



DaTABANK BD-R / BD-RE Disc & Stamper Analyzer

- BDR/RE Stamper and Disc analysis at 1X
- Performs all types of measurements: HF, tracking, Jitter, mechanical and digital.
- Special features such as BCA Analysis, Wobble Amplitude, Push Pull and Carrier to Noise Ratio
- Easy format upgrade for driveCubes
- driveCube module fits all DaTABANKs
- User interface consistent with DVD driveCubes
- DaTAVIEW and Quality Web display
- Spec-conform drive and pick-up
- Compact patented design
- Ready for in-line integration



The new DaTARIUS BD Analyzer driveCube adds Blu-ray Disc analysis to the flagship DaTABANK system. In keeping with the DaTARIUS 'prepared for the future' philosophy, the BD Analyzer driveCubes can be specified for new DaTABANK systems or hot-swapped into existing DaTABANKs, thus extending their capability to include BD.

Two versions of the BD recordable driveCube are available: the BDR Analyzer 1X (BDR A 1X) and the BDR Analyzer Stamper 1X. The BD A 1X is used to measure BD recordable (blank and recorded) discs, single and dual layer. The BDR A S1X is a modified version of the BDR A 1X to additionally enable stamper measurements with its unique adapter system. Both driveCubes can also perform measurements on pre-recorded discs and stampers*.

The BD driveCube measurement portfolio includes HF, jitter, digital, servo and mechanical. These are essential for Blu-ray Disc producers and format developers to assess the quality of their Blu-ray Disc product. The BD driveCubes are built around the DaTARIUS universal driveCube platform with adherence to format requirements that results in a high degree of repeatability, reproducibility and reliability of measurements.

The user interface is consistent with existing DaTABANK DaTAVIEW and Quality Web analyzer displays. These flexible, user-friendly, and configurable displays deliver the required data in fast and easy to assimilate formats. DaTABANK can be used with a mix of BD and DVD driveCubes to offer comprehensive format analysis.

* BDR A S1X only



Measured parameters

(Features available with DaTAVIEW release 2.0, MMB 2.0, pit O'resc pc and jitter board installed)

Before recording		BDR A 1X	BDR A S1X		
HF	RPS	Radial Push-Pull amplitude	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	NWO	Normalized Wobble Signal	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	PP	Push-Pull	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	RC	Radial Contrast	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	RL	Reflectivity Land	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	RG	Reflectivity Groove	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	WO	Wobble Amplitude	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	WOFFT	Spectrum of Wobble Signal	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	WobBeat	Wobble beat before recording	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	WCNR	Carrier to Noise Ratio of Wobble	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	Servo & Tracking	TRP	Track Pitch	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		IDIA	Inner Diameter of Information Area	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ODIA		Outer Diameter of Information Area	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Servo & Tracking	FE1	Focus Error	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	FE2	Focus Error Noise	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	RADIAL1	Radial Error	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	RADIAL2	Radial Noise	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

After recording		BDR A 1X	BDR A S1X		
digital	BEC	Burst Errors Counter	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	BEL	Burst Errors Length	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	RSER	Random Symbol Error Rate	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	RSErk	Random Symbol Error Rate blocked over 1k	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	SER	Symbol Error Rate	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	SERk	Symbol Error Rate blocked over 1k	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DPDAmp	Differential Phase Tracking	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DPDAsy	Differential Phase Asymmetry	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	RPP	Radial Push Pull	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	TCS	Track Crossing Signal	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
HF	HF-SNAP	HF Snapshot	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	I2H	I2 High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	I2L	I2 Low	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	I3H	I3 High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	I3L	I3 Low	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	I8H	I8 High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	I8Hmax	I8H max per block	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	I8Hmin	I8H min per block	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	I8Hrv	I8H variation per revolution	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	I8L	I8 Low	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	Asym	Asymmetry	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	I2/I8eq	2T Peak to Peak Modulation equalized	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	I3/I8	3T Peak to Peak Modulation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	I3M	I3 Modulation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	I8/I8H	8T Peak to Peak Modulation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	I8Hdv	I8H variation per disc	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	I8Hdvf	I8H variation per disc filtered	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	R8H	Reflectivity In Recorded Rewriteable Disc Areas	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	RxI2	Reflectivity I2 Modulation product	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	RxM	Reflectivity Modulation Product RxM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	mechanical	SVY	Scanning Velocity	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		TRP	Track Pitch	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		RRO	Radial run out	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		IDDA	Inner Diameter of Data Area	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		ODDA	Outer Diameter of Data Area	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		IDIA	Inner Diameter of Information Area	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		ODIA	Outer Diameter of Information Area	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	servo & tracking	SA	Spherical Aberration	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
TO		Tracking Offset	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
FE1		Focus Error	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
FE2		Focus Error Noise	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
FO		Focus Offset	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
TC		Tilt Compensation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
jitter	RADIAL1	Radial Error	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	RADIAL2	Radial Noise	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	JFCo	Jitter Falling with Conventional Equalizer	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	JFLi	Jitter Falling with Limit Equalizer	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	JFLiE2T	Jitter Falling with Limit Equalizer and Excluding 2T	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	JRCo	Jitter Rising with Conventional Equalizer	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
JRLi	Jitter Rising with Limit Equalizer	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
JRLiE2T	Jitter Rising with Limit Equalizer and Excluding 2T	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		

¹ only for recorded disc, pre-recorded disc and pre-recorded stamper
² only for recorded disc and pre-recorded disc

Specifications subject to change without notice

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Analyzer driveCube
 The BD driveCube delivers digital and mechanical data specified, as part of the DaTABANK system. It can be used to measure stampers* and both pre-recorded (ROM) and recorded recordable (R & RE) disc according to relevant specifications.
 * only BDR A S1X

Network technologies based
 Data exchange between the BD driveCube and the DaTABANK platform is based on standard network technologies. This enables data to be exchanged locally or through a LAN, W-LAN or over the Internet. Networking can be used to transfer analyzer data, software and firmware updates and for remote system control.

Test mode
 ▶ Pre-defined and customized functions: The DaTAVIEW software is installed with standard test sequences, including full test, spot measurement, and quick test. Users can also edit and customize these standard settings to compose a measurement strategy that meets their specific requirements.
 ▶ Double-Check: This feature can be

selected to perform a re-check, at 1X, on a suspect measurement detected either at 1X or at higher speeds.
 ▶ SPLIT TEST: The DaTAVIEW software can combine up to 8 BD Analyzers to further reduce measuring time.

Technical specifications
Environment conditions
 To broaden environmental operating conditions DaTABANK has an advanced filtered airflow system and each driveCube has its own temperature monitoring
 Recommended environmental conditions:
 Temperature: 23°C+/-2°C
 Humidity 40% - 60% relative humidity, condensation free

Electrical and mechanical specification
BD drive and pickup head:
 Wavelength: 405+/- 5nm
 Numerical Aperture: 0.85+/-0.01
 Size: 24cm x 24cm x 24cm
 Weight: 6Kg



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