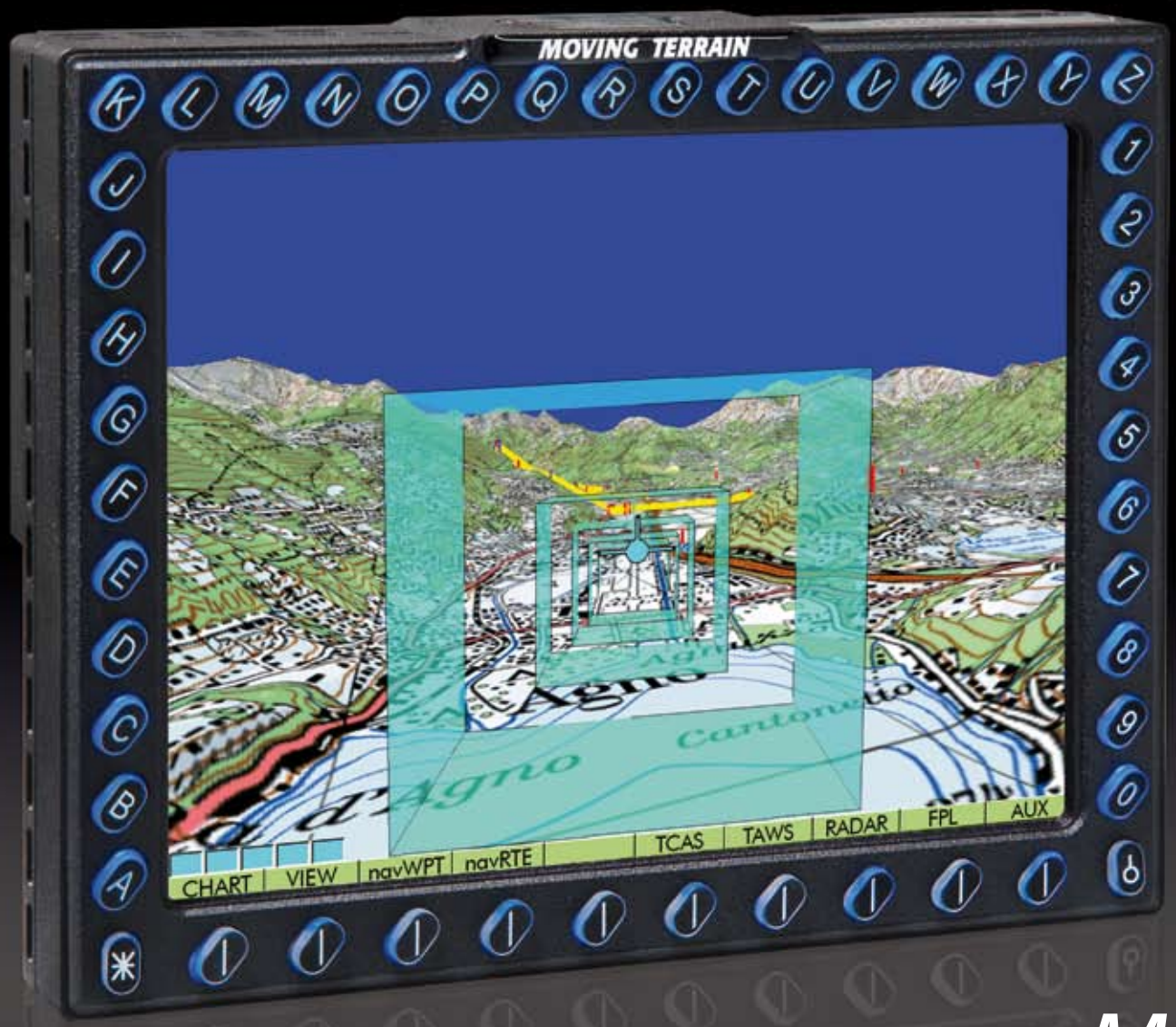


MOVING TERRAIN®
Aktiengesellschaft

MT VisionAir X

Efficiency has a name

Content

Moving Terrain

Quality "Made in Germany" since 1993.
Created for pilots by pilots.

- The only Moving Map System on the market, using original pilot charting which can be expanded to the full IFR range and as an EFB.
- The MFD offers stand-alone and complete redundancy in case of a total loss of cockpit electronics.
- Moving Terrain has the best resolution in its class. The only ARINC slot unit (158mm wide) with 1024 x 768 pixels.
- Fully automatic routing system MT-Blitz-Plan: IFR FPL directly from the aircraft.
- The artificial horizon system (EFIS) that does not require gyros or extra sensors.
- MT Relief Dynamics: 3D terrain relief in combination with original pilot charts. The 3D chart from the cockpit's perspective is updated constantly via GPS.
- High definition and satellite transmitted radar pictures for Europe
  MT Satellite Radar combined with original pilot charts.
- Pilot training for IFR and VFR purposes.
- The system can display video and camera images.

Moving Terrain – the Aviation Center of Excellence in the South of Germany

Charts and Nav Databases

- Own chart format with flowing charts worldwide in different scales.
- Digital data is optimized by mathematical processes, and intelligent storage guarantees fast loading processes and outstanding legibility.
- Charts are digitized in-house and special charts for particular customer demands are available, too.
- Quality assurance always by at least two independent, qualified associates.

Manufacture and Quality Assurance

- Quality assurance always by at least two independent, qualified associates.

Certification

- Extensive know-how of MT staff in avionic certification.
- New devices are designed from the outset to conform to DO160 Environmental Criteria.

Software Development

- All software engineering is in-house and guarantees independence and openness for further development.
- Some parts of programs are patent protected – also in USA – and the software and device combinations such as MT Satellite Radar and MT Relief Dynamics have registered design protection.
- Core competences in the sphere of faster and 100% stable running self-engineered multi-tasking processes.
- Own chart standard for a globally compatible format.

Equipment Development

- Since 1996 the design and development of all MT devices have been performed in-house.
- Development in close cooperation with specialists in the fields of software, hardware and licensing who have been associated with the company for many years.
- Thanks to the appropriate in-house expertise we are able to perform customized adaptations.
- Due to our many years of experience with procurement in the specialized supplier market, we have comparatively fast and reliable access to system components. We check and optimize our resources regularly.

In-Flight Testing

- „Pilots on staff“: design and ease of operation in the cockpit are critically tested and perfected in practice.
- All Master Systems and program modules undergo extensive ground and in-flight tests.

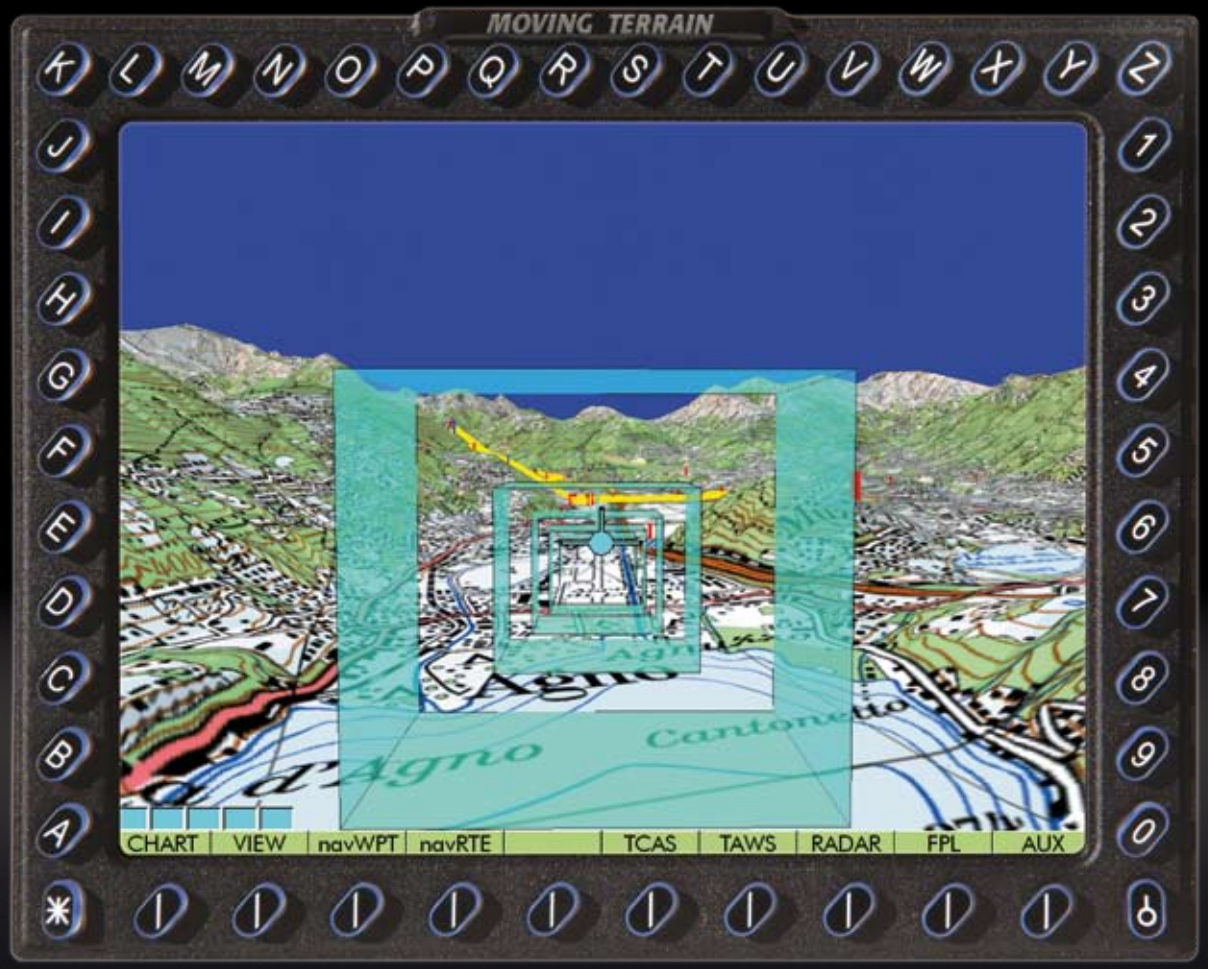
Support + Documentation

- The total know-how is available in-house – all technical questions are answered personally by qualified staff – in German, English and French.

Marketing

- Presence at trade shows: original Master Systems are exhibited in a realistic setting: Moving Terrain which you can touch!
- Many personal, longstanding contacts: Satisfied customers of the first hour remain loyal to our system, and their good suggestions have contributed to the quality of our products.
- We maintain close and fruitful contact to the leading LTBs.

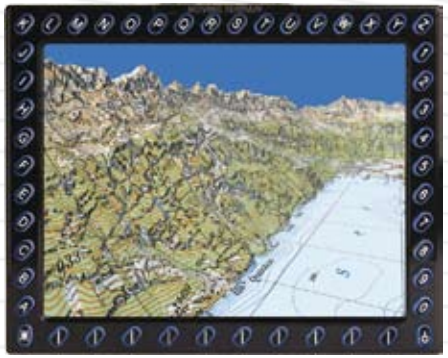
MT VisionAir X –
created by pilots for pilots



MT VisionAir X original size: 157 x 126 x 30 mm (W x H x D)

MT VisionAir X

The essentials in brief



- Impressive **3D graphics.**
- Option: high-end **touchscreen**.
- Brilliant: **high contrast display** even in direct sunlight.
- **Rugged and lightweight:** only 550 grams.
- **Built-in GPS** and antenna with latest **SiRF IV** technology.
- Built for long term mobility and complete backup in the cockpit. **Battery change during operation** due to our parallel system.
- **Highly efficient cooling:** extended temperature operation.
- Ultra-fast data transfer through 3G/UMTS technology.
- Geared for **future communication**.
- Effective cable routing: input and supply with one central connector.
- Low power consumption.
- Uncomplicated: **update via USB** flash drive.
- Packed with possibilities: **you decide what you really need**.

The Philosophy

Maximum ergonomics

Ergonomics in aviation means that certain actions may be taken easily and comfortably.

However, the pilot cannot benefit from an ergonomic cockpit if complex processes lie behind each ergonomic switch. An easily reachable switch in the cockpit should also trigger a clearly defined and simple function. There should be a minimum of ambiguities or choices to be made.

If a stress situation occurs during the flight, the pilot should not in addition have to deal with numerous options for the operation of switches.

Moving Terrain pursues the philosophy of true ergonomics in the cockpit. Moving Terrain eliminated all button combinations which needed explanation in pilot training sessions.

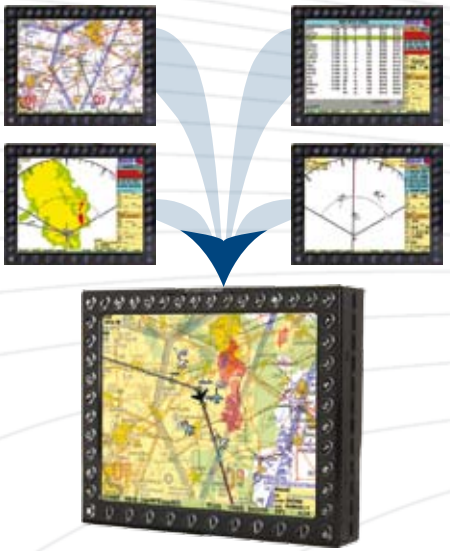
Moving Terrain – ergonomics not only in the design, but also in its operation.

The Layer Technology

Everything at a glance

On the multi-function display all information important to the pilot is arranged in a self-explanatory design. Now you don´t have to struggle any longer to gather all data from the cockpit. At a glance you can see all pertinent information with respect to your position.

With the layer technology you can display or disengage data quickly. Display only what is relevant for your current flight situation.



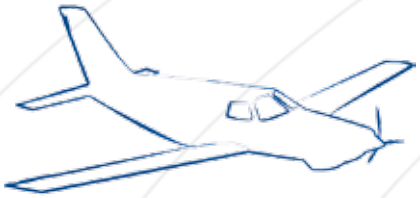
Use in fixed-wing aircraft

Flying requires the pilot's utmost concentration. The Moving Map and its modules were developed in order to offer you best support on your flight. You don't have to struggle any longer to gather all information from various devices in the cockpit and put them in relation to one another.

All important information, whether they be VFR or IFR, are neatly combined on one multi-function display.

MT VisionAir X LSA

(Light Sport Aircraft)



MT VisionAir X MFD Light

(Multi Function Display)

MT VisionAir X MFD

(Multi Function Display)

MT VisionAir X EFB

(Electronic Flight Bag)

Use in helicopters

Flying in unknown terrain, in busy airspace or in bad visibility is supported to the optimum level. Critical situations are immediately visible on the multi-function display; the pilot can react more quickly and avert hazards as far as possible.

The visual connection "view from the cockpit – perfectly positioned chart in the cockpit" is immediate and facilitates orientation significantly.

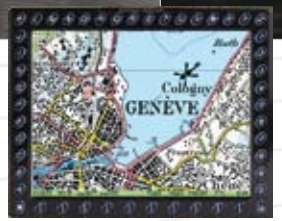
MT VisionAir X Heli

(Helicopter)

MT VisionAir X Heli Offshore

(Helicopter in offshore use)

Maps for special requirements, e.g. all helicopter landing places in Germany. Contact us, we will be pleased to advise you.



Up-to-date and extensive database of road names for various areas. Particularly suitable for rescue services.

Coloured icons on the maps which highlight obstacles, e.g. electricity poles. Special displays, e.g. pipelines, are possible.

MT VisionAir X LSA (Light Sport Aircraft)

Our **MT VisionAir X LSA** (Light Sport Aircraft) is light-weight (550g) and ideal for use in UL aircraft. Due to its versatile applications and portable batteries it can be used as a complete backup cockpit (e.g. independent of on-board power). If you want to upgrade to a larger aircraft it's no problem for MT VisionAir X LSA. You can add modules any time to adjust your Moving Terrain to your piloting skills level and only pay for what you need.

Online quotation: www.moving-terrain.com.

- The market leader for an attractive price.
- Turn it on and fly.
- Latest technology with autopilot interface.
- Individual and ready for the future: the MT VisionAir X LSA can be customized to your requirements.

The Package includes

MT Moving Map

VFR Approach Plates (DFS)

MT VisionAir X Standard

MT VisionAir X MFD Light

- Optimized VFR/IFR interface – proven technology priced fairly.
- Independence of onboard power – full backup system.
- Individual configuration – you only pay for what you really need.

MT VisionAir X MFD Light is the right choice for VFR pilots who are also flying in difficult conditions.

With MT Relief Dynamics the familiar pilot charts are expanded to the third dimension. This feature is not only impressive with visual flight, it also makes orientation in unfamiliar terrain or in bad visibility considerably easier.

The features integrated in the MFD Light Package are ideally matched to the change from VFR to IFR, but they can also be expanded and adapted any time. Modules can be retrofitted simply whenever you want them.

Online quotation: www.moving-terrain.com.

The Package includes

MT Moving Map

JeppView VFR Approach Charts

MT Relief Dynamics

MT VisionAir EP (Extended Performance)

Easy Mount

MT VisionAir X MFD (Multi Function Display)

Our Deluxe Package: **MT VisionAir X MFD**. With this package you are ready for every situation.

The highlight: Moving Terrain brings the 3D Moving Map into the cockpit: MT Relief Dynamics. With the integrated Terrain Viewer you can move intuitively through the terrain. For example you can study and plan your approach into difficult terrain in advance.

To be multifaceted does not mean to be complicated: thanks to its sophisticated menu guidance and intuitive handling your Moving Terrain always displays exactly the information you need in your particular flight situation.

Online quotation: www.moving-terrain.com.

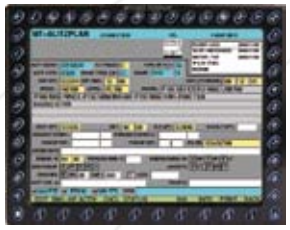
- The deluxe-MFD – perfectly equipped for all conditions.
- An optimum of information with intuitive handling.
- Glass-Cockpit – newly defined.
- Fulfills highest requirements.

The Package includes

MT Moving Map

VFR Approach Plates (DFS)

MT Relief Dynamics

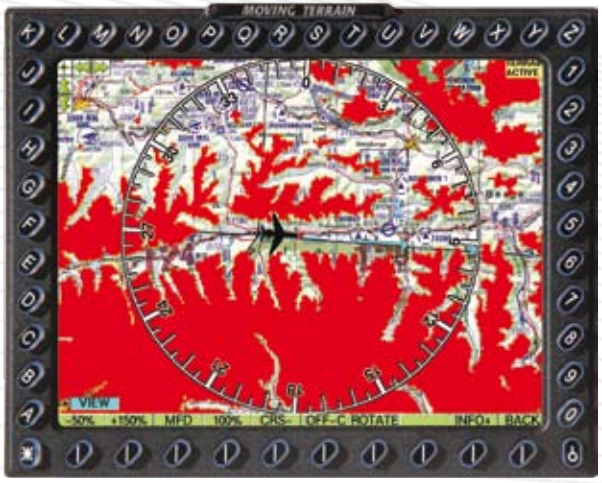


MT BlitzPlan

MT IFR Navigation Package

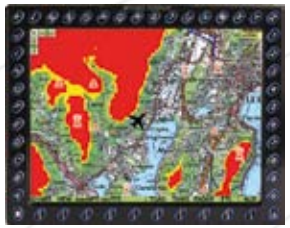
MT Satellite Radar

Thanks to the multifaceted equipment contained in the MT VisionAir X MFD package you can combine several individual MT modules depending on the flight situation (here: MT Satellite Radar and MT TCAS laid over the Moving Map).



MT TAWS warns you against a collision with the terrain. The danger zones are colored and can be ascertained at a glance.

MT Relief Dynamics even depicts approach charts three-dimensionally (here: approach to Lugano). You can study approaches into difficult terrain in advance – this is particularly convenient with the integrated Terrain Viewer.



MT TAWS

MT TCAS

MT VisionAir EP (Extended Performance)

MT VisionAir X EFB (Electronic Flight Bag)

MT VisionAir X EFB – the package for IFR pilots.

The compact lightweight system (only 550g) is especially suitable for mobile use. This is very useful for charter pilots who can rely on their Moving Terrain in every cockpit.

Thanks to the „Easy Update" via USB flash drive you can always use clearly structured and up-to-date charts.

- A mobile EFB in a class of its own.
- Flight planning with MT-BlitzPlan
- Up-to-date and well structured Jepp-View Charts.
- Intuitive menu – always the right chart available.

Highway in the Sky – improved flight guidance.

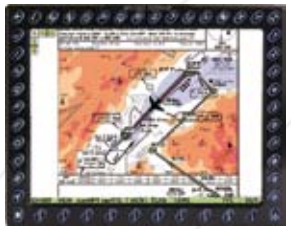
Semi-transparent tubes offer more directional indication,the Flight Path Indicator (displayed as ACFT symbol) shows the trend of the flight path depicting the future position 10sec ahead. Very helpful for precision approaches.

Online quotation: www.moving-terrain.com.

The Package includes

MT Moving Map

MT BlitzPlan



MT IFR Navigation Package

MT VisionAir X Standard

Battery option

- Battery operation guarantees a long term mobility: change of battery during operation due to parallel system

MT VisionAir X Heli *(Helicopter)*

MT VisionAir X Heli is impressive with it's brilliant screen – the perfect choice for bright helicopter cockpits.

This Moving Terrain brings a 3D Moving Map into the cockpit – the terrain relief with overlaid original pilot charts is constantly updated via GPS. This simplifies the terrain orientation even in bad conditions.

Special applications such as flights with NVGs (night vision goggles) or night flights are easily possible because of dimming option. A FLIR camera connection is also available.

Online quotation: www.moving-terrain.com.

- A new dimension – 3D terrain in the cockpit.
- Your choice – panel installation or mobile use.
- Brilliant display – even in direct sunlight.
- Detailed charts in every scale: from overview charts to town maps with hospital landing strips.

The Package includes

MT Moving Map

DFS VFR Approach Charts

MT Obstacle Layer

MT Relief Dynamics

MT TAWS

MT VisionAir EP (Extended Performance)

The modular Concept

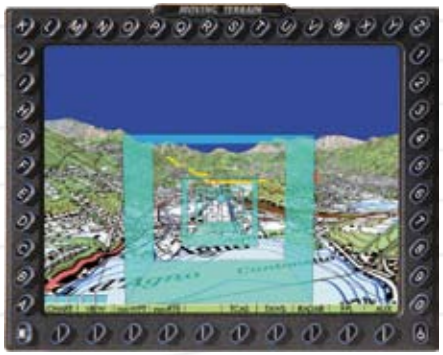
Combine individually, decide what you really need

Our Concept

- Creates space in the panel.
- Makes "scanning" in the cockpit easier as everything that belongs together is already superimposed on one MFD.
- Individual combination, simple upgrades.
- You only pay for components and functions you really need.

MT Moving Map

incl. ICAO Chart Europe, VFR NavData (plus VFR reporting points), MT Rotating Map function as well as MT Track Recording & MT Logbook.



MT Relief Dynamics

3D visualization from the cockpit's perspective: terrain data textured with original pilot charts is updated constantly via GPS.

MT Satellite Radar

A realistic, high definition radar picture transmitted via satellite directly into the cockpit without onboard radar.

MT BlitzPlan

Real time IFR flight planning in the cockpit with preflight documentation: W&B, Fuel Calculation, MET Briefing, NOTAMs and Flightlog.

MT IFR Complete Navigation Package

with Electronic Flight Bag incl. Enroute Layer Europe.

MT FMS (Flight Management System)

Import of your route from MT-BlitzPlan at the push of a button.

MT TAWS

High definition warning system with vertical profile and precise terrain data worldwide as zoomable moving map.

MT TCAS

Collision warning: display of Avidyne signals with indication of relative height and trend vector.

MT EFIS

Electronic Flight Information System: artificial horizon without any gyros or sensors. The ultra precise EGNOS-GPS data combined with MT DSS technology is sufficient.

MT Stormscope (WX 500)

Display of strikes in relation to the flight route in the head- up mode with detection of lightning and wind shears.

MT Track Recording and Logbook

Recording the flight route allows a post-flight review..

MT Autopilot Interface

In direct mode: flying a course line to destination.
In route mode: flying procedures and routes.
Smart interceptions without „overshoot".

* non-certified, for experimental use only

MT Camera

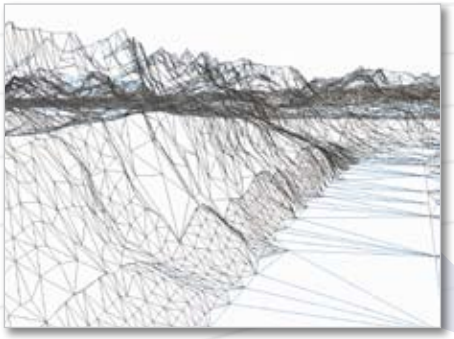
Display of high quality camera pictures (e.g. FLIR camera).

MT Obstacle Layer

Display of obstacles with colored icons on the map: power lines, cable cars and pipelines.

MT Relief Dynamics

3D Moving Map in the cockpitt



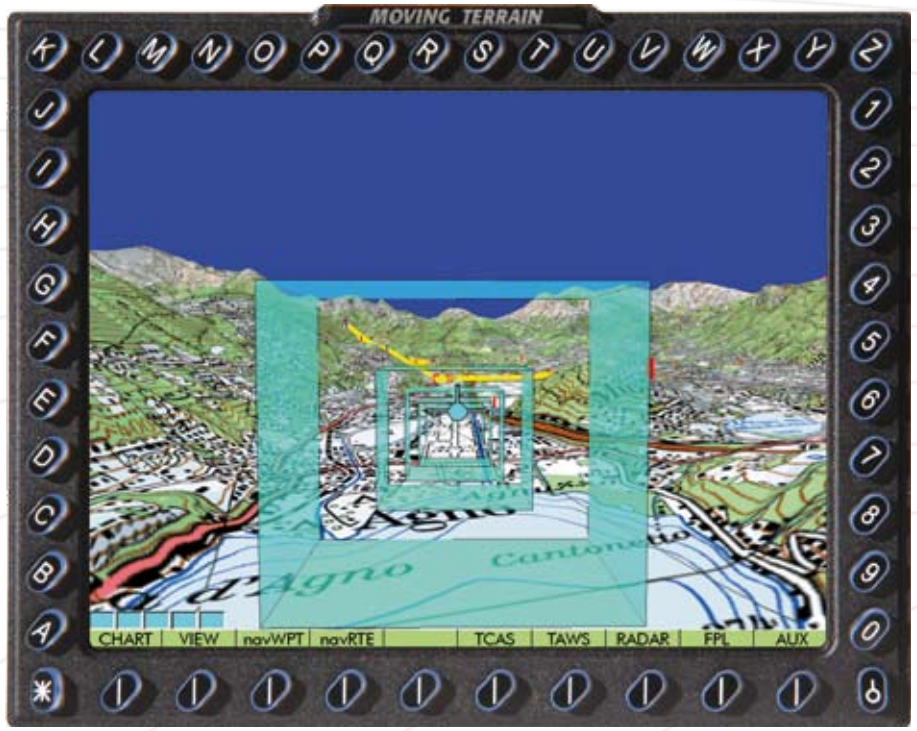
MT Relief Dynamics

High resolution terrain data, textured with original flight charts.

See MT Relief Dynamics in comparison with Walensee live shots from the cockpit: www.moving-terrain.de.

Highway in the Sky

Improved flight guidance**.** Semi-transparent tubes offer more directional indication,the Flight Path Indicator (displayed as ACFT symbol) shows the trend of the flight path depicting the future position 10sec ahead.



Terrain Viewer: you can move very intuitively and individually in the terrain and change the perspectives as required.

Multifaceted depiction possibilities

Walensee (Switzerland)
chart: ICAO, 1:500.000

Kitzbühel (Austria)

chart: TFC, 1:250.000

Walensee (Switzerland)
chart: Swiss Topo, 1:50.000

Innsbruck (Austria)
chart: JeppView Approach

MT VisionAir X – Twinpack

Position awareness in every situation

MT VisionAir X Twinpack

With 2 MT VisionAir X systems in your cockpit you have all the information available you need in difficult or critical situations. No need to switch between the 2 different views, everything is visible simultaneously.

System 1 with MT Relief Dynamics

allows the pilot an optimum evaluation of the terrain in combination with all relevant information from the chart.

System 2 with 2D view

displays all information of the further flight route and allows smart planning

Two MT systems in one cockpit – not redundancy but rather optimum completion.

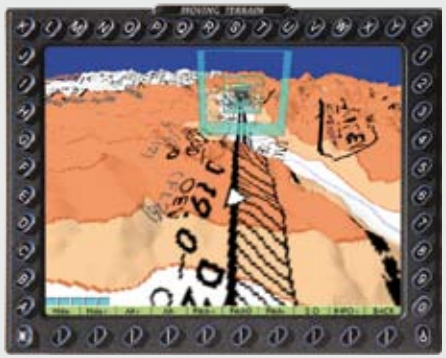
Live: flight in bad weather conditions over the Walensee

3D view of terrain

+

2D view of the further flight route

Night approach to Innsbruck (LOWI)



3D view of final approach

+

2D overview of the approach plate with the vertical profile

MT Satellite Radar

Moving Terrain: a new dimension of flying – even in the most unfavourable conditions

Dominique Manière

A report from level 230: What real benefit does MT Satellite Radar have?

„At first we delayed our take-off from 6.00 pm to 7.00 pm and we watched the development with MT-Satellite Radar. As a general decrease and change of activity towards the east of our flight route was displayed on the MFD (on the ground!) we decided to take off. Outside Grenoble the radar displayed a massive CB directly ahead of us moving eastbound to the left. We requested an avoidance heading by 15° to the right, since much activity could be recognized above the French Alps. With the alternative route, now on Level 210, we came out of the embedded area. The spectacular pictures could be recorded now, and the superb correlation documented between the radar picture and reality."

A realistic satellite transmitted radar picture directly into the cockpit‘s MFD

Flying with MT Satellite Radar

Seamless meteorological information in excellent quality before and during flight allows intelligent variations of possible flight routes and takeoff times between or after moving fronts or squall lines. An accurate assessment before and any time in flight ensures safety. Many flights would be too risky without this information. The new dimension replaces the uncertainty that appears between pre-flight WX briefing and the conventional use of onboard radar in-flight.

How does MT Satellite Radar work?

Imaging of raw data of the DWD (German Met Office): the ground-based meteorological radar (precipitation echo) of the European network of radar systems for the central European region. By linking many radar stations on the ground you will receive radar images not only as viewed from a single onboard radar, but a full representation along the entire flight route without blanked-out areas. Continuously updated information is downloaded via satellite modem to the MT-VisionAir, ensuring uninterrupted monitoring of the meteorological situation. The radar picture along the proposed route can already be checked on the ground, in detail or as a summary for the entire route.

Preflight Radar Briefing via GSM

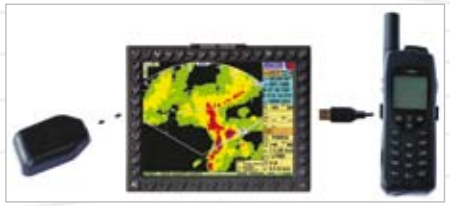
On the ground the use of ordinary GSM phones (Global System for Mobile Communication) or 3G modems is possible for downloading meteorological data. Moving Terrain recommends the in-flight use of satellite modems instead of GSM to provide area coverage independent of altitude.

Telephoning during flight

With the satellite telephone and the safety cell amplifier using the telephone during the flight is easily possible. The coverage is all-encompassing and independent of height. See page 37 for more information.

The Multi-Function Display: combination with other onboard sensor technology

The high resolution display of the powerful, computerized MT VisionAir X offers simultaneous depiction of various different signals which are captured by onboard sensor technology: MT TCAS can be combined with MT Satellite Radar and MT Stormscope. This enables the whole dimension of the Multi-Function Display to be viewed. The data can either be displayed on the MFD screen or laid over various terrain charts.

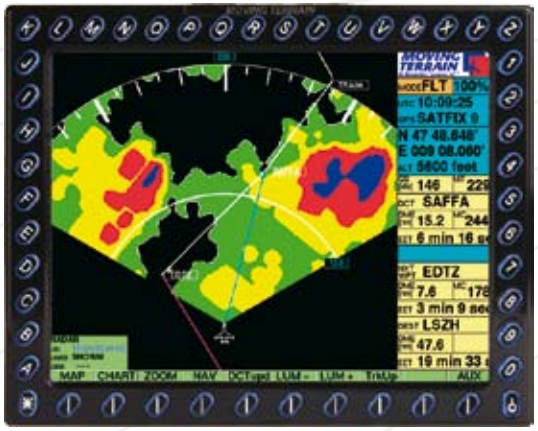


MT TCAS plus MT Satellite Radar

Combination with MT FMS

The entire Radar Picture without an onboard Radar

... in relation to the chart and to the planned route

	Close	Medium	Far
MFD screen			
	Arc mode: The usual presentation of a radar image, but in various ranges up to 800 nm.		Center mode: Shows the full 360° view around the aicrraft (up to 800 nm range).
Overlay technology			

Automatic updates every 15 minutes

Once initialized, the system runs automatically: It connects every 15 minutes – the dialing process requires no action on the part of the pilot. After downloading the data the connection is released automatically - ensuring that costs are kept to an absolute minimum.

History Function

The radar images are stored chronologically and can be scrolled through. This gives the option of monitoring clearly presented meteorological data over long periods. This increases the chances of accurate prediction of cell motion effectively.

The Radar Picture on the MFD
(e.g. for IFR flights)

The distinct advantage compared to ordinary radar systems: CB lines represent an impenetrable "wall" for on-board radar. With MT Satellite Radar an omni-directional radar detection is possible. The real geometry of rain, snow or thunder clouds is read and presented.

Radar information on top of the Terrain Map

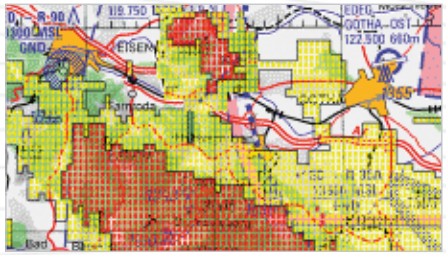
The semi-transparent overlay of the radar picture on charts of any type and scale enables simultaneous use of the moving map and radar images. At a glance the radar situation can be seen in a correct relation to the present position of the aircraft. This representation is suitable for VFR flights and helicopters, especially for a safe passage through mountainous areas.

Assessment en route on the Europe Chart

Since the radar data has been fully available wide-ranging, the radar picture can be depicted large-scaled on a chart along the planned flight route.

RDI Method:
Re-naturalizing Levels of Intensity

Primary precipitation data is refined by a mathematical process similar to focusing and is therefore closer to an image which can be interpreted. This is achieved by three-dimensional filtering by which the different levels of intensity can be represented more in their natural state rather than in an artificial depiction.



Conventional display

High definition MT Satellite Radar

Minimization of icing hazard:
Avoidance of certain precipitation areas

Test flights using MT-Satellite radar have given proof: icing can be avoided largely by consistent circumnavigation of areas with heavier precipitation or condensation.

Forecast to the Future

The engineering basis for processing further WX data relevant to aviation has been created: for example real time lightning data could replace a Stormscope to a large extent.

■ Satellite Radar only with Moving Terrain

MT Satellite Radar in this form is legally protected by a registered design patent. This legal protection covers the seamless display of precipitation over large areas on different terrain charts, the data transfer via satellite modem, the display of data and the recording of radar images (history function).

MT BlitzPlan

... Board and fly with a valid flightplan

„Board and fly with a valid IFR flightplan. This is no longer a hope, this is now a product.“

(Pilot und Flugzeug, 05/2006)

With MT-BlitzPlan from Moving Terrain you work out your flightplan in the aircraft and activate it – while starting up or if necessary even when being airborne. **From the decision to fly** it takes **two minutes to the actual startup**. „Start up and Fly“ – in the world of flying this is unique.

- **100% valid and CFMU compliant routings** which can not be rejected.
- **Enormous time saving** – no waiting times.
- Flightplan is **filed in a flash** and is **immediately available to the tower and control sectors concerned.** No investigation for AIS numbers or communication methods (telephone, fax, e-mail).
- **Marginal costs** for **guaranteed correct routings.** No AIS charges for flightplans filed abroad.
- **Connection to the MT server and Eurocontrol via GSM or satellite.**
- **Flightplan and routings** are sent to the pilot **by e-mail and SMS.**
- **No external routing program** required.
- **RAD and CDR do not have to be considered anymore.**

1. Planning:
Input of data highlighted in yellow

2. Flightplan submission:
No waiting time, instant activation of the 100% valid and CFMU compliant route

3. Input of the route into the FMS:
Transfer of the routing to the MT FMS at the touch of a button.

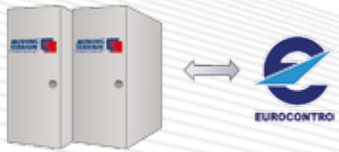
MT-BlitzPlan Features

- Flightplan archive.
- Multi- aircraft licence.
- Visualization of the routing on the map
- Complete IFR pre-flight documentation with W&B, Fuel Calculation, METAR/TAF and NOTAMs for DEP, DEST and ALT.
- Professional dial up server for up to 10 simultaneous connections.
- Visualized (colored) flightplan status.
- Eurocontrol and SLOT messages.
- Adaption of the route to your needs by optional Pickup Point, Inflight Entry or Forced Overfly Point.

Flightplan Submission two Minutes before takeoff – how does it work?

1. **Input of flightplan data:**
Load a preset and enter seven relevant pieces of data.

2. **MT BlitzPlan finds a valid route** allowing for CDR and RAD.



3. The **route is instantly shown on a map** and programmed into the **FMS**. The flightplan can **be activated immediately**.

4. The flightplan is **immediately available** for the **tower** and all **sector controllers** concerned.

5. **Ready to take off in 2 minutes.**.

The entire IFR Preflight Documentation

Paperless or printed

INSTANTLY AIRBORNE

Full automatic routing

Passenger manifest & familiarisation

FPL ACTIVE

Instant flight-plan activation

Full professional flightlog

Weight & Balance with graphics

Fuel calculation and ACFT performance

METAR / TAF

SLOT management: SLOTS via SMS

NOTAMS for DEP, DEST, ALT and enroute

MT-BlitzPlan and the Ramp Check

All calculations and documentation for IFR flight planning are visible in the aircraft and can be verified clearly.

The whole system from one supplier: MT-BlitzPlan is the only flight planning program with fully automatic route generation which also covers all aspects of the flight plan documentation at the same time.

IFR flightplan activation in the cockpit within 2 minutes

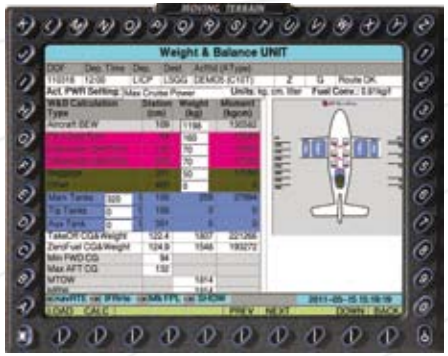
You only fill in the data fields highlighted in yellow. Everything else is loaded from your aircraft and personal data. MT BlitzPlan instantly composes a 100% CFMU compliant routing. It cannot be rejected.

Crossfill into your MT FMS

The complete flightlog will automatically be displayed, the routing can be inserted into the FMS

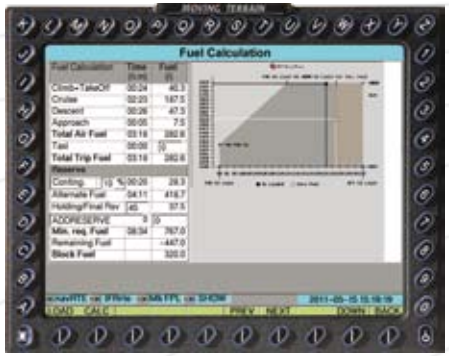
Active routing

The routing is clearly arranged on the map.



Weight & Balance

Weight & Balance are calculated within a few seconds for the respective flight. The CGs and weights for takeoff and landing are graphically presented in the limit diagram.



Fuel and performance

Fuel and cruising range calculations are automatically displayed considering the flightlog and aircraft performance sheets.

METAR / TAF and NOTAMs

MT-BlitzPlan polls METAR/TAF for DEP, DEST and ALT automatically and can be updated any time.

SLOTs

SLOT information can be downloaded to the MT VisionAir. They will be sent to the pilot's cellphone automatically.

MT IFR Navigation Package

Electronic Flight Bag

Always there: cleanly structured and always up-to-date JeppView charts. With these you are location-independent, able to plan your route everywhere and print the charts if required.

Enroute Layers and Charts

The enroute airways are available in a dedicated mode without further information and can be zoomed as desired. In addition – and this is the most interesting combination – they can be laid over any other chart. With this option every chart can be enhanced to an enroute or airway chart. Ideal for VFR flying, which requires more and more waypoint navigation, especially in South Eastern and Northern Europe.

FMS

All waypoints of a routing with detailed information are listed. In combination with MT-BlitzPlan automatically generated routings are filled into MT FMS at the touch of a button.

Say Goodbye to the war against paper!

Moving Terrain lays the foundations for your paperless cockpit

JeppView Charts

Enroute Layer

MT BlitzPlan

Moving Terrain: the unique Combination of VFR and IFR

Excellently combined

Everything necessary for flying a combined IFR / VFR mission is displayed at a glance on one screen – individual charts and database information. You are location-independent: you can prepare the flight and study your charts at home. Snap the system into the Easy Mount in your cockpit. Now you are prepared for maximum position awareness.

Always a challenge: The IFR Pickup

Do you always find the nearest IFR Pickup Point on the VFR chart at a glance when starting from a non-IFR airfield? Yes. The MT VisionAir X combines airway layer with the selected VFR Map. The exact knowledge of the terrain flown over during the IFR approach is a further advantage.

The mobile EFB

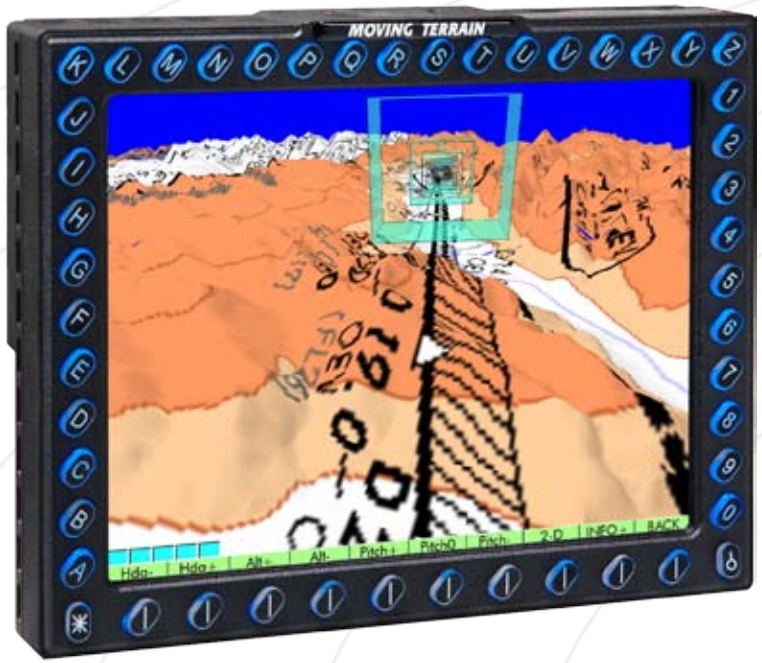
Quickly stowed, quickly operational

Small, manageable and compact – yet all the important information you need for an IFR-flight. The EFB can be used mobile for maximum flexibility.

Your Advantages

The paperless cockpit is possible.

- All JeppView charts are always with you, immediately available and properly sorted
- Flight planning with MT-BlitzPlan at the push of a button.
- Battery operation guarantees a long term mobility: change of battery during operation due to parallel system.
- Uncomplicated updates via USB flash drive.
- Significant reduction of preflight effort and time.



Your reliabe companion

The cockpit integrated EFB

The most professional solution

Extra 500 – yoke mount installation

Citation Jet – panel-installation

The ideal situation: two devices integrated in the cockpit allow simultaneous depiction of various different and complementary views. Here: approach to Innsbruck (LOWI) – the 3D chart with detailed view or to study the the terrain and the "classic" 2D Moving Map for long-range orientation.

Your Advantages

- Professional appearance.
- Peripherals are easy to connect.
- No loose cables.
- Perfect information due to two cockpit integrated systems.

MT TAWS *(Terrain Alert and Warning System)*

Flying safely in mountainous terrain

High resolution terrain data warns against the danger of a collision – clear and color coded. The reconciliation of two independent databases guarantees very precise terrain information. Based on this data the terrain which is assessed as a hazard is highlighted in color on the Moving Map, while at the same time the data provides the basis for the digital terrain model. The visualisation of large lakes and rivers makes orientation easier and ensures that your precise position is ascertained.

MT TAWS – for a safe arrival at your destination

Dead End?

Climb Gradient?

Unknown Terrain?

MT TAWS: color coded warning against terrain collision

The own flight altitude is continuously compared with the digital terrain model: if during descent or a low level flight the terrain is approached, the color code indicates higher elevated terrain. The 3 colors red – amber – green explain the proximity levels intuitively. Any possible "dead ends" are visible at a glance before the return option is gone.

Individual Configuration of Altitude Levels

The altitude or proximity levels can be configured individually. You decide which proximity should be colored and displayed as a hazard for your operation. Thus you see a maximum amount of chart and you are still informed about terrain hazards.

Illustration of the terrain considered as danger laid over the basic map.

Display of the "dedicated mode", in the „arc mode" or in the „360°" mode. The vertical profile analyses the future flight route regarding one's own altitude.

The Digital Terrain Model

The terrain model is based on very precise data: the resolution is up to 1 m for height and up to 50 m for the lateral dimension. The conventional resolution is 900 m (0,5 nm).

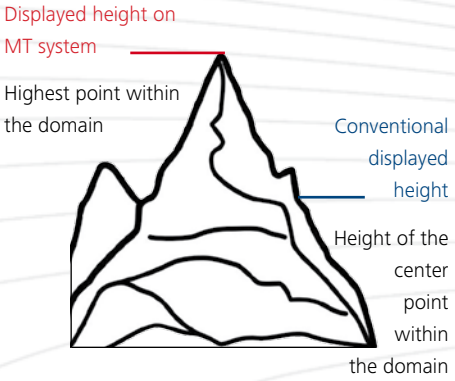
Detailed Terrain even without a chart

MT TAWS database can be used to generate an artificial terrain map. The analysis of the terrain structure is possible with the display of elevation using intuitively recognizable colors. As terrain data from all over the world is available this module offers the possibility to have precise terrain maps even for very remote areas – always an option if the particular chart is difficult to acquire.

With the optional high-end touchscreen you can navigate quickly and simply to any point on earth.

The visualization of waterbodies provides a better orientation and position awareness.

More Safety through an increased sampling rate



TCAS – Traffic Collision Avoidance Systems

Air traffic warning for early detection of dangerous situations - your window through the clouds

Strong combination – simultaneous display of MT TCAS signals (Ryan/Avidyne, TAS 600 series) and FLARM/FLOICE signals on a high efficient MFD. The display of ZAON signals is also possible.

Pilots watch the airspace constantly, but critical situations can still arise fast without auxiliary equipment.

"One is often surprised how close up a TCAS target already is once it becomes visual" says Steffen Keppler, ATP Pilot with more than 1.500 flight hours.

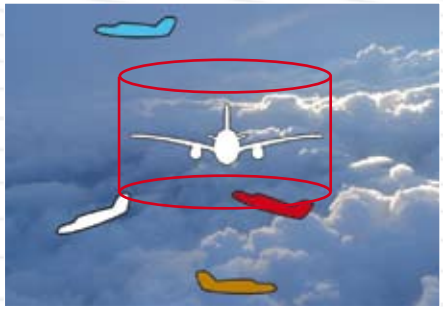
MT TCAS can be an almost irreplaceable aid here: the air traffic appears on the multi-function display in the form of symbols which are color coded depending on the degree of danger. This saves valuable time.

Reduction of Workload in the Cockpit

- The surrounding air traffic is depicted by symbols which are color coded depending on the degree of danger. This means that it is clear at a glance where the pilot should direct his attention.
- More time for airspace observation and other pilot duties is available.
- All information on your Moving Terrain Multi-Function Display – which has further options to offer you safety during your flight.

Advantages of MT TCAS

- Display of surrounding traffic with SQUAWK.
- Blinking aircraft symbols for optimum visibility on the Moving Map.
- Color coded aircraft symbols (no conventional diamonds).



The „Critical Cylinder" – your Wall of Safety

Higher than your aircraft (and than the "critical cylinder").

Within the "critical cylinder", distance and direction outside the danger zone.

Within the "critical cylinder", dangerously close.

Lower than your aircraft (and than the "critical cylinder").

The MT DSS Technology: Simulation of Direction and Trend

- Traffic Collision Avoidance Systems with Dynamic Synchronous Simulation (DSS).
- As a target is located in the area a simulator is activated, the traffic's performance is analyzed and the simulator is calibrated accordingly. The motion of the aircraft is extracted from that simulation and immediately visualized. Thus the pilot is able to recognize speed, direction and the resulting threat at a glance on the MT MFD.
- Each aircraft is recognized individually by the simulator and separately charted by the MT software. This gives a transparent picture of the surrounding air traffic.
- Display of:
  - Approach speed
  - Flight direction
  - Relative height in relation to the own aircraft
  - Trend (climb and descend rate)

Visualization of the traffic

Dedicated (without chart)

- Blinking symbols: optimum visibility – especially on the Moving Map.
- Indication of relative height with regard to to your own aircraft (in 100 ft).
- Red arrow: climbs / descends faster than 500 fpm.
- The speed vector: plots 15 seconds ahead and allows conclusions on the category of the aircraft.

Laid over the Moving Map

- The air traffic is seen in relation to the terrain and thus a fast identification is possible - much faster than "your traffic is 10 o'clock, 3 miles".
- The pilot is alerted to oncoming traffic while he is busy with flying duties.

MT EFIS

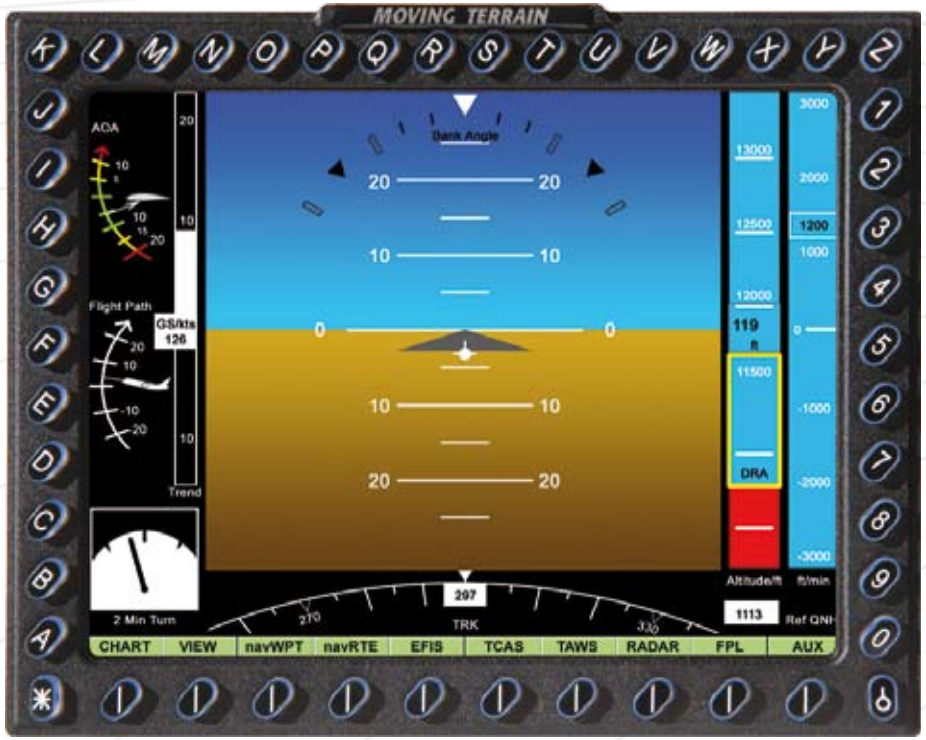
A Horizon without Gyros and Sensors - the ideal Backup

What is MT EFIS?

MT EFIS (Electronic Flight Information System) displays an artificial horizon without using any gyroscopes and additional sensors. The exact WAAS/EGNOS GPS data in combination with the Dynamic Synchronous Simulator (DSS) technology developed by Moving Terrain are sufficient to reverse compute the attitude from the flightpath. Impossible? Check yourself!

Application

- MT-EFIS may be used as a stand-by horizon for the conventional on-board system. Added safety in case of failure of the onboard instruments or unsteady horizon.
- With MT EFIS even ultra-light aircraft have the opportunity to upgrade cost-effectively.



All additional information at a glance

- Horizon / Attitude.
- Altitude (True).
- Climb and descent rate.
- QNH determination.
- Angle of Attack (AOA).
- Flight Path Angle.
- Track (Magnetic).
- Groundspeed.
- Speed trend in 10 seconds.
- Rate of turn.

Angle Of Attack (AOA)

Avoids stalls by visualizing the angle of attack. Particularly when flying in unknown terrain or in tight turns you are warned at a glance before any loss of ascending force.

Flight Path Angle

This display illustrates the real flight path. Climb and descent behaviour are displayed clearly and obviously.

Digital Radar Altitude (DRA)

The Digital Radar Altitude (DRA) displays the relative height of your aircraft based on the digital terrain model. The visualization is similar to a rising runway.

Inflight QNH

New: board-autonomous QNH determination for the overflown territory through specifying the true altitude via the precision WAAS/EGNOS GPS.

Limitations:
– In the post-stall area.
– In strong crosswinds and low true air speed (e.g. helicopter).
– In yawing motion (e.g. engine failure on twin aircraft).
– Non-certified, for information only.

Further MT Modules

MT Stormscope (WX 500)

- Display of the strikes in relation to the planned flight route (FMS display) in the head up mode.
- Detection of lightning and wind shears.

MT Rotating Chart

- The map is turned "track-up" in the main window.
- Fully colored with brilliant readability.
- Rotating of all maps irrespective of their scale.
- The “off centre mode” enables the display of a maximum amount of map.

Autopilot*

- Direct mode: flying a course line to destination.
- Route mode: flying procedures and routes.
- Smart interceptions with turn anticipation.
- Clear control and immediate orientation on the fully colored map: route and flown track are displayed.
- Active tracks are highlighted with color.

* non-certified, for experimental use only

MT Track Recording

- Recording of the flight route.
- Subsequent analysis of the flight with the replay function.

MT Logbook

- Automatic linking during each flight: date, time of take off and landing.
- Editing of all entries (ACT identification, ACT type, APT ID, type of FLT) possible.
- Inserting and deleting of flights possible.

MT Camera

- Display of camera pictures: pictures with external cameras can be tracked in high quality definition.
- For police and border patrol tasks with FLIR systems (infrared).
- To control the aircraft configuration (landing gear, flap settings, etc) in flight tests.
- Inputs: S-Video & FBAS for PAL, NTSC and SECAM video signals via USB grabber.
- Format 4:3 or 16:9.

MT Charting Module

We incorporate your own (global) maps into the system for you. But you can reference your maps yourself with the MT Charting module, too:

- Scanning and referencing maps of any scale.
- The allocation of coordinates in the map referencing program makes your maps useable as single charts in the Moving Terrain system.

Passenger Entertainment & Information System

Observation System

The Better Airshow

The right system for every size of business aircraft. Cabin bulkhead or tray table installations allow convenient and versatile viewing of DVDs, Apple iPod, videos or camera signals.

Worldwide passenger information charts provide instant orientation for VIP passengers.

Features

- Huge viewing angle of 85° each side.
- Automatic detection of PAL / NTCS / SECAM signals.
- Light weight: 870 grams.
- Hidden connector outlets for simple mounting.
- Easy to install with quick snap.

Technical Data

- Inputs: Composite Video (e.g. Apple ipod, DVD), S-Video (e.g. FLIR camera), DVI (e.g. notebook), VGA (e.g. MT-VisionAir).
- Native High Resolution: 1024 x 768 Pixel.
- Size: 10.4“ Display.
- Dimensions (W x H x D): 228mm x 181mm x 12mm, full installation depth: 30mm.
- Power: 24/28V, 18W.
- g load: 10 g in x, y, z direction, rugged aircraft design.
- Full package including quick release wall mount system.
- **DO 160 certified**.

Cockpit repeater function and camera input for observation purposes.

Accessories

Iridium Satellite Telephone

- Worldwide coverage irrespective of height.
- For telephony or for downloading data for MT-Satellite Radar and MT-BlitzPlan.
- Equipment: satellite telephone, modem, connection cable for MT VisionAir X, antenna, groundplane and mounting.

Fast Integral GPS

- Latest EGNOS technology.
- Professional aviation setting: only real 3D data, no simulated or dead reckoning values.
- High frequency evaluation, 4 "real" positions per seconds.
- Increased applicability even behind heated windscreens.

Mounting: Easy Mount

- Professional Aircraft Equipment for simple mounting of MT VisionAir X without tools in the cockpit.
- Flexible: suitable for both panel installation or mobile use (e.g. yoke-mount installation) through removable side panels.
- *Product video: www.moving-terrain.com.*

Eurocopter Interface

- Tharsys converter for displaying MT-VisionAir signals on THALES Displays in EC 135, EC145, EC 155.
- DO 160 certified.

Further Accessories:

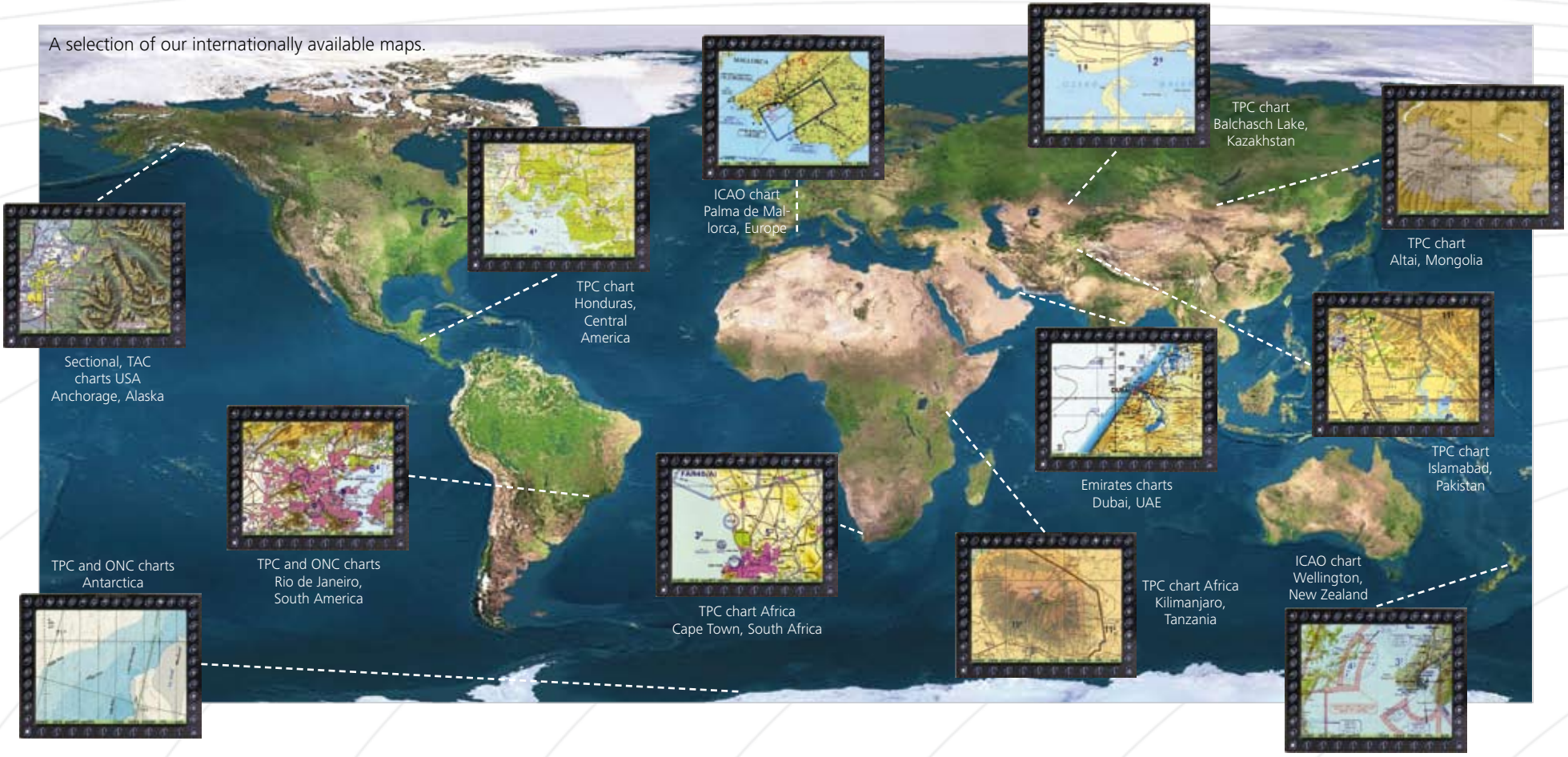
Sat Amplifier

- To make calls with the satellite telephone via headset.

Coiled Cable

- Optimized cable routing in the cockpit.

Familiar original Maps for our customers all over the World



Moving Terrain Systems in Use

Bell 206 Long Ranger – 2 MT VisionAir III EP

PA 34 Seneca – MT VisionAir III

Cessna Citation CJ2 – MT VisionAir III

Bell 206 Jet Ranger – MT VisionAir III

AS 350 Ecureuil – MT VisionAir III TSO

Piper Malibu DLX JetProp – MT VisionAir III EP + X

Sikorsky S76 – 2 MT VisionAir III

EC 120 – MT VisionAir III EP

Remos GX – MT VisionAir X

Lear Jet 45 – 2 MT VisionAir III EP

DA42 Twin Star from Diamond – MT VisionAir III

BK 117 – MT VisionAir III Camera EP

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