SMPTE/EBU
TIME CODE READERS

These eight-digit displays are designed to auto-detect, read and display SMPTE or EBU time code. Each is capable of reading in either direction (forward or reverse) at speeds ranging from 1/15th to 3x play-speed.

Setup Features allow the unit to display time in either 12 or 24 hour format and to display "User Bits" data. An Error Detection and Correction Feature maintains flicker-free operation in the event of poor quality or loss of time code. An Error Detection Indicator is also included and the Error Feature may be turned-off via an internal DIP switch.

Pressing the front mounted "Hold" push-button allows the display to be "frozen". A rear mounted toggle switch (front panel mounted when option "P" is specified) selects whether "time" or "user bits" are displayed. Note: Controls for the ES-493U and ES-443U are provided on the rear mounted terminal block.

Several Options are available with "U" Series Readers. Option "TZ" allows the unit to be "offset" to other time zones via an internal set of DIP switches. *ESE* and ASCII (RS-232C) time code outputs are also optionally available which allow these units to function as Time Code Converters. Most units are available with a rack mount enclosure, option "P". Other options are listed below.

Each Reader requires only a single pair of wires (or coax) between itself and the Master Clock (or other source of time code). The wiring arrangement can be parallel, serial or both. Please note that extra long cable runs may require a Distribution/Isolation Amplifier, please refer to the Distribution Amplifiers Brochure.

Features:

- Reads SMPTE Or EBU Time Code
- Error Detection & Correction
- Optional Time Zone Offset
- Optional *ESE* & RS-232C Time Code Outputs
- Display Time Or User Bits
- .56" to 4.0" Display Sizes
- 12/24 Hour Format
- Simple Installation & "Hands-Off" Operation
- Long-Life LED Displays
- Desk Top, Wall & Rack Mount Enclosures
- Perfect Synchronization With Master Clock
- 24, 25, 29, 30 Frame Rate - Auto Detect

SPECIFICATIONS

	LX-453U	ES-453U	LX-463U	ES-463U	ES-493U	ES-443U
Power:	5 Watts	5 Watts	5 Watts	5 Watts	8 Watts	10 Watts
Line Cord:	3-wire, 6'	3-wire, 6'	3-wire, 6'	3-wire, 6'	3-wire, 6'	3-wire, 6'
Electrical:	117 VAC, 50/60 Hz	117 VAC, 50/60 Hz	117 VAC, 50/60 Hz	117 VAC, 50/60 Hz	117 VAC, 50/60 Hz	117 VAC, 50/60 Hz
Time Code Input:	SMPTE/EBU	SMPTE/EBU	SMPTE/EBU	SMPTE/EBU	SMPTE/EBU	SMPTE/EBU
Connector:	BNC	XLR	BNC	XLR	Terminal Block	Terminal Block
Enclosure:	Desk Top	Desk Top	Desk Top	Rack Mount	Wall Mount	Wall Mount
Mechanical (HxWxD):	1.7" x 9.6" x 6"	2.5" x 8" x 6"	3.5" x 12.3" x 6"	3.5" x 19" x 10"	5" x 19" x 3.5"	7" x 43" x 3.5"
Display Height/Color:	.56", Yellow	.56", Yellow	1.0", Yellow	1.0", Yellow	2.3", Yellow	4.0", Red
Viewing Distance:	20 feet	20 feet	35 feet	35 feet	70 feet	120 feet
Options:	J, RS, TZ, UL	Black, *ESE*, J, P, RS, TZ, UL	Blue, Green, J, Red, RS, TZ, UL	Black, Blue, *ESE*, Green, J, Red, RS, TZ, UL	Blue, Green, J Red, TZ, UL	Amber, Blue, Green, J, TZ, UL