

**AV-HS6000-Protocol**

Live Switcher AV-HS6000  
Interface Specifications

**Network Control Protocol  
(AUX\_IP)**

Document No.  
Version 1.00  
Apr. 22. 2015

AVC Networks Company  
Panasonic Corporation

Date	Description	Version
Apr. 22. 2015	Issued the first edition.	1.00

- 1. INTRODUCTION .....3**
- 2. ABOUT COMMUNICATION.....3**
- 3. PROCESS IN EVERY FIELD .....3**
- 4. LIST OF COMMAND.....4**
  - 4.1 COMMAND RELATED TO XPT ..... 5
    - SBUS ..... 5
  - 4.2 COMMAND RELATED TO TRANSITION..... 6
    - SAUT ..... 6
    - ABST ..... 7
    - ATST ..... 8
    - SPAT ..... 9

## 1. Introduction

This document explains the protocol for Remote Control Panels(AUX Panel) for AV-HS6000 (2ME Live Switcher). (Protocol between AV-HS6000 and the AUX Panel.)

The communication specification is based on TCP/IP or UDP/IP.

1 packet starts from [STX]0x02 and ends with [ETX]0x03.

Command consist of 4character followed by : (colon).

There is the case multiple data will be sent , still each data is colon-delimited.

Numerical data is sent in ascii format.

## 2. About Communication

### Communication between AUX Panel and AV-HS6000

It is possible to change IP address with AV-HS6000 menu to use port (LAN side) of AV-HS6000.

IP adores of AUX Panel should be assigned correctly according to IP address domain of AV-HS6000.

Communication between AUX Panel – AV-HS6000 will be changed TCP/IP or UDP/IP depends on contents.

TCP/IP: Port 60020:AUX Panel -> AV-HS6000 [XPT switch, AUTO execution]

UDP/IP: Port 60020:AV-HS6000 -> AUX Panel [Tally, XPT status]

## 3. Process in every field

### 1) AV-HS6000

AV-HS6000 sends following two commands to AUX Panel on regular interval.

ABST command (Status of XPT and Tally on each buses.)

ATST command (Status of transition.)

SPAT command (Status of AUX or PinP transition pattern.)

### 2) AUX Panel

AUX Panel should send SPAT command (Parameter1:0, Parameter2:00) on every 500m sec interval. Because AV-HS6000 needs to know if AUX Panel is connected and working.

But AV-HS6000 doesn't send response to SPAT command.

## 4. List of Command

\*\*Communication path REMt is the command which can be used for AUX Panel to AV-HS6000 via TCP/IP.

REMu is the command which can be used for AV-HS6000 to AUX Panel via UDP/IP.

### Command related to XPT

No	Command	Function	Communication Path
	SBUS	Selecting bus	REMt

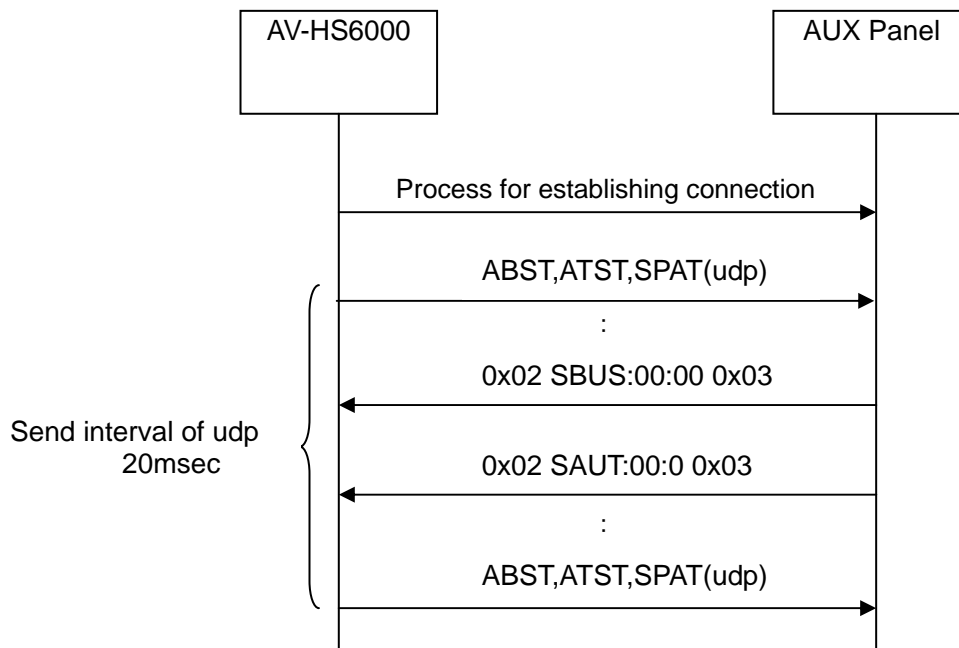
### Command related to Transition

No	Command	Function	Communication Path
	SAUT	Setting AUTO transition (activating trigger on)	REMt
	ABST	Reply of bus status (XPT status is returned)	REMu
	ATST	Reply of AUTO transition status	REMu
	SPAT	Setting or reply of transition pattern	REMt

### Command Sequence

AV-HS6000 start sending udp after establishing connection between AV-HS6000 and AUX Panel. After establishing connection, AUX Panel send SBUS,SAUT,SPAT commands.

The example of communication sequence is shown below.



## 4.1 Command related to XPT

No	Command	Function
	SBUS	Selecting bus

## 【No of Parameter】

2

## 【Parameter】

Parameter 1: Bus selection

00	PGM/A
01	PST/B
02	PGM/A
03	PST/B
04	KEY (KEY-F)
05	KEY (KEY-S)
06	DSK1 (DSK1-F)
07	DSK1 (DSK1-S)
08	DSK2 (DSK2-F)
09	DSK2 (DSK2-S)
10	PinP1
11	PinP2
12	AUX1
13	AUX2
14	AUX3
15	AUX4

Parameter 2: Source

00	XPT1
~	
31	XPT32
50	INPUT1
~	
69	INPUT20
77	PGM
78	PVW

## 【Function】

- Setting of bus selection.
- Work in normal XPT switching process

## 【Notes】

None

## 4.2 Command related to Transition

No	Command	Function
	SAUT	Setting AUTO transition (activating trigger on)

**【No of Parameter】**

2

**【Parameter】**

Parameter 1: Setting of the target for transition effect

00	BKGD
01	KEY
02	DSK1
03	DSK2
04	PinP1
05	PinP2

**【Parameter】**

Parameter 1: Setting of operation

0	Activating trigger on (when AUTO button is pressed)
---	---

**【Function】**

- Setting of AUTO transition. (Issue of trigger)
- Work in normal XPT switching process

**【Notes】**

None

No	Command	Function
	ABST	Reply of bus status (XPT status is returned)

**【No of Parameter】**

3

**【Parameter】**

Parameter 1: Bus selection

00	A bus (On the panel in every mode setting)
01	B bus (Under the panel in every mode setting)
02	PGM (PGM in every mode setting)
03	PVW (PVW in every mode setting)
04	KEY-F
05	KEY-S
06	DSK1-F
07	DSK2-S
08	DSK2-F
09	DSK2-S
10	PinP1
11	PinP2
12	AUX1 (destination bus of AUX1 transition)
13	AUX2
14	AUX3
15	AUX4
16	AUX1S (source bus of AUX1 transition)

Parameter 2:XPT

00	XPT1
~	
31	XPT32
99	No selection

Parameter 3:Tally

0	Tally Off
1	Tally On

**【Function】**

- AV-HS6000 returns XPT status of each bus.

AUX Panel can get status of AV-HS6000 using this command.

**【Notes】**

None



No	Command	Function
	ATST	Reply of AUTO transition status

**【No of Parameter】**

2

**【Parameter】**

Parameter 1: Setting of the target

0	BKGD
1	-
2	-
3	-
4	-
5	-
6	-
7	AUX
8	-
9	-

Parameter 2: Status

00	Stop off
01	Pause (BKGD only)
02	Transition running

**【Function】**

- Response of AUTO transition status.

**【Notes】**

AV-HS6000 sends ATST command to AUX Panel on regular interval..

(1) In case of PGM/A, PST/B selection (AUX Panel)

- Parameter 1- 0: BKGD

- Parameter 2-00 :Stop, 01:Pause, 02:Transition running

(2) In case of AUX1,PinP1,PinP2 selection (AUX Panel)

- Parameter 1- 7:AUX

- Parameter 2-00 :Stop, 02: Transition running

No	Command	Function
	SPAT	Setting or reply of transition pattern

【No of Parameter】

2

【Parameter】

Parameter 1: Target

0	-
1	-
2	AUX1

Parameter 2: Pattern

Parameter 1: 2 (AUX1, PiP1, PinP2)	
000	CUT (AUX Transition Off)
001	MIX (AUX Transition On)

【Function】

- Setting or reply of transition pattern

【Notes】

None

End