

# Operation manual for all available cards

## 1-card 1-port cards (MINI-MANAGER SERIES 9x9,18x18,36x36)

### 1080P HDMI/MAV Input Cards

Picture	Features
	<ul style="list-style-type: none"> <li>➤ Seamless switch</li> <li>➤ Universal inputs(DVI-I port)</li> <li>➤ Support HDMI/VGA/CVB/YPBPR with different adapters</li> <li>➤ 3.5mm audio embedded</li> <li>➤ 8-pin DIP switch for scaling</li> <li>➤ HDCP compliant</li> </ul>

1080P MAV Input Card DIP Switch												
Customize Resolution				Input Source Select				Image or Audio Select			IR Function	
DIP 3	DIP 4	DIP 5	Description	DIP 7	DIP 1	DIP 2	Description	DIP 6	Version	Description	DIP 8	Description
0	0	0	1024*768	1	0	0	CVBS Input	1	Version 2	HDMI audio input	0	IR off
0	0	1	1360*768	1	0	1	YPBPR input	0		3.5mm audio input	1	IR on
0	1	0	1920*1200	1	1	0	VGA input					
0	1	1	720P/60	1	1	1	DVI input					
1	0	0	Null	0			Signal Auto detect					
1	0	1	Null									
1	1	0	1080P/50									
1	1	1	1080P/60									

\* The maximum resolution of this card only can up to 1080P@60Hz

\*Can support 8-pin DIP switch, installer can manually set a fixed resolution, such as if needs a fixed 1920x1200 resolution, can set up the DIP switch DIP3, DIP4 and DIP5 to be "0,1,0".

### 1080P HDMI Input Cards

Picture	Features
	<ul style="list-style-type: none"> <li>➤ Seamless switch</li> <li>➤ Support 1 port HDMI input</li> <li>➤ 3.5mm audio embedded</li> <li>➤ 8-pin DIP switch for scaling</li> <li>➤ HDCP compliant</li> </ul>

1080P MAV Input Card DIP Switch												
Customize Resolution				Input Source Select				Image or Audio Select			IR Function	
DIP 3	DIP 4	DIP 5	Description	DIP 7	DIP 1	DIP 2	Description	DIP 6	Version	Description	DIP 8	Description
0	0	0	1024*768	1	0	0	CVBS Input	1	Version 2	HDMI audio input	0	IR off
0	0	1	1360*768	1	0	1	YPBPR input	0		3.5mm audio input	1	IR on
0	1	0	1920*1200	1	1	0	VGA input					
0	1	1	720P/60	1	1	1	DVI input					
1	0	0	Null	0			Signal Auto detect					
1	0	1	Null									
1	1	0	1080P/50									
1	1	1	1080P/60									

\* The maximum resolution of this card only can up to 1080P@60Hz

\*Can support 8-pin DIP switch, installer can manually set a fixed resolution, such as if needs a fixed 1920x1200 resolution, can set up the DIP switch DIP3, DIP4 and DIP5 to be "0,1,0".

1080P HDBaseT Input Cards	
Picture	Features
	<ul style="list-style-type: none"> <li>➤ Seamless switch</li> <li>➤ Support 1 port RJ45</li> <li>➤ POC function</li> <li>➤ 8-pin DIP switch for scaling</li> <li>➤ HDCP compliant</li> <li>➤ Bi-directional IR and RS232</li> </ul>

1080P HDBaseT Input Card DIP Switch												
Customize Resolution				Input Source Select				Image or Audio Select			IR Function	
DIP 3	DIP 4	DIP 5	Description	DIP 7	DIP 1	DIP 2	Description	DIP 6	Version	Description	DIP 8	Description
0	0	0	1024*768	1	0	0	CVBS Input	1	Version 2	HDMI audio input	0	IR off
0	0	1	1360*768	1	0	1	YPBPR input	0		3.5mm audio input	1	IR on
0	1	0	1920*1200	1	1	0	VGA input					
0	1	1	720P/60	1	1	1	DVI input					
1	0	0	Null	0			Signal Auto detect					
1	0	1	Null									
1	1	0	1080P/50									
1	1	1	1080P/60									

\* The maximum resolution of this card only can up to 1080P@60Hz

\* Can support 8-pin DIP switch, installer can manually set a fixed resolution, such as if needs a fixed 1920x1200 resolution, can set up the DIP switch DIP3, DIP4 and DIP5 to be "0,1,0".

\* Available for 100m/330ft@1080P60Hz or 70m/220ft@1080P60Hz

1080P SDI Input Cards	
Picture	Features



- Seamless switch
- Support 1 port 3G/HD SDI input, 1 SDI loop out
- 3.5mm audio embedded function
- 8-pin DIP switch for scaling

#### 1080P SDI Input Card DIP Switch

Customize Resolution					Image Mirror/Zoom Select						
DIP2	DIP3	DIP4	DIP5	Description	DIP1	Description	DIP6	Description	DIP7	DIP8	Description
0	0	0	0	800*600/60	0	VGA/HDMI	0	Image mirror	0	0	zoom off
0	0	0	1	1024*768/60	1	YUV/HDMI	1	Mirror Off	0	1	zoom 5%
0	0	1	0	1280*1024/60					1	0	zoom -5%
0	0	1	1	1360*768/60					1	1	zoom 9%
0	1	0	0	1400*900/60							
0	1	0	1	1600*1200/60							
0	1	1	0	1680*1050/60							
0	1	1	1	1920*1200/60							
1	0	0	0	576P/60							
1	0	0	1	576i/60							
1	0	1	0	720P/50							
1	0	1	1	720P/60							
1	1	0	0	1080i/50							
1	1	0	1	1080i/60							
1	1	1	0	1080P/50							
1	1	1	1	1080P/60							

\* The maximum resolution of this card only can up to 1080P@60Hz

\* Can support 8-pin DIP switch, installer can manually set a fixed resolution, such as if needs a fixed 1920x1200 resolution, can set up the DIP switch DIP, DIP3, DIP4 and DIP5 to be "0,1,1,1".

#### 1080P MAV Output Card

Picture



Features

- Seamless switch
- Universal output(DVI-I port)
- Support HDMI/VGA/CVB/YPBPR with different adapters
- 3.5mm audio de-embedded
- 8-pin DIP switch for scaling
- HDCP compliant

1080P (MAV, SDI)Output Card DIP Switch											
Resolution Set Up						Color Space		Image		IR	
D2	D3	D4	D5	D6	Description	D1	Description	D7	Description	D8	Description
0	0	0	0	0	1024*768@60	0	RGB	0	Image mirror	0	IR ON
0	0	0	0	1	800*600@60	1	YUV	1	Normal display	1	IR OFF
0	0	0	1	0	1280*800@60						
0	0	0	1	1	1280*1024@60						
0	0	1	0	0	1360*768@60						
0	0	1	0	1	1366*768@60						
0	0	1	1	0	1400*1050@60						
0	0	1	1	1	1440*900@60						
0	1	0	0	0	1680*1050@60						
0	1	0	0	1	1600*1200@60						
0	1	0	1	0	1920*1200@60						
0	1	0	1	1	1600*1200@60						
0	1	1	0	0	1680*1050@60						
0	1	1	0	1	1400*900@75						
0	1	1	1	0	640*480@75						
0	1	1	1	1	800*600@75						
1	0	0	0	0	480i@60						
1	0	0	0	1	576i@50						
1	0	0	1	0	480P@60						
1	0	0	1	1	576P@50						
1	0	1	0	0	1280*720@24						
1	0	1	0	1	1280*720@25						
1	0	1	1	0	1280*720@30						
1	0	1	1	1	1280*720@50						
1	1	0	0	0	1280*720@60						
1	1	0	0	1	1080i@50						
1	1	0	1	0	1080i@60						
1	1	0	1	1	1080P@24						
1	1	1	0	0	1080P@25						
1	1	1	0	1	1080P@30						
1	1	1	1	0	1080P@50						
1	1	1	1	1	1080P@60						

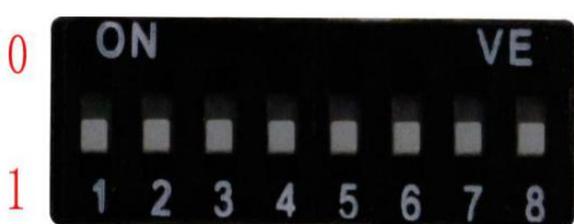
  

\* The maximum resolution of this card only can up to 1080P@60Hz

\*Can support 8-pin DIP switch, installer can manually set a fixed resolution, such as if needs a fixed 1080i resolution, can set up the DIP switch DIP3, DIP4, DIP 5 and DIP6 to be “1,1,0,0,1”.

1080P HDMI output Card	
Picture	Features
	<ul style="list-style-type: none"> <li>➤ Seamless switch</li> <li>➤ Support 1 port HDMI input</li> <li>➤ 3.5mm audio de-embedded</li> <li>➤ 8-pin DIP switch for scaling</li> <li>➤ HDCP compliant</li> <li>➤ TV Wall function</li> </ul>

## 1080P (HDMI/HDBaseT) Output Card with TVWall DIP Switch

Resolution Set Up					Image			
D1	D2	D3	D4	Description	D5	Description	D6	Description
0	0	0	0	720P/60	0	Image mirror	0	ZOOM 5%
0	0	0	1	720P/50	1	Normal display	1	Normal
0	0	1	0	1366*768/60	<b>HDMI/DVI</b>	<b>Description</b>	<b>IR</b>	<b>Description</b>
0	0	1	1	1024*768/60				
0	1	0	0	1280*800P/60	1	HDMI	1	OFF
0	1	0	1	1400*1050P/60				
0	1	1	0	1920*1080P/60				
0	1	1	1	1920*1080P/60				
1	0	0	0	1920*1080P/60				
1	0	0	1	1920*1080P/60				
1	0	1	0	1920*1080P/60				
1	0	1	1	480P/60				
1	1	0	0	576P/60				
1	1	0	1	1920*1080P/30				
1	1	1	0	1920*1080P/50				
1	1	1	1	1920*1080P/60				

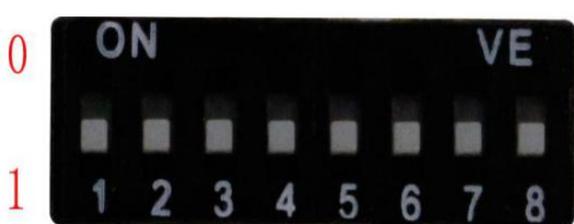
\* The maximum resolution of this card only can up to 1080P@60Hz

\* Can support 8-pin DIP switch, installer can manually set a fixed resolution, such as if needs a fixed 720P@60Hz resolution, can set up the DIP switch DIP1, DIP2, DIP3 and DIP4 to be "0,0,0,0".

### 1080P HDBaseT output Cards

Picture	Features
	<ul style="list-style-type: none"> <li>➤ Seamless switch</li> <li>➤ Support 1 port RJ45</li> <li>➤ POC function</li> <li>➤ 8-pin DIP switch for scaling</li> <li>➤ HDCP compliant</li> <li>➤ Bi-directional IR and RS232</li> <li>➤ TV Wall function</li> </ul>

## 1080P (HDMI/HDBaseT) Output Card with TVWall DIP Switch

Resolution Set Up					Image			
D1	D2	D3	D4	Description	D5	Description	D6	Description
0	0	0	0	720P/60	0	Image mirror	0	ZOOM 5%
0	0	0	1	720P/50	1	Normal display	1	Normal
0	0	1	0	1366*768/60	HDMI/DVI	Description	IR	Description
0	0	1	1	1024*768/60	0	DVI	0	ON
0	1	0	0	1280*800P/60	1	HDMI	1	OFF
0	1	0	1	1400*1050P/60				
0	1	1	0	1920*1080P/60				
0	1	1	1	1920*1080P/60				
1	0	0	0	1920*1080P/60				
1	0	0	1	1920*1080P/60				
1	0	1	0	1920*1080P/60				
1	0	1	1	480P/60				
1	1	0	0	576P/60				
1	1	0	1	1920*1080P/30				
1	1	1	0	1920*1080P/50				
1	1	1	1	1920*1080P/60				

\* The maximum resolution of this card only can up to 1080P@60Hz

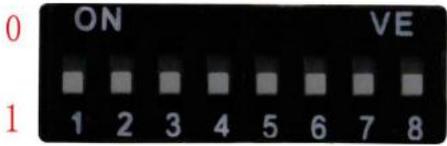
\* Can support 8-pin DIP switch, installer can manually set a fixed resolution, such as if needs a fixed 720P@60Hz resolution, can set up the DIP switch DIP1, DIP2, DIP3 and DIP4 to be "0,0,0,0".

\* Available for 100m/330ft@1080P60Hz or 70m/220ft@1080P60Hz

## 1080P SDI Output Card

Picture	Features
	<ul style="list-style-type: none"> <li>➤ Seamless switch</li> <li>➤ Support 2 SDI outputs</li> <li>➤ 3.5mm audio embedded function</li> <li>➤ 8-pin DIP switch for scaling</li> </ul>

1080P (MAV, SDI)Output Card DIP Switch											
Resolution Set Up						Color Space		Image		IR	
D2	D3	D4	D5	D6	Description	D1	Description	D7	Description	D8	Description
0	0	0	0	0	1024*768@60	0	RGB	0	Image mirror	0	IR ON
0	0	0	0	1	800*600@60	1	YUV	1	Normal display	1	IR OFF
0	0	0	1	0	1280*800@60						
0	0	0	1	1	1280*1024@60						
0	0	1	0	0	1360*768@60						
0	0	1	0	1	1366*768@60						
0	0	1	1	0	1400*1050@60						
0	0	1	1	1	1440*900@60						
0	1	0	0	0	1680*1050@60						
0	1	0	0	1	1600*1200@60						
0	1	0	1	0	1920*1200@60						
0	1	0	1	1	1600*1200@60						
0	1	1	0	0	1680*1050@60						
0	1	1	0	1	1400*900@75						
0	1	1	1	0	640*480@75						
0	1	1	1	1	800*600@75						
1	0	0	0	0	480i@60						
1	0	0	0	1	576i@50						
1	0	0	1	0	480P@60						
1	0	0	1	1	576P@50						
1	0	1	0	0	1280*720@24						
1	0	1	0	1	1280*720@25						
1	0	1	1	0	1280*720@30						
1	0	1	1	1	1280*720@50						
1	1	0	0	0	1280*720@60						
1	1	0	0	1	1080i@50						
1	1	0	1	0	1080i@60						
1	1	0	1	1	1080P@24						
1	1	1	0	0	1080P@25						
1	1	1	0	1	1080P@30						
1	1	1	1	0	1080P@50						
1	1	1	1	1	1080P@60						



\* The maximum resolution of this card only can up to 1080P@60Hz

\*Can support 8-pin DIP switch, installer can manually set a fixed resolution, such as if needs a fixed 1080i resolution, can set up the DIP switch DIP3, DIP4, DIP 5 and DIP6 to be “1,1,0,0,1”.

### 4K30 HDMI input Card

Picture	Features
	<ul style="list-style-type: none"> <li>➤ Fast switch(None-Seamless switch)</li> <li>➤ Support 1 port HDMI input</li> <li>➤ EDID key for EDID learning</li> <li>➤ Resolution up to 4k30, pass-through card</li> <li>➤ HDCP compliant</li> </ul>



\* To copy/learn EDID from the display

Step 1: Have an HDMI cable from the display directly connected to this HDMI input port

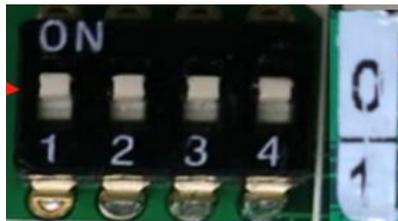
Step 2: Press the EDID key and hold for 3 seconds, the indicator will flashing

Step 3: Press the EDID key again until the indicator turns into solid light, EDID learning finished

\*Factory default EDID mode will no need to plug the display, can press and hold the EDID key to the flashing indicator status.

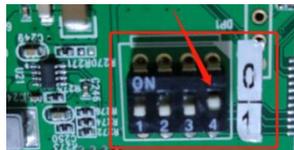
### 4K30 HDBaseT input Card

Picture	Features
	<ul style="list-style-type: none"> <li>➤ Fast switch(Non-Seamless switch)</li> <li>➤ Support 1 port RJ45 input and 1 HDMI loop out</li> <li>➤ 4-pin DIP switch for EDID learning</li> <li>➤ Resolution up to 4k30, pass-through card</li> <li>➤ HDCP compliant</li> <li>➤ POC function</li> <li>➤ Bidirectional IR, RS232</li> </ul>

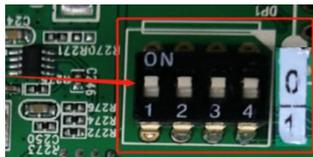


\* To copy/learn EDID from the display

**Step 1:** No need to turn off the matrix, plug out the HDBaseT input card from the Matrix Switcher chassis, have the 4-DIP switch(DIP1, DIP2, DIP3, DIP4) set up to position (1,1,1,0). Have an HDMI cable connected to the display from HDMI port, HDBaseT port keep connected to the transmitter. Insert the HDBaseT input card back to the matrix switcher, wait for about 15 seconds

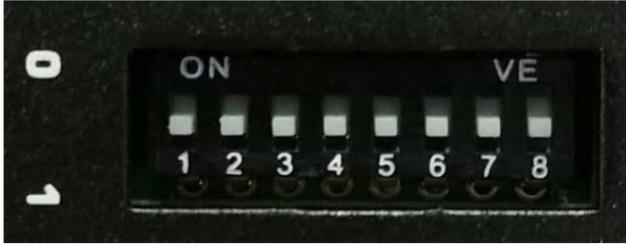


**Step 2:** Plug out the HDBaseT input card and have the 4-pin DIP switch(DIP1, DIP2, DIP3, DIP4) set up to position (0,0,0,0). Then insert the HDBaseT input card back to the matrix and disconnect the HDMI cable. EDID setup finished.



### 4K60 HDMI input Card

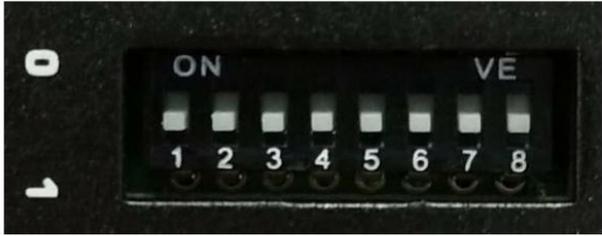
Picture	Features
	<ul style="list-style-type: none"> <li>➤ Seamless switch</li> <li>➤ Support 1 port HDMI input</li> <li>➤ 3.5mm audio embedded</li> <li>➤ 8-pin DIP switch for scaling</li> <li>➤ HDMI2.0, HDCP compliant</li> </ul>

4K60 HDBT/Fiber Tx and HDMI2.0 Input Card DIP Switch												
Customize Resolution					3.5mm Audio		Null				IR Function	
DIP 1	DIP 2	DIP 3	DIP 4	Description	DIP 5	Description	DIP 6	Description	DIP 7	Description	DIP 8	Description
0	0	0	0	1080P@60Hz	0	Using External audio	0	Null	0	Null	0	IR off
0	0	0	1	1080P@50Hz	1	Using HDMI audio	1	Null	1	Null	1	IR on
0	0	1	0	3840*2160@50Hz								
0	0	1	1	720P@60Hz								
0	1	0	1	1366*768@60Hz								
0	1	1	0	1024*768@60Hz								
0	1	1	1	3840*2160@30Hz								
0	1	0	0	3840*2160@24Hz								
1	0	0	1	480P@60Hz								
1	0	1	0	720P@50Hz								
1	0	1	1	576P@50Hz								
1	1	0	0	3840*2160@60Hz								
1	1	1	0	4096*2160@60Hz								
1	1	1	1	4096*2160@50Hz								

\* The maximum resolution of this card only can up to 4K60@60Hz

\* Can support 8-pin DIP switch, installer can manually set a fixed resolution, such as if needs a fixed 3840x2160@60Hz resolution, can set up the DIP switch DIP1, DIP2, DIP3 and DIP4 to be "1,1,0,0".

4K60 Fiber Optic input Card	
Picture	Features
	<ul style="list-style-type: none"> <li>➤ Seamless switch</li> <li>➤ Support 1 LC Fiber optic input</li> <li>➤ 8-pin DIP switch for scaling</li> <li>➤ Distance up to 2km with with 4K60 transmitter</li> </ul>

4K60 HDBT/Fiber Rx and HDMI2.0 Output Card DIP Switch											
Customize Resolution					Customize Color Space			HDCP2.2		IR Function	
DIP 1	DIP 2	DIP 3	DIP 4	Description	DIP 5	DIP 6	Description	DIP 7	Description	DIP 8	Description
0	0	0	0	1080P@60Hz	1	1	RGB	0	HDCP On	0	IR off
0	0	0	1	1080P@50Hz	1	0	YUV422	1	HDCP Off	1	IR on
0	0	1	0	3840*2160@50Hz	0	0	YUV420				
0	0	1	1	720P@60Hz	0	1	YUV444				
0	1	0	1	1366*768@60Hz							
0	1	1	0	1024*768@60Hz							
0	1	1	1	3840*2160@30Hz							
1	1	1	1	3840*2160@30Hz							
0	1	0	0	4096*2160@50							
1	0	0	0	4096*2160@30							
1	0	0	1	480P@60Hz							
1	0	1	0	720P@50Hz							
1	0	1	1	576P@50Hz							
1	1	0	1	1920*1200/60							
1	1	0	0	3840*2160@60Hz							
1	1	1	0	4096*2160@60Hz							

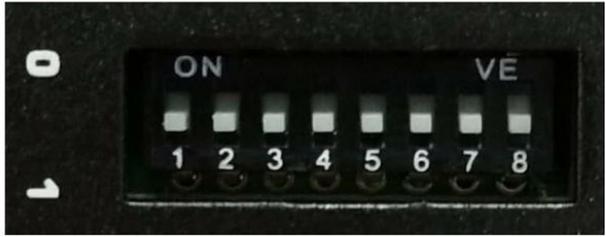
\* The maximum resolution of this card only can up to 4K60@60Hz

\* Can support 8-pin DIP switch, installer can manually set a fixed resolution, such as if needs a fixed 3840x2160@60Hz resolution, can set up the DIP switch DIP1, DIP2, DIP3 and DIP4 to be "1,1,0,0".

### 4K60 HDMI output Card

Picture	Features
	<ul style="list-style-type: none"> <li>➤ Seamless switch</li> <li>➤ Support 1 port HDMI output</li> <li>➤ 3.5mm audio de-embedded</li> <li>➤ 8-pin DIP switch for scaling</li> <li>➤ HDMI2.0, HDCP compliant</li> <li>➤ TV Wall function</li> </ul>

### 4K60 HDBT/Fiber Rx and HDMI2.0 Output Card DIP Switch

Customize Resolution					Customize Color Space			HDCP2.2		IR Function		
DIP 1	DIP 2	DIP 3	DIP 4	Description	DIP 5	DIP 6	Description	DIP 7	Description	DIP 8	Description	
0	0	0	0	1080P@60Hz	1	1	RGB	0	HDCP On	0	IR off	
0	0	0	1	1080P@50Hz	1	0	YUV422	1	HDCP Off	1	IR on	
0	0	1	0	3840*2160@50Hz	0	0	YUV420					
0	0	1	1	720P@60Hz	0	1	YUV444					
0	1	0	1	1366*768@60Hz								
0	1	1	0	1024*768@60Hz								
0	1	1	1	3840*2160@30Hz								
1	1	1	1									
0	1	0	0	4096*2160@50								
1	0	0	0	4096*2160@30								
1	0	0	1	480P@60Hz								
1	0	1	0	720P@50Hz								
1	0	1	1	576P@50Hz								
1	1	0	1	1920*1200/60								
1	1	0	0	3840*2160@60Hz								
1	1	1	0	4096*2160@60Hz								

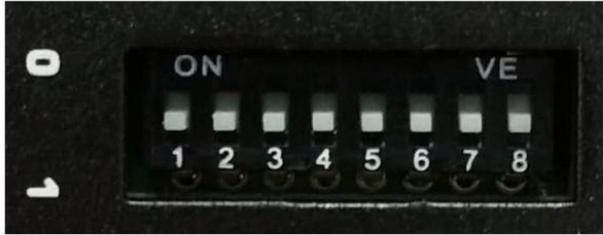
\* The maximum resolution of this card only can up to 4K60@60Hz

\* Can support 8-pin DIP switch, installer can manually set a fixed resolution, such as if needs a fixed 3840x2160@60Hz resolution, can set up the DIP switch DIP1, DIP2, DIP3 and DIP4 to be "1,1,0,0".

### 4K60 Fiber Optic output Card

Picture	Features
	<ul style="list-style-type: none"> <li>➤ Seamless switch</li> <li>➤ Support 1 LC Fiber optic output</li> <li>➤ 8-pin DIP switch for scaling</li> <li>➤ TV Wall function</li> <li>➤ Distance up to 2km with the 4K60 receiver</li> </ul>

## 4K60 HDBT/Fiber Rx and HDMI2.0 Output Card DIP Switch

Customize Resolution					Customize Color Space			HDCP2.2		IR Function	
DIP 1	DIP 2	DIP 3	DIP 4	Description	DIP 5	DIP 6	Description	DIP 7	Description	DIP 8	Description
0	0	0	0	1080P@60Hz	1	1	RGB	0	HDCP On	0	IR off
0	0	0	1	1080P@50Hz	1	0	YUV422	1	HDCP Off	1	IR on
0	0	1	0	3840*2160@50Hz	0	0	YUV420				
0	0	1	1	720P@60Hz	0	1	YUV444				
0	1	0	1	1366*768@60Hz							
0	1	1	0	1024*768@60Hz							
0	1	1	1	3840*2160@30Hz							
1	1	1	1								
0	1	0	0	4096*2160@50							
1	0	0	0	4096*2160@30							
1	0	0	1	480P@60Hz							
1	0	1	0	720P@50Hz							
1	0	1	1	576P@50Hz							
1	1	0	1	1920*1200/60							
1	1	0	0	3840*2160@60Hz							
1	1	1	0	4096*2160@60Hz							

\* The maximum resolution of this card only can up to 4K60@60Hz

\* Can support 8-pin DIP switch, installer can manually set a fixed resolution, such as if needs a fixed 3840x2160@60Hz resolution, can set up the DIP switch DIP1, DIP2, DIP3 and DIP4 to be "1,1,0,0".