## **Application Note**

CloseTal CONFERENCE SYSTEM

## **Camera Follow**

Camera follow is implemented in the *Close Talk Conference System* via the PC software *Close Talk Control.* With its powerful database functionality it provides easy configuration of the system for a variety of applications. The camera follow functionality is based on the VISCA camera control bus protocol from SONY<sup>TM</sup>, enabling any VISCA capable camera to be used. Up to seven cameras can be controlled for maximum flexibility where each can be programmed for specific events during the conference.

To start using camera follow with the *Close Talk Conference System*, all that is needed is a regular PC with two free RS-232 serial ports, the *Close Talk Control* software and one or more cameras. The Central Unit is connected to the first serial port on the PC using a null-modem cable. The cameras are connected to the second RS-232 port using an industry standard VISCA to PC serial cable. With more than one camera, the cameras are daisy-chained using a standard VISCA cable (see the camera documentation).



|       |         |          | JX |
|-------|---------|----------|----|
|       |         |          |    |
| Votes | Unit-ID | Position | ~  |
| Yes   | 1234    | 1        |    |
| Yes   | 2234    | 2        |    |
| Yes   | 4234    | 3        |    |
| Yes   | 2563    | 4        |    |
| Yes   | 1241    | 4        |    |
| Yes   | 5454    | 5        |    |
| Yes   | 3232    | 6        |    |
| Yes   | 6666    | 7        |    |
| Yes   | 6345    | 8        |    |
| Yes   | 2313    | 8        |    |

Fig. 1: Seating Table

The following description assumes familiarity with the *Close Talk Control* software functionality, the user manual will provide more information.

Added to the *Close Talk Control* softwares Seating Table is a Position column. Position is simply a list of programmed camera positions connected to one or more Seat Numbers. Any Position number can be used one or more times for any Seat Number making it possible to program detailed close-ups for each delegate or only a few section shots of the entire conference room.

To program the camera control system, start the *Camera configuration* function on the software main menu. The configuration panel contains two selection trees, communication port settings and camera type settings. Begin by selecting the correct serial port number. VISCA has preset serial port settings so only the port number is important, the other parameters have no effect.



## **Application Note**



Fig. 2: Camera configuration panel

| Camera configuration   |   |  |
|--|---|--|
| <ul> <li>Communication</li> <li>Im RS-232</li> <li>⇒ System</li> <li>⊕ BBV</li> <li>⊕ VISCA</li> <li>Im Generic</li> </ul> | Select COM port number and<br>parameters<br>COM 2 Port available<br>9600 V<br>8 V<br>2 V<br>N V |  |
| Selected system: VISCA, Generic Disable  |   |  |

Fig. 3: Serial port selection

| Camera configuration   | ו 🗵   |  |
|--|---|--|
| <ul> <li>Communication</li> <li>Im RS-232</li> <li>System</li> <li>BBV</li> <li>VISCA</li> <li>Im Generic</li> </ul> | VISCA.<br>Bus control<br>Update<br>2<br>Camera edit<br>Position: 1x 5x New<br>1 2 3 4 5 6 7<br>G G G G G G G G G<br>P P P P P P P P P<br>Camera:<br>1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |  |
| Selected system: VISCA, Generic Select   |   |  |

Fig. 4: VISCA programming panel

Selecting the "VISCA - Generic" branch will show the VISCA programming and control panel. After selecting the correct serial port number, connect the cameras to the port and turn them on. Wait until the cameras have settled and click the *Update* button in the Bus control group (see figure 4). The number of connected cameras should be shown within a second at *Cameras*. If not, verify port settings, cables and cameras and try again.

The Position entries in the Seating Table must be matched to actually programmed positions here. Click the New button to start adding positions. Besides delegate positions, Voting and Neutral can be added where Voting is a position for vote mode and Neutral is the resting positions for the camera. Use *Erase* to remove a position, use the 1x and 5x to navigate the position list. The 1 to 7 G and P buttons are Goto and Program buttons for up to seven cameras. Click the P button to program the position for the corresponding camera number. The camera state is stored in the position number/type shown at Position. Click G to send the corresponding camera to the programmed position. Click Shift-P to delete a specific cameras position. The PSpeed and TSpeed settings are the Pan Speed and Tilt Speed for the cameras. Different camera types accepts different speeds, if the camera misbehaves after changing these two settings, reduce it until the camera responds. Camera selects the current camera to be controlled. Click Lft, Rgt, Up, Dwn to pan and tilt, use Shift-Click to move in larger steps. The *In* and Out buttons control zoom, again use Shift-Click to move in larger steps. Be patient with the movement controls, let the camera move in its own pace, following the progress on a video monitor.

To configure *Close Talk Control* to use camera control, click the *Select* button and close the *Camera configuration* panel. When starting the conference, the selected system type will be initialized. To disable camera follow, click the *Disable* button (figure 3).