USER GUIDE

LP1822 INTERFACE

MODULE
Version 1.2

For use with the Endec SE1822 and Digital Endec 3644 Emergency Alert System
Encoder/Decoder

DM Engineering
2174 Chandler St.
Camarillo, CA 91345-4611
805-987-7881 800-249-0487
www.DMEngineering.com

1. **Theory of Operation**

   1.1 The DME LP1822 Interface Module is a microprocessor controlled interface that generates the required RS232 command set codes used by the Endec Models SE1822 and 3644 Digital E.A.S. Encoder/Decoder. The Interface Module may be connected to the DB9 "Computer" port on the front panel or COM 2, 3, or 6" port on the rear of the SE1822 Endec (COM 2 and 6 are 9600 baud by default and the other above mentioned ports must be set to 9600 baud using step 2.1 below). COM ports 3-6 of the 3644 Digital must be set to 9600 baud using step 2.2 below, and uses the DC voltage provided on pin 9 by both models of the Endec for all power requirements of the Interface Module. Upon a contact closure or logic LOW across the "RWT", (Required Weekly Test), "RMT-1" and "RMT-2" (Required Monthly Test) terminal blocks on the Interface Module, the proper codes are transmitted in the correct order to activate the transmission of the RWT or RMT.

   1.2 Familiarization with the sections 5.4 and 5.7 of the SE1822 Endec User Guide and Reference Manual, or sections 3.2, 4.7 and 5.7 of the 3644 Digital Endec User Guide and Reference Manual dealing with filters and relay programming is recommended for assurance to assure that the Endec is properly programmed to operate with this system

2. **Connections**

   2.1 SE1822: The Interface Module may be attached to the "Computer" COM port on the front of the unit or COM 2, 3 or 6 DB9 connector on the rear of the SE1822 Endec. The LP1822 operates at 9600 baud, and COM 2 and 6 are set to 9600 baud by default and cannot be changed. If the "Computer" or COM 3 ports are used, you may have to configure the port to 9600 baud as their default settings are 1200 baud. Configure the ports using *menu.devices.port.baud*.

   2.2 3644 Digital: Use COM ports 3-6 on the 3644 Digital located on the rear of the Endec. Secure the Module to the Endec using the captive screws provided as a part of the Module. You may have to configure the selected port to 9600 baud as their default settings are 1200 baud. Configure the ports using *menu.devices.port.baud*.

   2.3 If the LP1822 Interface Module is being used for RWT activation by an automation system or other customer supplied contact closure or logic LOW, connect the leads to the "RWT" terminal block on the Module.

   2.4 For activation of the RMT, connect the appropriate automation normally open contact closure or logic LOW to the "RMT-1" terminal block. When this input is activated the Endec will send the opening digital and two

tone signals as programmed in the Endec. After the programmed sequence the Endec will pause while waiting for the "END" signal.

2.5   The audio portion of the RMT may now be played from an automation system or other source.

2.6   A second set of normally open contacts or a logic LOW from the automation system applied to the RMT-2 terminal block will activate the End of Message (EOM) signal at the end of the audio portion of the alert.

2.7   If using a logic LOW to activate the device check to see which terminal of the LP1822 is normally high with a voltmeter and be sure to connect observing proper polarity.

3.   **Programming and Hardware Setup of the Endec for use with the LP1822 Interface Module**

3.1   The following areas of the Endec must be programmed for proper interface with the LP1822 Interface Module.

3.2   The selected COM port must be configured for remote control operation. To do this go to *menu.device.port.type.hand control,* where "*port"* is "COM X". Note: If not previously addressed in section 2 above, be aware that the only allowable ports for this device on the SE1822 are the front panel "Computer" port, COM 2, 3, & 6 as COM 4 & 5 have fixed baud rate issues, and COM 3-6 on the 3644 Digital Endec. These ports must be set to 9600 baud using *menu.devices.port.baud.*

3.3   **The User password must be 1111**, the factory default password. There can be no exceptions without custom programming of the Interface Module. Custom programming is available at an additional charge.   Please contact DME if custom programming is desired.

3.4   To change the User password to 1111, use the *menu.change password* command on the Endec. You will need the administrator's password to do this change, and if it is not available consult section 14.3 of the SE1822 Endec User Guide or section 12.11 in the 3644 Digital Endec User Guide.

3.5   **Note:** If an RC1 hand held remote has been or is connected to the unit and is operational, the jumper in the following steps has already been enabled.

3.6   **SE1822 only:** Open the printer cover plate and lift the printer slider plate up (rather than pulling it forward). Locate the JP16 jumper terminals underneath the metal cup that holds the paper (near the right hand edge). Make sure there is a jumper placed on JP16 as this enables

power to pin 9 of the Com port connectors, and is used to power the LP1822. Refer to section 12 of your Endec user manual.

3.7 **3644 Digital:** To enable the required DC voltage to pin 9 of the COM ports, remove the top cover of the Endec by removing the six retaining screws and slide the cover plate toward the rear of the Endec. Locate "JP1" on the main green PCB covering the bottom of the case. "JP1" is located towards the rear left corner of the PCB. Do not confuse this "JP1" with the JP1 on the red daughter card. You will find that the jumper is placed on only one of the pins by factory default. Remove the jumper and place it on both pins of "JP1" and replace the cover. Refer to section 13.2 of your Endec 3644 Digital User Guide and Reference Manual.

4.   Operation

4.1 Three separate sets of Normally Open contacts or logic LOW outputs are required by the LP1822 interface module. One set for activating an RWT, another set for initiating the start of an RMT, and a third for initiating the EOM of the RMT.

5.0   Supplied Materials

- LP1822 Interface Module
- This User Manual

6.0   Warranty

All materials and workmanship are warranted for a period of one year from the date of purchase. Damages incurred by misapplication, carelessness, introduction of foreign materials or extraneous voltages into the enclosure or circuitry, or damages caused by natural disaster are not covered under this warranty.

7.0   Technical Support

If you have questions, experience difficulties with the product or require further information please contact DME at:
805-987-7881 or 800-249-0487
Or
Contact technical support at:
support@DMEngineering.com

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