

ELECTRICAL	
DC Power supply (from LDB)	18 - 50 VDC (v2r5)
inrush limiting	set to 1,44W
idle current @ 200 FIM's (Full load)	100 mA continuous (measured after 10min in quiescent)
max. power consumption	2,4W
AMP input (100V audio)	
max. AC voltage	max. cont. 100Vrms audio
max. AC current	max. cont. 8A
AC Frequency range	40Hz - 20kHz (-3dB)
LOOP output	
AC	same as AMP input
DC line voltage	27 - 30V (Open Loop / Closed loop)
DC current	max. cont. 130mA
Maximum total LOOP load	800 W
Wiring	2-wire. Max. 2,5mm ² / Max. Loop length: 1000m
Grounding	optional earth loop through third connection pin
Loop relay contact rating	max. 250VAC / 8A (Dual state type)
Bus address range	00 - FF (0-255) / max. 32 on single DIN-rail bar
Detection - LOOP	Short, wire-to-wire / Open / Earth leakage
Maximum # FIM connected	200
Mechanical	
Housing	Bopla Combinorm-Connect - DIN rail version - IP30
Dimensions (WxHxD)	17.5 x 114.5 x 99 mm
Ordering information. Part No.	
LDB-03	1x IP30 housing with PCB
	1x 5-pole DIN-rail bus connector / 1x 5-pole screw connector for DIN-rail bus / 2x 3-pole screw connector / 1x 2-pole screw connector
Certification and Approvals	
Complies with	EN54-16:2008 / NEN2575-2
EMC immunity	see OD16.44 LDB05 D.o.C.

Detect - Locate - Isolate

LDB-QIG - V01R05
Quickguide

LOOPDRIVE

LoopDrive Booster - LDB



The Loop Drive Booster (LDB) is the heart of the Loopdrive system. This device drives up to 200 FIM's over a dual-core cable. A single LDB can pass 800 W of audio signal from an amplifier and injects at the same time DC to the loop for powering and managing FIM modules. One amplifier channel can be split into multiple LDB in parallel, creating multi-loop with individual surveillance for multi-zone paging applications.

The housing clicks on a DIN-rail that provides DC-power and accommodate for the RS485 data connection and General-Fault contact to a maximum of 32-LDB's on a single DIN-rail. Front buttons and indicators allow for quick access to the various functions and indications of the Loopdrive system.

4EVAC

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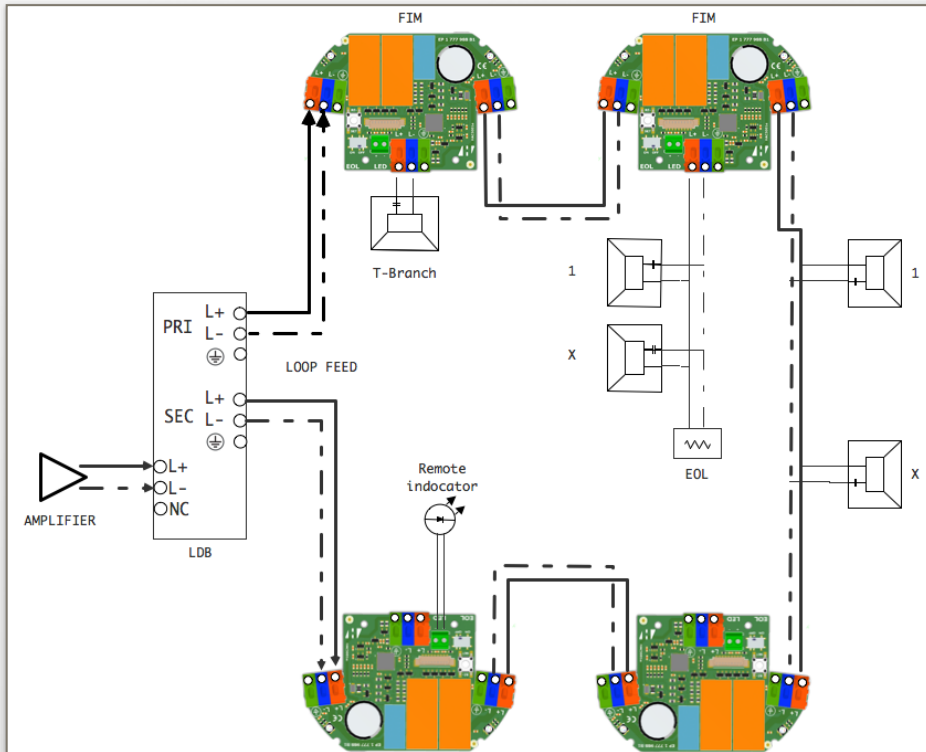
LoopDrive Booster - LDB

The LDB is equipped with clearly marked connectors. The LDB has a LOOP-PRIMARY and LOOP-SECONDARY connection that are not sensitive for feeding direction. LOOP has a DC-carrier for charging and communication purpose to FIM. Please observe correct connectivity:

RED = PHASE / PLUS

BLUE = ZERO / MINUS

GREEN = GROUND (If applicable)



NOTE:

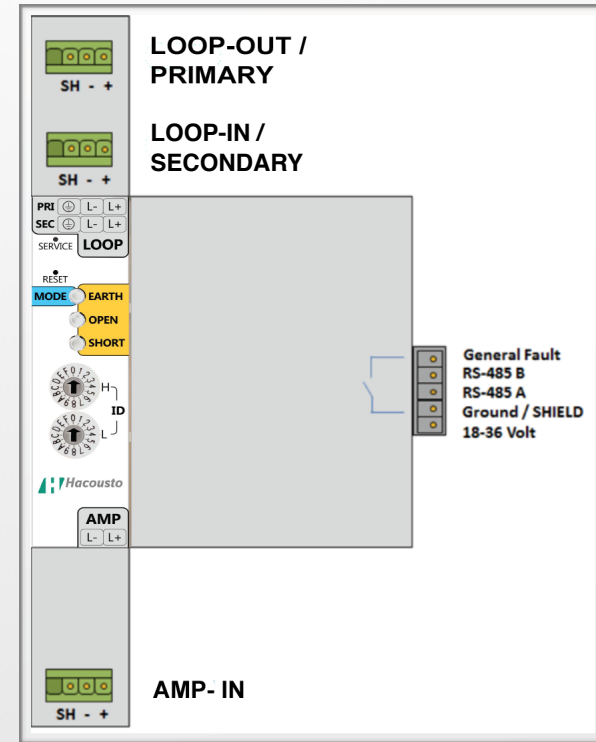
The maximum number of loudspeakers between FIM's is not limited within the maximum LOOP-load of 800W, however, National standards may limit the amount of loudspeakers between Isolators.

Earth connector is available for optional earth-wire loop detection.

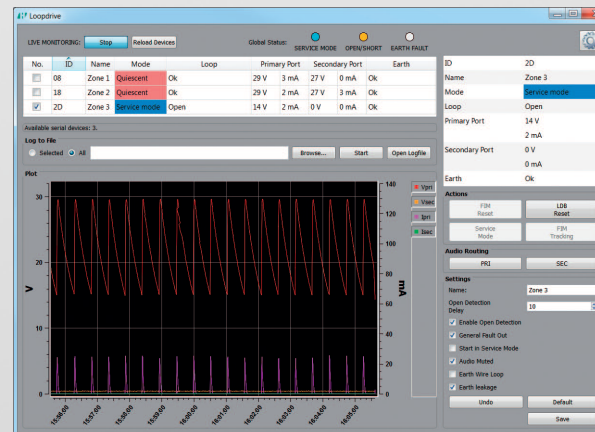
Detect - Locate - Isolate

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During fault status, the LoopDrive Booster, LDB, is feeding both loop-branches simultaneously and the fault is indicated by the status LED's on both FIM's and LDB's. The LED indicator(s) on the LDB are flashing with intervals to indicate the error. The FIM restores the faulty partition of the Loop-branch-lines to normal condition when the short or open circuit condition is removed and a general reset command is given by pressing the RESET button on the corresponding LDB. Please refer to the User and Installation manual V01R01 for entailed information on the various indications and functions.



SNIFFER is a comprehensive Graphical User Interface (GUI) that let you automate the commissioning and installation of a Loopdrive system with up to 256 LDB-units over a single RS485 connection. Sniffer is not only visualising the various commissioning procedures but also provide streamlined methods for fault-finding and device allocating without the direct need for a digital communication protocol over the 2-wire audio line's. It fulfils the user's needs and expectations by far. Please refer to the Sniffer application manual for more detailed information.