SERIAL/LAN command list
MODEL : TH-86/75/65/55/50/43CQ1U

2019/7/12

Panasonic Corporation

TYPE	Function	Control Command			Inquiry Command			Range and kind of parameter Call-back	Explanation
		Transmission Command [:Parameters]	Reception Command [:Parameters]	Standby	Transmission Command [:Parameters]	Reception Command [:Parameters]	Standby		
Basic Control	Power ON	PON	PON	Avail	-	-	-		
	Power OFF	POF	POF	-	-	-	-		
	Power Status	-	-	-	QPW	QPW:*	Avail	0 / 1	0 : Standby (Off) <include power save mode On/Off> 1 : Power ON (On)
	Input Change	IMS (:***)	IMS	Not avail	QMI	QMI:***	Not avail	Control:(Toggle) TV1 / HM1 / HM2 / PC1 / UD1 Inqury: TV1 / HM1 / HM2 / PC1 / UD1	TV1 : TV HM1 : HDMI1 HM2 : HDMI2 PC1 : PC UD1 : USB
	Audio Volume	AVL:***	AVL	Not avail	-	-	-	000 - 100	Volume value : 0 ~ 100
	Volume Up	AUU	AUU	Not avail	-	-	-		
	Volume Down	AUD	AUD	Not avail	-	-	-		
	Current Audio Volume	-	-	-	QAV	QAV:***	Not avail	000 - 100	Volume value : 0 ~ 100
	Audio Mute	AMT (:*)	AMT	Not avail	QAM	QAM: *	Not avail	Control:(Toggle) 0 / 1	Toggle (Audio mute Off) / (Audio mute On)
	Aspect Change	DAM:****	DAM	Not avail	QAS	QAS:****	Not avail	FULL / NORM / NATV / ZOOM	FULL / NORMAL / NATIVE(Dot by Dot) / ZOOM
TV Control	TV Channel Up	STV:CUP	STV	Not avail	-	-	Not avail		
	TV Channel Down	STV:CDN	STV	Not avail	-	-	Not avail		
	Analog TV channel direct	STV:AGC * ***	STV	Not avail	QTV:AGC	QTV:AGC * ***	Not avail	0:Air 1:Cable Air:002-069 Cable:001-135	Setting of the anntena type Ch number
	Digial TV channel direct	STV:DLC * ***** ****	STV	Not avail	QTV:DLC	QTV:DLC * ***** ****	Not avail	0:Air 1:Cable 00000-65535 0001-9999	Setting of the anntena type Major ch number Minor ch number
PICTURE	Picture Mode	VPC:MEN***	VPC	Not avail	QPC:MEN	QPC:MEN***	Not avail	DYN / GRH / SPT / CNM / STD / CTM	DYN : Dynamic GRH : Graphic SPT : Sports CNM : Cinema STD : Standard CTM : Custom
	Backlight	VPC:BLT***	VPC	Not avail	QPC:BLT	QPC:BLT***	Not avail	000 ~ 050	0 ~ 50
NETWORK SETTING	LAN Setup - Network Address	SSU:NET*** *** *** *** *** *** *** *** *** *** ***	SSU	Avail(*1)	QSU:NET	QSU:NET*** *** *** *** *** *** *** *** *** *** *	Avail(*1)	000 ~ 255 000 ~ 255 000 ~ 255 000 ~ 255 000 ~ 255 000 ~ 255 000 ~ 255 000 ~ 255 000 ~ 255 000 ~ 255 0/1	IP address 1st BYTE 000 ~ 255 IP address 2nd BYTE 000 ~ 255 IP address 3rd BYTE 000 ~ 255 IP address 4th BYTE 000 ~ 255 SUB NET MASK 1st BYTE 000 ~ 255 SUB NET MASK 2nd BYTE 000 ~ 255 SUB NET MASK 1st BYTE 000 ~ 255 SUB NET MASK 2nd BYTE 000 ~ 255 Gateway address 1st BYTE 000 ~ 255 Gateway address 2nd BYTE 000 ~ 255 Gateway address 3rd BYTE 000 ~ 255 Gateway address 4th BYTE 000 ~ 255 DHCP OFF / DHCP ON

TYPE	Function	Control Command			Inquiry Command			Range and kind of parameter Call-back	Explanation
		Transmission Command [:Parameters]	Reception Command [:Parameters]	Standby	Transmission Command [:Parameters]	Reception Command [:Parameters]	Standby		
NETWORK SETTING	User name	SSU:UNM *...*	SSU	Avail(*1)	QSU:UNM	QSU:UNM *...*	Avail(*1)	[space] 0 1 2 3 4 5 6 7 8 9 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z _ a b c d e f g h i j k l m n o p q r s t u v w x y z - @	Telnet Username(Max 16 Parameters) RS232C command only [Default] dispadmin
	User password	SSU:UPW *...*	SSU	Avail(*1)	QSU:UPW	QSU:UPW *...*	Avail(*1)	[space] 0 1 2 3 4 5 6 7 8 9 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z _ a b c d e f g h i j k l m n o p q r s t u v w x y z - @	Telnet password(Max 16 Parameters) RS232C command only [Default] @Panasonic
Others	Software Version	-	-	-	QRV	QRV: *.**00 ***..	Avail(*1)	*Example 1.0000 CQ1	 Verson model
	Software Version LAN MCU	-	-	-	QRV:LAN	QRV:LAN **.**	Avail(*1)	*Example 01.00	 Version
	IModel	-	-		QID	QID: **. ***.. *	Avail(*1)	43 / 50 / 55 / 65 / 75 / 86 CQ1 U / W	 Inch size model market
	Serial number	-	-	-	QSN	QSN:*****	Avail(*1)	9 to 15 figures of the ASCII characters	(Alphanumeric character)(capital letter of the alphabet)(Blank)'-'(0x30-0x39,0x41-0x5a,0x20,0x2d)

*1 Power save mode = off only

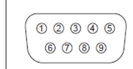
Protocol SERIAL

Communication parameters

Signal level	RS-232C compliant
Synchronization method	Asynchronous
Baudrate	9600 bps
Parity	None
Character length	8 bits
Stop bit	1 bit
Flow control	None

type of cable : straight cable

Signal names for SERIAL IN terminal:

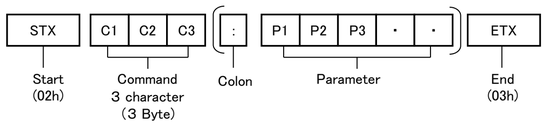


Pin layout for SERIAL Terminal

Pin No.	Signal Name
②	RXD
③	TXD
④	DTR
⑤	GND
⑥	DSR
⑦ ⑧	(Shorted in this set)
①⑨	NC

These signal names are those of computer specifications.

Basic format for control data:
The transmission of control data starts with a STX signal, followed by the command, the parameters, and lastly an ETX signal in that order.
If there are no parameters, the colon ":" does not need to be sent.



(Example)

Power on

(Transmition)

Character	STX	P	O	N	ETX
Binary	02	50	4F	4E	03

(Reception)

Character	STX	P	O	N	ETX
Binary	02	50	4F	4E	03

Changing input "HDMI1"

(Transmition)

Character	STX	I	M	S	:	H	M	1	ETX
Binary	02	49	4D	42	3A	48	4D	31	03

(Reception)

Character	STX	I	M	S	ETX
Binary	02	49	4D	42	03

Inquery input / "HDMI1"

(Transmition)

Character	STX	Q	M	I	ETX
Binary	02	51	4D	49	03

(Reception)

Character	STX	Q	M	I	:	H	M	1	ETX
Binary	02	51	4D	49	3A	48	4D	31	03

(Transmition)

Character	STX	Q	P	C	:	M	E	N	ETX
Binary	02	51	50	43	3A	4D	45	4E	03

(Reception)

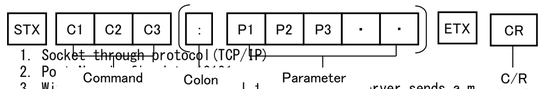
Character	STX	Q	P	C	:	M	E	N	D	Y	N	ETX
Binary	02	51	50	43	3A	4D	45	4E	44	59	4E	03

	00	10	20	30	40	50	60	70
00		DE		0	@	P		p
01	SH	D1	!	1	A	Q	a	q
02	SX	D2	"	2	B	R	b	r
03	EX	D3	#	3	C	S	c	s
04	ET	D4	$	4	D	T	d	t
05	EQ	NK	%	5	E	U	e	u
06	AK	SN	&	6	F	V	f	v
07	BL	EB	'	7	G	W	g	w
08	BS	CN	(	8	H	X	h	x
09	HT	EM	)	9	I	Y	i	y
0A	LF	SB	*	:	J	Z	j	z
0B	HM	EC	+	;	K	[	k	{
0C	CL	→	,	<	L	¥	l	|
0D	CR	←	−	=	M	]	m	}
0E	SO	↑	.	>	N	^	n	¯
0F	SI	↓	/	?	O	_	o	

Notes:

- If an incorrect command is sent, thi
- If customer send multiple commands, be sure to wait for the response for the first command to come before sending the next co TYPICAL within 100ms / MAX 1 s
- The length of the Parameters are different for each command.

LAN



1. Socket through protocol (TCP/IP)
2. Po
3. Wi
   − d default is
   rver sends a m ;in incorrect" and disconnects immediately
   @Panasonic"
4. Af ss, use RS232C commands with <STX> and <ETX> to communicate with the unit
5. [Discoonection] Disconnect the connection with following conditions.
   - A host sends CTRL+C(EXT) , CTRL+D(EOT) to the unit
   - Host send "BYE¥r¥n" command to the unit
   - Host sends FIN packet to the unit (FIN request by the client softwre on the host side)
   - 1 minutes later after last communication
   - If an error TCP protocol occurs