AE2800 Series
Installation Guide

This Bill Acceptor is designed to fit into the standard bill acceptor opening provided by Gaming, Lottery, Kiosk and Vending machine manufacturers. It mounts on either the existing four mounting studs located in the amusement or vending machine or on the mounting bracket provided in various mounting kits.
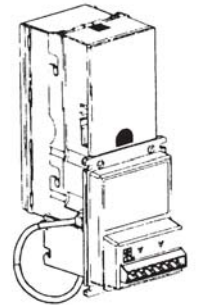
Features of the AE2800 include:

- $1, $2, $5, $10, $20 , $50 and $100 bill acceptance
- Four Direction bill acceptance
- Coupon Configuration
- Enhanced Security
- Easy Access to the bill path even while mounted
- Diagnostic LED (see back of unit)
- Multi-Drop Bus, Extended Bi - Directional Serial (EBDS) ,Vending and Gaming Interfaces (115/24V)
- Lighted Bezel (On Compact Model Only)
- Remote Download of Bill Sets (EBDS Interface)
- Cassette Removal Message (EBDS Interface)

Figure 1

INTERFACE OPTIONS

The AE2800 Bill Acceptor is capable of operating via four interfaces: Low Level Pulse, Serial, MDB or Extended Bi - directional Serial.

Accessories Available:

250077006 - 115 VAC Power Cable (Low Level Pulse or Serial Interface)
250075007 - 24 VAC Power Cable (Low Level Pulse or Serial Interface)
01-12-139 - 115 VAC Power Cable (Gaming & EBDS Interface)

250071043 - 24 VAC Multi-Drop Bus Interface (MDB)
250079049 -RS232 Cable

Note: These harnesses fit onto the male connectors located on the left side of the Bill Acceptor (see Fig. 3) and are designed to connect to the machine controller's or coin changer's Bill Acceptor interface harness.
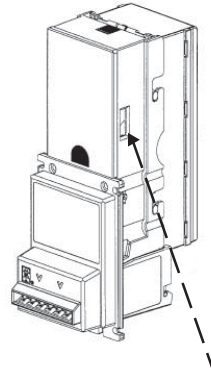*For further information on either interface harnesses or mounting kits, please contact your supplier or MEI Service Center.*

MEI
1301 Wilson Drive
West Chester, PA 19380
Technical Support 1(800)345-8172
Customer Support 1(800)345-8215
Field Service 1(800)634-1365
http://www.meiglobal.com

INSTALLATION INSTRUCTIONS

1. Set Bill Acceptor option switches. **See Figure 2.**

Note: When you receive the product, all switches are off. This will automatically enable the options as follows:

- Accept $1,$2, $5, $10, $20, $50, and $100 dollar bills.
- Four way accept.
- High Security accept.
- 50ms on/50 ms off pulse (short pulse).
- One pulse per dollar.
- Harness enable.

Important note: Placing any switch ON will override the above options, and the Bill Acceptor will operate according to the switch settings label! (See Figure 2)

NOTE: The unit may be configured with the attached coupon rather than using the option switches. *For coupon configuration, turn all option switches OFF and proceed to Coupon Configuration instructions on page 4.*
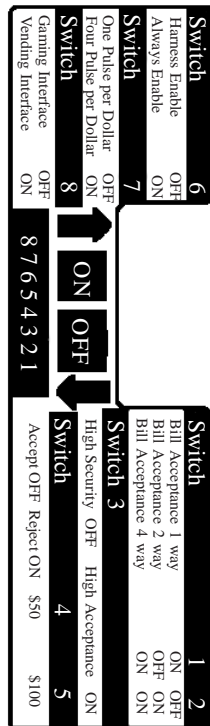
SWITCH DESCRIPTION	
1,2	Combination of these two switches selects number of enabled bill directions.
3	Position allows either acceptance or security to be maximized.
4,5	Individual switches enable or disable corresponding bill denomination.
6	Position allows for either **Always Enable**, acceptance at all times or **Harness Enable**, acceptance by way of controller.
7	Position allows for either one **(1)** or four **(4)** pulses per dollar. One pulse = 50ms on/50ms off
8	Position allows either **Gaming Interfaces** (amusement) or **Vending Interfaces**.

Switch 6	Harness Enable	OFF
	Always Enable	ON
Switch 7	One Pulse per Dollar	OFF
	Four Pulse per Dollar	ON
Switch 8	Gaming Interface	OFF
	Vending Interface	ON

8 7 6 5 4 3 2 1   ON / OFF

		1	2
Switch 1 2	Bill Acceptance 1 way	ON	OFF
	Bill Acceptance 2 way	OFF	ON
	Bill Acceptance 4 way	ON	ON
Switch 3	High Security OFF	High Acceptance ON	
		4	5
Switch 4 5	Accept OFF Reject ON	$50	$100

Figure 2

2. Remove power from the entire machine.

3. Install the AE2800 onto the Bill Acceptor mounting studs and through the mounting hole of the machine. Secure using the appropriate hardware.

NOTES

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INSTALLATION INSTRUCTIONS (CONTINUED)

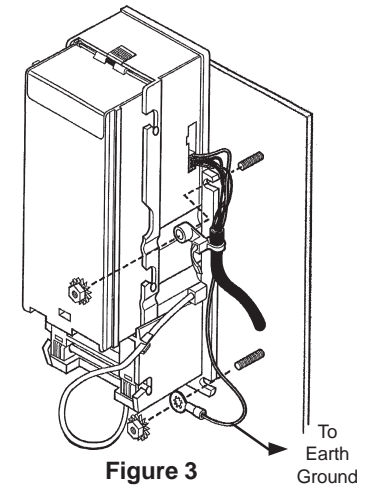**4. Connect the AE2800 to the appropriate interface harness.**

Do not force the harness into bill acceptor!! Will cause damage to the pins!

On 115V units, attach a tie-wrap to the mounting stud closest to the harness connection on the Bill Acceptor. Pull tie-wrap tightly around harness wires, including ground wire (equipped with ring terminal), to provide strain relief.
See Figure 3.

5. On 115V units, place the ring terminal of the grounding wire to an earth ground location within the machine. Secure with the appropriate hardware.

IMPORTANT NOTE TO OEMs: Step 5 must be performed prior to Machine Dielectric Voltage - Withstand Testing Hi-Pot.

To Earth Ground

Figure 3

6. Apply power to the machine.

Observe that the LED status indicator on the back of the AE2800 is ON and NOT flashing. This condition indicates that the unit is ready to accept bills.
• If the light is OFF, check to ensure that power has been applied.
• If the light is flashing, refer to the label located on the back of the magazine for a description of diagnostic codes.

7. Check operation
• Insert a $1 bill and observe that it is accepted and stacked.
• Repeat for other enabled bills.
• Ensure that proper credit was given, if not reconfigure the AE2800, using coupon or switch 7, for # of pulses per dollar.

8. Remove bills and check status
• Instructions for bill removal are located on a label at the back of magazine.
• Verify that the LED status indicator remains steady ON.

COUPON CONFIGURATION (ALL SWITCHES OFF)

1. Carefully remove the coupon from this Installation Guide. Copies are usable if made on a standard, carbon-based, non-color copier, AND if cut to match the size of the attached coupon. **(Coupon can be found on page 9.)**

2. Fill out the coupon using a #2 pencil. Fill in one block for each line. Do not mark the back of the coupon.

    Section 1 - Bill Denomination Fill in one block for $1 bill acceptance.Select High Accept for maximum bill acceptance. Select High Security for a higher level of discrimination. Select OFF to reject bills of that denomination.

    Section 2 - Bill Denomination Fill in one block for each denomination. Select High Accept for maximum bill acceptance. Select High Security for a higher level of discrimination. Select OFF to reject bills of that denomination.

    Section 3 - Bill Denomination Fill in one block for $100 bill acceptance.Select High Accept for maximum bill acceptance. Select High Security for a higher level of discrimination. Select OFF to reject bills of that denomination.

    Section 4 - Pulses per Dollar Most gaming and lottery machines use four pulses per dollar and vending machines use one pulse per dollar.

    Section 5 - Interface Selection Select one of three interfaces.

3. Locate the service button on the back of the unit (refer to Figure 4). depress the button once to enter coupon set-up mode. Depressing again will exit the mode.
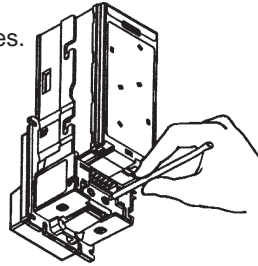

Figure 4

Electronic copies of this manual will not have the coupon included. Please contact MEI if you need a configuration coupon

4. Insert coupon and verify settings were accepted.

ACCEPTED: Coupon returned immediately and LED flashes 10 times when coupon pulled out.

REJECTED: Coupon returned after ten seconds. LED flashes number of times corresponding to section improperly filled out. Example: Two flashes for improper section two. If rejected, review instructions or try new coupon.

CLEANING
The AE2800 series will not need cleaning as often as magnetic sensing Bill Acceptors. If cleaning is required, use a soft cloth moistened with mild, non-abrasive detergent. Refer to label located on the back of the magazine for cleaning instructions.

PINOUT INFORMATION FOR 30 PIN CONNECTOR (CONT.)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

<u>115 Volt AC Model</u>   <u>24 Volt AC Model</u>

GAMING AND LOTTERY PINOUTS ONLY!

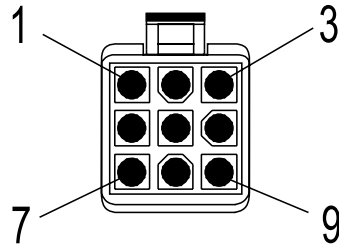|			
•	Pin 1	CREDIT RELAY, Common	Same
•	Pin 2	RESERVED	CREDIT RELAY N.O.
•	Pin 3	RESERVED	24 VAC HOT (Power)
•	Pin 4	115 VAC NEUTRAL (Power)	RESERVED
	Pin 5	RESERVED	**KEY**
•	Pin 6	**KEY**	RESERVED
•	Pin 7	CREDIT PULSE	Same
•	Pin 8	INTERRUPT_NOT	Same
•	Pin 9	SERIAL / PULSE_NOT	Same
•	Pin 10	LOW LEVEL GND / SIGNAL GND	Same
•	Pin 11	SERIAL _DATA_OUT /	
		BDS_MASTER_RXD	Same
•	Pin 12	NOT USED	Same
•	Pin 13	NOT USED	Same
•	Pin 14	NOT USED	SERIAL_DATA_IN
•	Pin 15	NOT USED	Same
•	Pin 16	CREDIT RELAY, Normally Open	DC RET./CSH.CNTER.LOW
•	Pin 17	RESERVED	RESERVED
	Pin 18	RESERVED	RESERVED
	Pin 19	**KEY**	
•	Pin 20	115 VAC HOT (Power)	24 VAC NEUTRAL (Power)
•	Pin 21	EARTH GROUND	**KEY**
•	Pin 22	OUT-OF-SERVICE_NOT	Same
•	Pin 23	RESERVED	RESERVED
•	Pin 24	ACCEPT ENABLE_NOT	Same
•	Pin 25	200 OHMS TO 5 VOLT	Same
	Pin 26	SEND_NOT	Same WITH
			BDS_MASTER_TXD
•	Pin 27	RESERVED	Same
•	Pin 28	RESERVED	Same
•	Pin 29	RESERVED	Same
•	Pin 30	RESERVED	Same

CHECK LIST

If a problem occurs	Please check the following
Unit dead (won't power up).	1. Harness(es) may be loose, not properly connected, or bent pins. 2. Check source voltage to ensure that power is being supplied to the bill acceptor.
Red message light flashing twice (disabled from mech / VMC). **NOTE:** If flashing other than twice refer to label located on back of the magazine.	1.Check settings on the bill acceptor to ensure that proper interface options are being used. If only the 9 pin power cable is being used make sure that switch # 6 is in the on position (Always Enable) and switch # 8 is in the off position (Gaming Interface).
Unit takes a bill, but won't credit.	1. Check to ensure that the proper interface has been selected.

PINOUT INFORMATION FOR 30 PIN CONNECTOR

• **Power Harness**

115VAC Part # 250077006
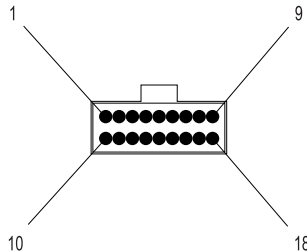24VAC Part# 250075007

Connector Assignment for the 9 pin Cable

•* Pin 1 NEUTRAL INHIBIT

• Pin 2 NEUTRAL ENABLE
• Pin 3 HOT ENABLE
• Pin 4 115 VAC HOT (POWER)
• Pin 5 24 VAC HOT (POWER)
• Pin 6 115 / 24 VAC NEUTRAL
• Pin 7 CREDIT RELAY (N.O.)
• Pin 8 CREDIT RELAY (COMM.)

• Pin 9 Reserved

9 - Pin Mating Connector
AMP "MATE-N-LOCK" (9) pin
AMP Part#172161-1 Shell
AMP Part#170364-1 Male Pin
#22 Gauge Wire Recommended

* Alternate plug compatibility for pins 7-15 and 22-30 of the 30 pin connector.

18 - Pin Mating Connector
AMP "MODU" (18) pin MT receptacle
AMP Part#102398-7 IDC Connector Housing
AMP Part#102536-7 Back cover
AMP Part#102681-4 Front cover
#22 Gauge Wire Recommended

PINOUT INFORMATION FOR 30 PIN CONNECTOR (CONT.)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

115 Volt AC Model   24 Volt AC / MDB Model

VENDING PINOUTS ONLY!

		115 Volt AC Model	24 Volt AC / MDB Model
•*	Pin 1	CREDIT RELAY, Common	Same
•	Pin 2	RESERVED	CREDIT RELAY N.O.
•	Pin 3	NEUTRAL ENABLE	24 VAC HOT (Power)
•	Pin 4	115 VAC NEUTRAL (Power)	HOT ENABLE
•	Pin 5	NEUTRAL INHIBIT	**KEY**
•	Pin 6	**KEY**	MDB MASTER RECEIVE
•	Pin 7	$ 1 CREDIT_NOT	Same
•	Pin 8	INTERRUPT_NOT	Same
•	Pin 9	$ 5 CREDIT_NOT	Same
•	Pin 10	LOW_LEVEL_GND	Same
•	Pin 11	DATA_NOT	Same
•	Pin 12	ESCROW, High	Same
•	Pin 13	$ 5 ENABLE, High	Same
•	Pin 14	$ 2 ENABLE High	Same With MDB_MASTER_TXD
•	Pin 15	$ 1 ENABLE, High	Same
•	Pin 16	CREDIT RELAY, Normally Open	DC RET./CSH.CNTER.LOW
•	Pin 17	RESERVED	NEUTRAL INHIBIT
•	Pin 18	HOT ENABLE	NEUTRAL ENABLE
•	Pin 19	**KEY**	
•	Pin 20	115 VAC HOT (Power)	24 VAC NEUTRAL (Power)
•	Pin 21	EARTH GROUND	**KEY**
•	Pin 22	OUT-OF-SERVICE_NOT	Same
•	Pin 23	RESERVED	MDB_34 Volt DC
•	Pin 24	ACCEPT ENABLE_NOT	Same
•	Pin 25	$ 2 CREDIT_NOT / OUT OF SERVICE POWER	Same
•	Pin 26	SEND_NOT	Same
•	Pin 27	$ 1 ENABLE, Low	Same
•	Pin 28	$ 2 ENABLE, Low	Same With MDB_COMMON
•	Pin 29	$ 5 ENABLE, Low	Same
•	Pin 30	ESCROW, Low	Same