

# TIME CODE READERS

These six-digit (or four-digit) displays are designed to be "Universal" Time Code Readers. All models described below are able to auto-detect, read and display **ESE** (TC76™, TC89™ or TC90™), ASCII (format A, 0 or 1 @ 9600 baud; RS-232C, RS-422A or RS-485), EBU or SMPTE time code.

Setup Features allow the unit to display time in either 12 or 24 hour format and if reading **ESE** Time Code to display "Date" information and if reading SMPTE/EBU to display "User Bits". 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 Correction Feature may be turned-off via an internal DIP switch.

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. 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, refer to page 15 (ES-243) for more information.

## Features:

- Reads SMPTE/EBU, ASCII or **ESE** Time Code
- Error Detection & Correction
- Optional Time Zone Offset
- Optional **ESE**, & RS-232C Time Code Outputs
- Display Date or Time
- 0.4" To 4.0" Display Sizes
- 12/24 Hour Format
- Simple Installation & "Hands-Off" Operation
- Long-Life LED Displays
- Desk Top, Console, Wall & Rack Mount Enclosures
- Perfect Synchronization With Master Clock



## SPECIFICATIONS

Model Number	Description	Viewing Distance	Time Code Input	Options
ES-171U	6-digit, 0.4" Red LED in Console mount enclosure	10'	ESE, SMPTE/EBU	J, V, TZ, UL, W
LX-161U	6-digit, .56" Yellow LED in "LX-" enclosure	20'	ESE, SMPTE/EBU, ASCII	J, RS, TZ, UL
ES-161U	6-digit, .56" Yellow LED in Desk mount enclosure	20'	ESE, SMPTE/EBU, ASCII	Black, <b>ESE</b> , J, NTP, P, P2, Q, RS, TZ, UL, W
LX-166U	6-digit, 1.0" Yellow LED in "LX-" enclosure	35'	ESE, SMPTE/EBU, ASCII	J, RS, TZ, UL
ES-166U	6-digit, 1.0" Yellow LED in Desk mount enclosure	35'	ESE, SMPTE/EBU, ASCII	Black, <b>ESE</b> , J, NTP, P, P2, Q, RS, TZ, UL, W, Wall
LX-991U	4-digit (Hr, Min), 2.3" Yellow LED in "LX-" enclosure	70'	ESE, SMPTE/EBU, ASCII	J, TZ, UL
ES-991U	4-digit (Hr, Min), 2.3" Yellow LED in Desk mount enclosure	70'	ESE, SMPTE/EBU, ASCII	Black, J, NTP, P, TZ, UL, W, Wall
LX-993U	6-digit, 2.3" (1" Sec) Yellow LED in "LX-" enclosure	70'	ESE, SMPTE/EBU, ASCII	J, TZ, UL
ES-993U	6-digit, 2.3" (1" Sec) Yellow LED in Wall mount enclosure	70'	ESE, SMPTE/EBU, ASCII	J, P, TZ, UL, W
ES-996U	6-digit, 2.3" Red LED in Wall mount enclosure	70'	ESE, SMPTE/EBU, ASCII	Black, CW, J, NTP, P, TZ, UL, W, Amber
ES-941U	4-digit (Hr, Min), 4.0" Red LED in Wall mount enclosure	120'	ESE, SMPTE/EBU, ASCII	J, NTP, TZ, UL, W
ES-943U	6-digit, 4.0" Red LED in Wall mount enclosure	120'	ESE, SMPTE/EBU, ASCII	J, NTP, TZ, UL, W

Display	Power	Electrical
0.4" LED:	5 Watts	117 VAC, 50/60 Hz
.56" LED:	5 Watts	117 VAC, 50/60 Hz
1.0" LED:	5 Watts	117 VAC, 50/60 Hz
2.3" LED:	8-10 Watts	117 VAC, 50/60 Hz
4.0" LED:	8-10 Watts	117 VAC, 50/60 Hz

Enclosure	Style	Dimensions
0.4" - Console:	Black ABS Plastic	2.2" H x 4.5" W x 4.5" D
.56" - LX:	Black Texture (High-Tech)	1.7" H x 8" W x 6" D
.56" - Desk:	Walnut Grain / Aluminum	2.8" H x 8" W x 6" D
1.0" - LX:	Black Texture (High-Tech)	3.5" H x 10" W x 6" D
1.0" - Desk:	Walnut Grain / Aluminum	5.5" H x 10.4" W x 6.6" D
2.3" - LX:	Black Texture (High-Tech)	3.5" H x 12" W x 6" D
2.3" 4-digit Desk:	Walnut Grain / Aluminum	5.5" H x 10.4" W x 6.6" D
2.3" 6-digit Wall:	Black Textured Aluminum	5" H x 12" W x 3.5" D
2.3" 6-digit Wall:	Black Textured Aluminum	5" H x 15" W x 3.5" D
4.0" 4-digit Wall:	Black Textured Aluminum	7" H x 19" W x 3.5" D
4.0" 6-digit Wall:	Black Textured Aluminum	7" H x 26" W x 3.5" D

