District generator

Description

D45 System hub device which can be connected with 4 riser shunt 323003 districts, one entrance panel, one switchboard and one system power supply. Device allows realization of big system network. Can be cascade connected to extend district branches. Device controls and manage video channels and give amplifying compensation for video signal. DIN rail installation.

Technical data

Power supply:	30 Vdc
Stand by current absorption:	\leq 100 mA @ 30 V
Max. operating current absorption:	\leq 300 mA @ 30 V
Stand by power consumption:	3 W
Operating power consumption:	9 W
Operating temperature:	(-10)-(+40)°C

Front view



Dimensional data



Legend

- 1. RJ45 D1 connector riser shunt branch 1 connection
- 2. RJ45 D2 connector riser shunt branch 2 connection
- 3. RJ45 D3 connector riser shunt branch 3 connection
- 4. RJ45 D4 connector riser shunt branch 4 connection
- 5. RJ45 WEP connector main entrance panel connection
- 6. RJ45 MC connector switchboard connection
- 7. Main 30 V power supply input connector
- 8. Serial interface port connector
- 9. BRANCH 3 video gain setting DIP SWITCH
- 10. BRANCH 4 video gain setting DIP SWITCH
- 11. Main entrance panel video gain setting DIP SWITCH
- 12.S1 S2 manual configuration pushbuttons
- 13. BRANCH 1 video gain setting DIP SWITCH
- 14. BRANCH 2 video gain setting DIP SWITCH
- 15. Configurators housing



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Video gain settings

The video gain setting can be divided into 5 branches: branch1, branch 2, branch 3, branch 4, wall EP. They can all be set according to the instruction data in following table. However, these data may be different during actual installation. To adjust and set the data take into account the actual image.

on 🗏	
OFF	1 2 3 4

	Distance	1	2	3	4
Colour	0 – 300 m	OFF	OFF	OFF	OFF
video	300 – 700 m	ON	OFF	OFF	OFF
signal	700 – 1000 m	ON	ON	OFF	OFF
B/W	1000 –1500 m	ON	ON	ON	OFF
video signal	1500 – 2000 m	ON	ON	ON	ON

Configuration

Two different configuration modes available for whole system:

configuration **MODE 1** and configuration **MODE 2**. The main characteristics for each configuration mode are listed below.

When the biggest number of #FF in whole system is \leq 20, and the biggest number of #II is \leq 4, and the total risers number is \leq 50, we recommend to choose (**MODE 1**) configuration for system.

When the biggest number of #FF in whole system is more than 20, or the biggest number of #II is more than 4, we suggest to use (**MODE 2**) configuration to setup #FF (choose the biggest number #FF of system) and #II (choose the biggest number #II of system), then calculate total IU number of system. If the total number (#FF * #II * R) is less or equal 4000, use of (**MODE 2**) is suggested.

Two different device configuration ways available:

WAY 1) Configuration settings by inserting phisical configurators WAY 2) Configuration by using SF2 Software and PC connection Configuration by inserting phisical configurators - WAY 1:

EPS	EPS	MC Min	MC Min	MC Max	MC Max	P/S	CF8	CF9	CF10
\bigcirc									
EPS	EPS	MIN	MIN	мах	мах	P/S			
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Meaning of the configuration places:

POSITION	MODE 1							
CF1		If 323013 is primary. EPS must be set as Max WEP address on WEP port						
CF2	EPS	If 323013 is secondary. EPS must be set as Max WEP address on MC port						
CF3	мс	Set Switchboard address range						
CF4	Min							
CF5								
CF6	MC Max							
CF7	P/S	0: primary 323013 1: secondary 323013						

Configuration by using SF2 software and PC connection - WAY 2:

This is the enhanced way to download the device configuration to interface device previously created by using SF2 configuration software and a personal computer. To transfer file use the configurator hardware tool 323020 serial interface.



WARNING: in order for the communication to take place, district generator device must be powered and not physically configured.



Configuration examples

Example (A):

Use 323018 to extend the first district generator and the second district generator layer MC port to install the main EP and the switchboard. Below diagram 1~3# District generator configuration example:



Position	Field Name	1# DISTRICT GENERATOR	2# DISTRICT GENERATOR	3# DISTRICT GENERATOR	Remarks
CF1	EPS	0	0	0	NULL means 0
CF2		1	2	8	
CF3	MC Min	0	0	0	
CF4		0	0	0	
CF5	MC Max	0	0	0	
CF6		0	0	0	
CF7	P/S	0	1	1	



Configuration examples

Example (B):

Use the EP/switchboard shunt to extend some second district generator layer MC port and fist district generator layer branch to install the main EP and switchboard. Some second district generator layer branch could be extended to install the main EP and switchboard also using the EP/switchboard shunt. Below diagram 1~3# District generator configuration example:



Position	Field Name	1# DISTRICT GENERATOR	2# DISTRICT GENERATOR	3# DISTRICT GENERATOR	Remarks
CF1	EPS	0	0	0	NULL means 0
CF2	-	1	2	1	
CF3	MC Min	0	0	0	
CF4		0	0	6	
CF5	MC Max	0	0	0	
CF6		0	0	6	
CF7	P/S	0	1	1	



Configuration examples

Example (C):

Use the EP/Switchboard shunt to extend the branch of the second district generator layer to install WEP and Switchboard. Below diagram 1~3# DH1 configuration as an example:



Position	Field Name	1# DISTRICT GENERATOR	2# DISTRICT GENERATOR	3# DISTRICT GENERATOR	Remark
CF1	EPS	0	0	0	NULL means 0
CF2		1	1	1	
CF3	MC Min	0	0	0	
CF4		0	2	6	
CF5	MC Max	0	0	0	
CF6		0	2	6	
CF7	P/S	0	1	1	

