








Dedicated Micros IP V3 Module Application Guide

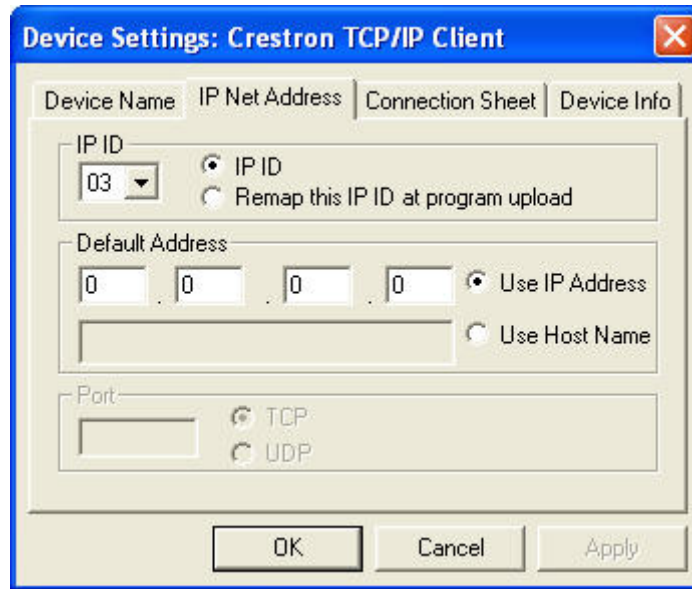
Description

This module allows IP control of the new Digital Sprite as well as the ECO9 and ECO16 models. This module was developed against an ECO9. The module allows you to control the main monitor output, sequencing, PTZ telemetry as well as playback controls by date. It is important to note that this IP module does not support the complete set of MCI commands that the older generation did. This is a shortcoming of the DM firmware. You should also be aware that the ECO series **does not** support PTZ. Therefore the telemetry controls on the module will only function on the new Digital Sprite series DVR's.

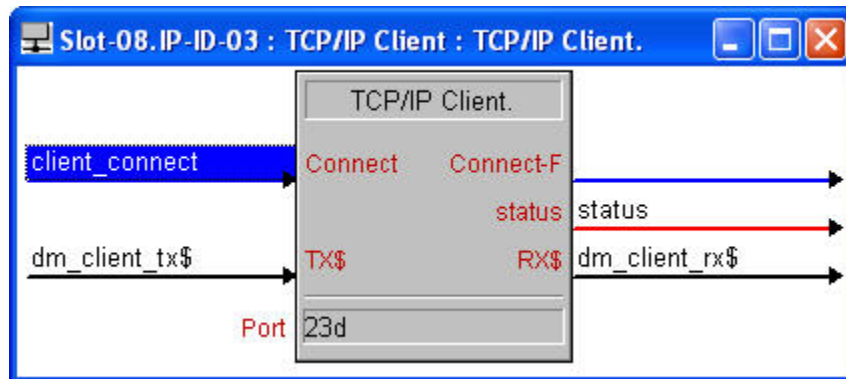
Compatibility			Processor Requirements	
 2-Series Compatible	 NOT CNMSX Compatible	 NOT System Builder Compatible	 Ethernet REQUIRED	 Compact Flash NOT NEEDED

Ethernet Configuration Information

In order to communicate with the DVR over Ethernet it is first necessary to add a TCP/IP client to your program. In SIMPL Windows under "Configure" right click on the processors Ethernet resource and select "Add Item" then scroll down to TCP/IP Client. Now Click OK. Next double click on the Client object and select the "IP Net Address" tab. Enter the IP address that has been assigned to the DVR in place of the zero's below:



The next step to getting the connection setup is to go to the "Program" side of SIMPL Windows and open up the Client in the "Central Control Modules" tree. Here you should ensure that you are using the correct port number. The demo program Client settings should be copied to your own program so they look like this:



Module Application

This module will **only** support the “new” style Digital Sprite 2. This generation can be identified by its sliver front panel with a black insert in the middle where the camera controls are located. This generation runs version 4.3 firmware. This module **does not** support the “old” DS2 which can be identified by its all sliver front panel. To control the old DS2 please use the Dedicated Micros MCI Module that is included in this module bundle. ControlWorks does not support serial control of the new Digital Sprite.

Signal and Parameter Descriptions

Bracketed signals such as "[signal_name]" are optional signals

DIGITAL INPUTS

connect_to_dvr	pulse to make the telnet connection to the DVR
disconnect_dvr	pulse to disconnect from the DVR
primary_mode_live	pulse to view live video
primary_mode_decode	pulse to enable playback of video from the DVR
smode_full...smode_pip4_bottom_right	pulse one to select the various multiplexed output formats, not all formats are available on all models
play_speed_halt...play_speed 64x+/-.....	pulse to select a playback speed, will force the DVR into decode if in live
select_channel_1...16	pulse to select a camera on the main monitor
sequence_on...off...toggle	pulse to select the sequence mode
cam1_seq_enable...cam16_seq_enable	enter a "1" on each camera input that you wish to include in the sequence operation
pan_right..zoom_out.....	hold high for the duration you wish to have the telemetry motion active. Releasing the button will stop the motion. See telemetry_speedx for setting the speed of the PTZ action
aux_relay1_on..aux_relay3_off.....	pulse to trigger the desired relay in the PTZ receiver
wash_on...lamps_off.....	pulse to turn on the related function on the cameras telemetry receiver
autopan_on...autopan_off.....	pulse to control the autopan function
patrol_on...patrol_off.....	pulse to control the patrol function
telemetry_preset_goto	pulse to recall presets
telemetry_preset_store	pulse to store presets
telemetry_preset_clear.....	pulse to clear the currently selected preset
telemetry_preset1..preset16	pulse to activate one of the three above actions for a specific camera
telemetry_speed1..speed17	place a "1" or hold an input high with an interlock to select which rate of speed to move the PTZ
playback_list_from_year_up..minute_down	pulse to increment and decrement the values for the playback year, month, hour and minutes
playback_list_launch	pulse to start playback from the date that you entered with the above inputs

ANALOG INPUTS

This module does not utilize any analog inputs.

SERIAL INPUTS

dm_client_rx\$	connect to the receive line of the Crestron TCP-IP client
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DIGITAL OUTPUTS

Note: All feedback is generated by the module. No feedback is parsed from the DVR

client_connect.....	connect this to the connect line on the TCP-IP clinet
connected.....	high to indicate when the module has connected to the DVR
not_connected	high to indicate what the module is not connected to the DVR
primary_mode_live_fb.....	high to indicate the DVR is in live mode
primary_mode_decode_fb.....	high to indicate the DVR is in decode (playback) mode
smode_full...smode_pip4_bottom_right	pulse one to select the various multiplexed output formats
play_speed_halt_fb...play_speed 64x_fb.....	high to indicate which speed is active
select_channel_1_fb...16_fb	high to indicate which camera input is selected
sequence_on_fb	high to indicate sequence mode is on
sequence_off_fb	high to indicate sequence mode is off
sequence_hold_on_fb.....	high to indicate sequence hold is on
sequence_hold_off_fb	high to indicate sequence hold is off
telemetry_preset_goto_fb.....	high when in preset recall mode
telemetry_preset_store_fb.....	high when in preset store mode
telemetry_preset_clear_fb	high when in preset clear mode
telemetry_preset1_fb..preset16_fb	high to indicate which preset is active

ANALOG OUTPUTS

playback_to_year	four digit analog representing the selected event list starting year
playback_to_month	two digit analog representing the selected event list starting month
playback_to_day	two digit analog representing the selected event list starting day
playback_to_hour	two digit analog representing the selected event list starting hour
playback_to_minute	two digit analog representing the selected event list

SERIAL OUTPUTS

dm_client_tx\$.	connect to the receive line of the Crestron TCP-IP Client
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PARAMETERS

Playback Year	number in decimal to default the year (2006d)
Playback Month	number in decimal to default the month (12d)
Playback Day	number in decimal to default the day (31d)
Playback Hour	number in decimal to default the hour (24d)
Playback Minute	number in decimal to default the minute (59d)
Stop Delay.....	time in seconds (example: .2s) that the module will wait before sending the telemetry stop command after releasing a PTZ button. Depending on the protocol you are using you may have to experiment with this value to achieve the proper operation.
User Name	Enter the user name for the telnet login. Default is dm.
Password.....	Enter the password for the telnet login. Default is telnet.

Support

This module is supported by ControlWorks Consulting, LLC. Should you need support for this module please email support@controlworks.com or call us at 440-449-1100. ControlWorks normal office hours are 9 AM to 5 PM Eastern, Monday through Friday, excluding holidays.

Before calling for support, please ensure that you have loaded and tested operation using the included demonstration program and touchpanel(s) to ensure that you understand the correct operation of the module. It may be difficult for ControlWorks to provide support until the demonstration program is loaded.

Updates, when available, are automatically distributed via Email notification to the address entered when the module was purchased. In addition, updates may be obtained using your username and password at <http://www.thecontrolworks.com/customerlogin.aspx>.

Distribution Package Contents

The distribution package for this module should include:

Dedicated_Micros_IP_Module_V3.umc	Crestron User Module
Dedicated Micros IP Demo XPanel v3.vtp.....	Demo touchpanel for XPanel
Dedicated Micros IP Demo Program V3.smw	Demo program for PRO2 processor
Dedicated_Micros_IP_Module_V3_Help.pdf.....	This Help File

Revision History

V3 jim@controlworks.com 2008.4.22

- Removed: Default telemetry speed as would cause issues with PTZ head if enabled
- Added: ILOCK to the demo program for telemetry speed control example
- Added: Negative (backwards) playback speeds

V2 caleb@controlworks.com 2007.06.08

- Changed module so the username and password for the telnet connection are exposed. Users can now set the username and password used for the module.

V1 jim@controlworks.com 2006.11.01

Initial release

Development Environment

This version of the module was developed on the following hardware and software. Different versions of hardware or software may or may not operate properly. If you have questions, please contact us.

Hardware	Firmware Version
Crestron PRO2 Processor	3.155.1143
Dedicated Micros ECO9	4.3
Software	Software Version
Crestron SIMPL Windows	2.08.44
Crestron Vision Tools Pro-e	3.7.2.8
Crestron Database	19.02.005
Crestron Symbol Library	531
Crestron Device Library	531

ControlWorks Consulting, LLC Module License Agreement

Definitions:

ControlWorks, *We*, and *Us* refer to ControlWorks Consulting, LLC, with headquarters located at 701 Beta Drive, Suite 22 Mayfield Village, Ohio 44143-2330. *You* and *Dealer* refer to the entity purchasing the module. *Client* and *End User* refer to the person or entity for whom the Crestron hardware is being installed and/or will utilize the installed system. *System* refers to all components described herein as well as other components, services, or utilities required to achieve the functionality described herein. *Module* refers to files required to implement the functionality provided by the module and may include source files with extensions such as UMC, USP, SMW and VTP. *Demo Program* refers to a group of files used to demonstrate the capabilities of the Module, for example a SIMPL Windows program and VisionTools Touchpanel file(s) illustrating the use of the Module but not including the Module. *Software* refers to the Module and the Demo Program.

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Provision of Support

We provide limited levels of technical support only for the most recent version of the Module as determined by Us. We do not provide support for previous version of the module, modifications to the module not made by Us, to persons who have not purchased the module from Us. In addition, we may decline to provide support if the Demo Program has not been utilized. We may withdraw a module from sale and discontinue providing support at any time and for any reason, including, for example, if the equipment for which the Module is written is discontinued or substantially modified. The remainder of your rights and obligations pursuant to this license will not be affected should ControlWorks discontinue support for a module.

Modification of Software

You may not decrypt (if encrypted), reverse engineer, modify, translate, disassemble, or de-compile the Module in whole or part. You may modify the Demo Program. In no event will ControlWorks Consulting, LLC be liable for direct, indirect, incidental or consequential damages resulting from You modifying the Software in any manner.

Indemnification/Hold Harmless

ControlWorks, in its sole and absolute discretion may refuse to provide support for the application of the Module in such a manner that We feel has the potential for property damage, or physical injury to any person. Dealer shall indemnify and hold harmless ControlWorks Consulting LLC, its employees, agents, and owners from any and all liability, including direct, indirect, and consequential damages, including but not limited to personal injury, property damage, or lost profits which may result from the operation of a program containing a ControlWorks Consulting, LLC Module or any component thereof.

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