## 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: | $\leq 100 \mathrm{~mA} \mathrm{@} \mathrm{30V}$ |
| Max. operating current absorption: | $\leq 300 \mathrm{~mA} @ 30 \mathrm{~V}$ |
| Stand by power consumption: | 3 W |
| Operating power consumption: | 9 W |
| Operating temperature: | $(-10)-(+40)^{\circ} \mathrm{C}$ |

## Front view



## 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
12. BRANCH 1 video gain setting DIP SWITCH
13. BRANCH 2 video gain setting DIP SWITCH
14. Configurators housing

## 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.

## 

|  | Distance | 1 | 2 | 3 | 4 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Colour <br> video | $0-300 \mathrm{~m}$ | OFF | OFF | OFF | OFF |
|  | $300-700 \mathrm{~m}$ | ON | OFF | OFF | OFF |
|  | $700-1000 \mathrm{~m}$ | 0 N | ON | OFF | OFF |
| B/W <br> video <br> signal | $1000-1500 \mathrm{~m}$ | ON | ON | ON | OFF |
|  | $1500-2000 \mathrm{~m}$ | 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:



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 | MC | Set Switchboard address range |
| CF4 | Min |  |
| CF5 | MC |  |
| CF6 | Max |  |
| CF7 | P/S | 0: primary 323013 <br> 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\# <br> DISTRICT GENERATOR | 2\# <br> DISTRICT GENERATOR | 3\# <br> DISTRICT GENERATOR | Remarks |
| :--- | :--- | :--- | :--- | :--- | :--- |
| CF1 | EPS | 0 | 0 | 0 |  |
| CF2 | 1 | 2 | 8 |  |  |
| CF3 | MC Min | 0 | 0 | 0 |  |
| CF4 |  | 0 | 0 | 0 |  |
| CF5 | MCMax means 0 |  |  |  |  |
| CF6 | 0 | 0 | 0 |  |  |
| CF7 | P/S | 0 | 0 | 0 | 1 |

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## 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\# <br> DISTRICT GENERATOR | 2\# <br> DISTRICT GENERATOR | 3\# <br> DISTRICT GENERATOR | Remarks |
| :--- | :--- | :--- | :--- | :--- | :--- |
| CF1 | EPS | 0 | 0 | 0 |  |
| CF2 | 1 | 2 | 1 | NULL means 0 |  |
| CF3 | MC Min | 0 | 0 | 0 |  |
| CF4 | 0 | 0 | 6 |  |  |
| CF5 | MCMax | 0 | 0 | 0 |  |
| CF6 |  | 0 | 0 | 6 |  |
| CF7 | P/S | 0 | 1 | 1 |  |

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## 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\# <br> 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 |  |

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