## m@i. <br> AE2600 Series <br> Installation Guide <br> GENERAL INFORMATION

This Bill Acceptor is designed to fit into the standard bill acceptor opening provided by Gaming, Lottery 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 AE2600 include:

- $\$ 1, \$ 2, \$ 5, \$ 10$ and $\$ 20$ bill acceptance
- Four Direction bill acceptance
- Re-programmable Flash Memory (Flashport ${ }^{\text {TM }}$ )
- Coupon configuration
- Enhanced Security
- Easy access to the bill path even when mounted
- Diagnostic LED (see back of unit)


Figure 1

- Multi-Drop Bus, Extended Bi-Directional Serial, Vending and Gaming Interfaces (115/24/12V)
- Remote Download of Bill Sets (EBDS Interface)
- Cassette Removal Message (EBDS Interface)
- Lighted Bezel (On Compact Model Only)


## INTERFACE OPTIONS

The AE2600 Bill Acceptor is capable of operating via five interfaces: Low Level Pulse, AC/High Level Pulse, Serial, MDB or Extended Bi-directional Serial, Isolated Pulse and Non-Isolated Pulse+. The following harnesses are available to support these interfaces:

250077006-115 VAC Power Cable (High/Low Level Pulse, Serial Interface) 250075007-24 VAC Power Cable (High/Low Level Pulse, Serial Interface) 250071043-24 VAC Multi-Drop Bus Interface (MDB)
250070079-12 VDC Power 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. 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.

## 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 follow:

- Accept \$1, \$2, \$5, \$10 and \$20 dollar bills.
- Four way accept.
- High Security accept.
- 50 ms on $/ 50 \mathrm{~ms}$ off pulse (short pulse).
- One pulse per dollar.
- Harness enabled.


Bill Acceptance Switch $1 \quad 2$ $\begin{array}{ll}1 \text { way ON OFF } \\ 2 \text { way } & \text { OFF ON }\end{array}$ 4 way ON ON 4 way | Switch |
| :--- |
| High Security | High Security OFF

High Acceptance ON Switch 45 | Swich | $\mathbf{4}$ | 5 |
| :---: | :---: | :---: |
|  | $\$ 2$ | $\$ 20$ | Accept=OFF Reject=ON

| SWITCH DESCRIPTION |  |
| :--- | :--- |
| $\mathbf{1 , 2}$ | Combination of these two switches selects number of <br> enabled bill directions. |
| $\mathbf{3}$ | Position allows either acceptance or security to be <br> maximized. |
| $\mathbf{4 , 5}$ | Individual switches enable or disable corresponding bill <br> denomination. |
| $\mathbf{6}$ | Position allows for either Always Enable acceptance at all <br> times or Harness Enable acceptance by way of controller. * |
| $\mathbf{7}$ | Position allows for either one (1) of four (4) pulses per dollar. <br> One pulse = 50ms on / 50ms off. |
| $\mathbf{8}$ | Position allows for either Gaming Interfaces (amusement) or <br> Vending Interfaces. * |



Switch position at Gaming and A/ways Enabled - IP Interface
Switch position at Gaming and Harness Enabled - NIP+ Interface
Switch position at Vending and Harness Enabled - Firmware download

## 2. Remove power from the entire machine.

3. Install the AE2600 onto the Bill Acceptor mounting studs and through the mounting hole of the machine. Secure using the appropriate hardware

## Back of Configuration Coupon

 Leave Blank! Do Not Write Below
## INSTALLATION INSTRUCTIONS (CONTINUED)

## 4. Connect the AE2600 to the supplied 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\# 01-12-139-4 115V only) may be used for supplying power to the bill acceptor and for routing pulse credits to a coin switch


115V AE2600


12VDC \& 24VAC AE2600
5. On 115 V 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 tiewrap tightly.

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

Observe that the LED status indicator on the back of the AE2600 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 12 V 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.

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.
- Ensure that proper credit was given, if not reconfigure the AE2600, using coupon or switch 7, for LONG PULSE. see page 2.


## 8. Remove bills and check status

- Instructions for bill removal are on label at the back of magazine.
- Verify that the LED status indicator remains steady ON.
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 information is located on page 9.)


## 2. 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 or Credit Line pulse timing. On 12V Battery models, Credit Line Pulse timing is not applicable.

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

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


Figure 4
4. Insert coupon and verify settings were accepted.
ACCEPTED: Coupon returned immediately and LED flashes 10 times

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 AE2600 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.

## PINOUT INFORMATION FOR 30-PIN CONNECTOR (CONT.)

\section*{| 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 |}


| GAMING AND LOTTERY PINOUTS ONLY |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| PINOUTS | 115V AC MODEL | 24VT AC/MDB MODEL | 12V DC MODEL | 12V BATT MODEL |
| PIN 1 | CREDIT RELAY COMMON | SAME | SAME | SAME |
| PIN 2 | RESERVED | CREDIT RELAY N.O. | CREDIT RELAY N.O. | CREDIT RELAY N.O. |
| PIN 3 | RESERVED | 24V AC HOT POWER | RESERVED | RESERVED |
| PIN 4 | 115V AC NEUTRAL POWER | RESERVED | RESERVED | RESERVED |
| PIN 5 | RESERVED | KEY | KEY | KEY |
| PIN 6 | KEY | RESERVED | RESERVED | RESERVED |
| PIN 7 | CREDIT PULSE | SAME | SAME | SAME |
| PIN 8 | INTERRUPT_NOT | SAME | SAME | SERVICE + |
| PIN 9 | SERIAL/PULSE_NOT | SAME | SAME | GROUND |
| PIN 10 | LOW LEVEL_GND | SAME | SAME | SAME |
| PIN 11 | SERIAL_DATA_OUT | SAME | SAME | SAME |
| PIN 12 | NOT USED | SAME | SAME | SAME |
| PIN 13 | NOT USED | SAME | SAME | SAME |
| PIN 14 | NOT USED | SAME | SAME | SAME |
| PIN 15 | NOT USED | SAME | SAME | SAME |
| PIN 16 | CREDIT RELAY - OPEN | DC RETURN | 12V DC RETURN | 12V DC RETURN |
| PIN 17 | RESERVED | RESERVED | RESERVED | RESERVED |
| PIN 18 | RESERVED | RESERVED | RESERVED | RESERVED |
| PIN 19 | KEY | RESERVED | 12V DC HOT POWER | 12V DC HOT POWER |
| PIN 20 | 115 V AC HOT POWER | 24V AC NEUTRAL POWER | RESERVED | RESERVED |
| PIN 21 | EARTH GROUND | KEY | KEY | KEY |
| PIN 22 | OUT-OF-SERVICE | SAME | SAME | SAME |
| PIN 23 | RESERVED | SAME | SAME | SAME |
| PIN 24 | ACCEPT ENABLE_NOT | SAME | SAME | INHIBIT + |
| PIN 25 | OUT-OF-SERVICE POWER | SAME | SAME | SAME |
| PIN 26 | SEND_NOT/SERIAL IN | SAME | SAME | SAME |
| PIN 27 | RESERVED | SAME | SAME | SAME |
| PIN 28 | RESERVED | SAME | SAME | SAME |
| PIN 29 | RESERVED | SAME | SAME | SAME |
| PIN 30 | RESERVED | SAME | SAME | 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 <br> connected, or bent pins. <br> 2. Check source voltage to ensure that power is <br> being supplied to the bill acceptor. |
| Red message light flashing twice <br> (disabled from mech / VMC) <br> NOTE: If flashing other than twice <br> refer to label on back of the <br> magazine. | 1. Check settings on the bill acceptor to ensure <br> that proper interface options are being used. <br> If only the 9 pin power cable is being used <br> make sure that switch \#6 is in the ON position <br> (Always Enable) and switch \#8 is in the OFF <br> position (Gaming Interface). |
| Unit takes a bill, but won't credit. | 1. Check to ensure that the proper interface has <br> been selected (long / short pulse). |

## PINOUT INFORMATION FOR 30-PIN CONNECTOR

- Power Harness

115 VAC Part\# 25007706
24 VAC Part\# 250075007
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 4115 VAC HOT (POWER)/SERVICE--Pin 524 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 912 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 | 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 |

## VENDING PINOUTS ONLY

| PINOUTS | 115V AC MODEL | 24VT AC/MDB MODEL | 12V DC MODEL | 12V BATT MODEL |
| :---: | :---: | :---: | :---: | :---: |
| PIN 1 | CREDIT RELAY COMMON | SAME | SAME | NOT APPLICABLE |
| PIN 2 | RESERVED | CREDIT RELAY N.O. | CREDIT RELAY N.O. | NOT APPLICABLE |
| PIN 3 | NEUTRAL ENABLE | 24V AC HOT POWER | RESERVED | NOT APPLICABLE |
| PIN 4 | 115V AC NEUTRAL POWER | HOT ENABLE | RESERVED | NOT APPLICABLE |
| PIN 5 | NEUTRAL INHIBIT | KEY | KEY | NOT APPLICABLE |
| PIN 6 | KEY | MDB MASTER RECEIVE | MDB MASTER RECEIVE | NOT APPLICABLE |
| PIN 7 | \$1 CREDIT_NOT | SAME | SAME | NOT APPLICABLE |
| PIN 8 | INTERRUPT_NOT | SAME | SAME | NOT APPLICABLE |
| PIN 9 | \$5 CREDIT_NOT | SAME | SAME | NOT APPLICABLE |
| PIN 10 | LOW LEVEL_GND | SAME | SAME | NOT APPLICABLE |
| PIN 11 | DATA_NOT | SAME | SAME | NOT APPLICABLE |
| PIN 12 | ESCROW HIGH | SAME | SAME | NOT APPLICABLE |
| PIN 13 | \$5 ENABLE HIGH | SAME | SAME | NOT APPLICABLE |
| PIN 14 | \$2 ENABLE HIGH | SAME W <br> MDB_MASTER_TXD | SAME W <br> MDB_MASTER_TXD | NOT APPLICABLE |
| PIN 15 | \$1 ENABLE HIGH | SAME | SAME | NOT APPLICABLE |
| PIN 16 | CREDIT RELAY - OPEN | DC RETURN | 12V DC RETURN | NOT APPLICABLE |
| PIN 17 | RESERVED | NEUTRAL INHIBIT | RESERVED | NOT APPLICABLE |
| PIN 18 | HOT ENABLE | NEUTRAL ENABLE | RESERVED | NOT APPLICABLE |
| PIN 19 | KEY |  | 12V DC HOT POWER | NOT APPLICABLE |
| PIN 20 | 115V AC HOT POWER | 24V AC NEUTRAL POWER | RESERVED | NOT APPLICABLE |
| PIN 21 | EARTH GROUND | KEY | KEY | NOT APPLICABLE |
| PIN 22 | OUT-OF- <br> SERVICE_NOT | SAME | SAME | NOT APPLICABLE |
| PIN 23 | RESERVED | MDB_34V DC | RESERVED | NOT APPLICABLE |
| PIN 24 | ACCEPT ENABLE_NOT | SAME | SAME | NOT APPLICABLE |
| PIN 25 | \$2 CREDIT_NOT/ | SAME | SAME | NOT APPLICABLE |
| PIN 26 | SEND_NOT | SAME | SAME | NOT APPLICABLE |
| PIN 27 | \$1 ENABLE LOW | SAME | SAME | NOT APPLICABLE |
| PIN 28 | \$2 ENABLE LOW | SAME W MDB_COMMON | \$2 ENABLE LOW | NOT APPLICABLE |
| PIN 29 | \$5 ENABLE LOW | SAME | SAME | NOT APPLICABLE |
| PIN 30 | ESCROW LOW | SAME | SAME | NOT APPLICABLE |

