# CameraPro 1.1.0

*Manual
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Harald Meyer
office@tequunique.com*

## Content

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>3</td>
</tr>
<tr>
<td>Download and Updates</td>
<td>3</td>
</tr>
<tr>
<td>Contact Information</td>
<td>3</td>
</tr>
<tr>
<td>User Interface</td>
<td>4</td>
</tr>
<tr>
<td>Changing the capture resolution</td>
<td>4</td>
</tr>
<tr>
<td>Menus</td>
<td>4</td>
</tr>
<tr>
<td>Customizing the menus</td>
<td>4</td>
</tr>
<tr>
<td>Flash</td>
<td>5</td>
</tr>
<tr>
<td>Scenes</td>
<td>5</td>
</tr>
<tr>
<td>White Balance</td>
<td>5</td>
</tr>
<tr>
<td>Exposure Time</td>
<td>5</td>
</tr>
<tr>
<td>Focus Mode</td>
<td>5</td>
</tr>
<tr>
<td>Exposure Compensation</td>
<td>6</td>
</tr>
<tr>
<td>ISO Rate</td>
<td>6</td>
</tr>
<tr>
<td>Camera Mode</td>
<td>6</td>
</tr>
<tr>
<td>Switch Camera</td>
<td>6</td>
</tr>
<tr>
<td>Reset</td>
<td>6</td>
</tr>
<tr>
<td>Assistant tools</td>
<td>7</td>
</tr>
<tr>
<td>CameraPro Settings</td>
<td>7</td>
</tr>
<tr>
<td>General Settings</td>
<td>7</td>
</tr>
<tr>
<td>Self-Timer Mode</td>
<td>8</td>
</tr>
<tr>
<td>Bracketing Mode</td>
<td>9</td>
</tr>
<tr>
<td>Burst Mode</td>
<td>9</td>
</tr>
<tr>
<td>Time-Lapse Mode</td>
<td>9</td>
</tr>
<tr>
<td>Capturing Pictures</td>
<td>10</td>
</tr>
<tr>
<td>Focusing an Object</td>
<td>10</td>
</tr>
<tr>
<td>Frequently Asked Questions</td>
<td>11</td>
</tr>
</tbody>
</table>
Change Log
**Introduction**

CameraPro is a **must-have camera app** for all Microsoft Windows Phone 8 (WP8) smartphones offering extensive camera functionality:

- Fast accessibility to camera features, such as flash, exposure, macro, etc.
- Full accessibility to camera features.
- Manual controls for exposure time, white balance, focus, etc.
- Camera assistance tools such as anti-shake, level meter, etc.

**Download and Updates**

CameraPro for WP8 is available in Microsoft Marketplace. The download link and further information can be found on the CameraPro website:


**Contact Information**

We are always looking forward to user feedback! The fastest way to reach us is by email or with the contact form which can be found here:

[http://www.tequnique.com/contact](http://www.tequnique.com/contact)

Please **include all relevant information** in your message such as: **app name** (e.g. „CameraPro“), **system** (e.g. “WP8”), **used device** (e.g. „Nokia Lumia 1020“), and your **comment/question/bug report**.

You can share your great pictures captured with CameraPro on our **Facebook** site:

User Interface
One of the major design goals of CameraPro was to provide fast access to important camera features. Most settings can be set within two taps.

![CameraPro user interface](image)

The four icons located on the left and right side of the screen provide access to most important settings. The functionality of the icons can be changed with the “Customizing the menus” function.

When the icons are tapped then a popup window is opened which provides different options. The popup window can be closed either by:

- Tapping outside of the popup, or
- Double-tapping the selected option, or
- Tapping on another menu item.

Changing the capture resolution
The still picture resolution can be changed by tapping on the resolution information text on the top left of the screen.

Menus
The following Sections describe the functionality of menu buttons.

Customizing the menus
Both the functionality and the visibility of menus can be changed using “Settings” – “Arrange menus” option. Selecting “Arrange menus” will show a button with the caption “Finish arranging”. To change a menu functionality press one of the menu buttons you want to change. This will open a selection dialog with all functions that can be applied to the selected menu button. The option “Hide menu entry” hides the button and the option “Reset all menus” resets all buttons. It is recommended to restart CameraPro when resetting all buttons. If you accidentally remove the “Settings” button you have to uninstall and re-install CameraPro again.
To finish the arranging of menu buttons press the “Finish arranging” button in the center of the screen.

**Flash**
This button opens a popup window with different flash options:

- Off: flash is turned off or the device does not have a flash.
- Auto: The flash will automatically fire, if required.
- On: The flash will always fire.

**Scenes**
Scenes are standard settings defined by the camera firmware for special situations. The set of available scenes can vary between phone models.

- Auto
- Macro
- Sport
- Night
- Night portrait
- Backlit

**White Balance**
This button opens a popup window with different white balance modes:

- Auto: The white balance is set automatically.
- Daylight: Normal daylight.
- Cloudy: Overcast daylight.
- Tungsten: Tungsten filament lightning.
- Fluorescent: Fluorescent tube lightning.
- Flash: The scene is illuminated by the camera flash.
- Candlelight
- Manual: Here the color temperature (in Kelvin) can be manually set.

**Note:** The manual adjustment of white balance does not work properly on Nokia Lumia devices due to a firmware bug.

**Exposure Time**
The menu “Exposure Time” sets the exposure time in seconds. The exposure time is the time the sensor is illuminated for capturing a photo.

Besides manual definition of the exposure time the following modes are available:

- Auto: The exposure time is set automatically.
- Locked AE: The current exposure time is locked (e.g. useful for capturing panoramas).

**Note:** On Nokia Lumia devices changing the exposure time will not affect the live preview but only the final captured image.

**Focus Mode**
This button opens a popup window with different focus modes:
- Off: The device does not support autofocus.
- Normal: The focus range is automatically set.
- Full: The focus range is automatically set by using the whole sensor area.
- Macro: The focus distance is set for close objects where details are of interest, such as flowers, insects, etc.
- Hyperfocal: All objects at distances from half of the hyperfocal distance out to infinity will be in focus. This gives maximum depth of field, for instance for landscape pictures.
- Infinite: Focus on distance.
- Manual: The focus distance is set manually. The unit of the distance varies between devices and thus is not given. Smaller values are for close distances (macro focus), while larger values are intended for far objects (infinite focus).

Exposure Compensation
This button opens a popup window with controls for adjusting exposure compensation (in EV).

ISO Rate
This button opens a popup window with different ISO rates:

- Auto: Adjusts the ISO mode automatically.
- Camera dependent manual ISO modes, such as 100, 200, 400, 800, 1000, 1200, 1600, 3200, etc.

Note: Due to a bug, on Nokia Lumia devices only manual ISO values between 100 and 800 work properly.

Camera Mode
CameraPro offers seven different camera modes:

- Still: A picture is taken each time when the shutter key is pressed.
- Self-Timer: Shooting is delayed by a user-defined amount.
- Anti-Shake: A picture is taken when the camera is held still.
- Burst: A user-defined number of pictures are captured as fast as possible.
- Time-Lapse: Pictures are taken in a user-defined interval.
- Bracketing: Up to 5 consecutive images with different exposure settings are captured. These images can be used for high dynamic range (HDR) photos. CameraPro captures only series of pictures. If you want to generate a HDR directly on your phone then take a look at the app “HDR Pro” (http://www.tequunique.com/hdrpro).

Note: The parameters (such as delays, exposure values, etc.) of all modes can be changed in the CameraPro “CameraPro Settings”.

Note: The burst mode in CameraPro is quite slow for high resolutions (due to hardware restrictions). If you need an ultra-fast burst camera, take a look at the BurstCamera app (http://www.tequunique.com/burstcamera).

Switch Camera
Pressing the “Switch” camera icon switches between front and back-facing camera.

Reset
Pressing the “Reset” button resets all CameraPro camera settings to the default settings.
**Assistant tools**

CameraPro offers assistant tools for capturing pictures:

- Grid: Shows a grid on top of the viewfinder. The number of grid lines can be changed in the CameraPro settings.
- Compass: Show a compass on the viewfinder. Note, that not all phone models have a compass.
- Virtual Horizon (level meter): Overlays a virtual horizon/level meter over the camera viewfinder to align pictures with the horizon. This can be useful if the exact level is uncertain (for instance to show the steepness of a hillside during skiing or hiking).

**CameraPro Settings**

The CameraPro settings can be accessed in the “Settings” popup menu. The settings are grouped into multiple tabs which are described in the next Sections.

**General Settings**

The general settings tab shows settings which affect all camera modes.

*Show capture button*

If enabled, then a touch capture button is shown.

*Show focusing button*

If enabled, then a touch focus button is shown.

*Show menu captions*

If enabled, then a short caption text is displayed below menu items.

*Menu font size*

Here, the menu font size can be changed (this setting is only affective if “Show menu captions” is enabled).

*Play shutter sound*

If enabled, then a shutter sound is played during capturing.

**Note:** Depending on your country it might not be possible to deactivate the shutter sound due to local legal restrictions!

*Show histogram*

If enabled, then a histogram of the intensity distribution is shown on top of the camera viewfinder.

*Touch capture button mode*

This option defines what happens when the touch capture button is pressed:

- Capture only.
- Focus and capture on success: first focus is triggered. If focusing succeeds an image is captured.
- Focus and capture every time: first focus is triggered, then an image is captured, independent of the focusing result.
**Capture after touch focus**
If enabled, then an image is captured after touching the screen.

**Preview time (seconds)**
If this time is larger than “0” and the “Show mini preview” option is disabled, then the preview after capturing a picture is shown for the given amount of seconds. The preview window allows you to save and delete the image. The preview window timer can be stopped by touching the preview image. The preview window can be closed by pressing the hardware shutter button or by pressing the save/delete buttons.

**Show mini preview**
If enabled, then a mini preview is shown on the viewfinder after capturing a picture. When touching the mini preview, then a full-screen preview opens. The preview window can be closed by pressing the hardware shutter button or by pressing the save button. It is not possible to delete an image when this option is enabled.

**Autofocus light mode**
Here the auto focus light mode can be changed (off/auto/on). The autofocus light is shown during focusing an object.

**Filename pattern preset**
This field specifies the filename pattern of captured images. Patterns are case sensitive. The following fields are available and can be mixed:

- @y: year, e.g. “2013”
- @m: month, e.g. “01”
- @d: day, e.g. “29”
- @H: hour, e.g. “14”
- @M: month, e.g. “02”
- @S: second, e.g. “59”
- @COUNTER: a counter, e.g. “camerapro_000001”

**Note:** use only characters which are valid. For instance a filename may not contain “:”, “/” or “\” (this list of forbidden characters is not complete!).

**Note:** The file extension (“.jpg”) is automatically added to the final filename.

**Save to image gallery**
By default images are saved to the camera roll. If this option is enabled, then images are added to the image gallery instead.

**Number of grid rows**
Here the number of rows displayed in the grid overlay can be specified.

**Self-Timer Mode**
In the self-timer tab the duration in seconds until the picture is captured can be set.
**Bracketing Mode**
In the bracketing mode tab the delay in seconds until capturing is started and the exposure compensation for up to 5 pictures can be set.

**Use exposure compensation**
By default CameraPro uses fixed exposure times for individual pictures. If this option is enabled, then exposure is adapted based on the current camera exposure.

**Burst Mode**
In the burst mode tab the delay in seconds until capturing is started and the number of pictures to be captured can be set.

**Time-Lapse Mode**
In the time-lapse tab the capturing interval in seconds can be set. This mode does not generate video files but only a series of pictures.
Capturing Pictures
There are various means for capturing pictures:

- By pressing the hardware camera shutter key.
- By tapping the camera touch button.
- After touch focus (depending on capture button mode setting)

Focusing an Object
If your phone model supports autofocus an object can be focused either

- By slightly pressing the hardware camera shutter key, or
- By tapping on the touch focusing button, or
- By tapping somewhere on the viewfinder (which focuses on the selected region).
- Additionally it is possible to manually set the focus distance. But keep in mind that even if an image looks sharp on the small phone screen, it might be blurred in full resolution!

The success or failure of the focus operation is visualized by a red (unfocused) or green (successfully focused) rectangle.
Frequently Asked Questions

Does CameraPro support Windows Phone 8 lenses?
Yes.

I accidently removed the settings menu. How can I get it back?
Please delete and re-install CameraPro from the Microsoft Marketplace. You are only charged once and you can install CameraPro as often as you want.

Some images seem to be missing! Where are they?
There is a bug in Windows Phone 8 when exporting images to the photo gallery. All 3rd party apps are affected by this bug which occurs randomly.

Can CameraPro manually set focus distance, exposure time, ISO rate, and white balance?
Yes.

Can CameraPro change aperture?
The aperture cannot be changed because it is fixed (hardware restriction).

Can I record videos with CameraPro?
At the moment video recording is not possible due to Windows Phone 8 system restrictions.

How can I enable geo tagging?
Geo tagging is automatically activated when GPS is activated.

Does CameraPro support Nokia PureView technology?
Yes.

Does CameraPro support the Nokia 1020 high resolution images?
Yes.

I like CameraPro very much. Do you have plans to make it more Metro-Look like?
CameraPro uses a consistent user interface over different platforms (Symbian, Meego, Android, Windows Phone 8).

How can I take pictures in 16:9 formats?
To change the capturing resolution tap on the resolution text on the top left on the viewfinder.

Change Log

Note: possible missing version numbers are private releases.

Version 1.1.0
  - Added support for full resolution Nokia 1020 images

Version 1.0.9
  - Added workaround for WP8 memory bug (copy of file generated when saving to isolated storage)

Version 1.0.8
- Added support for longer manual exposure times
- Bug fixes

Version 1.0.7
- Added option to remove menus (under "Arrange menus")
- Added option for 2 to 9 grid lines
- Fixed AF light mode

Version 1.0.6
- Added option to enable histogram
- Added option to save images to photo gallery (instead of camera roll)
- Fixed white balance crash on HTC devices

Version 1.0.5
- Fixed HTC front camera crash

Version 1.0.4
- Bug fixes
- UI improvements
- Improved bracketing mode

Version 1.0.3
- Fixed HTC crash
- Added option to change between fixed exposure times and exposure compensation for bracketing
- Added option for manual white balance (does not work properly on Nokia phones)
- Changed exposure compensation labels from steps to EV steps
- Fixed German translation
- Bug fixes

Version 1.0.2
- Added German translation

Version 1.0.1
- Added support for low-memory device
- Improved user interface

Version 1.0.0
- Initial release