POWER   STATUS

≡ apart

DIGITAL PRIORIT

DIPEX
Instruction manual

Safety precautions

- Keep this manual for future reference.

- Take care of your connection wires; they should be free of damage. Damaged wires may result in poor sound quality or malfunctions and can cause damage to the installation.

- Only use accessories specified by the manufacturer

- Make sure the wall construction can support the unit's weight.

- No mains power shall be connected to the device, doing so will damage the unit.

- This device should only be serviced by qualified personnel. If not serviced by qualified personnel, warranty may be void.

- Use cables with clear color indication and maintain polarity throughout the whole system.

- Please check the packing for any kind of damage upon reception of the goods. If the packing is damaged, please contact your dealer before opening it.

- Please note that this unit must be protected from moisture and is meant for indoor use only.

Introduction

Please read this manual before using the product in order to give you the necessary product and installation instructions to assure a seamless installation and non-compromised overall sound quality and functionality.

Thanks for purchasing our DIPEX Digital Priority / Emergency Extender.

DIPEX is a versatile priority/emergency extender, easy to configure via the host's graphical installer interface.

Affordable, versatile, but by no means a compromise on sound quality or on functionality – Typically Apart!

Features and benefits

- Remarkable sound quality
- Configuration/test button, power and multicolor status LED
- Wall mounting possible
- Output volume control
- Automatic addressing via config pushbutton, standard priority level = 0 (adjustable via AudioControl 12.8 configuration program)
- Balanced line-in allows the use of long cables
- Easy connection using standard CAT5 cables
- External power supply possible
- Indoor use only

Connecting the unit

Consult the manual of your AudioControl 12.8 before connecting the DIPEX, use a standard CAT5 cable to connect the DIPEX. Normally, the main unit (AudioControl 12.8) will also provide the necessary power to the DIPEX unit.
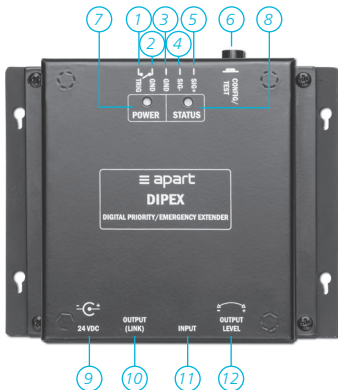
*When applying an unbalanced line level signal, connector 3 and 4(GND and SIG-) must be shorted using a wire bridge ! Connect the ground from the unbalanced source to GND AND SIG-, the + to SIG+. When nothing is connected to SIG-, there will be no sound at all.

1. **Trig:** trigger input: connect your voltage free priority contact here
2. **GND:** ground connection for the voltage free priority contact
3. **GND:** ground connection for the analog line level signal
4. **SIG-:** line level signal negative input (balanced)*
5. **SIG+:** line level signal positive input (balanced)
6. **Config/test button:** push the button to install the DIPEX unit with the AudioControl 12.8. By pushing the config/test button the first time, the unit will receive an address from the main unit. After receiving an address, the button also functions as a priority test switch
7. **Power led:** blue led lights up when the unit is powered
8. **Status led:** the led shows the status from the DIPEX unit: green color: the unit is paging, priority is active. The incoming audio signal will pass through. Orange color: paging is requested, or the chime is sounding (priority level 1 to 7). Red: paging is not allowed because a higher priority unit keeps the paging line occupied. Out of the box, the DIPEX has highest priority and the status led will never be red. When this led blinks, there is no connection to an AudioControl 12.8, or the DIPEX unit has not received an address from the AudioControl 12.8.
9. **24 VDC jack:** connect an external DC power supply here if the master unit is unable to supply the power for the required number of microphones. Consult the manual of your AudioControl 12.8 for more details.
10. **Output (link):** RJ45 connector. Connect multiple DIPEX end DIMIC units in a daisy chain. Output (link) and input are internally hardwired to each other. Audiocontrol 12.8 can power a maximum of 8 devices.
11. **Input: RJ45 connector:** connect the DIPEX to the AudioControl 12.8 using a standard CAT5 cable
12. **Output level adjustment:** turn the potentiometer to adjust the output level

Using DIPEX for the first time

Default settings: out of the box, the DIPEX is set up as a priority 0 (highest) priority/emergency extender, meant for paging line level signals from evacuation systems, emergency message players, telephone or alarm systems etc. When the priority switch is activated, the chime from the AudioControl 12.8 will not sound (DIPEX priority level = 0 = highest). If you want to make the chime sound, you must configure the DIPEX as a lower priority unit (1 to 7).

Connect the DIPEX to the Audiocontrol 12.8 main unit using a standard CAT5 cable. The status LED will blink (red and orange), and the power LED will light up, indicating that the unit is powered. Wait for approx 10 seconds until the status LED blinks orange/green. Now push the test/config (6) button on the DIPEX unit. The DIPEX will now receive an address from the AudioControl 12.8 unit. The status LED will dim, indicating that the unit has been successfully configured. Push the test button once to check the functionality: the status LED will light up green, indicating that the line level signal is passed through (priority = 0, no chime).

NOTE: when you configure the DIPEX unit with a priority level from 1 to 7, the chime from the main unit will sound when enabled. Please consult the graphic installer interface for details. When the chime sounds, the status LED will be orange, indicating that the unit is waiting until the chime has finished sounding. When the chime has finished sounding, the status LED will become green and the audio signal will be passed through.

Attention!

DIPEX cannot function unless properly connected to an AudioControl 12.8!

When another DIPEX unit is added to the system, it will become a priority 0 unit by default. This may cause a conflict with the first DIPEX unit. In such cases, configure the priority levels of the DIPEX units via the graphic user interface program of the AudioControl 12.8.

Do not connect the DIPEX unit to a computer or other network via the RJ45 connector. This will cause malfunctions and may cause damage to your network, computer and/or DIPEX. A maximum of 8 DIPEX units, or a mixture of 8 DIPEX and DIMIC units can be powered by the internal power supply of the AudioControl 12.8. If more than 8 units are required, you must use an external 24 VDC power supply. A dedicated power supply connector is available on all units. Maximum current consumption per DIPEX unit is approximately 75 mA.

Maximum CAT5 cable length is approximately 400 meters (one DIPEX unit connected, theoretical value).

Multifunction status LED

Not lit	Green	Orange
Ready for use (when blue power LED is lit)	Paging in progress from this device	A lower priority device is paging or the unit is waiting until the chime has finished sounding (priority 1 to 7)

Red	Orange / Red	Orange / Green
A higher priority device is paging. Paging from this device is not possible.	Contacting main unit	Waiting for address from main unit

Using DIPEX for the first time

Pin 1: Audio + (balanced)
Pin 2: Audio – (balanced)
Pin 3: GROUND
Pin 4: not used
Pin 5: not used
Pin 6: 24 VDC power supply (approx 75 mA per DIPEX unit)
Pin 7: RS485
Pin 8: RS485

TIA/EIA 568A Wiring

1		White and Green
2		Green
3		White and Orange
4		Blue
5		White and Blue
6		Orange
7		White and Brown
8		Brown

TIA/EIA 568B Wiring

1		White and Orange
2		Orange
3		White and Green
4		Blue
5		White and Blue
6		Green
7		White and Brown
8		Brown

Specifications

Dimensions	128 x 105 x 35 (L x W x H) mm (without connectors and buttons)
Weight	350 g
External Power supply (optional)	12 – 24 VDC/75 mA per unit
Nominal sensitivity	1 VRMS (0 dBV) or 100 mVRMS (input gain set at +20dB in AudioControl 12.8)
Maximum input level	4.5 VRMS
THD	typical < 0.01%
Input impedance	100 kΩ
Input configuration	balanced line level input
Frequency response -3 dB	20 – 20000 Hz
Signal to noise ratio	> 95 dB, A-weighted

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