



MERIDIAN

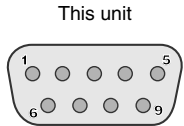
MF10

1080p High Definition Projector—RS232 information

RS-232C Interface

Control of this unit via a computer is possible by connecting the computer to this unit with a RS-232C cross cable (D-Sub 9 pin).

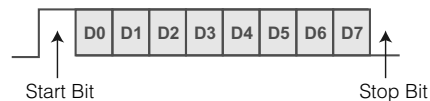
RS-232C Specifications



Pin No.	Signal	Operation	Signal Direction
2	RxD	Receive data	This unit ← PC
3	TxD	Transmit data	This unit → PC
5	GND	Signal ground	—
1, 4, 6 – 9	N/C	—	—

● PC refers to the controller such as a personal computer.

Mode	Non-synchronous
Character Length	8 bit
Parity	None
Start Bit	1
Stop Bit	1
Data Rate	19200 bps
Data Format	Binary



Command Format

The command between this unit and the computer consists of “Header”, “Unit ID”, “Command”, “Data” and “End”.

● Header (1 byte), Unit ID (2 bytes), Command (2 bytes), Data (n bytes), End (1 byte)

■ Header


This binary code indicates the start of communication.

Binary code	Type	Description
21	Operating command	PC → This unit
3F	Reference command	PC → This unit
40	Response command	This unit → PC
06	ACK	This unit → PC (When the command is accepted without error, it returns to PC)

■ Unit ID

This code specifies the unit. The binary code is fixed at “8901”.

Operating command and data (Binary code)

Command	Type	Data description
0000	Connection check	Checks whether communication is available between this unit and the PC during standby.
5057	Power supply	During standby 31 : Turns on the power. During power on 30 : Turns off the power. (Standby mode)
4950	Input	During power on 30 : S-VIDEO 31 : VIDEO 32 : COMP. 36 : HDMI 1 37 : HDMI 2
4754	Gamma table	During power on 30 : Switches to "Normal". 31 : Switches to "Theater1". 32 : Switches to "Theater2". 33 : Switches to "Dynamic". 34 : Switches to "Custom".
4750	Gamma coefficient	30 : 1.8 35 : 2.3 31 : 1.9 36 : 2.4 32 : 2.0 37 : 2.5 33 : 2.1 38 : 2.6 34 : 2.2
4752	Gamma data (R)	Sets the gradation (0 ~ 1023) of the output signal in hexadecimal. The data is 16 bit (2 byte) with the 2 byte data in the high/low order.
4747	Gamma data (G)	Same as gamma data (R).
4742	Gamma data (B)	Same as gamma data (R).
5453	Test pattern	During power on 30 : Do not display. 36 : Displays staircase (gray).
5243	Remote Control	Sends the same code as the supplied remote control. ● "Remote control code" ( P47)

Command	Type	Data description
5057	Power supply	During standby or power on 30 : Standby mode 31 : Power-on mode 32 : During Cool Down mode 34 : Warning mode
4950	Input	During power on 30 : S-VIDEO 31 : VIDEO 32 : COMP. 36 : HDMI 1 37 : HDMI 2
4754	Gamma table	During power on 30 : "Normal" 31 : "Theater1" 32 : "Theater2" 33 : "Dynamic" 34 : "Custom"
4750	Gamma coefficient	30 : 1.8 35 : 2.3 31 : 1.9 36 : 2.4 32 : 2.0 37 : 2.5 33 : 2.1 38 : 2.6 34 : 2.2
4752	Gamma data (R)	Gradation of the output signal (0 ~ 1023)
4747	Gamma data (G)	Gradation of the output signal (0 ~ 1023)
4742	Gamma data (B)	Gradation of the output signal (0 ~ 1023)
5453	Test pattern	During power on 30 : Do not display. 36 : Staircase (gray).

■ End

This code indicates the end of communication. The binary code is fixed at "0A".

ADDENDUM:

Vertical Stretch command (On/Off) – Allows 2.35:1 images to use the entire D-ILA display area in conjunction with a third-party amorphic lens.

PC → This unit:

V-Stretch (On): 21 89 01 5653 31 0A

V-Stretch (Off): 21 89 01 5653 30 0A

■ Operating command

Type	Command	Description
Connection check	PC → This unit: 21 89 01 00 00 0A This unit → PC: 06 89 01 00 00 0A	Checks connection
Power (On)	PC → This unit: 21 89 01 50 57 31 0A This unit → PC: 06 89 01 50 57 0A	When power is turned on from standby mode
Power (Off)	PC → This unit: 21 89 01 50 57 30 0A This unit → PC: 06 89 01 50 57 0A	When power is turned off (standby mode) from power-on mode
Input (COMP.)	PC → This unit: 21 89 01 49 50 32 0A This unit → PC: 06 89 01 49 50 0A	When video input is set to component
Remote Control (MENU)	PC → This unit: 21 89 01 52 43 37 33 32 45 0A This unit → PC: 06 89 01 52 43 0A	When the same operation as pressing the [MENU] button on the remote control is made
Gamma table (Custom)	PC → This unit: 21 89 01 47 54 34 0A This unit → PC: 06 89 01 47 54 0A	When switched to “Custom”
Gamma coefficient (1.8)	PC → This unit: 21 89 01 47 50 30 0A This unit → PC: 06 89 01 47 50 0A	When set to “1.8”
Gamma data (R)	PC → This unit: 21 89 01 47 52 0A This unit → PC: 06 89 01 47 52 0A PC → This unit: 512 bytes of gamma data This unit → PC: 06 89 01 47 52 0A	When the red gamma data is set
Test pattern (Staircase)	PC → This unit: 21 89 01 54 53 36 0A This unit → PC: 06 89 01 54 53 0A	When staircase (gray) is set

■ Reference command

Type	Command	Description
Power (On)	PC → This unit: 3F 89 01 50 57 0A This unit → PC: 06 89 01 50 57 0A This unit → PC: 40 89 01 50 57 31 0A	When information on power-on mode is acquired
Input (S-VIDEO)	PC → This unit: 3F 89 01 49 50 0A This unit → PC: 06 89 01 49 50 0A This unit → PC: 40 89 01 49 50 30 0A	When information on S-VIDEO input is acquired
Gamma table (Custom)	PC → This unit: 3F 89 01 47 54 0A This unit → PC: 06 89 01 47 54 0A This unit → PC: 40 89 01 47 54 34 0A	When information on “Custom” is acquired
Gamma coefficient (1.8)	PC → This unit: 3F 89 01 47 50 0A This unit → PC: 06 89 01 47 50 0A This unit → PC: 40 89 01 47 50 30 0A	When information on “1.8” is acquired
Gamma data (R)	PC → This unit: 3F 89 01 47 52 0A This unit → PC: 06 89 01 47 52 0A This unit → PC: 512 bytes of gamma data	When information on red gamma data is acquired
Test pattern (Staircase)	PC → This unit: 3F 89 01 54 53 0A This unit → PC: 06 89 01 54 53 0A This unit → PC: 40 89 01 54 53 36 0A	When information on staircase (gray) is acquired