first appearance by a Lancia and there were entries from two Grand Prix drivers, Graham Hill and Jim Clark.

TRYING TIMES

An outbreak of foot and mouth disease in Britain caused the cancellation of the 1967 rally but next year Ford were back in action, gaining third place with an Escort. Dreadful weather conditions brought chaos to the 1971 Rally – snow drifts and ice-encrusted roads caused total disarray and many cars were brought to a complete standstill. So bad were the conditions that, in the middle of a special stage, one car was even attempting to drive in the wrong direction!

In contrast, the 1972 Rally was a huge success, mainly thanks to a larger HQ control, a more compact route (1,800 miles with 72 stages), better organisation and improved weather. The surprise winner, beating the previous year's victor (Stig Blomqvist in a Saab), was a Ford Escort driven by Roger Clark with Tony Mason navigating. This was to be the first of eight consecutive RAC Rally victories for the famous Ford car, three of those wins (1973-1975) being gained by the combined efforts of Timo Makinen and Henry Liddon.

A CHANGE OF NAME

By 1974 the RAC Rally had become renowned as an event for the finest rally drivers and cars in the world and, following a successful liaisonship with the Lombard Group, became known as the Lombard RAC Rally.

The year 1980 saw the Ford Escort's string of first-place victories come to an end, beaten into second place by Henri Toivenen and Paul White in a Talbot Sunbeam-Lotus. The next three years were to be dominated by one of the new breed of supercars, the turbocharged, four-wheel drive Audi Quattro. Driven in 1981-1982 by Hannu Mikkola with Arne Hertz at his side and in 1983 by Stig Blomqvist with Bjorn Cederberg, the Audi Quattro broke all rally performance expectations and in so doing altered the face of world championship rallying. Even so, a Ford Escort still finished second in 1980 and in 1981 took the Ladies' Prize, the eighth time Ford had won this award.

FROM STRENGTH TO STRENGTH

Bringing events right up to date, the most recent four years have seen the pattern change yet again. Now it was time for two other cars to take turns to win this famous rally. In 1984 and 1986, a Peugeot 205 took the honours while in 1985 and 1987, a Lancia Delta reigned supreme. The 1985 highlight was another landmark in rallying history – the Austin Rover Metro made its international debut and finished third.

What the future holds is anyone's guess. Ford have undoubtedly made their indelible mark on the rally's history and will assuredly continue to appear in the prize lists. What is even more certain is that the Lombard RAC Rally will continue to excite and entertain the motoring enthusiast for many years to come.



PREVIOUS WINNERS

The first rally was held in 1932. Up to 1937 only class winners were produced before a classification for overall winner was introduced.

Year	Winners	Car
1937	Jack Harrop	SS Jaguar 2.5 litre
1938	Jack Harrop	SS Jaguar 2.5 litre
1939	A F P Fane	Frazer-Nash BMW 328
1940		
to	No Rally	
1950		
1951	Ian Appleyard/Pat Appleyard	Jaguar XK120
1952	Godfrey Imhof/Mrs B Frayling	Allard-Cadillac J2
1953	Ian Appleyard/Pat Appleyard	Jaguar XK120
1954	John Wallwork/J H Brooks	Triumph TR2
1955	Jimmy Ray/Brian Horrocks	Standard 10
1956	Lyndon Sims/R Jones/A Ambrose	Aston Martin DB2
1957	No Rally	
1958	Peter Harper/Dr E W Deane	Sunbeam Rapier
1959	Gerald Burgess/Sam Croft-Pearson	Ford Zephyr
1960	Erik Carlsson/Stuart Turner	Saab 96
1961	Erik Carlsson/John Brown	Saab 96
1962	Erik Carlsson/David Stone	Saab 96
1963	Tom Trana/S Lindstrom	Volvo PV544
1964	Tom Trana/Gunnar Thermanius	Volvo PV544

1965	Rauno Aaltonen/Tony Ambrose	Mini-Cooper S
1966	Bengt Soderstrom/Gunnar Palm	Ford Cortina-Lotus
1967	No Rally	
1968	Simo Lampinen/John Davenport	Saab V4
1969	Harry Kalstrom/Gunnar Haggbom	Lancia Fulvia HF
1970	Harry Kalstrom/Gunnar Haggbom	Lancia Fulvia HF
1971	Stig Blomqvist/Arne Hertz	Saab V4
1972	Roger Clark/Tony Mason	Ford Escort RS1600
1973	Timo Makinen/Henry Liddon	Ford Escort RS1600
1974	Timo Makinen/Henry Liddon	Ford Escort RS1600
1975	Timo Makinen/Henry Liddon	Ford Escort RS1800
1976	Roger Clark/Stuart Pegg	Ford Escort RS1800
1977	Bjorn Waldegard/Hans Thorszelius	Ford Escort RS
1978	Hannu Mikkola/Arne Hertz	Ford Escort RS
1979	Hannu Mikkola/Arne Hertz	Ford Escort RS
1980	Henri Toivonen/Paul White	Talbot Sunbeam-Lotus
1981	Hannu Mikkola/Arne Hertz	Audi Quattro
1982	Hannu Mikkola/Arne Hertz	Audi Quattro
1983	Stig Blomqvist/Bjorn Cederberg	Audi Quattro
1984	Ari Vatanen/Terry Harryman	Peugeot 205 T16
1985	Henri Toivonen/Neil Wilson	Lancia Delta S4
1986	Timo Salonen/Seppo Harjanne	Peugeot 205 T16 E2
1987	Juha Kankkunen/Juha Piironen	Lancia Delta

HIGHLIGHTS OF THE OFFICIAL RULES

1. ELIGIBILITY

The event is a qualifying round for:

- The FIA World Rally Championship for Manufacturers
- The FIA World Rally Championship for Drivers
- The Triple Crown Championship

2. DESCRIPTION

The length of the rally will be approximately 1700 miles (2,700 km), including 350 miles (560 km) of special stages.

3. ROUTE RECONNAISSANCE

Practising, reconnoitering or having prior information of the special stages in the form of pace notes is expressly forbidden except under the following conditions and on the dates and times laid down:

- a) Competitors may traverse the stages at a maximum speed of 25 mph (40 kph)
- b) Rally cars not permitted.

4. ELIGIBLE COMPETITORS

Any person holding a currently valid FIA International Competitor's licence.

5. ENTRY FEES

- a) With optional advertising proposed by the organisers:
 - (i) Entry paid three weeks before closing date: £640.
 - (ii) Entry paid one week before closing date: £950.
 - (iii) Entry paid by closing date: £1,250.
- b) Without optional advertising: Double the above amounts.

6. TIME CARD

- a) Each crew will be given a book of time cards on which the times to

cover distances between time controls will appear.

- b) The crew is responsible for submitting the time card at the different controls and for the accuracy of the entries.
- c) The absence of a stamp or official mark from any control or the failure to hand in the time card at each control will result in exclusion from the event.

7. TRAFFIC LAWS

Throughout the rally competitors must strictly observe the traffic laws of the United Kingdom. Competitors shall always drive and conduct themselves in a manner which shall not discredit the event or arouse adverse public opinion.

8. REPAIRS

Repairs and refuelling are freely permitted throughout the whole event.

9. ADVERTISING

Competitors are allowed to affix any kind of advertising to their cars, provided that:-

- a) It is authorised by national laws and organising conditions for World Rally Championship events.
- b) It is not likely to give offence.
- c) That it does not encroach upon the space reserved for plates and competition numbers.
- d) That it does not interfere with the crew's vision through the windows.

10. SPECIAL STAGES

Crews are forbidden to drive in the opposite direction to that of the rally, under pain of exclusion.

ACKNOWLEDGMENTS

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