



# QUANTUM TECHNOLOGY, INC.

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**MODEL MDA-80  
AMPLIFIER-PULSE PICKER  
DRIVER SYSTEM FOR  
RESONANT EOMS**

**DATA SHEET 769D**

## **MODEL MDA-80 AMPLIFIER-PULSE PICKER FOR RESONANT REM-101A EOMS R.F. AMPLIFIERS FOR ELECTRO-OPTICS**

### **FEATURES:**

- **65-110 MHz Mode Locked Lasers**
- **Divide by 2 for Sine Wave Drive**
- **Mates with REM-101A Amplitude EOMs**
- **Adjustable Phase Delay and Bias**

The Quantum Technology Model MDA-80D Resonant EOM Pulse Picker System Driver is a high quality, high stability driver that makes it possible to do a Divide by 2 Pulse Picking for commonly used 80MHz ML lasers. These are commonly used in electro-optic applications where no compromising can be made. This system offers the user ease of operation with Quantum's high efficiency resonant EOM REM-101A over a broadband range. It can accommodate 80 MHz Mode Locked Photodiode input or high level electrical Mode Locker output signal which, typically, is half the ML laser output frequency. An adjustable Phase Delay circuit electrically sets the EOM output to coincide with Mode Locked laser pulses in the Modulator to allow only every alternate optical pulse to transmit through. A convenient Gain control manually sets the optimum level for 100% modulation. The MDA-80's Bias Control supplies up to +/- 400VDC to manually bias intensity EOMs at the 50% optical bias point for optimum symmetrical modulation. The MDA-80A Amplifier has the same bias control as the MDA-80D without the divide by 2 circuit on the front and Phase Delay circuit. If the Phase Delay option is needed please let us know as it can easily be added. A 24VDC power supply is available for these units for A.C. mains operation.

The Quantum Technology's MDA-40 has special configurations which are available such as higher Driver power, or higher frequency Mode Locked Laser Pulse Picking up to 200MHz.

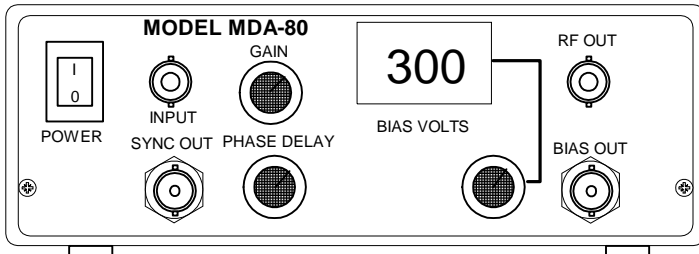
Please consult Quantum Technology directly for information.

### **MODEL MDA-40 SPECIFICATION**

<b>Parameter</b>	
<b>Mode Locked Frequency Range</b>	<b>65-110 MHz</b>
<b>Input Sensitivity @ 50ohms</b>	<b>&lt;100mV-1Vpk, Photo diode input</b>
<b>Adj Phase Delay Range</b>	<b>&gt;15ns@80MHz input</b>
<b>Adj Bias Range</b>	<b>+/-300V</b>
<b>Output Power</b>	<b>&gt;2Watt@ 50 ohms</b>
<b>Size</b>	<b>7.25x2.5x9.5 (WxHxD, inch)</b>
<b>Power Requirements</b>	<b>24VDC, 30W</b>
<b>ORDER Options:</b>	<b>MDA-40A (Amplifier only, without Divide by 2)</b>
	<b>MDA-40D (with Divide by 2 input for Pulse Picker)</b>

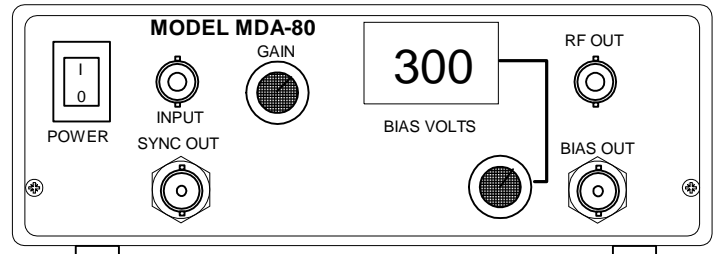
# MODEL MDA-80

FRONT VIEW



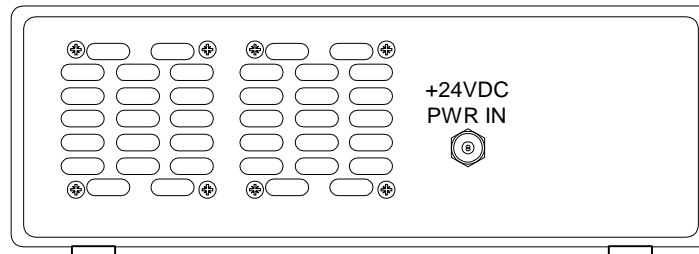
MODEL MDA-80D: WITH DIVIDE/2 FEATURE

FRONT VIEW



MODEL MDA-80A: WITH AMPLIFIER ONLY FEATURE

REAR VIEW



MODEL MDA-80D  
RESONANT EOM REM-101A  
PULSE PICKER DRIVER SYSTEM

MODEL MDA-80A  
RESONANT EOM REM-101A DRIVER