

TP-DX-N Kits

Handbook Contents:

- Safety
- Introduction
- Installation
- Block Diagram
- Controls and Connections
- Specification
- Warranty Information
- Declaration of Conformity

Standard Kit Contents:

- 1 x TalkPerfect DX-N in bracket
- 1 x Combi speaker/microphone
- 1 x POD speaker
- 1 x Glass mount or POD microphone
- 1 x Power supply
- 1 x Break out loom
- 2 x 4-way connectors
- 2 x 3-way connectors
- 1 x Hearing loop coil
- 1 x Bag of clips & ties
- 1 x TalkPerfect DX-N Kit handbook (this document)
- 1 x Installation guide



Safety:



This symbol is used to alert the user to important operating or maintenance instructions.



The Lightning bolt triangle is used to alert the user to the risk of electric shock.

1. It is important to read these instructions, and to follow them.
2. Keep this instruction manual in an accessible place.
3. Clean only with a dry cloth. Cleaning fluids may effect the equipment.
4.  The equipment generates some heat during normal operation. Forced ventilation is not required but convective or conductive dissipation of the limited heat is necessary. Do not install in an insulating enclosure or space. A metal enclosure is acceptable.
5. Do not install near any heat sources such as radiators, heating vents, or other apparatus that produces heat.
6. Refer all servicing to qualified personnel. Servicing is required when the apparatus has been damaged in any way, such as when a power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to any rain or moisture, does not operate normally or has been dropped.
7.  **WARNING** - To reduce risk of fire or electric shock, do not expose this apparatus to rain or moisture. The apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

Introduction:

The Ampetronic TalkPerfect DX-N is the control unit for a two-way voice enhancement system, with an integral Hearing Loop driver.

It is intended for use at Security Reception Desks, Customer Returns Points, Banks, Post Offices, Rail, Train and Bus ticket/service counters, Bureau de Change - any area that has a glazed security screen. The system is robust and built with a high standard of construction.

The TalkPerfect DX-N contains signal processing for system stability and clarity of speech and is shipped pre-set, directly for use with minimum set up adjustment.

The Hearing Loop (or Audio Induction Loop System [AFILS]) driver will allow hearing assistance to be provided to customers as part of the installation when connected to suitable installed loop wiring.

Installation:

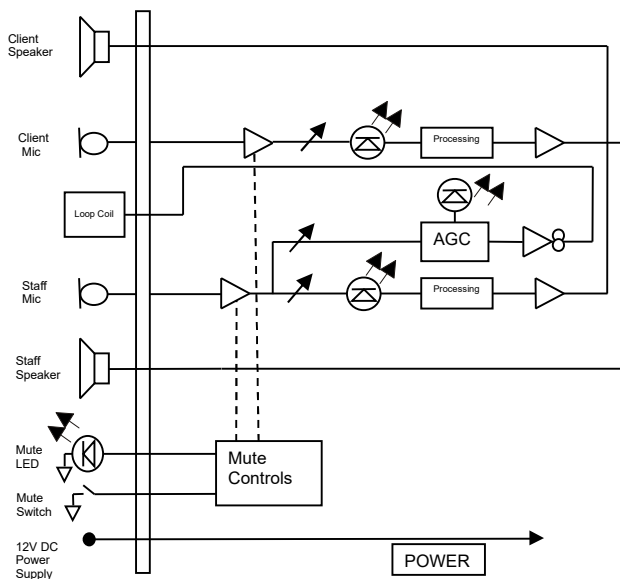
You will require the following tools:

- Screws and appropriate tools for mounting on or adjacent to a counter.
- Small flat bladed screwdriver, if adjusting the controls

Before installing the equipment, check that you have all of the parts required for your application.

This handbook only relates to the TalkPerfect TP-DX-N unit, and not to other components. See Installation handbook provided for detailed explanation of installation procedure with a range of microphone and speaker options.

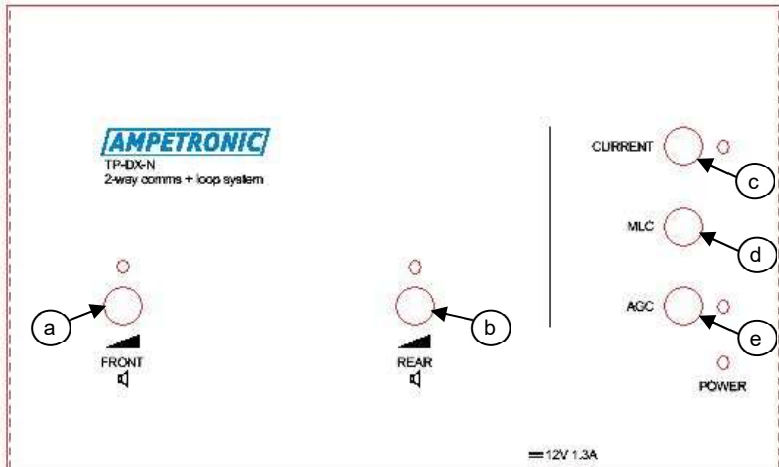
Typical System Block Diagram:



Controls and connections:

Front panel controls

- a. Staff Speaker Volume control (Marked 'FRONT')
- b. Client Speaker Volume control (Marked 'REAR')
- c. Loop Current control
- d. Loop Metal Loss Correction - (Tone control)
- e. Loop Automatic Gain Control - (Input level control)
- f. Input / Output / Power Connector, 24-Pin (Mating part: Tyco/Amp 1318917-1)



Specification:

- Mic Inputs:** Unbalanced electret microphone: Source impedance <math><1k\Omega</math>, Gain: >60dB (control at max)
Sensitivity: -50dBu (2.4mV_{RMS}) @ 1kHz with gain control at max level
Input noise level: -124dBu,
Input impedance: 1.1k Ω , DC bias voltage: 12V though 11k Ω
- Speaker O/Ps:** 4W per channel, <math><0.5\%</math> THD @ 1kHz with +9dBu (1.2W into 4 Ω), 20Hz - 10kHz
Minimum load: 4 Ω , Frequency response: 100Hz – 6KHz +/-3dB
- Loop O/P:** Current: 2.4A_{RMS}, Max Voltage: +14dBu (3.9V_{RMS}), THD <math><0.5\%</math> @ 1kHz with 2.2A_{RMS} into 0.3 Ω , 70uH, Loop resistance: Min 0.3 Ω ,
Frequency response: 80Hz – 5.0kHz +/-1.5dB re: 1kHz,
AGC: 40dB dynamic range, high ratio limiting type, MLC: Flat to >3dB per octave boost (fully anti-clockwise – flat response)
- Control/Status:** Mute turns all outputs off.
LED output indicates if the system is active – connect to ground.
- Environmental:** IP30, Operating: -30°C to +75°C, 95% relative humidity
- Dimensions:** 220 x 116 x 40mm, 630g
- DC Power:** 12V_{DC}, Range: 9V_{DC} to 16V_{DC}, Power Quiescent: 3.0W (250mA)
Power Maximum: 24W (2.0A), Protection: 2.0A resettable device
- Standards:** Meets relevant CE, EMC and safety standards
Maximum cable length for all connections is 3m

Warranty information:

This product carries a five year parts and labour warranty from date of shipment from Ampetronic. To qualify for the five year warranty, the product must be registered at www.ampetronic.com (products/warranty), without which the warranty will be valid for two years only.

The 5-year warranty is dated from the time the equipment leaves Ampetronic and NOT when it is installed.

Declaration of Conformity:

Manufacturer: Ampetronic Ltd.
Address: Unit 2, Trentside Business Village, Farndon Road, Newark, NG24 4XB

Declares that the product: TP-DX-N

Conforms to the following Directive(s) and Norm(s):

Directive 2004 / 108 / EC

EMC: EN 55103 (1&2):2009

Directive 2006 / 95 / EC

Safety: EN 60065:2002+A12:2011

Directive 2011 / 65 / EU RoHS

Date: April 2015, J.R. Pieters, Managing Director, Ampetronic Ltd.

Ampetronic Ltd.

www.ampetronic.com

Email: sales@ampetronic.com

UP18003-1