User Manual
CP8
Rev1.0

Connection type: RS-485

The CP8 communication to the DPA880T is by RS485. +1 and -2 are only required pins from the RJ45

Power Supply

Power supply DC +12V is required to power the CP8 (not supplied with the panel)

To programme CP8:

CP8 you can set user defined as either Master Mode or Zone ModeUser. The following instruction explains the process

- "Set" button is used to access the various menus and to confirm
- "Esc" button is used to exit from the menus
- "Encoder" The large rotary encoder is used to enter and exit the standby mode if the key is pressed for around 5-6 sec. Or with the single press allows setting the steps for changing the values of Gain and Volume (Gain =-127dB to + 12dB; Volume =-127dB to + 18dB)
- The Encoder is also used to move between the various menus and changing the values of the parameters.
- LCD display 2 x 20 alphanumeric
- Power ON Led: when lit indicates that the system is powered
- Eth Led: when lit indicates that the CP8 is communicating with the DPA880T

The CP8 has 3 operating modes:

1. SYSTEM SETUP
2. MASTER MODE
3. ZONE MODE

The CP8 is programmed from the factory in Master Mode with the following default settings:

Mode	**= MASTER MODE**
Id	**= 01**
Auto Stand-by	**= ON**
Zone	**= 01**
Lock	**= OFF**

To access the CP8 **SYSTEM SETUP** you hold down "Sel" + "Esc" + "Encoder" for around 5-6 sec.

To exit the CP8 **SYSTEM SETUP** you press and hold the button " Encoder " for around 3-4 sec. The CP8 goes into standby mode after no activity and to activate press " Encoder " for aroundt 3-4 sec and the CP8 will exit from standby mode.

To manually enter or leave from **Stand-by mode** you must press and hold the button " Encoder " for about 3-4 sec.

SYSTEM SETUP MODE

The SYSTEM SETUP mode is used by the installer to configure the CP8.

SYSTEM SETUP Configure Mode	SYSTEM SETUP Configure ID	SYSTEM SETUP Configure Stand-by	SYSTEM SETUP Configure Zone

- **Configure Mode**: Using this menu, you can configure the CP8 as Master Control or Zone Control
- **Configure ID**: Through this menu it is possible to configure the ID for the communication with the DPA880T device (the ID setting of the CP8 must be the same the setting in the DPA880T)
- **Configure standby**: with this menu you can configure the auto stand-by mode. In this mode if the CP8 parameter is set to ON then after 40 sec of no activity the CP8 automatically goes into standby (display off)
- **Configure ZONE**: this menu is only visible if the menu "configure mode" has been set in the ZONE parameter. Through this menu you can set the Zone (output) that must be controlled by CP8

After selecting the Configure Mode by using the Encoder

> SYSTEM SETUP
> Configure Mode

Pressed the SET button then via rotating the Encoder you can select between Master and Zone

> Configure Mode
> Mode = Master

> Configure Mode
> Mode = Zone

Press the SET button to confirm and exit, press ESC to cancel and exit

> SYSTEM SETUP
> Configure Mode

After you have selected the Configure ID menu using the Encoder

> SYSTEM SETUP
> Configure ID

Pressed the SET button then via Encoder you can select the ID from 1 – 64 to match the device

> Configure ID
> ID = 01

> Configure ID
> ID = 02

....

> Configure ID
> ID = 64

Press the SET button to confirm and exit, press ESC to cancel and exit

> SYSTEM SETUP
> Configure ID

After selecting the menu using the Encoder you can configure the standby mode

> SYSTEM SETUP
> Configure Stand-by

Pressed the SET button then via Encoder select between Off or On

> Configure Stand-by
> Auto stand-by = OFF

> Configure Stand-by
> Auto stand-by = ON

Press the SET button to confirm and exit, press ESC to cancel and exit

```
SYSTEM SETUP
Configure Stand-by
```

After selecting the Configure Zone menu using the Encoder (only if MODE = Zone)

```
SYSTEM SETUP
Configure Zone
```
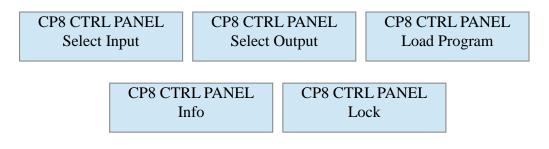
Pressed the SET button then via Encoder you can select between Zone 1 – 8 Zone outputs

```
Configure Zone        Configure Zone                 Configure Zone
Zone = 01             Zone = 02                      Zone = 08
                                      ....
```

Press the SET button to confirm and exit, press ESC to cancel and exit

```
SYSTEM SETUP
Configure Zone
```

MASTER MODE MODE

```
CP8 CTRL PANEL        CP8 CTRL PANEL        CP8 CTRL PANEL
Select Input          Select Output         Load Program
```

```
        CP8 CTRL PANEL        CP8 CTRL PANEL
        Info                  Lock
```

- **Select Input**: Via this menu you can select and set the Gain control and input Mute
- **Select Output**: Via this menu, you can configure the volume and Mute
- **Load Program**: Through this menu you can load anyone of the **6** presets
- **Info**: Via this menu the model, version and ID set is displayed
- **Lock**: Through this menu it is possible to Lock the CP8
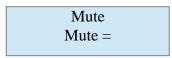
1. **SELECT INPUT**

```
CP8 CTRL PANEL
Select Input
```

After pressing the SET button, via Encoder you can select between Inputs 1 - 8.

Select Input	Select Input		Select Input
Input 1	Input 2	....	Input 8

After selecting an Input (eg. Input 2) press the SET button to select the Mute or Gain by using the Encoder
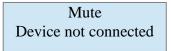
Input 2	Input 2
Mute	Gain

If you select Mute and press SET, on the display you will see the following screen
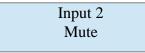
Mute
Mute =

the Eth led will turn on with the system sends a message to DPA880T asking for the current status of mute on the selected input.
If the CP8 is not connected to the DPA880T or the ID is not correct then the display will show the following message
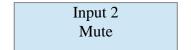
Mute
Device not connected

and after 2 sec. The Eth led will turn off and the system will go back to the menu

Input 2
Mute

If communication is successful, then the display will show the current status of the Mute

Mute	Mute
Mute = Off	Mute = On

through Encoder it is possible to change the status of the Mute from ON to OFF or vice versa in real-time and the parameter will be updated on DPA880T
Press the Esc key to return to the start screen

Input 2
Mute

If you select Gain and press SET, on the display you will see the following screen
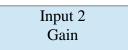
```
      Gain [dB]
 Step=0.1dB     G=
```

the Eth led will be turned on because the system sends a message to DPA880T asking for the current status of the gain on the selected input.
If the CP8 is not connected to the DPA880T or the ID is not correct then the display will show the following message

```
      Gain [dB]
 Device not connected
```

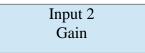and after 2 sec. The Eth led will turn off and the system will go back to the menu

```
      Input 2
       Gain
```

If communication is successful, then the display will show the current status of Gain

```
      Gain [dB]          Gain [dB]             Gain [dB]
 Step=0.1dB    G=-   Step=0.1dB    G=0.0    Step=0.1dB
      127.0                                    G=+12.0
```
...   ...

through Encoder it is possible to change the Gain value (Gain varies between-127.0 dB to + 12dB) and in real-time the parameter will be updated on DPA880T
Using Encoder it is possible to change the gain variation in steps of 0.1 dB or 1dB

Press the Esc key to return to the start screen

```
      Input 2
       Gain
```

2. SELECT OUTPUT

```
 CP8 CTRL PANEL
   Select Output
```
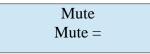
After pressing the SET button, via Encoder you can select between Output 1 - 8.

```
   Select Output       Select Output              Select Output
     Output 1            Output 2                    Output 8
```
....

After selecting an Output (eg. Output2) and press the SET button you and can select using the Encoder or Mute Volume parameter
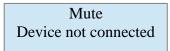
Output 2	Output 2
Mute	Volume

If you select Mute and press SET, on the display you will see the following screen
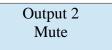
Mute
Mute =

the Eth led will be turned on because the system sends a message to DPA880T asking for the current status of the Mute on the selected Output.
If the CP8 is not connected to the DPA880T or the ID is not correct then the display will show the following message

Mute
Device not connected

and after 2 sec. The Eth led will turn off and the system will go back to the menu

Output 2
Mute

If communication is successful, then the display will show the current status of the Mute

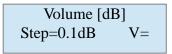| Mute	Mute
Mute = Off	Mute = On

through Encoder is possible to change the status of the Mute from ON or OFF or vice versa in real-time and the parameter will be updated on DPA880T

Press the Esc key to return to the start screen

Output 2
Mute

If you selected Volume and press SET, on the display you will see the following screen

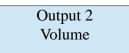| Volume [dB] |
|-------------|
| Step=0.1dB   V= |

the Eth led will be turned on because the system sends a message to DPA880T asking for the current status of the selected Output Volume.
If the CP8 is not connected to the DPA880T or the ID is not correct then the display will show the

following message

```
        Volume [dB]
     Device not connected
```

and after 2 sec. The Eth led will be turned off and the system will return to this menu

```
         Output 2
          Volume
```

If communication is successful, then on the display will display the current Volume State

```
      Volume [dB]            Volume [dB]              Volume [dB]
  Step=0.1dB     V=-      Step=0.1dB     V=0.0      Step=0.1dB
      127.0                                            V=+18.0
```
...   ...

through Encoder is possible to change the Volume value (range between-127.0 dB to + 18dB) and in real-time the parameter will be updated on DPA880T
using Encoder it is possible to choose the variation of the Volume in steps of 0.1 dB or 1dB
Press the Esc key to return to the start screen

```
         Output 2
          Volume
```

3. LOAD PROGRAM

```
     CP8 CTRL PANEL
       Load Program
```

After pressing the SET button, the Eth led will lit as the system sends a message to DPA880T to ask which preset is loaded and read the names of the program.
If the preset currently uploaded on DPA880T is an extra presets (preset from 7 to 10, activated via inputs S1,..,S4 available on the back panel) the display will then show the message

```
       Load Program
        not possible
```

and after 2 sec. The Eth led turns off and returns to the previous screen

```
     CP8 CTRL PANEL
       Load Program
```

This is because the extra presets are associated with special events and these have priority on preset 1 - 6,   recallable from front-panel using the buttons 1 - 6.
If the CP8 is not connected to the DPA880T or the ID is not correct then the display will show the

following message

```
      Load Program
  Device not connected
```

and after 2 sec. The Eth led will be turned off and the system will go back to the menu

```
    CP8 CTRL PANEL
      Load Program
```

If communication is successful, then the display will show the program that currently uploaded on DPA880T (eg. Program2)

```
      Load Program
   P02: name preset
```

through Encoder you can scroll the list of the 6 program

```
      Load Program          Load Program              Load Program
   P01: name preset      P02: name preset          P06: name preset
```
..   ..

If the selected program is not currently the loaded program on DPA880T then the number of the preset will flash
Press the ESC key to exit the submenu
Press the SET button to load the selected preset and exit from submenu
During the upload phase, the led will be lit and Eth on the display will show the following message

```
      Load Program
  Loading Program.....
```

When loading if the Eth led turns off the system will go back to the main menu
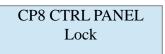
```
    CP8 CTRL PANEL
      Load Program
```

4. INFO

```
    CP8 CTRL PANEL
          Info
```

After pressing the SET button

```
  Model:CP8    ID:01
    Version: 1.0.0
```

Press the SET button or the ESC key to return to the menu

```
CP8 CTRL PANEL
     Info
```

5. LOCK

```
CP8 CTRL PANEL
     Lock
```

After pressing the SET button, the system asks for confirmation

```
   Lock CP8
  Are you sure?
```

If you pressed Esc returns you to the menu

```
CP8 CTRL PANEL
     Lock
```

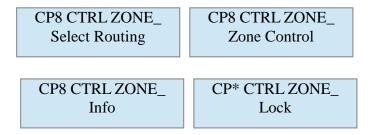If press SET the system goes into Lock mode

```
CP8 CTRL PANEL
 System Locked
```

To unlocked the panel this is done by simultaneously pressing the keys ESC and SET for around 5-6 sec. After that the system will be unlocked

```
CP8 CTRL PANEL
  Select Input
```

ZONE MODE Mode

(the symbol "_" can be a number between 1 and 8)

```
CP8 CTRL ZONE_
 Select Routing
```

```
CP8 CTRL ZONE_
 Zone Control
```

```
CP8 CTRL ZONE_
     Info
```

```
CP* CTRL ZONE_
     Lock
```

- **Select Routing**: Using this menu, it is possible to select the input to be associated with the selected zone, here it is possible to vary the mute (if the selected input is enabled on the zone) and gain (% selected on input area)
- **Select Zone**: Using this menu, you can configure the Volume and Mute for the Zone
- **Info**: Via this menu is possible to display the model, version and ID set
- **Lock**: Through this menu it is possible to put CP8 in Lock

1. SELECT ROUTING

> CP8 CTRL ZONE_
> Select Routing

After pressing the SET button,
the Eth led will turn on because the system sends a message to DPA880T asking for the current status of the Routing of the Zone
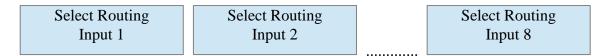If the CP8 is not connected to the DPA880T or the ID is not correct then the display show the following message

> Select Routing
> Device not connected

and after 2 sec. The Eth led will turn off and the system will go back to the menu

> CP8 CTRL ZONE_
> Select Routing

If communication is successful, then the display will show the selection and using the Encoder you can select between Input 1 - 8.

> Select Routing
> Input 1

> Select Routing
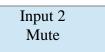> Input 2

....

> Select Routing
> Input 8

After selecting an entry (eg. Input2) and press the SET button,
It is possible to select by using the Encoder, the Mute (enable/disable input areas) or Gain (% input on Zone) parameters

> Input 2
> Mute

> Input 2
> Gain

If you select Mute and press SET, on the display you will see the following screen

> Mute
> Mute = Off

> Mute
> Mute = On

Using Encoder to change the status of the Mute from ON to OFF or vice versa in real-time and the parameter will be updated on DAP880T

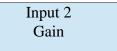Press the Esc key to return to the start screen

```
      Input 2
       Mute
```

If you select Gain and press SET, on the display you will see the following screen

```
  Gain [dB]☐      G= -10
```

Using Encoder it is possible to change the value gain (gain varies between-30dB to 0dB) and in real-time the parameter will be updated on DPA880T

```
  Gain [dB]☐     G= -30          Gain [dB]☐      G= -10          Gain [dB]☐      G = 0
```
...   ...

Press the Esc key to return to the start screen

```
      Input 2
       Gain
```

2. SELECT ZONE

```
  CP8 CTRL ZONE_
    Zone Control
```
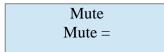
After pressing the SET button, via Encoder you can select between Mute or Volume
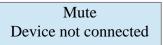
```
      Zone 2                        Zone 2
       Mute                         Volume
```

If you select Mute and press SET, on the display you will see the following screen

```
       Mute
      Mute =
```

the Eth led will turn on because the system sends a message to DPA880T asking for the current state of mute on the Zone selected.

If the CP8 is not connected to the DPA880T or the ID is not correct on then the display will appear the following message
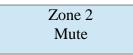
```
          Mute
  Device not connected
```

and after 2 sec. The Eth led will turn off and the system will go back to the menu

```
        Zone 2
         Mute
```

If communication is successful, then the display will show the current status of the Mute

```
         Mute                        Mute
      Mute = Off                   Mute = On
```

Using Encoder to change the status of the Mute from ON to OFF or vice versa in real-time and the parameter will be updated on DPA880T
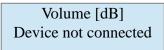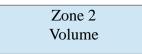Press the Esc key to return to the start screen

```
        Zone 2
         Mute
```

If you selected Volume and press SET, on the display you will see the following screen

```
       Volume [dB]
    Step=0.1dB      V=
```

the Eth led will turn on because the system sends a message to DPA880T asking for the current status of the volume for the selected zone.
If the CP8 is not connected to the DPA880T or the ID is not correct then on the display will appear the following message
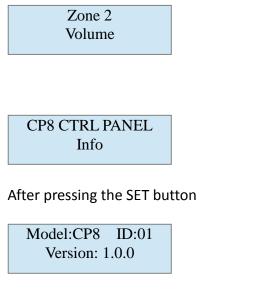
```
       Volume [dB]
   Device not connected
```

and after 2 sec. The Eth led will turn off and the system will go back to the menu

```
        Zone 2
        Volume
```

If communication is successful, then the display will display the current Volume Status

```
       Volume [dB]              Volume [dB]              Volume [dB]
   Step=0.1dB     V=-       Step=0.1dB     V=0.0      Step=0.1dB
        127.0                                             V=+18.0
```
...   ...

Using Encoder is possible to change the volume value (range between-127.0 dB to + 18dB) and in real-time the parameter will be updated on DPA880T
Using Encoder it is possible to choose the volume steps between 0.1 dB or 1dB
Press the Esc key to return to the start screen

```
Zone 2
Volume
```

3. INFO

```
CP8 CTRL PANEL
Info
```

After pressing the SET button

```
Model:CP8    ID:01
Version: 1.0.0
```

Press the SET button or the ESC key to return to the menu

```
CP8 CTRL PANEL
Info
```

4. LOCK

```
CP8 CTRL PANEL
Lock
```

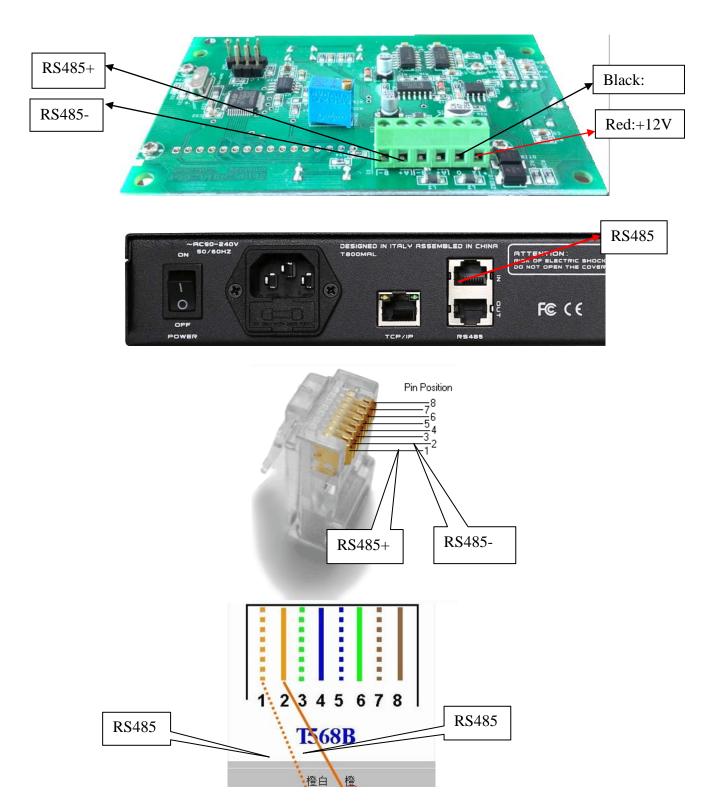After pressing the SET button, the system asks for confirmation

```
Lock CP8
Are you sure?
```

If pressed Esc returns you to the menu

```
CP8 CTRL PANEL
Lock
```

If press SET the system goes into Lock mode

```
CP8 CTRL PANEL
System Locked
```

in this case the only way possible to unlock the system is by simultaneously pressing the keys ESC and SET for around 5-6 sec.

CP8 Connection Details

RS485+

RS485-

Black:

Red:+12V

RS485

Pin Position

8
7
6
5
4
3
2
1

RS485+   RS485-

1 2 3 4 5 6 7 8

T568B

RS485   RS485

橙白 橙

- 2 The ID on CP8 must be set the same as the DPA880T.