

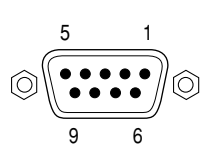
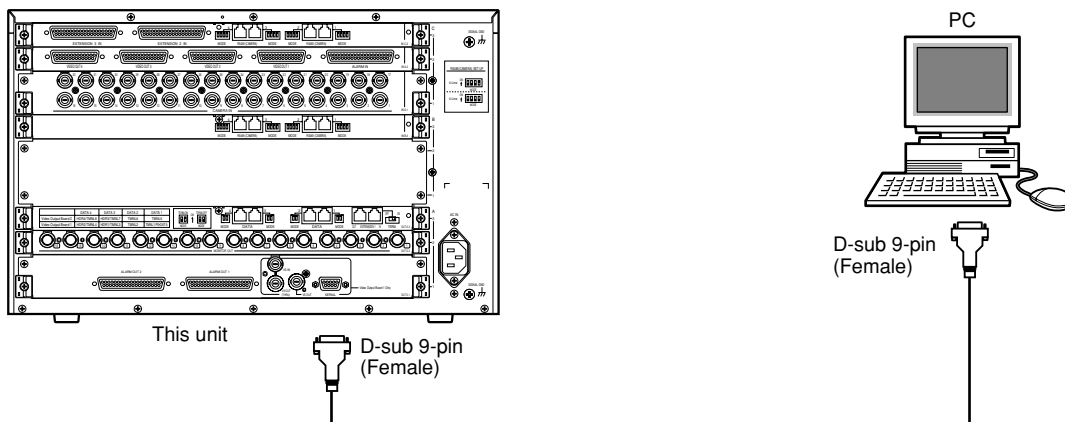
Serial (RS-232C) Connector Command Reference

■ SERIAL (RS-232C) Communication Protocol

When a PC and the unit are connected with the SERIAL (RS-232C) interface, it is possible to control the functions of this unit by transmitting the specified commands from a PC.

PC Connection Example

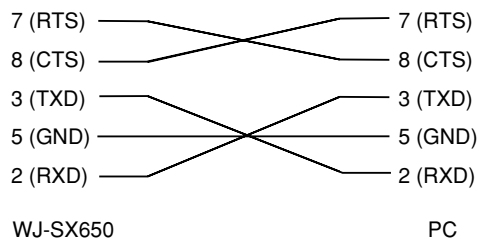
An RS-232C crossing cable is used for connection between the unit and PC. (Refer to the following for the pin array of the SERIAL connector and a cable connection sample.)



As viewed from the rear of the video output board

Pin No.	Signal Name	I/O
1	CD	IN
2	RXD	IN
3	TXD	OUT
4	DTR	OUT
5	SG	-
6	DSR	IN
7	RTS	OUT
8	CTS	IN
9	RI	IN

Cross cable connection example



Important:

- This unit does not support the communication converted between the SERIAL (RS-232C) and USB interface.
- When controlling the unit using the PC connected with the SERIAL (RS-232C) interface, the parameters of the following settings should be identical between the unit and the PC.

It is possible to configure the following settings (communication status) on the setup menu of the unit. (It is impossible to configure the communication status using the "WJ-SX650 Series Administrator Console".)

Baud Rate: 38 400 bps/19 200 bps/9 600 bps/4 800 bps (Default: 38 400 bps)

Data Bit: 8bit (Fixed. It is impossible to change the value.)

Parity Check: None (Fixed. It is impossible to change the value.)

Stop Bit: 1bit (Fixed. It is impossible to change the value.)

■ Command Format

The following are descriptions of how to write the transmission command (PC → Unit) and the response command (Unit → PC). Commands shall be in ASCII format.

Transmission Command (from the PC to the Unit)

STX: Indicates the data start. A command shall begin with this prefix "STX" (ASCII code: 02h).
("h" indicates hexadecimal.)

Transmission command: Designate a command shown in the command list on the following pages.

Parameter: When a command needs a parameter, a colon (:) is used for dividing a command and a parameter. The following is the syntax of a command with two or more parameters.

[STX] [Transmission Command] : [Parameter1] : [Parameter2] : [ETX]

ETX: Indicates the data end. A command shall be ended with this prefix "ETX" (ASCII code: 03h).
("h" indicates hexadecimal.)

About the ACK response

After the unit correctly received a command from the PC, the unit will send back the ACK response (ASCII code: 06h) to the PC within 20 ms. The unit will start command processing after sending the ACK response.

Syntax	[ACK]
ASCII code	06h

About the NAK response

When an error occurs in the process of receiving a command from the PC, the unit will send the NAK response (ASCII code: 15h) within 20 ms.

Depending on the error type, the NAK code will be attached to the NAK response.

The unit will not start command processing when having sent the NAK response.

Syntax	[NAK] [NAK code]
ASCII code	15h

NAK code: The NAK code will be determined according to the error type as below.

ASCII code: 31h (Parity error)

ASCII code: 32h (Overflow error)

ASCII code: 33h (Framing error)

ASCII code: 34h (Overrun error)

ASCII code: 35h (Timeout error)

Response Command (from the PC to the Unit)

The unit will start command processing after sending the ACK response.

When completing the command processing, the unit will send the response command.

Refer to the following command list on the following pages for further information.

About the error response

When the unit failed processing the transmission command from the PC, the unit will send the error response to the PC.

Depending on the error type, the error code will be attached to the response command.

A colon (:) is used for dividing the response command and the error code. The following is the syntax of a command with the error code.

Syntax	[STX] [Response command] : [Error code] [ETX]
ASCII code	02h 03h

STX: Indicates the data start. A command shall begin with this prefix "STX" (ASCII code: 02h).

("h" indicates hexadecimal.)

Response command: Designate a response command shown in the command list on the following pages. (When an error code is attached, some commands will be abbreviated.)

Error code: Depending on the error type, the error code will be attached to the response command. A colon (:) will be inserted between the response command and the error code.

ER001: Invalid command (No applicable command)

ER002: Invalid parameter (No applicable parameter)

ER301: Invalid command (Inapplicable operational mode)

ER302: Invalid parameter (Inapplicable operational mode)

ETX: Indicates the data end. A command shall be ended with this prefix "ETX" (ASCII code: 03h).

("h" indicates hexadecimal.)

Command List

Basic Operation

Item	Transmission Command (ASCII)	Response Command (ASCII)	Parameter (ASCII)
Login	CMD:Wooooo-ppppp	OK NG	oooo=**** User ID (5 digits) pppp=**** Password (5 digits) Note: When the user ID or the password is less than 5 digits, such as "650" for example, enter "00650".
Logout	CMD:HmmLG	ANS:HmmLG	mm=01-32 Monitor number (Enter a monitor number for "mm" on the following pages if there is no particular notation.)
Monitor selection	CMD:HmmMS	ANS:HmmMS	
Camera selection	CMD:HmmCSccc	ANS:HmmCSccc	ccc=001-999 Logical camera number (Display the designated camera picture.) +1 Shift to the next camera input channel -1 Shift to the previous camera input channel Note: When designating logical camera number "5", enter "005" for "ccc".
Tour sequence	CMD:HmmSTnn	ANS:HmmSTnn	nn=01-32 Tour sequence number
Group sequence/ preset	CMD:H00SGnn	ANS:H00SGnn	nn=01-32 Group sequence/preset number
Sequence pause	CMD:HmmSO	ANS:HmmSON	n=0 Release sequence pause n=1 Sequence pause
Sequence stop	CMD:HmmSR	ANS:HmmSR	
Sequence increment (NEXT)	CMD:HmmSI	ANS:HmmSI	Valid only during pausing the tour/group sequence.
Sequence decrement (PREV)	CMD:HmmSD	ANS:HmmSD	Valid only during pausing the tour/group sequence.
Monitor lock	CMD:HmmPR	ANS:HmmPRn	Toggle-type command. The response command shows the current status. n=0 Monitor lock OFF n=1 Monitor lock ON
Alarm history display	CMD:HmmDA	ANS:HmmDAn	Toggle-type command. The response command shows the current status. n=0 Alarm history display OFF n=1 Alarm history display ON

Item	Transmission Command (ASCII)	Response Command (ASCII)	Parameter (ASCII)
System status display	CMD:HmmDS	ANS:HmmDSn	Toggle-type command. The response command shows the current status. n=0 System status display OFF n=1 System status display ON
OSD ON/OFF (All)	CMD:HmmAL(o)	ANS:HmmALn	Toggle-type command. The response command shows the current status. n=0 OSD OFF n=1 OSD ON n=2 Displays only the information displays set to ON. It is possible to move the OSD position in units of the width of one character by entering the following character for the parameter "o". o=L Move leftward. o=R Move rightward. o=U Move upward. o=D Move downward.
OSD ON/OFF (Time and date info only)	CMD:HmmTM(o)	ANS:HmmTMn	Same parameters as of "OSD ON/OFF (All)" but the parameter "n=2" is unavailable.
OSD ON/OFF (Camera info only)	CMD:HmmTL(o)	ANS:HmmTLn	Same parameters as of "OSD ON/OFF (All)" but the parameter "n=2" is unavailable.
OSD ON/OFF (Event info only)	CMD:HmmTE(o)	ANS:HmmTEn	Same parameters as of "OSD ON/OFF (All)" but the parameter "n=2" is unavailable.
OSD ON/OFF (Monitor info only)	CMD:HmmTO(o)	ANS:HmmTON	Same parameters as of "OSD ON/OFF (All)" but the parameter "n=2" is unavailable.
Time and date settings	CMD:F00 :YYYY:MM:DD: hh:mm:ss	No response command	YYYY=2005-2099 Year MM=01-12 Month DD=01-31 Day hh=00-23 Hour mm=00-59 Minute ss=00-59 Second
Open the setup menu	CMD:HmmSS	ANS:HmmSS	
Close the setup menu	CMD:HmmSE	ANS:HmmSE	
Move the cursor leftward	CMD:AmmJL	No response command	
Move the cursor rightward	CMD:AmmJR	No response command	
Move the cursor upward	CMD:AmmJU	No response command	
Move the cursor downward	CMD:AmmJD	No response command	
Enter the number "0"	CMD:AmmT0	No response command	
Enter the number "1"	CMD:AmmT1	No response command	
Enter the number "2"	CMD:AmmT2	No response command	

Item	Transmission Command (ASCII)	Response Command (ASCII)	Parameter (ASCII)
Enter the number "3"	CMD:AmmT3	No response command	
Enter the number "4"	CMD:AmmT4	No response command	
Enter the number "5"	CMD:AmmT5	No response command	
Enter the number "6"	CMD:AmmT6	No response command	
Enter the number "7"	CMD:AmmT7	No response command	
Enter the number "8"	CMD:AmmT8	No response command	
Enter the number "9"	CMD:AmmT9	No response command	
Move to the lower-level menu	CMD:AmmST	No response command	This command also can be used to determine the entered value.
Move to the higher-level menu	CMD:AmmES	No response command	The setup menu will close when this command is sent while displaying the highest-level menu.
Increment the parameter value	CMD:AmmIN	No response command	
Decrement the parameter value	CMD:AmmDE	No response command	
Delete the entered parameter value	CMD:AmmDL	No response command	
Move to the next page	CMD:AmmP+	No response command	
Move to the previous page	CMD:AmmP-	No response command	

Alarm Control

Item	Transmission Command (ASCII)	Response Command (ASCII)	Parameter (ASCII)
Alarm suspension	MAD	madn	Toggle-type command. The response command shows the current status. N=0 Alarm suspension OFF n=1 Alarm suspension ON
Alarm input	OAlaaaa	No response command	aaaa=Alarm number (Serial alarm) Inputs a serial alarm of the designated number. Note: To input serial alarm 1024, enter "1024" for "aaaa".
Alarm acknowledgment/Alarm individual reset	CMD:HmmAK	ANS:HmmAK	This command works differently depending on the status as follows. In the alarm mode state: Switches into the alarm acknowledged state In the alarm acknowledged state: Resets the selected alarm

Item	Transmission Command (ASCII)	Response Command (ASCII)	Parameter (ASCII)
Alarm monitor reset	CMD:HmmAR	ANS:HmmAR	Resets alarms being input to the designated monitor
Alarm all reset	CMD:H00AA	ANS:H00AA	Resets all alarms being input to the system
Alarm history inquiry	QAD :YYYYMMDDHHMMSS :yyyymmddhhmmss	qad :nnnn :yyyymmddhhmmss :s :tnnnn :mm :ccc :rrr :ee :uuuuu :kk (End of alarm info 1) :yyyymmddhhmmss :s :tnnnn :mm :ccc :rrr :ee :uuuuu :kk (End of alarm info 2) . . . :yyyymmddhhmmss :s :tnnnn :mm :ccc :rrr :ee :uuuuu :kk (End of alarm info n)	Inquire an alarm history by designating the time and date (start and end time and date). • Parameter of the transmission command YYYYMMDDHHMMSS=Start time and date of searching range (near the present time) To inquire the latest alarm history, enter "9999999999999999" for "YYYYMMDDHHMMSS". yyyymmddhhmmss=End time and date of the search range (further from the present time) To inquire the earliest alarm history, enter "0000000000000000" for "yyyymmddhhmmss". • Parameter of the response command nnnn=0000-1000 Search result number yyyymmdd=year/month/day hhmmss=hour/minute/second s=0 Daylight saving time/summer time OFF s=1 Daylight saving time/summer time ON tnnnn=T0001-T0256 Terminal alarm tnnnn=C0001-C0999 Camera alarm tnnnn=R0001-R0999 Recorder alarm tnnnn=V0001-V0999 Video loss tnnnn=S0001-S1024 Serial alarm mm=01-32 Monitor number ccc=001-999 Logical camera number (Spot) ccc=T01-T99 Tour sequence number ccc=G01-G99 Group sequence number rrr=001-999 Recording source (LCN) ee=00 Alarm occurrence ee=01 Alarm reset ee=02 Alarm all reset ee=03 Alarm suspension ON ee=04 Alarm suspension OFF ee=05 Power of the unit ON ee=06 Power of the unit OFF uuuuu=User ID (5 digits) kk=01-32 Terminal mode controller (K1-1-K1-4.....K8-1-K8-4) kk=33 PS-Data mode controller (PSD) kk=37 PC When the state is other than above, the parameter of the response command will be the number "0".

Camera/Receiver Operation

Item	Transmission Command (ASCII)	Response Command (ASCII)	Parameter (ASCII)
Pan/Tilt	CMD:CmmPTcccxyy	No response command	ccc=001-999 Logical camera number xx=00h-C0h Panning speed yy=00h-C0h Tilting speed 00h Stop panning/tilting 01h-40h Upward/rightward (40h: fastest, 01h: slowest) 81h-C0h Downward/leftward (81h: fastest, C0h: slowest) "h" indicates hexadecimal.
Zoom	CMD:CmmZMcccn	No response command	ccc=001-999 Logical camera number nn=00h Stop zooming nn=10h-13h TELE (13h: maximum zoom speed, 10h: minimum zoom speed) nn=10h-13h WIDE (13h: maximum zoom speed, 10h: minimum zoom speed) "h" indicates hexadecimal.
Focus	CMD:CmmFCcccn	No response command	ccc=001-999 Logical camera number nn=00h Stop focusing nn=10h-13h NEAR (13h: maximum, focus speed 10h: minimum focus speed) nn=20h-23h FAR (23h: maximum, 20h: minimum focus speed) "h" indicates hexadecimal.
Iris	CMD:CmmIRcccn	No response command	ccc=001-999 Logical camera number nn=00h Stop iris adjustment nn=10h-13h OPEN (13h: maximum, iris speed 10h: minimum iris speed) nn=20h-23h CLOSE (23h: maximum, iris speed 20h: minimum iris speed) "h" indicates hexadecimal.
Camera setup menu	CMD:CmmCMcccn	No response command	ccc= 001-999 Logical camera number n=0 Camera setup menu display OFF n=1 Camera setup menu display ON It is possible to operate the camera setup menu using the commands used to operate the setup menu of this unit when the camera is selected. The available commands for the camera setup menu operations are as follows. CMD:AmmJL Move the cursor leftward CMD:AmmJR Move the cursor rightward CMD:AmmJU Move the cursor upward CMD:AmmJD Move the cursor downward CMD:AmmST Move to the lower-level menu CMD:AmmES Move to the higher-level menu CMD:AmmIN Reset the camera setting CMD:AmmDE Reset all the camera settings

Item	Transmission Command (ASCII)	Response Command (ASCII)	Parameter (ASCII)
Preset position registration	CMD:CmmPSccnnn	No response command	ccc=001-999 Logical camera number nnn=001-256 Preset number
Call a preset position	CMD:CmmPMccccnn	No response command	ccc=001-999 Logical camera number nnn=001-256 Preset number nnn=000 Home position
BW mode switching	CMD:CmmBWcccn	No response command	ccc=001-999 Logical camera number n=0 BW OFF n=1 BW ON n=2 BW AUTO1 n=3 BW AUTO2
Patrol	CMD:CmmPAcccn	No response command	ccc=001-999 Logical camera number n=0 End the patrol setting/stop the active patrol function n=1 Start the patrol function n=2 Start the patrol setting
Auto pan	CMD:CmmAPcccn	No response command	ccc=001-999 Logical camera number n=0 Set the start point of the auto pan function n=1 Set the end point of the auto pan function n=2 Start the reverse panning (Will be rejected when the auto pan function is active.) n=3 Start the auto pan function n=4 Start the auto sort function n=5 Start the auto sequence function
Camera function	CMD:CmmCFccccnnn	No response command	ccc=001-999 Logical camera number nnnn=0001-4096 Camera function number
Wiper	CMD:CmmWPcccn	No response command	ccc=001-999 Logical camera number n=0 Wiper OFF n=1 Wiper ON When the wiper function starts (ON), the wiper function will automatically stop after for around 20 seconds.
Defroster	CMD:CmmDFcccn	No response command	ccc=001-999 Logical camera number n=0 Defroster OFF n=1 Defroster ON When the defroster function starts (ON), the defroster function will automatically stop after for a few minutes.
Aux 1	CMD:CmmA1cccn	No response command	ccc=001-999 Logical camera number n=0 Aux 1 OFF n=1 Aux 1 ON (Applicable only when the camera or receiver is in the latch mode.)
Aux 2	CMD:CmmA2cccn	No response command	ccc=001-999 Logical camera number n=0 Aux 2 OFF n=1 Aux 2 ON (Applicable only when the camera or receiver is in the latch mode.)
Recorder selection	CMD:HmmRSnn	ANS:HmmRSnn	nn=01 Recorder 1 "Select recorder 1." nn=02 Recorder 2 "Select recorder 2." nn=16 Recorder 16 "Select recorder 16."

Recorder Operation

Item	Transmission Command (ASCII)	Response Command (ASCII)	Parameter (ASCII)
Disk selection*	CMD:RmmDSn	ANS:RmmDS	n=0 HDD normal recording area/Event recording area n=1 HDD copy area n=2 Media connected to COPY1 n=3 Media connected to COPY2 * Not available for WJ-RT416 Series
Playback	CMD:RmmPL	ANS:RmmPL	
Pause playback	CMD:RmmPA	ANS:RmmPA	
Stop (playback/recording)*	CMD:RmmSPn	ANS:RmmSPn	n=0 Stop playback n=1 Stop recording n=V Stop the VMD search * "Stop the VMD search" is not available for WJ-RT416 Series
Fast forward	CMD:RmmFF	ANS:RmmFF	
Fast reverse	CMD:RmmRW	ANS:RmmRW	
Skip to the next frame	CMD:RmmFA	ANS:RmmFA	
Skip to the previous frame	CMD:RmmRA	ANS:RmmRA	
Skip to the next record	CMD:RmmFK	ANS:RmmFK	
Skip to the previous record	CMD:RmmRK	ANS:RmmRK	
Marking*	CMD:RmmMP	ANS:RmmMP	* Not available for WJ-RT416 Series
Play the latest recorded image*	CMD:RmmPM	ANS:RmmPM	* Not available for WJ-RT416 Series
Manual recording	CMD:RmmRC	ANS:RmmRC	
Display the search list	CMD:RmmSC	ANS:RmmSC	Toggle-type command. It is possible to switch each search window in the same way of pressing the SEARCH button on the front panel of the recorder. Use the following commands to operate the search windows of the recorder. CMD:AmmSE Close the search window CMD:AmmJL Move the cursor leftward CMD:AmmJR Move the cursor rightward CMD:AmmJU Move the cursor upward CMD:AmmJD Move the cursor downward CMD:AmmST Select an item CMD:AmmIN Change the parameter (+1) Move the cursor rightward in the input field (When using WJ-RT416 Series) CMD:AmmDE Change the parameter (-1) Move the cursor leftward in the input field (When using WJ-RT416 Series) CMD:AmmP+ Go to the next page* CMD:AmmP- Go back to the previous page* * Not available for WJ-RT416 Series The following commands are available only for WJ-RT416 Series. CMD:AmmT0 Numeric input "0"

Item	Transmission Command (ASCII)	Response Command (ASCII)	Parameter (ASCII)
			CMD:AmmT1 Numeric input "1" CMD:AmmT2 Numeric input "2" CMD:AmmT3 Numeric input "3" CMD:AmmT4 Numeric input "4" CMD:AmmT5 Numeric input "5" CMD:AmmT6 Numeric input "6" CMD:AmmT7 Numeric input "7" CMD:AmmT8 Numeric input "8" CMD:AmmT9 Numeric input "9"
List/Thumbnail switching*	CMD:RmmTN	ANS:RmmTN	Toggle-type command. (Switch between the list window and the thumbnail window) * Not available for WJ-RT416 Series
Display the DATA COPY window	CMD:RmmPD	ANS:RmmPD	Available only when the list window is displayed
Text information display*	CMD:RmmDT	ANS:RmmDT	Available only when the list window is displayed * Not available for WJ-RT416 Series
Sequential display	CMD:HmmST00	ANS:HmmST00	
Multi-screen selection*	CMD:RmmMLn	ANS:RmmML	n=0 4-split screen n=1 7-split screen n=2 9-split screen n=3 10-split screen n=4 13-split screen n=5 16-split screen When the transmission command is sent without the parameter, the multi-screen will be toggled. The multi-screen to be displayed differs according to the recorder in use. * When using WJ-RT416 Series, the parameter cannot be specified.
Electronic zoom*	CMD:RmmZM	ANS:RmmZMn	Toggle type command. It is possible to change the zooming level in the same way of pressing the EL-ZOOM button on the front panel of the recorder. When an image is zoomed, it is possible to move the zoomed image using the following commands. CMD:AmmJL Move the zoomed image leftward CMD:AmmJR Move the zoomed image rightward CMD:AmmJU Move the zoomed image upward CMD:AmmJD Move the zoomed image downward * Not available for WJ-RT416 Series
A-B repeat playback*	CMD:RmmRPn	ANS:RmmRP	n=0 Cancel n=1 Set the start point (point A) n=2 Set the end point (point B) * Not available for WJ-RT416 Series
Filtering*	CMD:RmmLTn	ANS:RmmLT	n=0 Filtering ON n=1 Filtering OFF * Not available for WJ-RT416 Series
Recorder OSD ON/OFF*	CMD:RmmDI	ANS:RmmDI	The displayed OSD will be switched (toggle-type) each time the command is transmitted. * Not available for WJ-RT416 Series

Item	Transmission Command (ASCII)	Response Command (ASCII)	Parameter (ASCII)
Recorder setup menu	CMD:HmmSS	ANS:HmmSS	<p>It is possible to operate the recorder setup menu using the commands used to operate the setup menu of this unit when the recorder is selected.</p> <p>The available commands for the recorder setup menu operations are as follows.</p> <p>CMD:AmmSE Close the setup menu</p> <p>CMD:AmmJL Move the cursor leftward</p> <p>CMD:AmmJR Move the cursor rightward</p> <p>CMD:AmmJU Move the cursor upward</p> <p>CMD:AmmJD Move the cursor downward</p> <p>CMD:AmmST Move to the lower-level menu</p> <p>CMD:AmmES Move to the higher-level menu</p> <p>CMD:AmmIN Increment the parameter value</p> <p>Move the cursor rightward in the input field (When using WJ-RT416 Series)</p> <p>CMD:AmmDE Decrement the parameter value.</p> <p>Move the cursor leftward in the input field (When using WJ-RT416 Series)</p> <p>CMD:AmmP+ Move to the next page*</p> <p>CMD:AmmP- Move to the previous page*</p> <p>* Not available for WJ-RT416 Series</p>
Copy completion	CMD:RmmUMn	ANS:RmmUM	<p>n=0 To eject the disk of COPY1</p> <p>n=1 To eject the disk of COPY2</p> <p>* Not available for WJ-RT416 Series</p>

MONITOR OUT1 (of the WJ-HD300 Series) Control

Notes:

- The following commands are available only when a monitor is connected to the MONITOR OUT 1 connector of the recorder.
- The following commands are not available for WJ-RT416 Series.

Item	Transmission Command (ASCII)	Response Command (ASCII)	Parameter (ASCII)
Camera selection	CMD:RmmLCccc	ANS:HmmLCccc	<p>ccc=001-999 Logical camera number (Switch images from the camera of the designated logical camera number)</p> <p>ccc=+1 Logical camera number (+1) (To the next camera number)</p> <p>ccc=-1 Logical camera number (-1) (To the previous camera number)</p> <p>Important:</p> <p>When the parameter "+1" or "-1" is used, the cameras connected to the recorder will be switched.</p>
Sequential display	CMD:RmmLS	ANS:HmmLS	

Item	Transmission Command (ASCII)	Response Command (ASCII)	Parameter (ASCII)
Multi-screen selection	CMD:RmmLMn	ANS:RmmLM	n=0 4-split screen n=1 7-split screen n=2 9-split screen n=3 10-split screen n=4 13-split screen n=5 16-split screen When the transmission command is sent without the parameter, the multi-screen will be toggled. The multi-screen to be displayed differs according to the settings of the recorder in use.
Electronic zoom	CMD:RmmLZ	ANS:RmmLZ	Toggle-type command. It is possible to change the zooming level in the same way of pressing the EL-ZOOM button on the front panel of the recorder. When an image is zoomed, it is possible to move the zoomed image using the following commands. CMD:RmmLL Move the zoomed image leftward CMD:RmmLR Move the zoomed image rightward CMD:RmmLU Move the zoomed image upward CMD:RmmLD Move the zoomed image downward
Recorder OSD ON/OFF	CMD:RmmLI	ANS:RmmLI	The displayed OSD will be switched (toggle-type) each time the command is transmitted.
Model number	QID	qid:WJ-SX650	
Software version	QRV	qrv:.* */.* **	Each version of video output board 1 and 2 are divided by the slash (/). When video output board 2 is not installed, only the version of video output board 1 will be acquired.
Monitor busy status	CMD:PN	When the monitor status is not busy: ANS:HNmmmR When the monitor status is busy: ANS:HNmmmB ANS:HN000R	When the monitor status is not busy, "mmm" indicates the monitor number selected by the PC. When the monitor status is busy, "mmm" indicates that the monitor number selected by the PC, whose status is busy. This response command will be sent back when the monitor number is not selected.
Camera busy status	CMD:PC	When the camera status is not busy: ANS:HCcccR When the camera status is busy: ANS:HCcccB ANS:HC000R	When the camera status is not busy, "ccc" indicates the monitor number selected by the PC. When the camera status is busy, "ccc" indicates that the monitor number selected by the PC, whose status is busy. This response command will be sent back when the camera number is not selected.

Status Inquiry

Item	Transmission Command (ASCII)	Response Command (ASCII)	Parameter (ASCII)
Recorder status	QHS	qhs:p:r:s:m	<p>This command will be acceptable only when the recorder is selected.</p> <p>p=0 Being transferring live images p=1 Playback is being performed ("play-back is being paused" included)</p> <p>r=0 Recording is being stopped r=1 Recording is being performed</p> <p>s=0 Search window display OFF s=1 Search window display ON</p> <p>m=0 SETUP MENU display OFF m=1 SETUP MENU display ON</p>
System status	QSS	<p>qss</p> <p>:YYYYMMDDhhmmss:s (End of the time stamp)</p> <p>:mm:ccc:MMM:A:</p> <p>kk:oooo:pp:l (End of the monitor info 1)</p> <p>...</p> <p>:mm:ccc:MMM:A:</p> <p>kk:oooo:pp:l (End of the monitor info 32)</p>	<p>• Time stamp YYYYMMDDhhmmss</p> <p>s=0 Daylight saving time/summer time OFF s=1 Daylight saving time/summer time ON</p> <p>• Monitor info</p> <p>mm=01-32 Monitor number ccc=001-999 Logical camera number ccc=R01-R16 Recorder number MMM=000 Spot MMM=101-132 Tour sequence 1-32 MMM=201-232 Group sequence 1-32 MMM=300 Recorder selection MMM=400 SETUP MENU (of this unit) display MMM=500 Camera setup menu display MMM=600 Alarm history display</p> <p>A=0 No alarm A=1 In the alarm mode state A=2 In the alarm acknowledged state</p> <p>kk=01-32 Terminal mode controller (K1-1-K1-4.....K8-1-K8-4) kk=33 PS>Data mode controller (PSD) kOk=37 PC</p> <p>Oooooo=00001-99999 User ID ooooo=/T001-/T128 Timer event ----- Not applicable pp= 01-99 Priority l=0 Monitor lock OFF l=1 Monitor lock ON</p> <p>When the state is other than above, the parameter of the response command will be the number "0". When no optional video output board is installed (one video output board is installed), the number "0" will be displayed for monitor info 17-32.</p>

Item	Transmission Command (ASCII)	Response Command (ASCII)	Parameter (ASCII)
System status history	QSL (:1)	qsl YYMMDDhhmmss:s (End of the time stamp 1) :mm:ccc:MMM:A:kk: ooooo:pp:l (End of the monitor info 1) :... :mm:ccc:MMM:A:kk: ooooo:pp:l (End of the monitor info 32) :YYMMDDhhmmss:s (End of the time stamp 2) :mm:ccc:MMM:A:kk: ooooo:pp:l (End of the monitor info 1) :... :mm:ccc:MMM:A:kk: ooooo:pp:l (End of the monitor info 32) ... :YYMMDDhhmmss:s (End of the time stamp 99) :mm:ccc:MMM:A:kk: ooooo:pp:l (End of the monitor info 1) :... :mm:ccc:MMM:A:kk: ooooo:pp:l (End of the monitor info 32)	Only the not inquired system status histories can be acquired. When number of the system status histories is less than 100, supposing that 60 system status histories are not inquired, the number "0" will be filled in for the time stamp 61-100 and the respective monitor info. It is possible to acquire 100 histories by attaching the parameter ":1". The parameters of the response command are the same as of "QSS".
Input/output board status	QBD	qbd:O ₁ O ₂ :I ₁ I ₂ I ₃ I ₄ I ₅ I ₆ I ₇ I ₈	O ₁ =0 Video output board 1 Not installed O ₁ =1 Video output board 1 Installed O ₂ =0 Video output board 2 Not installed O ₂ =1 Video output board 2 Installed I ₁ =0 Video input board 1 Not installed I ₁ =1 Video input board 1 Installed I ₈ =0 Video input board 8 Not installed I ₈ =1 Video input board 8 Installed
Time and date	CMD:F01	ANS:F01 :YYYY:MM :DD:hh :mm:ss	YYYY=2005-2099 Year MM=01-12 Month DD=01-31 Day hh=00-23 Hour mm=00-59 Minute ss=00-59 Second

Notifications from the unit (without inquiry by the transmission commands)

Item	Transmission Command (ASCII)	Response Command (ASCII)	Parameter (ASCII)
Alarm output	No transmission commands	OAO:N ₁ ...N ₂₅₆	<p>Applicable for alarm output 1-4. The following parameters are for "N".</p> <p>0:0000 No alarm output 1:0001 Alarm output 4 2:0010 Alarm output 3 3:0011 Alarm output 3, 4 4:0100 Alarm output 2 5:0101 Alarm output 2, 4 6:0110 Alarm output 2, 3 7:0111 Alarm output 2, 3, 4 8:1000 Alarm output 1 9:1001 Alarm output 1, 4 A:1010 Alarm output 1, 3 B:1011 Alarm output 1, 3, 4 C:1100 Alarm output 1, 2 D:1101 Alarm output 1, 2, 4 E:1110 Alarm output 1, 2, 3 F:1111 Alarm output 1, 2, 3, 4</p> <p>When "OAO:F₁...F₂₅₆" is sent, 1024 alarms can be sent simultaneously.</p> <p>When "OAO:0₁...0₂₅₆" is sent, all alarms will be reset.</p>
Alarm notification	No transmission command	ALM :yyyymmddhhmmss :s :tnnnn :mm :ccc :rrr :ee :uuuuu :kk	<p>The parameters are the same as of "QAD", however, the parameter "ee=06" (Power of the unit OFF) will not be sent.</p> <p>Important:</p> <ul style="list-style-type: none"> This response command will be sent only when "ON" is selected for "Alarm Notification" on the setting page of "Serial Command" (under "Communication") of the "WJ-SX650 Series Administrator Console". This response command will be sent each time the alarm state changes.
System status notification (Periodical transmission in 1-60 seconds intervals)	No transmission command	qss : Time stamp : Monitor info 1 ... : Monitor info 32	<p>The parameters are the same as of "QSS".</p> <p>Important:</p> <ul style="list-style-type: none"> This response command will be sent only when "ON" is selected for "System Status Notification" on the setting page of "Serial Command" (under "Communication") of the "WJ-SX650 Series Administrator Console". It is recommended to set 5 seconds or more for "System Status Notification" ("Communication" - "Serial Command").

