GUZIK PRODUCT BULLETIN

Head Amplifier Active Injector For Spinstand V2002



A new Guzik Head Amplifier Active Injector has bandwidth from DC to 6 GHz and provides a differential output signal with high symmetry of frequency response and group delay. This signal injector is required for frequency response measurements of high bandwidth analog front-end integrated in the Guzik test system. The injector bandwidth starts from DC to measure frequency response of read-back amplifiers for perpendicular recording. The injector converts the single-ended signal from a network analyzer or a signal generator to a differential signal and attenuates the level of the signal, so it can be connected to the input of a head amplifier.

Head Amplifier Active Injector Specifications:

Frequency Response

- **Bandwidth:** DC to 6 GHz (-3dB)
- Flatness: ±0.5 dB, DC to 5 GHz
- Amplitude Difference Between Positive and Negative Outputs: less than 0.5 dB

Group Delay

- Flatness: better then 100 psec to 6 GHz
- Difference Between Positive and Negative Outputs: less than 25 psec

Output Impedance

• Nominal: 50 Ohm differential

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Attenuation

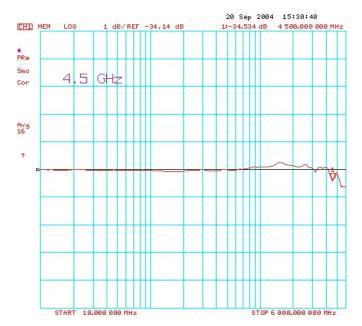
• Single Ended Input to Differential Output: 36 dB nominal

Power Supply

• ±5 V, 120 mA from the power filter of RWA Analog Box

Items available: CCW Cartridge with Active Injector Board (Guzik P/N S80-702376), CW Cartridge with Active Injector Board (Guzik P/N S80-702373), and Power Filter Cable (Guzik P/N 30-461017). Separate Injector Boards CCW (Guzik P/N 23-323080) and CW (Guzik P/N 23-323000) can be ordered as spare parts.

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Frequency Response and Group Delay

Figure 1: Frequency Response of Head Amplifier Active Injector

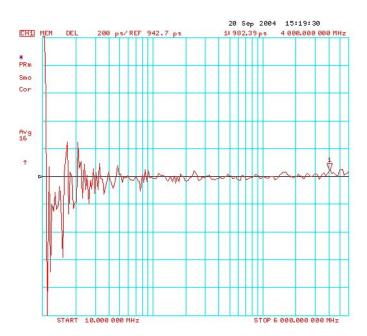


Figure 2: Group Delay of Head Amplifier Active Injector



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