



The top cover has a cut-out to facilitate inser-tion of the cartridge. In a stepped-back position, it provides easy access to the mechanism and allows even more rapid feeding of car-tridges. It can be fully removed. The cover is tightly fitted to avoid vibration during operation

117 volts, AC, 60 Hz, 50 watts continuous, 625 volt amperes

intermittent (at peak erasure).

25-29 IPS. Direct-drive, high-

speed capstan motor with permanently lubricated ball

SPLICE SENSITIVITY:

of 1/2 mll or greater.

TAPE CAPACITY:

NAB size AA cartridges.

ERASE DEPTH:

Senses splicing tape thickness

45 dB\* or better 50 Hz to 15 kHz

POWER:

bearings.

TAPE SPEED:

# **ESL-IV SERIES** Cartridge Tape Eraser/ **Splice Locator**



### Guaranteed

The ITC ESL-IV guarantees good sound, time savings, convenience, fool-proof operation and performance. At a very modest cost.

All this plus ITC's famous thirty-day guarantee of satisfaction and bold twoyear warranty on parts and factory labor.

### **SPECIFICATIONS**

### CYCLE TIME:

For complete erase/splice location cycle: Minimum any length cartridge 15 sec. Maximum 70 sec. cartridge 35 sec. 101/2 min. cartridge 180 sec.

maximum.

### DIMENSIONS:

53/4" wide, 15" deep, 51/4" high (add 3/8" for feet).

#### WEIGHT:

17 lbs.

\* As referenced to "0" level at 1 kHz (fluxivity level 160 nW m)

Made under one or more of the following patents: 3,800,323; 3,801,043; 3,801,329; 3,833,935; 3,865,719; 3,932,887; 4,142,221.



## **ESL-IV SERIES Cartridge Tape Eraser**/ **Splice Locator**



### AMBIENT TEMPERATURE:

55 degrees C., 131 degrees F.,

MOUNTING: Table top mounting.

World Radio History



### Combines cartridge erasing and splice locating in a single, automatic operation.

### For Better Sound

Clean, crisp recording - and on-air sound - requires that tapes be completely erased and the splice located and positioned just past the playback head. If the erasure is not complete there will be noise superimposed on the new recording. And if the new sound is recorded over a splice, sound quality will be poor - or sound will drop out entirely - for that period. If a high frequency cue tone is recorded on the splice, as might occur in an automated system, the tone may be garbled. For these reasons, automated stations, large stations - and all stations concerned with their sound - locate splices in conjunction with cartridge erasure.

### Manual Operation A Problem

USING A HAND-HELD BULK ERASER does not always produce a uniformly erased tape. Positioning of the eraser, length of erasing time, operator-error and other factors all affect the outcome. For example, continuous use of the eraser will cause overheating and possible failure of the eraser. And, of course, use of the bulk eraser requires both hands and the full attention of the operator. Since most operators turn the tape cartridge over during erasure, the process may take twenty or thirty seconds.

### Splice locating also tedious

TO LOCATE A SPLICE VISUALLY. the operator has to place the cartridge in a regular machine (normally running at  $7\frac{1}{2}$  IPS), run it, and watch for the splice to appear at the playback head position. Depending on the tape length, it takes from several seconds to several minutes for the splice to appear. Sometimes the splice will elude the operator at the first pass and the cycle must be repeated. Because the process of locating splices is tedious and time consuming many stations elect instead to tolerate the loss of quality caused by recording over them.

### The ESL does both jobs with ease

The operator simply inserts a cartridge and pushes the "Start" button. The button lights up the indicate tape movement. A diagonal cartridge guide assures accurate positioning of the cartridge even when insertion is done rapidly or carelessly. This permits rapid handling of cartridges without risk of damage. A hold-down spring locks the cartridge solidly in position.

### 3 Modes

Any of three modes can be selected: combination, erase only, or splice locate only. The COMBINATION MODE involves two, sequential cycles. The erase cycle comes first and lasts 15 seconds. During the erase cycle, a light on the control panel glows red, dimming and then going out as erasing is accomplished. The splice locating cycle follows. The length of this cycle depends on the length of the tape and the position of the splice. Upon sensing the splice, tape motion stops and the machine returns to a "ready" condition. If the machine is started again, with the same cartridge left in place, the ESL-IV will ignore the erase cycle, going directly into the splice locator cycle. A "Stop" button permits the operator to over-ride any function, turning the machine off at any point, in any cycle, in any mode. A safety feature.

In the ERASE-ONLY MODE, the internal bulk eraser erases the cartridge. At

the end of this 15 second cycle, tape motion stops. This mode is useful when the operator is more concerned with time savings than with production quality.

The SPLICE LOCATOR ONLY MODE is used where a tape has already been erased but where the splice has not been located. Or, where, for some reason, tape has multiple splices. In this mode, the machine goes directly into the splice locate cycle. When the splice is located, tape motion stops.

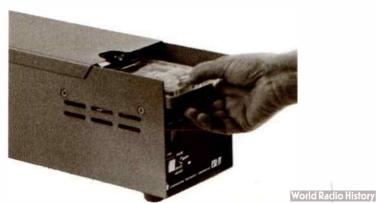
### Virtually Fool-Proof

The switches on the panel are easy to see and control, speeding operation and reducing the probability of error. The machine is very quiet in operation, highly resistant to shock, external vibration, and noise. This resistance is provided for by the massive, rugged construction of the machine and by the rejection of noise by its electronics. It is compact. Visually attractive.

### **Built With ITC Quality**

The ESL is fast, running at about four times normal playing speed, without harmful stress to the tape. It is a fine guality machine, built to the same high standards you expect from ITC cartridge machines, using parts interchangeable with these machines. This assures long life, dependable service, and ease of servicing and parts replacement.

Angled cartridge guide permits rapid placement of cartridge



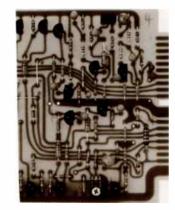


Heavy-duty AC induction motor provides for precision tape travel at speeds between 25 and 29 inches per second. Reliable, long-lived. The motor is electrically isolated from the elec-tronics, each enabled by a separate Micro-Switch. This permits the motor to be turned off when there is no cartridge in the machine, reducing deck heat.

### Will Not Overheat

The design of the machine makes it almost impossible for the operator to subject the erase-coil to continuous duty, which can cause overheating and failure in manual erasers. The necessary "rest" period is provided in the combination mode by the splice locating cycle. In the erase mode, a cartridge must be removed and replaced before the machine will reenergize the coil. And, of course, in the splice finder only mode, the erase-coil is turned off. The operator, thus, cannot inadvertently damage the machine.

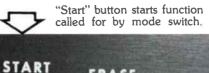
Electronics are totally accessible from back of machine. All high voltage electronics are on the mother board, out of reach of human hands. There are no high voltage electronics on the plug-in daughter board. The erase coil and other electronics are individually fused for safety





Half-inch thick, milled aluminum deck provides the massive support and stability needed to withstand shock and vibration and permit precision performance of all components.

The erase-coil is positioned horizontally on the tape deck so that the flux field is equally distributed, assuring uniform and complete erasure.





Erase indicator lamp reflects relative in-tensity of magnetic field during erasing process. Dims and goes out as erasure is completed.

"Erase" position calls for erase-only mode. This cancels the splice locator cycle and locks out the "Start" button until cartridge is removed and another

"Both" mode erases the tape and locates the splice.

"Splice Locate" locates splice only. Does not erase. Does not lock out "Start."



"Start" and "Stop" buttons have indicator lamps. Manual "Stop" over-rides all functions.

Plug-in termination of all harnesses and cables permits rapid assembly, dis-assembly and easy maintenance.

