

SONY

SRP-X351P

RS-232C Protocol Manual

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1 Outline

This manual describes technical information necessary to control the SRP-X351P via the 9 pin RS-232C port. It is intended solely for users of the SRP-X351P.

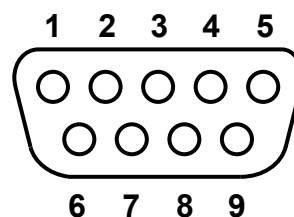
Hexadecimal numbers are shown in italics with an "H" suffix.

Example: 18 (decimal) = 12H (hexadecimal)

2 Physical Connection

The SRP-X351P uses a D-Sub9 male connector for communication via RS-232C. The pin assignments are shown below:

1	N.C.
2	TXD (Input to SRP-x300)
3	RXD (Output from SRP-x300)
4	Connected to 6 in SRP-x300
5	GND
6	Connected to 4 in SRP-x300
7	Connected to 8 in SRP-x300
8	Connected to 7 in SRP-x300
9	N.C.



Communication settings for RS-232C

The SRP-X351P uses the following communication settings:

Communication mode	:	half duplex mode (asynchronous)
Character length	:	8bit
Parity	:	odd parity
Stop bit length	:	1bit
Bit order	:	LSB first
Baud rate	:	9600bps

3 Provisions for communication

Acknowledge (ACK) , No Acknowledge (NAK)

When the SRP-X351P receives a defined command, it transmits ACK and when the

SRP-X351P can not receive a command normally, it transmits NAK.

Commands

The controller should transmit a command after receiving ACK or NAK.

Time out (1)

When there is no response from the SRP-X351P after 100ms of sending a command, the controller should transmit the same command again.

Time out (2)

The controller should transmit a command within 500ms. When the controller transmits a command in more than 500ms, the SRP-X351P send back NAK with no handling a command.

NAK

When the controller receives NAK during transmitting a command, the controller should stop transmission of commands immediately.

Handshake

Communication is done by handshake. The Control line of the RS-232C must be used for communication.

4 Command List

ACK (0AH)

NAK (0BH)

When the SRP-X351P can not receive a command normally, this command is sent with 1 byte variable describing the error:

NAK (0BH) TIME OUT (02H)

When the SRP-X351P can not receive DELIMITA (B1H) from the controller within 500ms receiving command, this command is sent.

NAK (0BH) ERROR (04H)

When there is communication error of RS-232C (Parity error, Framing error, Over run error), this command is sent.

NAK (0BH) NOT FIND (05H)

When the SRP-X351P receives an undefined command, this command is sent after receiving DELIMITA (*B1H*).

ST3 Input Selection

ST3 SELECT INPUT A (*11H 80H 20H B1H*)

INPUT A of ST3 is selected.

ST3 SELECT INPUT B (*11H 80H 21H B1H*)

INPUT B of ST3 is selected.

ST3 SELECT INPUT C (*11H 80H 22H B1H*)

INPUT C of ST3 is selected.

ST3 SELECT INPUT D (*11H 80H 23H B1H*)

INPUT D of ST3 is selected.

Output MUTE

MUTE OFF (*11H 81H 20H B1H*)

Muting function of the SRP-X351P is released.

MUTE ON (*11H 81H 21H B1H*)

Muting function of the SRP-X351P is active.

Master Volume

MASTER VOLUME DOWN (*11H 82H 20H B1H*)

Master volume level is decreased.

MASTER VOLUME UP (*11H 82H 21H B1H*)

Master volume level is increased.

MASTER VOLUME STOP (*11H 82H 22H B1H*)

Master volume level remains in its position.