

# Discovery

GSM/GPRS & GPS

## Data Sheet

### The world's first navigation and location device in your hands

The new TWIG Discovery is the first mobile device on the market to combine GSM mobile telephony with GPS navigation and location-based services capability. It combines the comfort and ease-of-use of in-car GPS voice guidance systems with the familiar, user-friendly and portable format of a mobile phone.

The pre-installed navigation system on TWIG Discovery uses an integrated module removing the need of an additional expensive GPS receiver.

The broad range of Discovery functions includes the 'TWIG Finder' service, an easy way to locate fellow Discovery users. Simply by requesting a position from a specific Discovery user, the device calculates navigation instructions on how to reach their exact location. 'TWIG Alert' allows the user to press the pre-defined "alert" key on the top of the TWIG Discovery and open a voice call and/or send an SMS with the position, time/date stamp and if applicable direction of travel of the handset.\*

Other location-based services will become available to TWIG users shortly.

#### TWIG Navigation features:

- 2D and 3D map views
- Road safety screen with driving directions
- Full driving directions view for your complete route
- Zoom in/out functionality
- Map browser
- Compass arrow
- Distance to next turn
- Speed
- Estimated time of arrival
- Day and night display
- Voice prompted turn by turn guidance
- Walking, Cycling and Driving modes
- Fastest and Shortest route modes
- Toll road avoidance option
- Destination history
- Favorites so you can store your favorite destinations
- Route selection interface including route to:
  - Address
  - Past History
  - Favorites
  - Contacts
  - Points of Interest
- Route planning with up to 5 destinations

- Route quick keys
- Send map image via MMS/E-mail
- Full postcode input (7 digit support in UK)
- Thousands of Points of Interest from airports through to universities and the ability to find the nearest POI based off your current location
- Full demo mode to preview any route

#### TWIG Finder features:

TWIG Finder gives the user the ability to locate other TWIG Discovery handsets anywhere in the world.

- Locate any TWIG Discovery user and route to that location
- Send you address via SMS to any mobile phone
- Full history of past TWIG Finder

#### TWIG Alert

TWIG Alert allows the user to press the pre-defined "alert" top key on the top of the TWIG Discovery and open a voice call and/or send an SMS with the position of the handset.

- Open voice call to predefined number
- SMS with position, direction and speed sent to predefined number
- Length of "alert" key press configurable in handset menu

twig™





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### Mechanics

Indented display window  
Weight: 128g  
Length: 116mm  
Width: 51mm  
Thickness: 24mm

### Wireless Network Standard\*\*

Tri-Band GSM/GPRS 900/1800/1900Mhz  
Tri-Band GSM/GPRS 850/1800/1900Mhz  
GPRS Multi Slot B Class 10  
Compliant to GSM phase 2/2 + USSD

### Output Power

2W for GSM 850/900  
1W for GSM 1800/1900

### Hardware

ARM9 application processor running at 312MHz  
10MB of internal user memory  
MiniSD card up to 1GB for map and application storage

### Audio

Codecs HR/FR/EFR/AMR  
Speaker phone operation

### Display

2" TFT display  
176 x 220 pixels within 262k colours

### Antenna

GSM: Integrated antenna  
GPS: High sensitivity, integrated, quad helix antenna

### GPS

12 channel high performance receiver  
Accuracy ~5m, 95% of time (Open sky)  
Acquisition Rate (Open sky, receiver stationary)

- Cold Start 45sec (typical)
- Warm Start 38sec (typical)
- Snap Start 2-8sec (typical)
- Reacquisition 0.1sec (typical)

Advanced power saving methods

### Operating Times\*\*\*

Standard battery Li-ion 1000mAh  
Stand-by time: up to 160hrs  
Talk time: up to 7hrs  
GPS Navigation (walking)  
GPS standby time: up to 25hrs  
Navigation op time: up to 3.5hrs  
Charging time <2 h for 100%

### Security

- PIN codes
- Fixed dialing
- SIM card/network lock

### Controls

- Vibrating Alert
- Sound/GPS profiles
- Keypad/phone lock
- Dedicated TWIG Alert button
- Dedicated menu/application switcher key
- Dedicated volume level keys

### Messaging

- Concatenated SMS: Send and receive up to 640 characters in one message consisting of several ordinary messages
- Send to multiple recipients at the same time
- Predictive text input: Support for major European and Asian languages
- MMS (Multimedia messaging)
- E-mail client (POP3/IMAP/SMTP)
- Cell broadcast
- SMS/MMS unified Inbox

### Integrated Software

- Mobile Internet Access: WAP Browser 2.0
- Contacts book
- Six Games
- PIM applications (Calendar, notes, converter, calculator)
- Dual zone clock with 3 alarms with snooze capability
- Communication log with missed/received/dialed call lists
- SIM application toolkit
- GPS monitor
- GPS Profiles menu allowing the user to add and customize GPS operation
- TWIG Navigation – Turn-by-turn personal navigation application
- TWIG Alert – Assistance application
- Help menu

### Connectivity

- Connect via USB/Bluetooth to a PC application
- Browsing XHTML (WAP 2.0)
- Bluetooth Data connection for data exchange
- Bluetooth headset connection
- Synchronisation with MS Outlook/Lotus Notes via Benefon PC Tools

### Accessories

- Windscreen mount car cradle
- Cigarette lighter adapter
- Personal hands free
- USB cable
- Carrying case
- PC Tools SW
- Bluetooth headset

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