



WORKSWELL COREPLAYER

Datasheet

CorePlayer functions overview

Thermal Camera Settings	
Camera connection	Supported cameras: Workswell WIRIS , Workswell Infrared Camera (WIC), Workswell GigE and USB3 modules for FLIR TAU2
Temperature range	According to type of camera you can set the temperature range to Low (usually -40°C – 150°C) or High (usually 0°C - 550°C) range
Source of image	As a source of image can be used full image (full sensor size) or only a part of the image specified by a rectangle ROI tool
Framerate	According to the camera you can change frame-rate from 1Hz to 30Hz
Calibration	Using Calibration button you can activate NUC (non-uniformity compensation) to reach the best image quality and camera signal stabilization
Play/Pause	Using Play/Pause icon you can start and pause real time image streaming
Start recording/Snapshot	During radiometric thermal video acquisition (using Start capture button) you can save snapshots (Radiometric JPG) at the same time
Analog video settings	User can change analog palette and isothermal mode , insert spot meter into the image, select video standard (PAL or NTSC)
AVI Record	User can save live video streaming directly as AVI format . It is possible to change framerate and bitrate and display into the video Palette bar , Bottom bar and ROI
Thermal Image Settings	
Palette	User can choose from 14 palettes – BlackRed, BlueRed, BWRGB, Fire, FLIR Iron, Gradient, Gray, Iron1, Natural, Rainbow, Sepia, Steps, Temperature, WBRGB
Interpolation	To obtain a smooth image without pixelization, user can interpolate the image
Units	Temperature can be displayed and calculated in °C or °F
Acquisition Parameters	User can set basic parameters as Emissivity (continuously in range 0.01 – 1.0 with step 0,01) and Reflected temperature
Advanced Parameters	In CorePlayer can be set/changed other parameters as Atmospheric temperature , Humidity , Distance and Transmission of external optics
Temperature Range	Interactive temperature range can be used in manual or automatic mode. Using it you can change the color distribution of temperatures to e.g. highlight details.
Isothermal Mode	User can set Isothermal mode of the image. CorePlayer offers four types of isotherms: Below , Above , Between and Below and Above . You can change the color of isotherm and of course the limit values.

Measurement features	
ROI analysis	User can insert into the image variety of measurement tools/ROI: Point, Line, Polyline and Rectangle . User can insert more ROIs into one image, change its color, replace it or delete ROIs that a user can see in the top-right subwindow
Zoom	User can zoom real-time streamed data, the acquired image or sequence – continuously, each mouse scroll zooms 0,5x
Measured Values	In each ROI can be measured and visualized Min, Max, and Average temperature. User can save temperature values from the ROI as CSV file
Graphs	
Thermal Scanner	Temperature values for Line ROI could be visualized in Thermal Scanner . User can select number of lines and temperature range (manual or automatic)
Thermal Profile	All measured data can be displayed in real time Thermal Profile (for Line ROI). User can adjust range of graph axis and see the measurement Target Cross for fast and easy visualization of measured graph values
Time Graph	Temperature values from all ROI tools (for real time visualization or captured sequence measurement) can be showed into the Time Graph . User can adjust range of graph axis and see the measurement Target Cross for fast and easy visualization of graph values. For saved sequence can be set upper and lower limit for the temperatures in each ROI and x-axis in relative or real time
Radiometric Sequence	
Playback	Radiometric video can be played Backwards, Forwards , show Next frame or Previous frame or play the sequence continuously in the loop
Processing	User can cut the video and save it into new file as radiometric sequence.
Additional functions	
Export	User can export images into different file formats - save *.seq file as Radiometric JPEG, PNG or CSV file. Radiometric sequence can be exported to AVI file
Presentation Mode	For presentation purposes the live stream or acquired image can be displayed in full screen mode with image related controls.
User Interface	Intuitive and well-arranged user interface . User can change layout of sub-windows or restore layout to defaults
Image Information	The information about saved image in sub-window: filename, camera type, captured date, resolution, emissivity and reflected temperature
Camera Information	CorePlayer shows information about connected camera: IP and MAC address, Camera manufacturer, Camera model, Name, Serial number and Resolution
GPS Support	CorePlayer supports integration of GPS data from standard GPS receiver and display the position in Google Maps

Report generation	
Report Contents	There are automatically shown thermal images and time graphs and parameters of the image: emissivity, reflected temperature, atmospheric temperature, humidity, distance and transmission of external optics
Additional Information	User can insert into a report: protocol name, date and time of measurement, company logo, user/company name and additional information about measured area
Communication Parameters	
Control Grades	User has possibility of three grades for camera control: Beginner (Basic functions), Expert (Advanced settings), and Guru (All adjustable functions)
Device Control	User can control large set of functions, i.e. Image Format, Acquisition parameters, Counter and Timer, Events, Image Stream, Mono&Video, Object Parameters, IP settings etc.
Communication Control	User can control: Communication parameters (Answer Timeout, Command Retry Count), HeartBeat, Connection ports, Streaming Pocket Size, Device GeniCam Access or Recovery Status
Image Stream Control	Using this table can user change Timeouts (FirstPacket, InterPacket, Request) or check IP address of camera and device and variable statistics

Recommended Requirements	
Processor	Intel Core i5
Memory (RAM)	4 GB
HDD	4 GB available hard disk space
NIC	Gigabit Ethernet adapter and also a Gigabit Ethernet switch could be used for connecting more devices
OS	Windows 7
Minimum System Requirements	
Processor	Intel Core i3
Memory (RAM)	2 GB
HDD	At least 2 GB available hard disk space
NIC	1000 Mb/s, Jumbo frame 9kb
Special Hardware Requirements	
USB3 port	USB3 3.0 Standard-A
Gigabit Ethernet port	Gigabit Ethernet Network Interface Controller (NIC)