








# Panasonic WJ-HD309/16 DVR Module v1 Module Application Guide

## Description

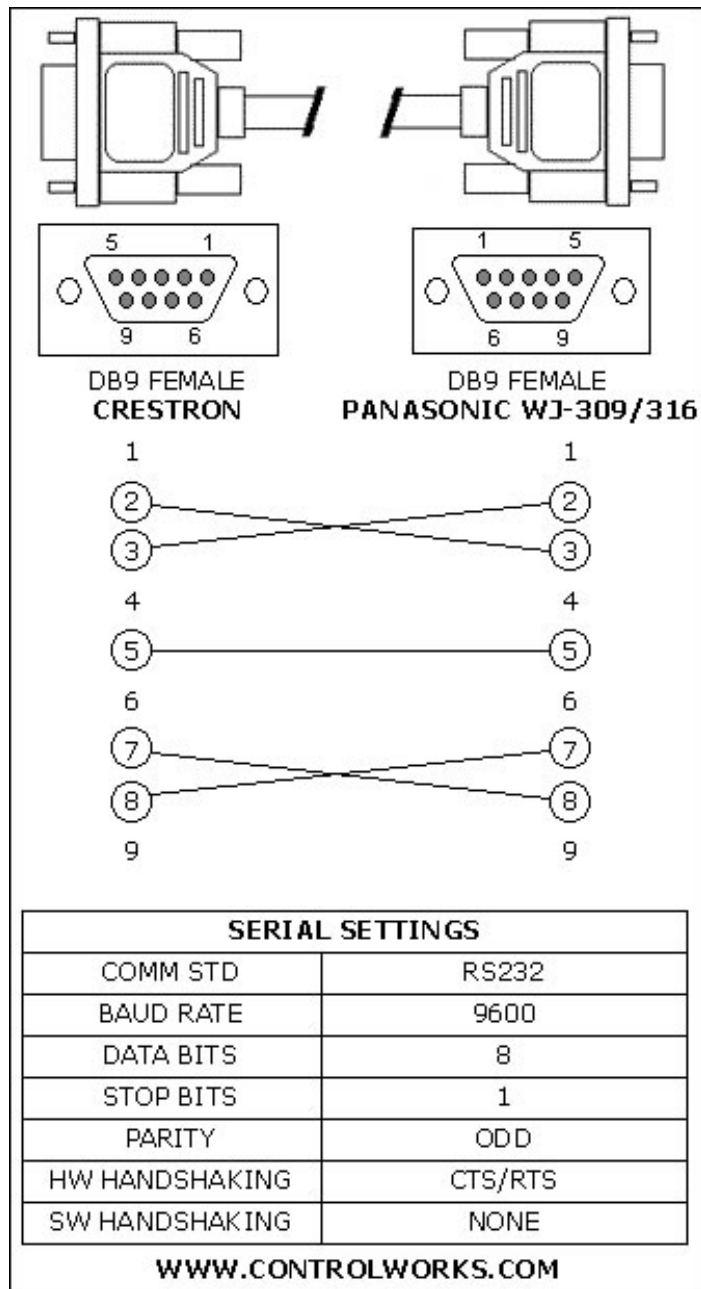
This module allows a Crestron 2-Series processor to control a Panasonic WJ-HD 309/316 DVR via RS-232. Controls include camera selection, single or multi camera screen display, transport controls, event search by date and time, and menu navigation controls. This module also provides telemetry control for PTZ cameras such as the Panasonic WV-CS Series PTZ Camera.

## Supported Processor

Any 2-Series processor with an open RS-232 COM port.

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

## Serial Cable Pinout



Note on pre-made serial cabling: Build a custom cable according to the diagram above. If using a pre-made cable ensure that no additional pins are populated in the cable. As Crestron com ports are non-standard ports undesirable behavior may result if the Crestron port sees logic level voltage on pins 1,4,6 or 9.



# Signal and Parameter Descriptions

Bracketed signals such as "[signal\_name]" are optional signals

## DIGITAL INPUTS

[dvr_login]	pulse to login to the dvr
[dvr_logout]	pulse to logout of the dvr
[camera_recall_preset1-20]	pulse to recall camera preset location, presets are stored in the camera
[camera_zoom_in]	pulse to zoom camera in
[camera_zoom_out]	pulse to zoom camera out
[camera_focus_near]	pulse to focus camera near
[camera_focus_far]	pulse to focus camera far
[pan_left]	pulse to pan camera left
[pan_right]	pulse to pan camera right
[tilt_up]	pulse to tilt camera up
[tilt_down]	pulse to tilt camera down
[auto_pan_on]	pulse to turn on auto pan feature
[auto_pan_off]	pulse to turn off auto pan feature
[auto_pan_speed+]	pulse to increase auto pan speed
[auto_pan_speed-]	pulse to decrease auto pan speed
[bw_on]	pulse to turn on black and white camera mode
[bw_off]	pulse to turn off black and white camera mode
[bw_auto]	pulse to turn on black and white auto mode
[multi_screen_4/7/9/10/13/16]	pulse to enter multi-screen mode
[text_display_on]	pulse to turn on text display during playback
[text_display_off]	pulse to turn off text display during playback
[play]	pulse to start playback
[pause_playback]	pulse to pause playback
[stop_playback]	pulse to stop playback and return to live video
[record_manual]	pulse to start manual recording
[stop_record]	pulse to stop a manual recording
[stop_both]	pulse to stop any transport function
[fast_forward_one_field]	pulse during playback to advance one field/frame
[skip_and_play_forward_normal]	pulse during playback for normal speed
[skip_and_play_forward_x2/x5/x10/x20/x50/x100]	pulse to increase speed during playback
[rewind_one_field]	pulse during playback to rewind one field/frame
[skip_and_play_rewind_normal]	pulse during playback for normal speed rewind
[skip_and_play_rewind_x2/x5/x10/x20/x50/x100]	pulse to increase rewind speed during playback
[skip_and_play_forward/rewind_half]	pulse to playback half frames
[playback_year_up]	pulse to increment playback year
[playback_year_down]	pulse to decrement playback year
[playback_month_up]	pulse to increment playback month
[playback_month_down]	pulse to decrement playback month
[playback_day_up]	pulse to increment playback day
[playback_day_down]	pulse to decrement playback day
[playback_hour_up]	pulse to increment playback hour
[playback_hour_down]	pulse to decrement playback hour
[playback_minute_up]	pulse to increment playback minute
[playback_minute_down]	pulse to decrement playback minute
[playback_second_up]	pulse to increment playback second
[playback_second_down]	pulse to decrement playback second

[playback_from_date_and_time_go] .....	pulse to start time and date playback, select a camera first to view that cameras playback
[setup_menu_on] .....	pulse to enter on-screen setup menu
[setup_menu_off] .....	pulse to exit on-screen setup menu
[menu_up] .....	pulse to move cursor up
[menu_down] .....	pulse to move cursor down
[menu_left] .....	pulse to move cursor left
[menu_right] .....	pulse to move cursor right
[menu_increment] .....	pulse to increment menu value
[menu_decrement] .....	pulse to decrement menu value
[menu_page_next_page_(FWD)] .....	pulse to advance menu selection or page
[menu_page_previous_page_(BACK)] .....	pulse to move back menu selection or page
[menu_move_up_one_level_(ESC)] .....	pulse to move cursor up one level or escape
[menu_virtual_menu_(SET)] .....	pulse to select the highlighted menu item

## **ANALOG INPUTS**

[select_monitor] .....	select the monitor output using an analog initialize
[camera_number] .....	select a camera using an analog initialize, changing the camera selection works for live video as well as playback

## **SERIAL INPUTS**

[Panasonic_dvr_rx\$] .....	serial rx\$ from the dvr com port
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## **DIGITAL OUTPUTS**

[dvr_login_password_or_name_error] .....	pulses high to indicate incorrect name or password at login
[dvr_login_succeeded] .....	pulses high to indicate successful login
[dvr_login_failed] .....	pulse high to indicate login failure

## **ANALOG OUTPUTS**

[playback_year] .....	displays playback year as 4 digit analog
[playback_month] .....	displays playback month as 2 digit analog
[playback_day] .....	displays playback day as 2 digit analog
[playback_hour] .....	displays playback hour as 2 digit analog
[playback_minute] .....	displays playback minute as 2 digit analog
[playback_second] .....	displays playback second as 2 digit analog

## **SERIAL OUTPUTS**

Panasonic_dvr_tx\$ .....	serial tx\$ to the dvr com port
[dvr_login_status] .....	serial string indicating login status
[playback_year_month_day\$] .....	serial string formatted yyyy-mm-dd for playback
[playback_hour_minute_second\$] .....	serial string formatted hh-mm-ss for playback

## **PARAMETERS**

Unit ID .....	enter the unit ID as setup on dvr (default = 001)
Username (32 chars) .....	enter the username as setup on the DVR
Password (32 chars) .....	enter the password as setup on the DVR

## Support

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This module is supported by ControlWorks Consulting, LLC. Should you need support for this module please email [support@controlworks.com](mailto: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.controlworks.com/customerlogin.aspx> .

## Distribution Package Contents

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The distribution package for this module should include:

Panasonic_WJ-HD_3xx_v1.umc .....	Crestron User Module to control DVR
Panasonic_WJ_HD309_v1.smw .....	Demo program for QM-RMC processor
Panasonic_WJ_HD309_v1.vtp .....	Demo X-Panel Project
Panasonic_WJ_HD_DVR_Help_v1.pdf .....	This help file

## Revision History

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V1 [lee@controlworks.com](mailto:lee@controlworks.com) 2010.03.16

-Initial Release

## Development Environment

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This module version 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.

<b>Panasonic Hardware</b>	<b>Firmware Version</b>
Panasonic WJ HD-309	1.52
<b>Crestron Hardware</b>	<b>Firmware Version</b>
Crestron QM-RMC	4.001.1012
<b>Software</b>	<b>Software Version</b>
Crestron SIMPL Windows	2.11.27
Crestron Vision Tools Pro-e	4.0.19
Crestron Database	21.02.016.00
Crestron Symbol Library	653
Crestron Device Library	653

# ControlWorks Consulting, LLC Module License Agreement

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*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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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

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