

**Technical product information No. 06.01**

<b>Product/Version</b>	<b>CamDisc<sup>svr</sup> 4, CamDisc<sup>svr</sup> 10, CamTel<sup>svr</sup> 4, CamTel<sup>svr</sup> 10, CamMobile 4, CamMobile 10</b> Firmware 1.28 and higher
<b>Date</b>	April 2006
<b>Topic</b>	Serial Control of <b>svr</b> series and <b>CamMobile</b> devices
<b>Short Description</b>	<b>svr</b> series and <b>CamMobile</b> devices with firmware version 1.28 and higher support serial control. Important basic information such as synchronisation of time and date or alarm triggering with variable recording parameters.
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## 1. Protocol Description

Each command is always transmitted in ASCII (in plain text).  
A complete command uses the following format:

```
[start character] + [command] + [parameter] + [end character]
```

- The asterisk "\*" and the ASCII character 42 respectively is always used as the start character.
- A command comprises four characters followed by an optional parameter block whose structure and length are determined by the respective command.
- The number sign "#" and the ASCII character 35 is always used as the end character.
- An entry is created in the **CamDisc<sup>svr</sup>** or **CamMobile** log file every time a command is executed.

The commands described in the following table can be combined as required.

Example:

```
*SETI (14:33:50) #*SEDA (22.01.06) #
```

In this example, the time is set to 14:33:50 and the date to January 22<sup>nd</sup> 2006.

## 2. Requirements


The serial control for svr series and CamMobile devices is chosen in the dropdown menu Function of the menu Recorder settings/Serial channel. To activate a change of the **Serial channel** settings, you have to "hang-up" the connection to your transmitter.

- When using the external **Serial control** feature, the functions **Transparent channel** or **POS** are not available.
- If the timer option (**Recorder settings/Site archive/Video x in**) is being used and is currently in the "pause" mode then pictures will not record until time schedule turns recording back on.

## 3. Commands in the overview

Function	Format	Parameter Description
Set time ( <b>SetTime</b> )	*SETI (HH:MM:SS) #	HH = hour MM = minute SS = second  Device responds with "OK" or "ERROR".
Set date ( <b>SetDate</b> )	*SEDA (DD.MM.YY) #	DD = day MM = month YY = year  Device responds with "OK" or "ERROR".

Function	Format	Parameter Description
Get time ( <b>GetTime</b> )	*GETI () #	Device responds in format:  HH:MM:SS (e.g. "23:48:20")  without <CRLF> (without carriage return and line feed)  In case of error, device responds "ERROR".
Get date ( <b>GetDate</b> )	*GEDA () #	Device responds in format:  DD.MM.YY (e.g. "07.01.06")  without <CRLF> (without carriage return and line feed)  In case of error, device responds "ERROR".
Get serial number (ID) ( <b>GetID</b> )	*GEID () #	Device responds in format:  YZxxxxxxx (e.g. "CV542016")  without <CRLF> (without carriage return and line feed)  YZ = device identifier (two characters) xxxxxxx = number (six digits)  In case of error, device responds "ERROR".
Record pictures ( <b>RecordPictures</b> ) <b>CamDisc<sup>svr</sup></b> only (refer to comment * <sup>1</sup> )	*REPI (Camera, PicCount, Speed, "Text") #	Camera = number of camera (1 to 4/10) PicCount = number of pictures (1 to 999) Speed = Recording speed in steps of 100ms (refer to comment * <sup>2</sup> ) Text = up to 32 alphanumeric characters (refer to comment * <sup>3</sup> )  Example: *REPI (2, 100, 5, "200610002") #  In this example, a total of 100 pictures are recorded from camera 2 in steps of 500ms. Additionally, the text "200610002" is stored with each picture.  If <b>CamDisc<sup>svr</sup></b> or <b>CamMobile</b> receives an additional REPI command while a current recording process is in progress the earlier command becomes invalid.  Device responds with "OK" or "ERROR".

Function	Format	Parameter Description
Camera-selective alarm (Alarm)	*ALRM (Camera) #	<p>Camera = number of camera (1 to 4/10)</p> <p>A camera-selective event is triggered by this command. The alarm is processed in the same way as an alarm triggered via one of the control inputs <i>Control in 1 to 4/10</i>. The recording criteria are set according to the menu <b>Recorder settings/Site archive/ Video x in</b>.</p> <p>Device responds with "OK" or "ERROR".</p>
Trigger event (TrigEvent)	*TREV (Camera) #	<p>Camera = number of camera (1 to 4/10)</p> <p>A camera-selective event is triggered by this command. The recording criteria are set according to the menu <b>Recorder settings/Site archive/ Video x in/Event recording x</b>. These events are marked by  <b>S</b> during evaluation.</p> <p>Device responds with "OK" or "ERROR".</p>

#### Comments to picture recording:

Comment <sup>\*1</sup>: If the command is received while in online mode (live picture transmission) when **record online** or **triplex** is enabled (refer to the menu **Recorder settings/Site archive/Track settings**), then recording is started immediately. If the command is received in online mode – live picture transmission – when **record online** or **triplex** is disabled, then recording is only started after a return to offline mode.

A recording activated by this command is immediately stopped if the archive settings are changed during the recording. In combination with timer mode, a command is executed after recording is activated.

Comment <sup>\*2</sup>: The recording speed is entered in steps of 100ms. To record at the maximum speed, a 0 is entered.

Examples for Speed values:

0 = maximum speed

1 = picture frequency 100 ms

5 = picture frequency 500 ms

10 = picture frequency 1 s

150 = picture frequency 15 s

Comment <sup>\*3</sup>: Up to 32 alphanumeric characters can be stored together with each picture as text information. If no text is to be stored then the parameter must nevertheless be comprised by two sets of double-inverted commas ("").

When using the **CamControl PLAYER** software, the respective text is displayed beneath the video window during playback. To enable this function, the parameter SERIALPICINFOS=1 must be entered in the SERVICE.INF file.

## 4. Connection Assignments and Port Parameters

### Connection configuration:

- 9 pin Sub-D connector with RS-232 interface at the rear of **svr** series devices or **CamMobile** models:

Pin	Type	Description	Short Descr.
1	-	-	
2	Output	Transmit Data	TxD
3	Input	Receive Data	RxD
4	-	-	-
5	Ground	Ground	GND
6	-	-	-
7	Input	Clear to Send	CTS
8	Output	Ready to Send	RTS
9	-	-	-

### Baud rate (bps):

- 300, 600, 1200, 2400, 4800, 9600, 19200, 38400, 57600 or 115200

### Data formats:

- 8/N/1: 8 data bits, no parity, 1 stop bit
- 8/N/2: 8 data bits, no parity, 2 stop bits
- 8/E/1: 8 data bits, even parity, 1 stop bit
- 8/O/1: 8 data bits, odd parity, 1 stop bit

### Handshake:

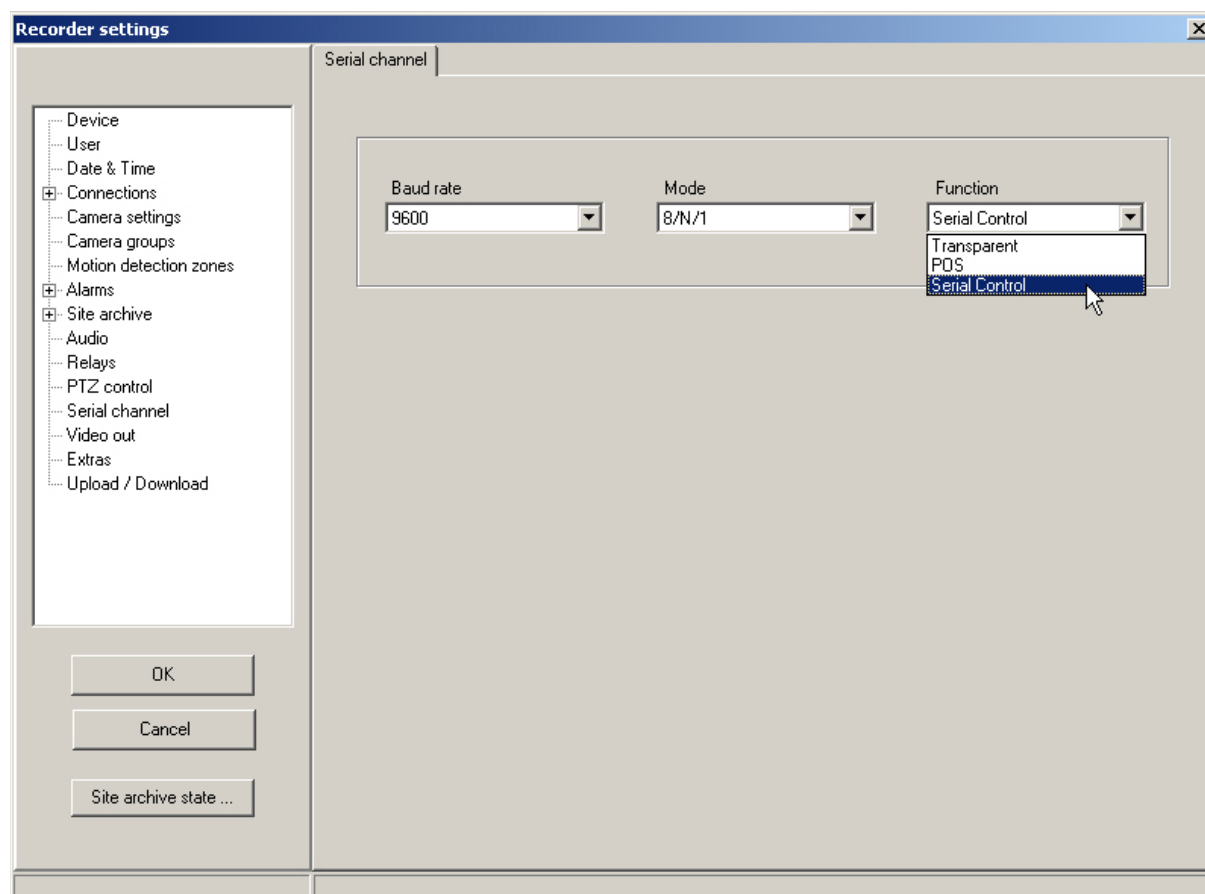
- Hardware handshake with RTS/CTS

### Level:

- According to V.24 recommendations

## 5. Transmitter Configuration with CamControl LITE/PRO

The configuration of the **svr** or **CamMobile** devices is made by the menu **Recorder settings/Serial channel**, after a connection to the respective transmitter was established by **CamControl LITE** or **CamControl PRO** (both version 3.46 and higher).



Configure baud rate and mode, before you set function to **Serial control**. Confirm the new configuration with **OK**.

The change of the function **Serial channel** is only activated after the connection to the transmitter is terminated.

### Limitations:

Please note that the serial interface with the title **Transp. data / Control interface** is a multifunctional interface of your **svr** series device that is used as a control interface for different functions like serial control, transparent remote control, for example, of dome cameras or pan tilt heads, or for POS (point of sale) operations. These functions are mutually exclusive and can therefore not be combined.