

#### THALES NAVIGATION





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## MAGELLAN and MLR,

#### **Trademarks of THALES Navigation**

Our GPS receivers have put satellite navigation within reach of mariners and outdoor enthusiasts everywhere. Whatever adventure you seek, we have innovative products for you – products that are ready for action straight out of the box!

MAGELLAN and MLR are trademarks of THALES Navigation, one of the world leaders in the manufacture of GPS receivers.

## **THALES Navigation**

#### **Key facts**

- Subsidiary of THALES (formerly THOMSON-CSF),
- present in more than 100 countries,
- more than 600 employees -Worldwide,
- •turnover of 150 million Euros in 2001.

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#### The MLR range of GPS receivers

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## **MERIDIAN** line

The new line from MAGELLAN

The GPS receiver for serious navigators

#### Features:

- 2 or 16 MB built in European map database including cities, motorways, national frontiers, main waterways, airports, etc.
- Expandable memory capacity for downloading even more detailed maps, using optional SD (Secure Digital) memory cards in 8, 16, 32 or 64 MB versions
- Can store up to 20 routes, 500 waypoints and 2,000 track points
- Large, backlit display for easy map viewing in all conditions. Resolution: 120x160 pixels, grey scale
- Accessible, backlit Key pad with ergonomic design, easy to use even at night
- Rugged rubber armouring and high impact plastic for use in the harshest environments.
   Battery life: 14 hours continuous use. Weight: 227 a
- Supports nine languages: Dutch, English, Finnish, French, German, Italian, Portuguese, Spanish and Swedish
- Highly detailed maps indicating streets, roads, lakes, coasts, tourist sites, etc. of the major Western European countries can be downloaded from MapSend Streets CD-Rom (optional, see page 10)



#### **MERIDIAN GPS**

2 MB of map details including motorways, major waterways, airports, cities, etc.



## **MERIDIAN GOLD**

16 MB of map details including motorways, major roads, parks, waterways, airports, cities, etc.

product reference: ......980598-06

## MERIDIAN PLATINUM

Electronic compass, barometer/altimeter 16 MB of map details including motorways, major roads, parks, waterways, airports, cities, etc.





## MERIDIAN MARINE

16 MB of map details including motorways, major roads, parks, waterways, fixed navaids, buoys, lighthouses, etc.

## MAGELLAN

## MAGELLAN

## **MAP 330**

A powerful PC compatible mapping GPS, with a built-in map of Western Europe: tough, compact, easy to use, ideal for open-air activities. With the CD Rom MapSend Streets (optional) you can download highly detailed maps of streets, roads, lakes, coasts, tourist sites, etc. of the major Western European countries (see page 10).



- 12-channel receiver
- High resolution, backlit display
- Data downloading from PC
- 8 MB Built in map of Western Europe
- 8MB built in "flash" memory for map download no memory card needed -Calculates best fishing or hunting times and rising and setting of sun and moon
- Stores 500 waypoints. 20 routes with 30 points
- Battery life: 10 hours continuous use
- Weight: 199 g including batteries

product reference: 980582-02



## **MAP 330 X**

Are you ready for action? The MAP 330 X pack is a great bundle which consists of: MAP 330 receiver, the CD Rom MapSend Streets, the vehicle mounting bracket and the PC cable with cigarette-lighter adapter.



## **MAP 330 M**

The MAP 330 M is ready for marine navigation the instant you turn it on. It is pre-loaded with a detailed 9MB marine navigation background map of Western Europe, which includes marine navaids (buoys, lighthouses, channel markers, wrecks, reefs, etc.).

With the CD Rom MapSend Streets (optional) vou can also download highly detailed maps of streets, roads, lakes, coasts, tourist sites, etc. of the major Western European countries (see page 10).

## **GPS 320**

The GPS 320 personal navigator will take you where you want to go. Its built-in database puts more than 15,000 cities and nautical navigation aids in the palm of your hand.

Using the CD Rom DataSend (optional), you can access nearly 20,000 points of interest (airports, car rental locations, cash machines local points of interest, etc. in Europe).

#### **Specifications**

- 12 channel receiver
- High resolution, backlit display
- Data downloading from PC
- Stores 500 waypoints, 20 routes with 30 points
- Calculates best fishing or hunting times and rising and setting of sun and moon
- 10 year memory storage with lithium battery
- Battery life: 15 hours continuous use
- Weight: 199 g including batteries



## **GPS 315**

Affordable and easy to use, the GPS 315 is the ultimate outdoor quide. This pocket - sized unit will navigate you to nearly 20,000 worldwide cities or bring you back to as many as 500 user entered locations.

The optional DataSend CD-Rom can be used to download detailed land and nautical Points of Interest.

#### **Specifications**

- 12 channel receiver
- High resolution, backlit display
- Data downloading from PC
- Stores 500 waypoints, 20 routes with 30 points
- Calculates best fishing or hunting times and rising and setting of sun and moon
- 10 year memory storage with lithium battery
- Battery life: 15 hours continuous use
- Weight: 199 g including batteries

product reference: 990437



#### **GPS 310**

This practical, user-friendly model is the most affordable and easy to use hand-held receiver in the MAGELLAN range. It gives you maximum information on three different screens

#### **Specifications**

- 12 channel receiver
- Alphanumeric and graphic backlit display
- Stores 100 waypoints, 1 route with 10 points
- Battery life: 20 hours continuous use
- Weight: 199 g including batteries
- NMEA 0183 output allowing use with popular laptop PC navigation software

## MAGELLAN

## **GPS COMPANION.** for Palm V/VX or Hanspring Visor





With a "Companion" \*\*, all it takes is one "click" to transform vour Palm V/VX\* or Visor\* into a fantastic mapping GPS unit indispensable for travelling and outdoor activities. The CD Rom "Route Europe", supplied with the Companion, will guide you between the major cities of Europe, step by step... until vou reach vour destination.

#### **Specifications**

- Maps of the major roads in Europe on CD Rom "Route Europe" (included). Other compatible software is available from third party software developers. Marine Navigation charts available
- Dimensions: H 169 mm x W 58 mm x D 25 mm.
- Weight: 55 g without batteries, 105 g with internal power supply from 2 batteries supplied
- Minimum battery life: 10 hours continuous use
- External power supply by cable plugged into vehicle cigarette lighter.
- GPS reception: up to 12 satellites at the same time, with GPS signal updating every second.
- Positional accuracy: 10 metres
- \*Palm is a trademark of Palm Inc. Visor is a trademark of Handspring Inc.
- \*\* Models sold separately

product reference Companion Palm: ...... 980588-03 product reference Companion Visor: ...... 980595-03







#### DATASEND

Enhance your GPS 315 or 320 with an additional 800,000 items of data.

The Magellan DataSend software is a PC application and database developed for use with the GPS 315 and the GPS 320 receivers. DataSend provides a large database of worldwide cities and navaids together with a regional database of Points of Interest such as airports, petrol stations, tourist attractions, sports stadiums and may other categories (Europe).

Use the power of your PC to customise the GPS 315 and the GPS 320 receivers for your next adventure.



product reference: 990450



## MAPSEND STREETS Europe

This programme has been specially designed for the Meridian and MAP 330 products. The MapSend Streets CD Rom enables you to select and download to your GPS receiver highly detailed maps, together with all the accompanying information you need. You can choose a particular zone (roads, lakes, rivers, coasts, etc.) or a city map. This software can also be used to save and transfer routes and waypoints between the GPS units and a PC

product reference: 980599

#### **ACCESSORIES**

ROCESSONIES	<b>GPS</b> 310	<b>GPS</b> 315	GPS 320	MAP 330	MAP 330 X	MAP 330 M	Meridian GPS	Meridian Gold	Meridian Platinum	Meridian Marine	GPS Companion Palm/Visor
Supplied with:  Accessories:	Wrist strap Manual	Wrist strap Manual	2 AA alkaline batteries Wrist strap Manual PC Cable	Wrist strap Manuel PC Cable	Wrist strap Manual PC Cable CD-Rom Mapsend Streets Vehicle Mounting bracket PC Cable cig.lighter	Wrist strap Manual PC Cable	Manual PC Cable	Manual PC Cable	Manual PC Cable	Manual PC Cable	Manual CD-Rom Route Europe CD-Rom Nav Companion 2 AAA alkaline batteries
Canvas carrying case	~	~	~	~	~	~	~	~	~	~	~
Leather carrying case	~	~	~	~	~	~					
Hard carrying case											~
Swivel mounting bracket	~	~	~	~	<b>/</b>	/	~	~	~	~	
Car mounting bracket	~	~	~	~	~	~	~	~	~	~	~
Bicycle mounting bracket	~	~	~	/	<b>/</b>	/	~	~	~	/	
External power supply cable with cigarette lighter adapter	~	~	~	~	>	>	~	/	~	/	~
PC Cable with cigarette lighter adapter	~	~	~	/	<b>/</b>	/	/	/	/	~	
Power / data cable	~	~	~	/	/	/	/	~	/	/	
PC cable	~	~	~	~	<b>/</b>	/	~	~	~	~	
DataSend CD-Rom		~	~								
MapSend Streets CD-Rom				~	/	~	~	~	~	~	
SD MAGRILIN Memory 64ss card Section (Card							~	~	~	~	



# MLR



This is the handheld receiver within everybody's reach. Quick start, accuracy to 3 metres RMS (2D), high sensitivity for use in dense foliage, battery life of 36 hours in continuous use, 100 hours in standby mode.

#### **Specifications**

- Totally user-friendly with 3 levels of use
- 500 waypoints, 20 routes of 20 waypoints
- 1,000 track points
- FlashRom memory (no lithium battery)
- Very high contrast FSTN display
- · Backlit push buttons and display
- RS232 input/output interface (NMEA)
- Compatible with external antenna



Product references:	SP24 yellow only = P0100800 / grey = P0100802



## SP24 XC

The SP24 XC gives you all the advantages of the SP24 and, thanks to its expanded memory, it also has an interactive database of port entry lights and can receive two maps from the MLR CD Rom of mapping (optional, see page 16).

## SP24 XC Free Flying

The GPS of reference for national and international competitions. Land speed measurement, Glide Ratio calculation, compatible with "Check-In" software, large capacity for secured track points, approved by FFVL (French Free Flight Federation) and FFPLUM (French Federation of ULM gliders).

Product references:	SP24XC blue only = P0100797 / grey = P0100798
	SP24 full blue = P0100786 / grey = P0100799
	SP24XC Free Flying blue only = P0100937 / grey = P0100938
	SP24 Free Flying full blue = P0100939 / grey = P0100940



## **GA24 X**

This "active antenna", so compact and discreet, in fact houses a real GPS receiver which supplies your position, altitude, speed and bearing, the position of the satellites and the strength of their signals, every second. It can easily be interfaced with all track plotters and navigation systems (marine). The GA24 X is also the perfect GPS receiver for use in monitoring fleets of vehicles. Supplied with manual, connector and 10 metre cable.

#### **Specifications**

- Receiver: 12 parallel channels with double acquisition
- Very low power consumption (0,043 Amps for 12 Volts)
- Power supply from 10 to 36 V.
- Small size
- Flat or swivel mounting system

#### For Fleet Management

- Track memory of 1000 points (transfer by serial input)
- Distance and bearing to 1 waypoint (downloading by serial input)

Product references:	version RS422 (1 input/output) = P0100708
	version RS232 (2 inputs/outputs) = P0101219

## **FX112**

The FX112, with its built-in antenna, has been specially designed for use on open-deck boats. Its unique bracket support enables you to fix and connect it all in one movement.

#### **Specifications**

- 500 waypoints, 20 routes of 20 waypoints, 250 track points
- GOTO function: 3 graphic representations (3D road, compass and radar) and DATA page.
- Includes a port entry lights database.
- Full backlit keyboard.
- Direct access push buttons Direct Access<sup>TM</sup> for navigation information (POS, NAV, GOTO, PLOT, MARK/MOB)
- Large, backlit, FSTN display

Product reference: P0100672









#### FX312 / 312 XC

Indispensable in its category, the FX312 is the reference on the yachting market. The XC version also has a built-in CD-Rom mapping system.

#### **Specifications**

- 12 satellites technology
- 500 waypoints, 20 routes of 20 waypoints, 250 track points
- GOTO function: 3 graphic representations (3D track, compass and radar) and DATA page.
- Includes a port entry lights database (Channel, Mediterranean, Atlantic).
- Full backlit keyboard.
- Direct access push buttons Direct Access<sup>TM</sup> for navigation information (POS, NAV, GOTO, PLOT, MARK/MOB)
- · Large, backlit, FSTN display, waterproof case
- XC Version: the FX312 XC also has an expanded memory for receiving two maps from the MLR CD-Rom of mapping (optional, see page 16).



### FX412 / 412 XC

The FX412 and 412 XC are combined receivers, with integrated differential, providing the same functions as the FX 312 and 312 XC. They receive both GPS and DGPS signals through one single antenna, which is easy to install with its unique coaxial cable. The DGPS system enables you to obtain greater precision and the integrity of the GPS system.

Product references: ......FX412 = P0101019 ......FX412 XC = P0101038

#### FX312 4x4

This GPS has been specially designed for using in "all-terrain" activities. It has its own specific antenna and additional icons.

#### **Specifications**

- 12 satellites technology
- 500 waypoints, 20 routes of 20 waypoints, 250 track points
- GOTO function: 3 graphic representations (3D track, compass and radar) and DATA page.
- Full backlit keyboard.
- Direct access push buttons Direct Access™
   - for navigation information (POS, NAV, GOTO, PLOT. MARK/MOB)
- · Large, backlit, FSTN display
- Flat antenna



Product reference: P0101004



# FX312 PRO / FX412 PRO

The FX312 PRO and the FX412 PRO (version with built-in differential) are positioning systems designed for professional fishing. They can be used to calculate Toran, Decca and Loran C hyperbolic coordinates. They also have a NAV function that can be customised, and correction and position offset functions. Their expanded memories can receive MLR mapping (CD-Rom optional, see page 16).

Product reference: .......FX312PR0 = P0100998 ......FX412PR0 = P0101036





# MLR

### **PMS** Plus

This PC software for road and coastal mapping allows you to calculate routes on a European scale, with downloading of waypoints into the compatible Magellan and MLR GPS. You can use it to view your position on the PC and to manage your data (waypoints, routes, track depending on the GPS model). This software includes more than 200,000 points of interest on land and sea.

Product reference: ......P0101330





# CD Rom of mapping (coastal)

More than 300 sea charts (with coastal outlines) on one single CD Rom: France Channel, France Mediterranean, France Atlantic, Spain Atlantic, Spain Mediterranean, Belgium, Netherlands, South England, North England, Scotland, Ireland, Germany, Denmark, West Indies, New Caledonia, Australia, Indonesia, Malaysia/Brunei/Singapore, Thailand/Burma, Vietnam/Cambodia, China, Korea.

Product reference: ......P0101081

#### **ACCESSORIES FOR HANDHELD MLR GPS**

	SP24	SP24XC	SP24XC Free Flying	
Supplied with :	Velcro fixture Wrist strap User's manual	Velcro fixture Wrist strap Discovery manual Technical manual Memo	Velcro fixture Wrist strap Discovery manual Technical manual Memo	
"Pack" version :	+ power/data cable (P0101097) + mounting bracket (P0101057)	+ power/data cable (P0101097) + mounting bracket (P0101057)	+ power/data cable (P0101097) + mounting bracket (P0101057)	
Accessories :				Product reference
Cables				
External 10 to 20 V power and data cable (RS232)	V	V	V	P0101097
External 10 to 20 V power and data cable (RS232) with cigarette lighter connector	V	V	~	P0101098
Data cable (RS232) delivered with SUB9 connector for direct connection to PC serial port	~	~	~	P0101099
External 10 to 20 V power and data cable (RS232), delivered with SUB9 connector for direct connection to PC serial port, with cigarette lighter plug for external power supply.	~	~	~	P0101100
External 10 to 20 V power and data cable (RS232), delivered with SUB9 connector for direct connection to PC serial port, with cigarette lighter plug for external power supply.	~	~	~	P0101101
Others				
Universal mounting bracket. With 2 axes of rotation	<b>V</b>	<b>V</b>	<b>V</b>	P0101057
Carrying case. With loop for attaching to belt.	<b>~</b>	~	~	P0101059
Totally waterproof case. Protects your GPS from bad weather and floats if dropped overboard.	~	<b>~</b>	~	P0101060
Additional battery holder	~	~	V	P0101058
External antenna kit for boats. With a bowl antenna (diameter: 11 cm), 10 metres of coaxial cable and a coupler for connection to the GPS.	~	~	~	P0100827
External antenna kit for cars, ULM, etc. With one flat magnetic antenna, 3 metres of coaxial cable and a coupler for connection to the GPS	~	~	~	P0100825
External antenna kit. Antenna not supplied	V	V	V	P0100810
P.M.S. Waypoints & Routes for PC Windows 95, 98, NT	~	~	~	P0101123
CD-ROM of mapping		~	~	P0101081
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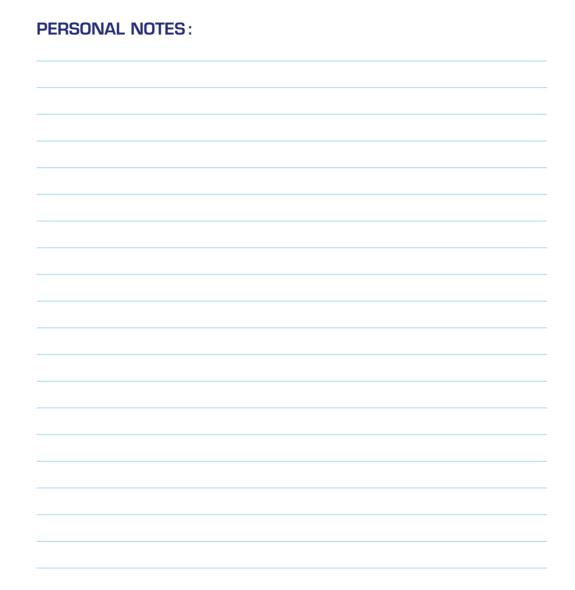


## THALES

#### ACCESSORIES FOR PANEL-MOUNT MIR GPS

	FX112	FX312/312 XC FX312 PRO	FX412/412 XC FX412 PRO	FX312 4x4	
Supplied with	Bracket and power cord Protective cover Manual Memo	GPS antenna with cable and connector Power supply cable 2 multi-position brackets Manual Memo FX312XC: + power/PC cable	GPS antenna with cable and connector Antenna whip 0,85 m. Power supply cable. 2 multi-position brackets Manual Memo FX412XC: + power /PC cable	Flat GPS antenna with cable and connector Power supply cable for cigarette lighter. 2 multi-position brackets Manual Memo	
Accessories :					Product reference
Cables					
Power and data cable. 10 m of cable for GA24 X.					P0100694
Power and data cable.		<b>✓</b>	<b>✓</b>	<b>/</b>	P0101085
Power and data cable with PC plug		<b>/</b>	<b>/</b>	<b>/</b>	P0101086
Power and data cable with cigarette lighter plug		~	<b>/</b>	<b>V</b>	P0101082
Power and data cable with cigarette lighter and PC plugs		V	<b>/</b>	<b>V</b>	P0101083
Power and data cable with 220V/12V transformer + PC plug		V	<b>/</b>	<b>V</b>	P0101084
Antennas					
External GPS antenna with 10 m of coaxial cable and waterproof TNC plug		~	<b>V</b>	<b>V</b>	P0100989
External GPS antenna with 20 m of coaxial cable and waterproof TNC plug		~	<b>V</b>	~	P0101078
Magnetic patch antenna with 3 m of cable and TNC plug		~	<b>✓</b>	<b>/</b>	P0101077
External GPS/DGPS antenna with 10 m of cable, waterproof TNC plug and differential whip (0,80 m)			<b>V</b>		P0101029
External GPS/DGPS antenna with 20 m of cable, waterproof TNC plug and differential whip (0,80 m)			~		P0101077
Antenna whip 0,80 m			<b>/</b>		P0101055
Others					
Weather cover (receiver)	V	<b>/</b>	<b>V</b>	<b>/</b>	P0101067
Weather cover - bracket	V				P0100663
Flush-mounting kit		V	<b>V</b>	<b>V</b>	P0101068
Set of brackets (with knurled buttons, screws and rubber washers)		~	<b>V</b>	<b>V</b>	P0100971
Mounting bracket with knurled buttons, screws, washers and cord	~				P0100668
CD-ROM for mapping (except FX312 - FX412)		V	<b>V</b>		P0101081
Ratchet mount for bowl spiral GPS antenna		<b>/</b>	<b>V</b>		P0101070
Push pit rail mount for bowl spiral GPS antenna		<b>V</b>	<b>V</b>		P0101069
Extension for antenna mounting		<b>V</b>	<b>V</b>		P0101071
Set of 3 power-filtering capacitors			V		Consult us

For all MLR products and accessories not mentioned above, please consult your dealer.



Thales Navigation follows a policy of continuous product improvement; specifications and descriptions are thus subject to change without notice.

The US policy of GPS signal control (Selective Availability) was discontinued on 2 May 2000, but may be re-established without prior notification to users.

