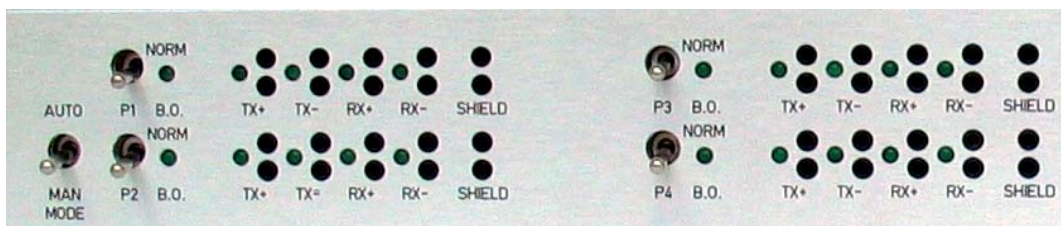


AFDX-BOP

AFDX® Breakout Panel



- Breakout of four redundant AFDX® channels equivalent to eight parts
- Fully compliant to IEE 802.3 physical layer in norm position
- Breakout of signals to standard 2 mm test jacks for test, fault insertion and monitoring
- Manual operation or SW-controlled operation of AFDX-BOP selectable

AFDX-BOP AFDX® Breakout Panel

Application Scope

The **AFDX® Breakout Panel (AFDX-BOP)** is designed to either directly connect an AFDX® network segment to another or connect the AFDX® bus to a manual patch panel. The operation is either manually by a front panel switch per channel or fully automatic via ADS-2 SW control.

Functional Description

The AFDX-BOP can patch up to eight AFDX® ports equivalent to four AFDX® redundant channels. The AFDX® interface is established via a shielded RJ45 receptacle. The signal path is operated via shielded RF relays. The normal signal path connects the AFDX® input directly with the AFDX® output (full duplex). The normal position will minimize distortion to the AFDX® bus. The patch position is designed to feed the AFDX® bus signals to standard 2 mm test jacks for external signal conditioning and analysis. The signal switching is performed via RF relays.

A manual switch selects the mode of operation.

Modes of operation are:

- > Normal operation - AFDX® bus segments connected
- > Patch operation - AFDX® manually routed to the patch connectors
- > SW-controlled operation - AFDX® bus under SW control routed to normal or patch position

The AFDX-BOP is controlled by a Remote Controller Modul (RCM). The RCM has a RS422 multi-party serial communication port to communicate with the host hardware.

In addition the controller can read out the local switch setting and will force the relay to be operated locally without ADS-2 control. However, a feedback to the ADS-2 is generated via the controller to the ADS-2 software to supply information to the operator about local lock out.

Kanal 1...8	Norm-Position		Break Out-Position	
Reserve (NEXT 12-36)	21,0.. 22,9 dB		10,0..12,3 dB	
Laufzeit	10ns		7..13 ns	
Abweichung der Laufzeit	0 ns		0..6 ns	
Dämpfung	9,6 dB		9,4 dB	
Frequenz	16,0 MHz			
Grenzwert	10 dB			
Mindest Abstand	Main	SR	Main	SR
NEXT/dB	22,0..23,8	21,0..22,9	11,8..21,5	10,0..12,3
Frequenz/MHz	23,3..25,2	22,9..80,0	19,4..80,0	65,2..80,0
Grenzwert/dB	30,1..30,6	22,5..30,7	22,5..31,8	22,5..23,9
ACR/dB	24,1..25,9	23,1..25,0	13,7..23,4	11,9..14,2
Frequenz/MHz	23,3..25,2	22,9..80,0	19,4..80,0	65,2..80,0
Grenzwert/dB	27,6..28,1	20,0..28,2	20,0..29,3	20,0..21,4
Mindest Wert	Main	SR	Main	SR
NEXT	23,2..25,5	21,0..22,9	11,8..24,7	10,0..12,7
Frequenz	79,6..80,0	80,0	79,6..80,0	79,0..80,0
Grenzwert	22,5	22,5	22,5	22,5..22,6
ACR	25,3..27,6	23,1..25,0	13,7..26,6	11,9..14,6
Frequenz	79,6..80,0	80,0	79,6..80,0	79,0..80,0
Grenzwert	20,0	20,0	20,0	20,0..20,1

AFDX is a registered trademark of Airbus Deutschland GmbH