

## Video quick-start guide for Carus ARGOS

### 1. Video formats and signalling

Carus ARGOS offers two different formats:

#### 1.1. H.264

This format is used in conjunction with SIP. As soon as a SIP-connection is established, in which the H.264 as video format is negotiated, the H.264 stream is output via RTP. The transfer of the video stream is according to RFC.

#### 1.2. MJPEG, JPEG

This format is used in conjunction with HTTP/TCP. The video is not offered via the WEB server port, but via its own configurable port. It can be requested either a single JPEG image or an MJPEG stream via an HTTP get. Up to 15 streams can be displayed simultaneously.

➔ Single image:	<ip address><videoport>/singleframe	or
	<ip address><videoport>/video.jpg	
➔ Videostream:	<ip address><videoport>/stream	or
	<ip address><videoport>/video.mjpg	

### 2. Configuration and resolution

Resolution for MJPEG and H264 cannot be displayed in the LCD GUI, only in the WEB GUI. As H.264 and MJPEG are simultaneously retrievable and use the same sensor image, there are dependencies between the resolution for MJPEG and H.264: The H.264 resolution is either

➔Two times MJPEG resolution

➔MJPEG resolution

➔half of MJPEG resolution

➔a quarter of MJPEG resolution

The maximum resolution of H.264 is VGA (640x480).

### 3. Pan, Tilt, Zoom – Configuration of image section

Settings can be made in the WEB GUI or in the LCD GUI. Furthermore, the image section can be changed via DTMF commands with an existing SIP connection. Only one image section can be displayed at the moment. The image section is the same for MJPEG and H.264. This means that a change of the image section is visible for all participants of the network. Up to three fixed positions can be stored. This is possible via the LCD GUI as well as via the WEB GUI. But not via DTMF, as this is considered as a configuration and not every user should be able to make the change.

#### 3.1. Zoom factor and resolution

The adjustable zoom factor is dependent on the selected resolution for products without fisheye. The larger the resolution, the less the image can be zoomed. Corresponds to the image resolution to the camera resolution you cannot zoom and thus also not pan.

### 3.2. Setting in the LCD GUI

- The configuration page is opened with the red RFID card
- Then select camera menu
- The live image shows the currently displayed camera cut
- The position buttons (1, 2, 3) call up the fixed positions
- The slider below the live image changes the zoom factor
- If the zoom factor is  $>1$ , the picture section can be changed via the control in the live picture. It will be changed planar by moving the image in the live image with the finger.
- To store the current position as a fixed position, the active button is pressed until the memory is acknowledged by a short tone.

### 3.3. Settings in the WEB GUI

- At the Audio/Video menu of the web page, the live image and control panel therefore are displayed with the "Show information" button.
- Use the arrow keys + and – to change the image section. With the keys Pos1 to Pos3, already stored fixed positions can be selected.
- Using the save button, the current image section for the corresponding fixed position can be stored.