

# **Informations - Scope**

# SCOPE SYSTEMS

# VIDEO ANALYSIS SYSTEMS

#### Why a Scope Systems Product

- We deliver complete systems with perfectly matched components using state of the art technology
- One-stop service for all components
- Software Service via Teamviewer (Online Session)
- Customization of system configuration to meet customer needs
- Complete on-site installation
- More than 300 installations

#### ► Technical Highlights

- Outstanding Image Quality
- Special-Cameras with network technology or USB3.0 technology
- Cameras with 100 500 fps high sensitive to light for indoor recordings
- HD-Camera Systems
- Exposure Times 1/2000 1/25000 s for christal clear picture at impact position
- Camera-Settings via Software Interface (Brightness, Contrast, Zoom, etc.)
- Image-synchronous Multi-Camera-Systems
- Full Screen Floor Monitor Feature
- Visual Impact-Detection
- Foresight Sports Integration
- BodiTrak Pressure Mats Integration



# **Scout Analyzer Software Versions**

#### **►** Scout mini

The software version: *Scout mini* shows the two recorded images from the SCOUT mini cameras centred on the software interface, each in portrait mode.

- · Recorded images in portrait mode
- Image-synchronous
- Automatic impact detection
- Camera settings adjustable directly from PC
- · Sketched markings and swing comparison
- Interface for additional training equipment (ES14)



#### ▶ Dual Cam Advanced

The software version: Dual Cam Advanced shows the two recorded images from the SCOUT Duo Advanced cameras centred on the software interface, each in portrait mode.

- · Recorded images in portrait mode
- Image-synchronous
- Automatic impact detection
- Camera settings adjustable directly from PC
- Subsequent image enhancement
- Floor monitor support
- Sketched markings and swing comparison
- Interface for additional training equipment
- Swing archive

#### ▶ Dual Cam HD

The software version: Dual Cam Edition HD shows the two recorded images from the SCOUT Duo HD cameras centred on the software interface, each in portrait mode. Same software like Dual Cam Advanced plus additional features:

- New high-resolution cameras
- Scalable camera speed 100-300 fps
- Colour systems and monochrom systems
- · Very fast video processing
- Longer recording times
- · Proven synchronicity between all cameras
- · Sensorshifting image detail / region of interest
- More recording slots





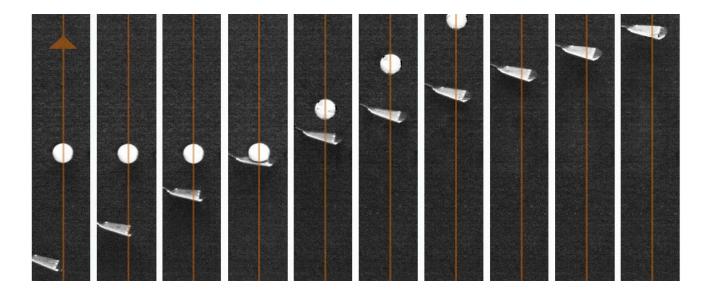




# Impact Vision - Super Highspeed Camera



# ▶ Single frame series - Impact Camera







# **Integration: Foresight Sports Launchmonitor**



The Foresight Sports software Add-On for the SCOUT ANALYZER systems allows the user to view, compare and save launch monitor data along with the associated high-speed video recordings. In doing so, the launch monitor data from Foresight are integrated into the SCOUT ANALYZER software, i.e. only one software type and only one computer are needed.



 Auto Mode (Auto-Live, Auto-Impact and Auto-Loop) for selfoperating terminals and simulators •Expansion to Foresight Golf Simulator available





# **Integration: BodiTrak Pressure Mat**



Expand your swing analyses with an additional level. The BodiTrak software Add-On clearly and understandably shows the player's balance behaviour throughout the entire swing. As a result, improvements are measurable and can be recorded across multiple training sessions. The display of the measured values can also be integrated into the program as a video overlay, even for Live Mode! The red lines (see figure above) shows the current weight distribution. Left picture shows left/right weight distribution and picture right shows the distribution heel/toe for each feed. The BodiTrak proprietary Software (see fig. below) is installed on our systems, too. This software shows of the weight/pressure distribution.





#### **SCOUT Cameras**

Our SCOUT cameras with a standard recording speed of 100-300 real frames per second have a special high-speed shutter which enables extremely short exposure times. This gives you high-quality, high-definition images even when using the Impact position. A practice-proven combination of our light-sensitive SCOUT cameras with carefully tested lenses ensures the best image quality, even for indoor shots and in low-light conditions. SCOUT ANALYZER systems are specifically developed in cooperation with international golf pros for a user- oriented application. An adaption of the SCOUT cameras developed exclusively for SCOPE forms its necessary technical foundation.

#### **SCOUT Cameras:**

- standard recording speed of 100-300 real frames per second
- high-speed shutter for very short exposure times
- light-sensitive for indoor shots
- Scope Firmware Adaption

#### **► SCOUT Mini**

#### ► SCOUT Duo Advanced/Duo HD



- 100 frames per second
- · mega-pixel fixed focal length lens or
- mega-pixel varifocal lens
- grayscale images for professional analysis results (colour optional)



- image synchronizes with SCOUT Sync Electronic
- 100-300 frames per second
- mega-pixel fixed focal length lens or
- mega-pixel varifocal lens grayscale or colour images for professional analysis results

#### SCOUT Camera Cable

# ► SCOUT Sync Electronic



Composite of power and data cables: for cable lengths up 40 m with fixed installations and convenient cables for portable cable systems



Hardware expansion for absolute synchronized image recordings for the multi-camera systems



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#### Dual Cam - Edition - Dual Cam Advanced or HD-Version



The SCOUT ANALYZER Dual Cam Edition is our new portable two-camera system which records with 100-300 frames per second and which can be fully operated from a battery in combination with a laptop. In addition to electronic synchronization, the SCOUT Camera Hub also provides the power supply for both cameras. Our SCOUT DUO cameras have a special high-speed shutter for sharp images, even when in the Impact position. Furthermore, you can easily use the user interface to select different settings for various light conditions at any time. Whether outside in the bright sunlight or in artificial light, you'll always create optimal recordings. SCOUT ANALYZER systems are the first to offer automatic impact detection through image analysis. This allows the system to automatically detect and save golf swings and to subsequently mark the exact time of the impact on the recording.

#### **Software Features**

- Automatic impact detection
- Camera settings adjustable directly from PC
- Subsequent image enhancement
- Floor monitor support
- Sketched markings, swing comparison and zoom
- Interface for launch monitor / balance plate
- Swing archive
- Swing Import/Export

#### **Camera Features**

- Special cameras allow short exposure times even in lowlight conditions
- Records with 100-300 frames per second
- high-speed shutters (up to 1/25,000 sec.)
- image-synchronous recordings using SCOUT Camera Hub
- Power supply possible via battery
- Fast lenses

#### **Set Comprises**

- 2 x Scout Duo Advanced or HD Cameras
- 2 x Tripod, 2 x Camera Cable
- Scout SyncElectronics
- Software (included): Dual Cam Advanced/HD
- Sturdy system case (simultaneously functions as laptop pad)
- Battery for cameras (optional), can be integrated in system case
- Software (optional): Foresight Add-On
- Software (optional): BodiTrak Sports Add-On
- Software (optional): Impact Vision Add-On





## **Dual Cam – Edition - Dual Cam Advanced or HD-Version**

#### ► SCOUT Duo Advanced/ Duo HD



- Image synchronizes with SCOUT Sync Electronic
- 100-300 frames per second (Scout Duo Adv. 100-250/Scout HD 100-300)
- mega-pixel fixed focal length lens ormega-pixel varifocal lens
- grayscale images or colour (only HD) for professional analysis

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#### **▶ SCOUT Camera Cable**



Composite of power and data cables: for handy cables for portable systems

### **► SCOUT Sync Electronic**



Hardware expansion for absolute synchronized image swing recordings for the multi-camera systems.







#### Dual Cam - Edition Plus - Dual Cam Advanced- or HD-Version



The SCOUT ANALYZER Dual Cam Plus Edition combines all the benefits of our Dual Cam Edition with optimal performance and the latest technology. In addition to our SCOUT cameras, this is made possible with a modern Mac system or PC and a high luminosity large display, all combined in one sturdy carrying case.

This allows one of the most powerful, portable video analysis studios for golf to be set up in just a few easy steps. You can benefit from our years of experience and close cooperation with golf associations and teaching pros. This complete system offers all the strengths that are especially expected of a video analysis system for golf training and utilizes the latest inventions.

The SCOUT ANALYZER systems are the first ones to offer automatic impact detections via image analysis. This allows the system to automatically recognize and save golf swings and to subsequently mark the exact time of impact in the recording.

#### **Software Features**

- Automatic impact detection
- · Camera settings adjustable directly from PC
- Subsequent image enhancement
- Floor monitor support
- Sketched markings, swing comparison and zoom
- Interface for launch monitor / balance plate
- Swing archive
- Swing Import/Export

#### **Camera Features**

- special cameras allow short exposure times even in lowlight conditions
- Records with 100-300 frames per second
- high-speed shutters (up to 1/25,000 sec.)
- image-synchronous recordings using SCOUT Camera Hub

#### **Set Comprises**

- 2 x Scout Duo Advanced or HD Cameras
- 2 x Tripod, 2 x Camera Cable
- Scout Sync Electronics
- Sturdy system case incl.: Mac-Mini system, large highluminosity, display, wireless keyboard and mouse
- Floor monitor connection
- Software (included): Dual Cam Advanced/HD
- Software (optional): Foresight Add-On
- Software (optional): BodiTrak Sports Add-On
- Software (optional): Impact Vision Add-On





## Dual Cam - Edition Plus - Dual Cam Advanced- or HD-Version

#### SCOUT Duo Advanced/Duo HD



- Image synchronizes with SCOUT Sync Electronic
- 100-300 frames per second (more optionally available)
- mega-pixel fixed focal length lens or mega-pixel varifocal lens
- Grayscale or colour (only HD) images for professional analysis

#### **► SCOUT Sync Electronic**

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Hardware expansion for absolute synchronized image swing recordings for the multi-camera systems.

#### **▶ SCOUT Camera Cable**



Composite of power and data cables: for handy cables for portable systems

#### Driving Range hut and Dual Cam System



(Donnafugata, Italie)n

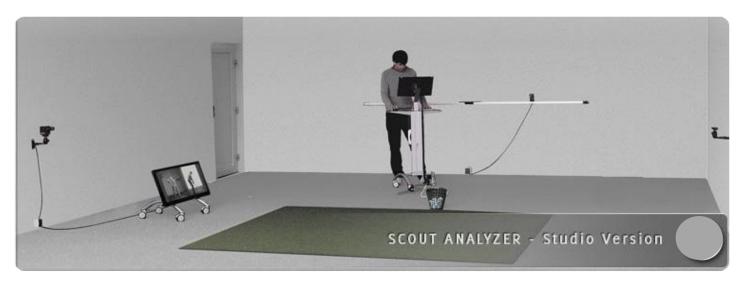
The SCOUT ANALYZER Dual Cam Plus System can not only be used as a portable system but can also be permanently installed in a tee-off hut. For this purpose, the camera mounts, the ground monitor and the corresponding cabling are securely installed (see: studio version). With an additional set of camera cables and the tripod included in the product scope of the Dual Cam Plus Systems, the system will always remain portable and available for use, for example, for tees on grass or on the road on golf trips. The planning aid for tee-off huts is free of charge for our customers.







#### Studio Version - Multi Cam Edition



The SCOUT ANALYZER system by SCOPE was developed in cooperation with famous golf professionals from Europe and the USA. Its popularity is due in part to its simple operating philosophy.

With the SCOUT ANALYZER system, the student can view their own swing at 100-300 frames per second from multiple perspectives (e.g. two levels) simultaneously through the use of the latest computer and video technology. The pro can analyse the different perspectives, slow-motion takes or still images to precisely analyse the student's technique and to accurately identify errors. An important learning aid for students is the so-called floor monitor. This monitor is placed directly in front of the golf pupil and enables immediate visual assessment of the golf swing in slow motion and in still images. The student sees the recorded golf swing without having to change their own position on the hitting mat. The studio version, a fixed installation of the system in a tee-off hut, ensures the system's immediate availability and guarantees weatherindependent operation. For our customers, the planning aid for tee-off huts is free of charge.

#### **Installations Version**

- 2 x Scout Duo Advanced or HD Cameras
- Mount for frontal camera (left and right-handed)
- Adjustable holder for down-the-line camera (left and righthanded)
- Movable terminal incl.: Mac-Mini system or other PC, large high-luminosity display, wireless keyboard and mouse
- Scout Sync Electronics
- Movable floor monitor

#### **Software Features**

- Automatic impact detection
- Camera settings adjustable directly from PC
- Subsequent image enhancement
- Floor monitor support
- Sketched markings, swing comparison and zoom
- Interface for launch monitor / balance plate
- Swing archive
- Swing Import/Export
- Software (included): Dual Cam Advanced/HD
- Software (optional): Foresight Add-On
- Software (optional): BodiTrak Sports Add-On
- Software (optional): Impact Vision Add-On



Bad Rappenau, Deutschland





## **Studio Version - Multi Cam Edition**

#### ► SCOUT Duo Advanced/Duo HD



- special cameras allow short exposure times even in lowlight conditions
- records with 100-300 frames per second
- high-speed shutters (up to 1/25,000 sec.)
- image-synchronous recordings using SCOUT Camera Hub
- megapixel fixed focal length lens or megapixel varifocal lens
- 3. Camera possible as B2 Kamera (Backswing-Cam)

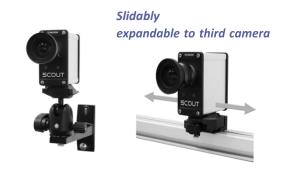
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#### **Movable Control Terminal**

here with Mac mini System



# Wall brackets Frontal Camera and Down-the-Line Camera



#### **Bracket for overhead camera**



Floor monitor (optional wireless video transmission)



# SCOPE SYSTEMS

# VIDEO ANALYSIS SYSTEMS

**Kind Regards** 

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