

**SIMPLWINDOWS NAME:** Tandberg Wave Camera Direct Control  
**CATEGORY:** Camera  
**VERSION:** 1.0  
**SUMMARY:** Controls pan/tilt/focus/zoom/presets of camera  
**GENERAL NOTES:** This module will control a Tandberg WAVE camera when it is a standalone unit - not connected to the Tandberg codec, but connected directly to the Crestron system.

To accomplish this, you will need to obtain the Tandberg WAVE Camera Integrators Cable from Tandberg. This cable will break out the 15 pin connector on the WAVE camera into separate connectors for 1) power, 2) a female DB9 (for RS232 control from Crestron), 3) an S-Video connector, and 4) a video connector. Plug the DB9 into the Crestron system, and this module will control the WAVE camera.

Saving a preset is a three step process:

1. Move the camera to the desired position
2. Press SAVE (the SAVE-FB will go high)
3. Press the preset you wish to save the location to.

To recall a preset, just press the preset number.

**CRESTRON HARDWARE:** ST-COM, CNXCOM

**SETUP OF CRESTRON HARDWARE:** Baud Rate - 9600  
Parity - None  
Data Bits - 8  
Stop Bits - 1

RTS and CTS do not need to be defined. Also, RTS does not need to be held high.

**VENDOR FIRMWARE:** None

**VENDOR SETUP:** Must use the Tandberg WAVE Camera Integrators Cable for connection to the Crestron system

**CABLE NUMBER:** None

## CONTROL:

<b>TILT-UP</b>	D	Activate tilt up for as long as signal is held high
<b>TILT-DOWN</b>	D	Activate tilt down for as long as signal is held high
<b>PAN-LEFT</b>	D	Activate pan left for as long as signal is held high
<b>PAN-RIGHT</b>	D	Activate pan right for as long as signal is held high
<b>ZOOM-IN</b>	D	Activate zoom in for as long as signal is held high
<b>ZOOM-OUT</b>	D	Activate zoom out for as long as signal is held high
<b>FOCUS-NEAR</b>	D	Activate focus near for as long as signal is held high
<b>FOCUS-FAR</b>	D	Activate focus far for as long as signal is held high
<b>AUTOFOCUS-ON</b>	D	Turn on autofocus (recalling a preset will also

turn it on)

<b>AUTOFOCUS-OFF</b>	D	Turn off autofocus (using manual focus controls will also turn it off)
<b>AUTOFOCUS-TOGGLE</b>	D	Toggle the state of autofocus
<b>PRESETS</b>	D	Used to store and recall presets for pan, tilt and zoom positions
<b>SAVE</b>	D	Puts the module into save mode to allow storage of presets
<b>HOME</b>	D	Sends the camera to a home position for pan and tilt
<b>POWER-ON</b>	D	Power on the camera
<b>POWER-OFF</b>	D	Power off the camera
<b>RX\$</b>	S	Serial data string to be routed from a 2-way RS232 com port

### **FEEDBACK:**

<b>PRESETS-FB</b>	-	Indicate which preset was last chosen
<b>PRESET-SAVE-FB</b>	-	Indicates when the module is in save mode
<b>TX\$</b>	-	Serial data string to be routed to a 2-way RS232 port

<b>.UPZ FILE USED FOR TESTING:</b>	5.11.65x.upz
<b>COMPILER USED FOR TESTING:</b>	SimplWindows Version 1.51.08
<b>SAMPLE PROGRAM:</b>	Tandberg WAVE Camera Demo Program
<b>REVISION HISTORY:</b>	None