



C.E. Electronics, Inc.
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SHAIO-XXXXXXXX

Ver. 3 Rel. 01/05/2012

MICRO COMM[®]
DRIVERS

ALL IN ONE CONTROL DRIVER BOARD

Drives any remote display indicator (RDI's, Voice, Lanterns) on the C.E. Micro Comm 3-wire display network. The "SHAIO" accepts the floor select signals in a choice of formats and voltages, does a redundancy check to verify correct inputs, then sends out all necessary signals for digital floor position, car direction and passing chime to all RDI's via 3 wires.

Features:

- Arrival (Next Direction) arrows
- Traveling arrows
- Strobe (voice)
- Fast, 3-wire hookup
- Latched inputs
- Cross wire protected
- Self testing
- Integrated Alternate message module capable of 7 prioritized messages
- Error detection and correction feature
- 8 Floor Inputs

TO ORDER: - SHAIO - X X X X X X

SIGNAL VOLTAGE:

"A" = + 6 - 20 VDC, 6 - 24 VAC
"B" = + 24 - 48 VDC, 24 - 48 VAC
"C" = 120 VAC
"D" = ± 125 VDC
"E" = - 6 - 20 VDC
"F" = - 24 - 48 VDC
"G" = - 125 VDC

SIGNAL FORMAT:

"1" = SINGLE LINE / FLOOR *
"2" = BINARY
"3" = UNITS & TENS
"4" = GRAY CODE
"5" = INVERTED BINARY
"6" = SPECIAL
"7" = PRO TECH FORMAT
"8" = JRT FORMAT P367

TRAVEL ARROW VOLTAGE

"A" = + 6 - 20 VDC, 6 - 24 VAC
"B" = + 24 - 48 VDC, 24 - 48 VAC
"C" = 120 VAC
"D" = ± 125 VDC
"E" = - 6 - 20 VDC
"F" = - 24 - 48 VDC
"G" = - 125 VDC

ARRIVAL ARROW VOLTAGE (next direction)

"A" = + 6 - 20 VDC, 6 - 24 VAC
"B" = + 24 - 48 VDC, 24 - 48 VAC
"C" = 120 VAC
"D" = ± 125 VDC
"E" = - 6 - 48 VDC
"F" = - 24 - 48 VDC
"G" = - 125 VDC

STROBE VOLTAGE (speech)

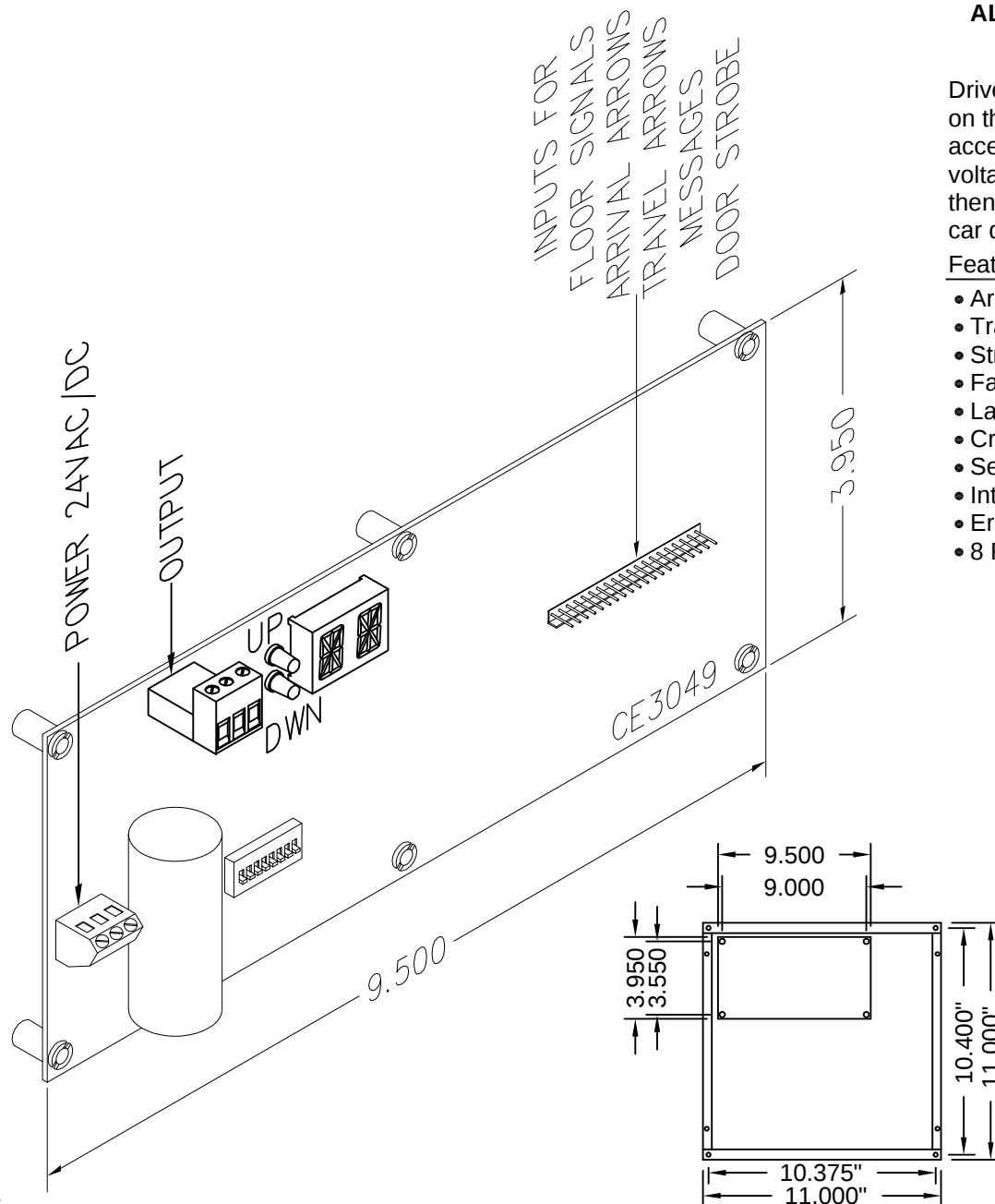
"A" = + 6 - 20 VDC, 6 - 24 VAC
"B" = + 24 - 48 VDC, 24 - 48 VAC
"C" = 120 VAC
"D" = ± 125 VDC
"E" = - 6 - 20 VDC
"F" = - 24 - 48 VDC
"G" = - 125 VDC

MAMMI VOLTAGE (messages)

"A" = + 6 - 20 VDC, 6 - 24 VAC
"B" = + 24 - 48 VDC, 24 - 48 VAC
"C" = 120 VAC
"D" = ± 125 VDC
"E" = - 6 - 20 VDC
"F" = - 24 - 48 VDC
"G" = - 125 VDC

TRANSFORMER/BUILD

"B" = SWITCHABLE 110/220VAC W/BOX
"X" = NO TRANSFORMER, NO BOX
"S" = NO TRANSFORMER, W/BOX



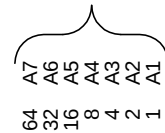
NOTE:

* 1. May require external decoder board.

NOTE: 8 Discrete or Binary Inputs - may require additional input boards

BINARY FLOOR CHART

BINARY BITS

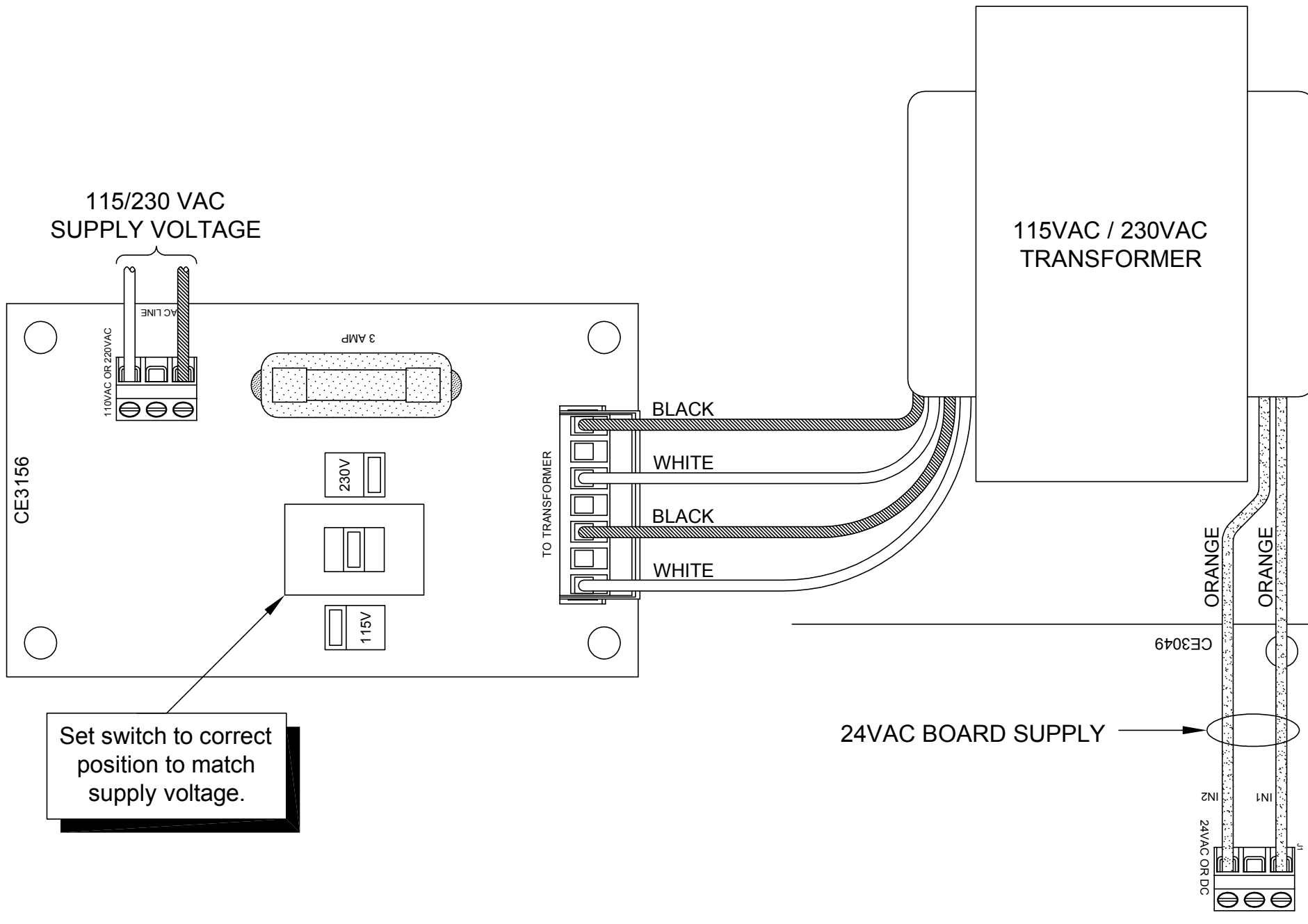


1000000 _____			
0111111 _____	0101111 _____	0011111 _____	0001111 _____
0111110 _____	0101110 _____	0011110 _____	0001110 _____
0111101 _____	0101101 _____	0011101 _____	0001101 _____
0111100 _____	0101100 _____	0011100 _____	0001100 _____
0111011 _____	0101011 _____	0011011 _____	0001011 _____
0111010 _____	0101010 _____	0011010 _____	0001010 _____
0111001 _____	0101001 _____	0011001 _____	0001001 _____
0111000 _____	0101000 _____	0011000 _____	0001000 _____
0110111 _____	0100111 _____	0010111 _____	0000111 _____
0110110 _____	0100110 _____	0010110 _____	0000110 _____
0110101 _____	0100101 _____	0010101 _____	0000101 _____
0110100 _____	0100100 _____	0010100 _____	0000100 _____
0110011 _____	0100011 _____	0010011 _____	0000011 _____
0110010 _____	0100010 _____	0010010 _____	0000010 _____
0110001 _____	0100001 _____	0010001 _____	0000001 _____
0110000 _____	0100000 _____	0010000 _____	0000000 _____

INSTALLATION GUIDE

1. The SHAIO unit (CE3049) operates from a 24V input supply. Connect 24V AC/DC power to the outer terminals of connector J1. The center terminal is not connected. On some units, a power input board and transformer may be pre-wired to the unit. Set the switch on the CE3156 power input board for the correct supply voltage and connect 115/230VAC power to the outer terminals of J1 on the power input board.
2. Turn on DIP switch one to start self-test. The unit will cycle through the floor/message data. Verify the floor markings displayed are the ones required for the job.
3. Verify the input resistors are fully seated in their sockets.
4. Connect the unit to the controller through the 20-pin MTA connector. The voltage, polarity, and input connections are marked on the reverse side of this diagram. This unit works like a light bulb. It must have voltage from common to the selected input.
5. For Single Line per Floor connections, there should only be one floor input wire with voltage present (with reference to common) at any time.
6. If the unit fails to operate properly, write down the serial number from the white job label on the unit and exactly what is displayed for each floor input. Contact Customer Tech Support at 419-636-6705.

DATE DRAWN: 06/29/05	DRAWN BY: DAC	REQUESTED BY: DAC	C.E. ELECTRONICS, INC. 2107 Industrial Drive Bryan, Ohio 43306 (419) 636-6705
BOARD NUMBER: N/A	LAST DATE REVISED: 08/10/07	APPROVED BY:	
PRODUCT SHAIO BINARY FLOOR CHART			
DWG. NO. SHAIO-03			REV. A



SHAIO 115/230VAC CONNECTION DIAGRAM

DATE DRAWN: 06/30/05	DRAWN BY: DAC	REQUESTED BY: DAC	 C.E. ELECTRONICS, INC. 2107 Industrial Drive Bryan, Ohio 43506 (419) 636-6705
BOARD NUMBER: 3156	LAST DATE REVISED: 05/17/13	APPROVED BY:	
PRODUCT 115/230 VAC SUPPLY INTERFACE		DWG. NO. SHAIO-02	
			REV.