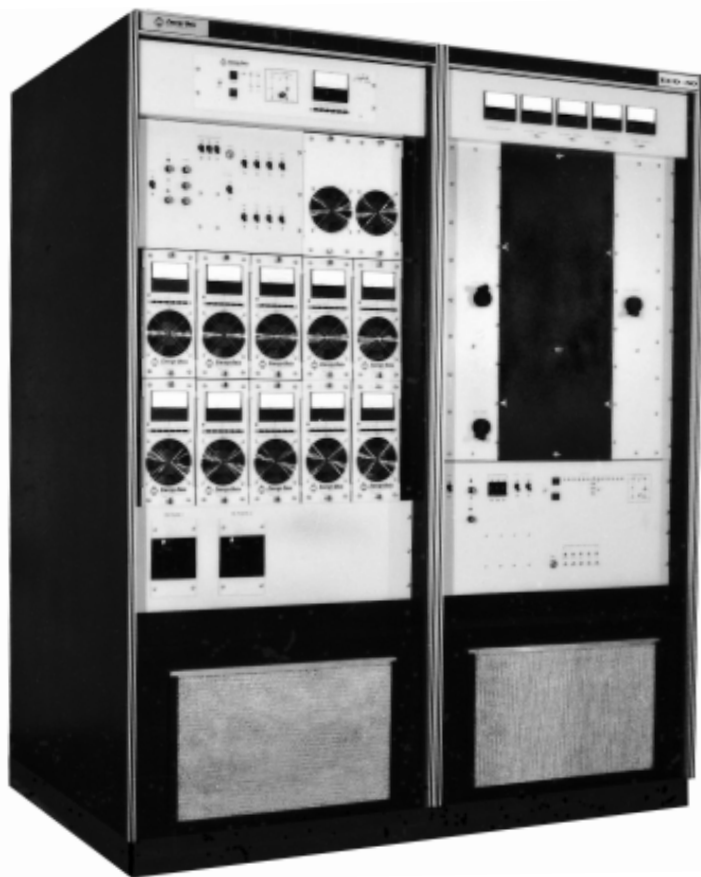


ECO - 40 ♦ ECO - 50

Economical ♦ Super High Power ♦ Single Ended Grounded Grid ♦ FM Broadcast Transmitter



Features:

- ◆ Long Life, Zero Bias Triode PA, Single Ended with (2) 3CX15000A7s In Parallel
- ◆ Never Requires Neutralization
- ◆ 4KW Solid State Independent Driver Doubles as Emergency Transmitter
- ◆ Independent Power Supply For Each Final Tube
- ◆ Filament Voltage Regulators
- ◆ Self Contained in Two 32" x 48" Cabinets, 21.32 Sq. Ft. Footprint
- ◆ Simple Reliable Controller
- ◆ Automatic Power Output Control
- ◆ VSWR Foldback & Protection
- ◆ Designed For Local & Remote Control

Application:

The ECO 40 & 50 are designed for Broadcasters who require Super High Power transmitters for extended range or who want to use a low gain antenna in a congested or mountainous area to achieve a reduction in multipath interference. These transmitters offer excellent quality and the highest level of reliability for stations that require transmitter powers up to 52KW to achieve their licensed power.

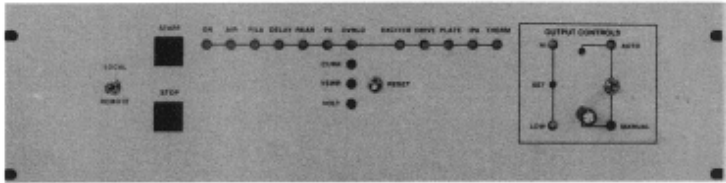


ENERGY-ONIX

The Transmitter People

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The ECO Control Center



ECO Controller — Simple and Reliable — Field proven in the world's harshest environments, the ECO controller's straight forward design contains no multiprocessors. The Controller utilizes LEDs to indicate the status of the transmitters operation including interlocks, overloads and the Automatic Power Output Control. This "At A Glance" transmitter status controller layout is a favorite of engineers.

Single Button Operation: One touch of the start switch, in either local or remote position, turns the transmitter on. Once filament warm-up occurs the transmitter will automatically activate, provided all interlocks are closed. The controller will automatically restart the transmitter when power is restored after a power outage.

Circuit Breaker Protection: Every major circuit in the ECO series is protected by circuit breakers. Independent circuit breakers for the blowers, filaments, driver and PA power supplies are conveniently located on the ECO Circuit Breaker Panel.

Full Metering: The ECO 40 & 50 has full metering of all transmitter parameters including separate metering for the filament voltage, grid current, plate current and plate voltage of each final tube. Complete metering of all driver stages, line voltages and forward and reflected power is also present.

Remote Control: The ECO series is designed for both local and remote operation. Start, stop, VSWR and overload reset, and metering is available at the remote control point.

Other Features

Solid State Driver: The ECO 40 & 50 features a self contained, totally independent 4KW solid state driver. This is our Legend 4KW transmitter packaged to fit in the ECO cabinet. Our design allows the driver to easily be placed into service as an emergency back up transmitter.

PA Tube: (2) 3CX15000A7 long life Triode tubes, paralleled, in grounded grid configuration are used in the single ended PA of the ECO 40 & 50. These two tubes are capable of conservatively producing 60KW of RF power. Average tube life for triode tubes is three to four years.

Power Supplies: Regulated power supplies are used for the ECO controller. Independent full wave bridge rectified power supplies are used for the final tubes.

Exciter: The Energy-Onix Stealth 100 exciter is provided with each ECO transmitter. Exciter specifications are available on the Exciter literature sheet.

Quick & Easy Access: All parts of the ECO series transmitter are easily accessible through the interlocked rear door, interlocked PA front cover and removable 500 watt packages used in the driver.

Technical Specifications

Model	Power Range	Power Consumption	Weight	Frequency Range:	88 - 108 mHz (50-150 mHz optional)
ECO-40	10KW - 40KW	62KW @ 40KW	4200 lb.	Modulation Capability:	± 250 KHz
ECO-50	10KW - 52KW	75KW @ 50KW	4400 lb.	RF Harmonics:	At least 80db below carrier
AM Noise:	At least 55db below carrier			FM Noise:	At least 70db below 100% mod. at 400Hz
				Audio Performance:	Please see Exciter Specs

Line Voltage: 380-440 VAC (specify), 50 or 60HZ, Three phase (Single phase by special order only)

Total Transmitter size: 64" W x 81" H x 48" D (2 cabinets 32" W x 81" H x 48" D)

Output Impedance: 50 ohm , 3 1/8" EIA flange

ECO series transmitters, including the solid state driver, are manufactured by Energy-Onix at our Valatie, NY factory. Specifications listed in this brochure are subject to change without notice.