

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.

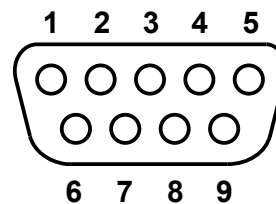
Hexadecimal numbers are shown in italics with an "H" suffix.

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.