

# **AE2400 Series**Installation Guide

#### GENERAL INFORMATION

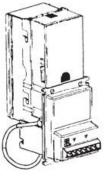
This document contains information for installing the MEI AE2400 Series Bill Acceptor. This Bill Acceptor is designed to fit into the standard bill acceptor opening provided by amusement machine manufacturers. It mounts on either the existing four mounting studs located in the amusement machine or on the mounting bracket provided in various mounting kits.

#### Features of the AE2400 include:

- \$1, \$2 and \$5 bill acceptance
- Four Direction bill acceptance
- Re-programmable Flash Memory (Flashport™)
- Coupon configuration
- Lighted Bezel (On Compact model only)
- · Easy access to the bill path even when mounted
- Diagnostic LED (see back of unit)
- Enhanced Security
- Factory set to four pulses per dollar

#### FI ASHDORTIN

The AE2400 Bill Acceptor with MEI Flashport<sup>™</sup> has the ability to ι flash downloading.



by

#### INTERFACE OPTIONS

The 12V, 24V and 115V AE2400 support pulse interfaces. The battery powered 12V models support only Isolated Pulse (IP) and Non-Isolated Pulse+ (NIP+). Depending upon the model you order, one of the following harnesses will be supplied:

250079022 - 115 VAC Power / Enable Cable (Pulse Interface) 250071021 - 24 VAC Power / Enable Cable (Pulse Interface)

250070079 - 12 VDC Power / Enable Cable (Pulse Interface)

250075105 - 12 VDC Battery Power / Enable Cable (IP and NIP+ Interface)\*

250070111 - 12 VDC Service Cable \*

\*250075105 & 250070111 are not shipped with the unit but can be purchased as an accessory.

For further information on either interface harnesses or mounting kits, please contact your supplier or MEI Service Center.

## <u>MEI</u>

Technical Support 1(800) 345-8172 Customer Support 1(800) 345-8215 http://www.meigroup.com



©2009 MEI www.meigroup.com Part # 250057042 Revision G9

#### **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 and \$5 dollar bills.
- Four way accept.
- · High Security accept.
- 50ms on/50 ms off pulse (short pulse).
- Four pulses per dollar.
- Always enabled.

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.				
4,5,6	Individual switches enable or disable corresponding bill denomination.				
7	Position allows for either one (1) or four (4) pulses per dollar. One pulse = 50ms on/50ms off.				
8	Position allows for either <b>Always Enable</b> , acceptance at all times or <b>Harness Enable</b> , acceptance by way of controller.				

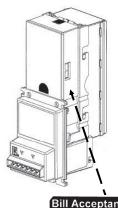




Figure 2

#### 2. Remove power from the entire machine.

**3. Install the AE2400** onto the Bill Acceptor mounting studs and through the mounting hole of the machine. Secure using the appropriate hardware.

# **Configuration Coupon**

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

2 <u>11</u>

### **NOTES**

#### INSTALLATION INSTRUCTIONS (CONTINUED)

#### 4. Connect the AE2400 to the appropriate interface harness.

Install the (12) pin connector into the bottom of interface slot, matching connector keys to blank pin locations. **See Figure 3.** 

#### Do not force the harness into bill acceptor!! This will cause pins to bend or break!

A power cord (available separately - MEI Part# 01-12-139C, 115V only) may be used for supplying power to the bill acceptor and for routing pulse credits to a coin switch.

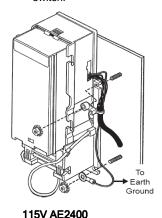


Figure 3

12VDC & 24VAC AE2400

**5.** On 115V units, attach the ring terminal of the grounding wire to an earth ground location within the machine. Secure with appropriate hardware. **See figure 3**.

To provide strain relief, wrap the enclosed tie-wrap around the closest mounting stud, harness wires, and ground wire, then pull tie-wrap tightly.

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

#### 6. Apply power to the machine.

On Line powered 12V, 24V and 115V models: Observe that the LED status indicator on the back of the AE2400 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.

On Battery powered 12V models: Observe that the LED status indicator on the back of the AE2400 is always OFF. This condition indicates that the unit is ready to accept bills.

- If the light is flashing, refer to the label located on the back of the magazine for a description of diagnostic codes.
- Quick flashes indicate coupon set-up/teach mode
- 7 flashes indicate that either no interface was detected or all denominations are disabled

#### **INSTALLATION INSTRUCTIONS (CONTINUED)**

#### 7. Check operation

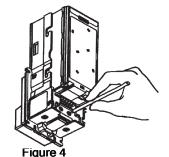
- Insert a \$1 bill and observe that it is accepted and stacked.
- · Repeat for other enabled bills.
- Insert a \$5 bill and verify that proper credits have been established.
- If the machine display indicates that a credit was missed; reconfigure the using coupon, for LONG PULSE (60ms on/300ms off).

#### 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 is located on page 11.)
- Fill out the coupon using a #2 or HB pencil. Fill in one block for each line. Do not mark the back of the coupon.
- **Section 1 Bill Direction** Enable one or two-way (face-up) or four-way acceptance (all directions).
- **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 Pulse Timing Select either SHORT, LONG pulse timing.
- Section 4 Pulses per Dollar Most machines use four pulses per dollar.
- **Section 5 Bezel Lights** Select ON or Flashing (Compact Bezel only). For 12V Battery models, either selection is not applicable because Bezel Lights are always OFF.
- 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 or generic coupon teach mode. Depressing again will exit the mode.
  - ON 12V Battery models: Power up the unit And press button immediately after run and Stack cycle completes to enter coupon set-up or teach mode.



#### **COUPON CONFIGURATION (CONTINUED)**

#### 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: Six flashes for improper section six. If rejected,

review instructions or try new coupon.

#### **CLEANING**

The AE2400 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 on the back of the magazine for cleaning instructions.

#### **BEZEL LIGHTS:**

On 12V Battery models, the bezel lights are OFF in sleep mode. They turn on momentarily when a bill is presented and the unit wakes up. The bezel lights only stay ON during bill transport. The Bezel lights also flash the diagnostic code as listed on the label at the back of the magazine if an error condition occurs.

# <u>NOTES</u>

# **CHECK LIST**

If a problem occurs	Please check the following
Unit dead (won't power up).	Harness(es) may be loose, not properly connected, or bent pins.
	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 on back of the magazine.	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 #8 is in the OFF position (Always Enable).
Unit takes a bill, but won't credit.	Check to ensure that the proper interface has been selected (long / short pulse).

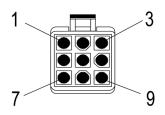
#### PINOUT INFORMATION FOR 30 PIN CONNECTOR

#### Power Harness

115 VAC Part# 250079022 24 VAC Part# 250071021 12 VDC Part# 250070079 12 VDC Battery Part# 250075105

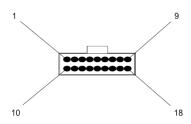
#### Connector Assignment for the 9 pin Cable

- \*Pin 1 NEUTRAL INHIBIT/ INHIBIT+
- Pin 2 NEUTRAL ENABLE/INHIBIT-
- Pin 3 HOT ENABLE/SERVICE+
- Pin 4 115 VAC HOT (POWER)/SERVICE-
- Pin 5 24 VAC / 12 VDC HOT (POWER)
- Pin 6 115 / 24 VAC NEUTRAL
- Pin 7 CREDIT RELAY (N.O)/CREDIT\_PULSE
- Pin 8 CREDIT RELAY (COMMON)
- Pin 9 12 VDC NEUTRAL



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															
										10					
Г	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

GAMING AND LOTTERY PINOUTS ONLY!							
Pinout	115 Volt AC Model	24 Volt AC Model	12 Volt DC Model				
Pin 1	CREDIT RELAY Common	Same	Same				
Pin 2	RESERVED	CREDIT RELAY N.O.	CREDIT RELAY N.O.				
Pin 3	RESERVED	24 VAC HOT power	RESERVED				
Pin 4	115 VAC NEUTRAL	RESERVED	RESERVED				
Pin 5	RESERVED	KEY	KEY				
Pin 6	KEY	RESERVED	RESERVED				
Pin 7	CREDIT PULSE	Same	CREDIT_PULSE				
Pin 8	INTERRUPT_NOT	Same	SERVICE+				
Pin 9	SERIAL/PULSE_NOT	Same	GROUND				
Pin 10	LOW LEVEL GND	Same	LOW LEVEL GND				
Pin 11	SERIAL_DATA_OUT	Same	Same				
Pin 12	NOT USED	Same	Same				
Pin 13	NOT USED	Same	Same				
Pin 14	NOT USED	Same	Same				
Pin 15	NOT USED	Same	Same				
Pin 16	CREDIT RELAY - Open	DC RETURN	DC RETURN				
Pin 17	RESERVED	RESERVED	RESERVED				
Pin 18	RESERVED	RESERVED	RESERVED				
Pin 19	KEY	RESERVED	12 VDC HOT power				
Pin 20	115 VAC HOT power	24 VAC NEUTRAL power	RESERVED				
Pin 21	EARTH GROUND	KEY	KEY				
Pin 22	OUT-OF-SERVICE	Same	Same				
Pin 23	RESERVED	Same	Same				
Pin 24	ACCEPT ENABLE_NOT	Same	INHIBIT+				
Pin 25	OUT-OF-SERVICE_power	Same	Same				
Pin 26	SEND_NOT/SERIAL IN	Same	Same				
Pin 27	RESERVED	Same	Same				
Pin 28	RESERVED	Same	Same				
Pin 29	RESERVED	Same	Same				
Pin 30	RESERVED	Same	Same				