TSEC/HL-1
**DESCRIPTION**

An electro-mechanical tape reader designed to provide semi-automatic decryption (and encryption when used in conjunction with the HL-2) of teletypewriter traffic. It converts the 5 level code on a punched teletypewriter tape into a form suitable for use by the cipher unit of the associated crypto equipment (either a KL-47 or a KL-7 plus a KLX-7) thereby eliminating the need for retyping the information on the keyboard of the crypto equipment. It is equipped with a universal tape guide. Operating speed is 37 baud (50 WPM).

The HL-1B is a basic HL-1 which has been modified by the CE-27257 kit to permit it to work with the HL-2 code converter in the AN/SGA-3 configuration. Operates at a speed of 48 baud (65 WPM).

Either the HL-1 or HL-1B can be modified to produce one each HL-1 and HLT-1 for use in the AN/SGA-5 configuration.

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**STATUS**

Approved for service use.

Repair parts support - ESO

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**TRAINING**

A 5 week course is conducted at Portsmouth and Mare Island which includes KL-6, KL-1, KL-2, and AN/SGA-3.

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**CRYPTOSYSTEM**

Used only with the KL-47 or KL-7 (Adonis/Pollux)

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**CLASSIFICATION**

Equipment: Unclassified

Keying Material: Not applicable

Traffic: see KL-47 and KL-7 sections

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**PUBLICATIONS**

Maintenance: HL-11, AFBSG 19707 (Unclassified)

Operating: KAO-6 (Confidential-Crypto)

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**PROCUREMENT**

<table>
<thead>
<tr>
<th>UNIT COST</th>
<th>PAST</th>
<th>FY 1963</th>
<th>FY 1964</th>
<th>FY 1965</th>
<th>FY 1966</th>
<th>FUTURE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1,224</td>
<td>1988</td>
<td>2534</td>
<td></td>
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**PHYSICAL CHARACTERISTICS**

<table>
<thead>
<tr>
<th>CHARACTERISTIC</th>
<th>QTY</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>11 1/2 IN.</td>
<td>10 3/8 IN.</td>
</tr>
<tr>
<td>Depth</td>
<td>10 1/2 IN.</td>
<td>29 1/2 LBS.</td>
</tr>
<tr>
<td>Weight</td>
<td>115 (50-60 CPS)</td>
<td>300 WATTS.</td>
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</tbody>
</table>

**DISTRIBUTION**

See AN/SGA-3 and AN/SGA-5 sections CSPM-1C, 1-35 also refers

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**NOTE:** Only the HL-1B is capable of operating in conjunction with the HL-2 in the AN/SGA-3 configuration.