

# MCCA-XXXXXXXX

## CENTRAL CONTROL UNIT ("CCU")



## MICRO COMM DRIVERS

### CENTRAL CONTROL UNIT ("CCU")

Drives any remote display indicator (RDI's, Voice, Lanterns) on the C.E. Micro Comm 3-wire display network. The "MCCA" 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.

#### TYPICAL APPLICATIONS:

- > UL listed
- > Arrival arrows
- > Strobe
- > Fast, 3-wire hookup
- > Latched inputs
- > Cross wire protected
- > Self testing
- > With alternate message module capable of 8 prioritized messages
- > Drives multiple RDI's directly
- > Passing chime output
- > Error detection and correction feature



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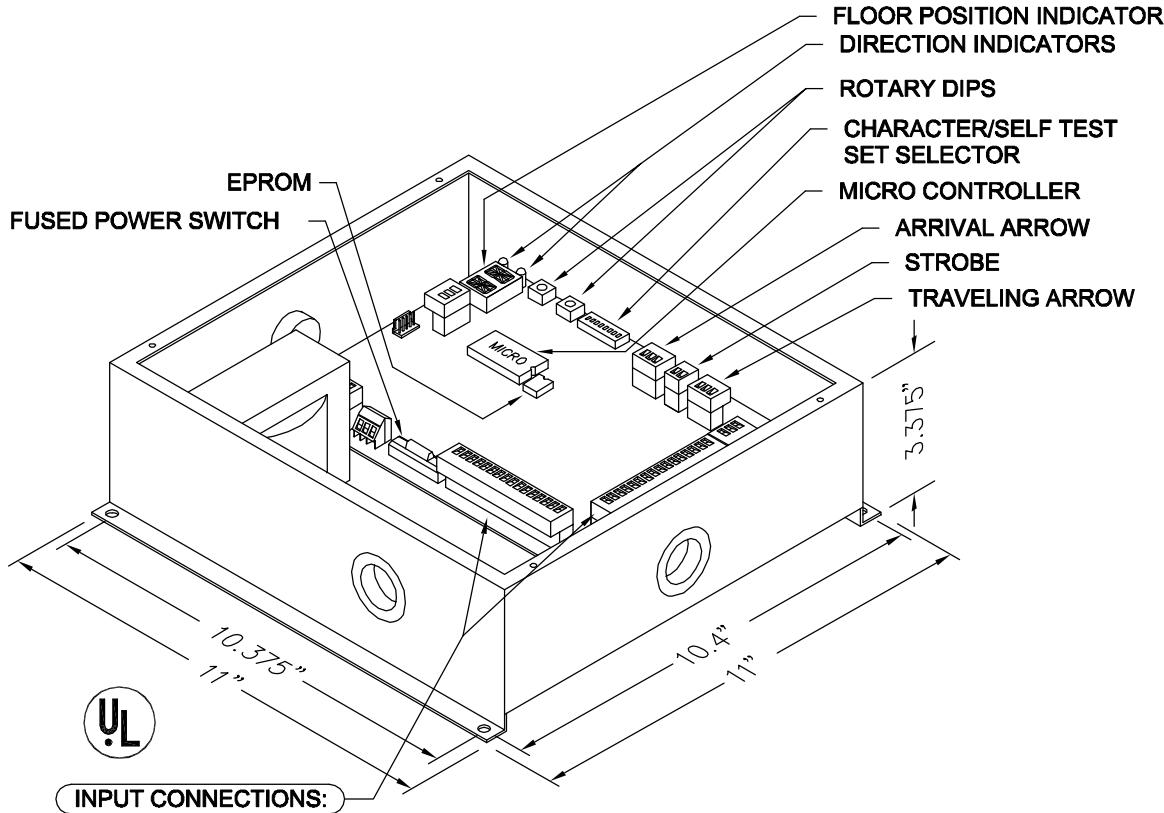


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# MCCA-XXXXXXXX

Ver. 1 Rel. 06/18/02

MICRO COMM<sup>®</sup>  
 DRIVERS



## CENTRAL CONTROL UNIT ("CCU")

UL listed controller

Drives any remote display indicator (RDI's, Voice, Lanterns) on the C.E. Micro Comm 3-wire display network. The "MCCA" 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:

- UL listed
- Arrival arrows
- Strobe
- Fast, 3-wire hookup
- Latched inputs
- Cross wire protected
- Self testing
- With Alternate message module capable of 8 prioritized messages
- Drives 31 RDI's directly
- Passing chime output
- Error detection and correction feature

### TO ORDER: - MCCA - X X X X X X X

NUMBER OF INPUTS:  
 "2" = 15 INPUT  
 "4" = 31 INPUT  
 "5" = 55 INPUT  
 \*"8" = 119 INPUT

SIGNAL VOLTAGE:  
 "A" = POSITIVE 6-20VDC, 6-24VAC  
 "B" = POSITIVE 24-48VDC, 24-48VAC  
 "C" = 120VAC (Use POSITIVE build)  
 "D" = POSITIVE 125VDC  
 "E" = NEGATIVE 6-20VDC  
 "F" = NEGATIVE 24-48VDC  
 "G" = NEGATIVE 125VDC

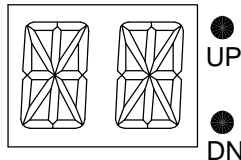
SIGNAL FORMAT:  
 "1" = SINGLE LINE/FLOOR  
 "2" = BINARY  
 "3" = UNITS & TENS  
 "4" = GRAY CODE  
 "5" = INVERTED BINARY  
 "6" = SPECIAL

TRANSFORMER/BUILD  
 "A" = 110/120VAC Transformer w/Box  
 "B" = 110/120VAC Transformer w/o Box  
 "E" = 220/230VAC Transformer w/Box  
 "F" = 220/230VAC Transformer w/o Box  
 "X" = No Box/No Transformer

STROBE VOLTAGE  
 "A" = POSITIVE 6-20VDC, 6-24VAC  
 "B" = POSITIVE 24-48VDC, 24-48VAC  
 "C" = 120VAC (Use POSITIVE build)  
 "D" = POSITIVE 125VDC  
 "E" = NEGATIVE 6-20VDC  
 "F" = NEGATIVE 24-48VDC  
 "G" = NEGATIVE 125VDC

ARRIVAL ARROW VOLTAGE  
 "A" = POSITIVE 6-20VDC, 6-24VAC  
 "B" = POSITIVE 24-48VDC, 24-48VAC  
 "C" = 120VAC (Use POSITIVE build)  
 "D" = POSITIVE 125VDC  
 "E" = NEGATIVE 6-20VDC  
 "F" = NEGATIVE 24-48VDC  
 "G" = NEGATIVE 125VDC

TRAVEL ARROW VOLTAGE  
 "A" = POSITIVE 6-20VDC, 6-24VAC  
 "B" = POSITIVE 24-48VDC, 24-48VAC  
 "C" = 120VAC (Use POSITIVE build)  
 "D" = POSITIVE 125VDC  
 "E" = NEGATIVE 6-20VDC  
 "F" = NEGATIVE 24-48VDC  
 "G" = NEGATIVE 125VDC



### NOTE:

1. If a special voltage is required, please consult factory.
- \*2. Requires external decoder board.

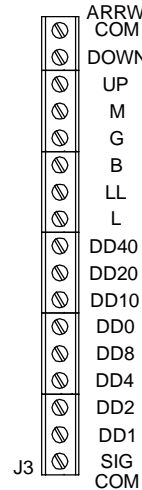
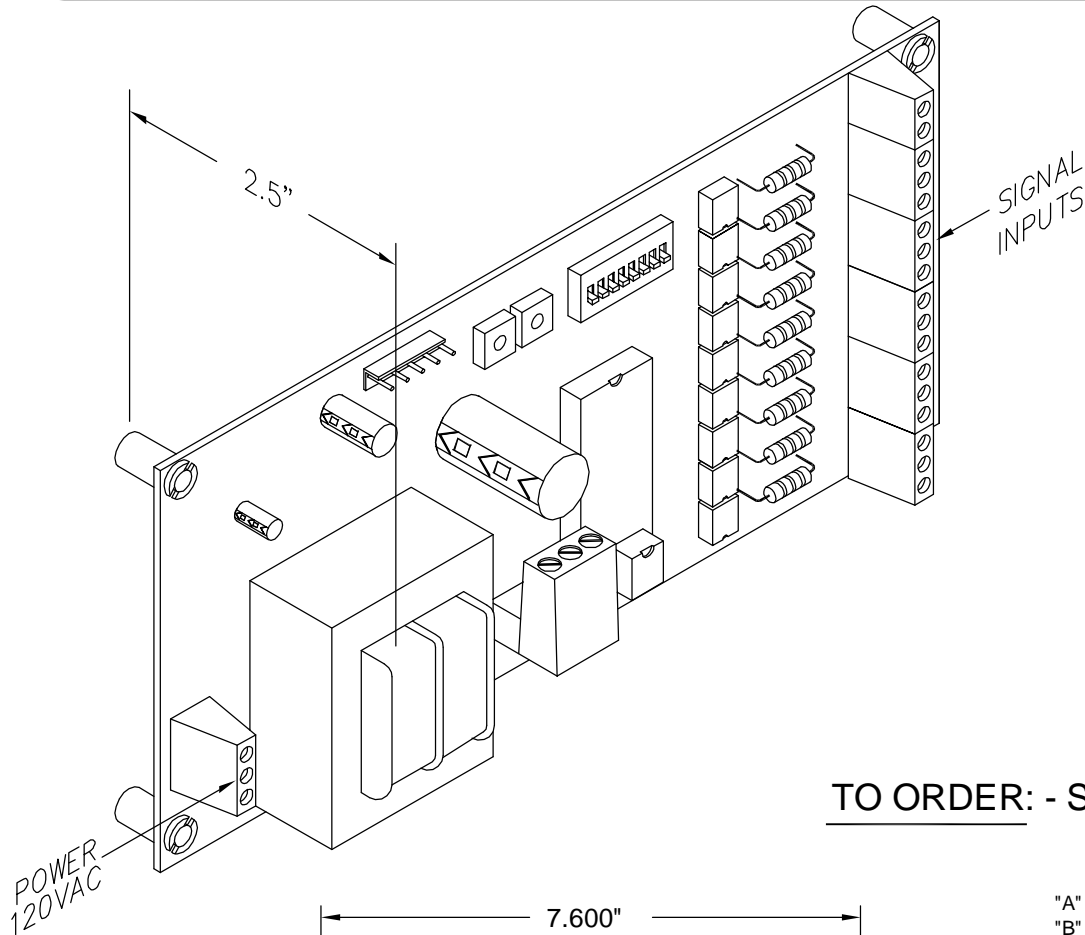


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# SDCDU-XXXX

Ver. 1 Rel. 06/18/02

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 DRIVERS



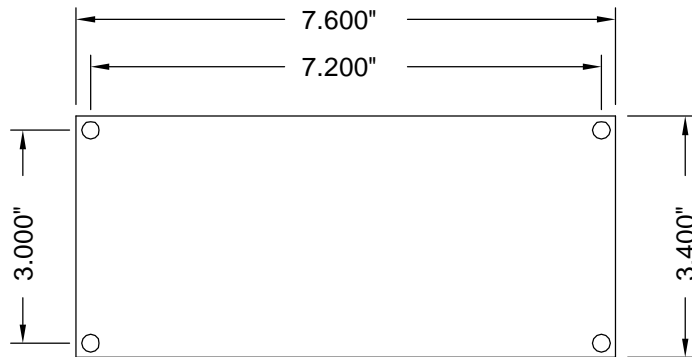
## CONTROL DRIVER BOARD

This unit was designed to be interfaced to Dover type controllers. The board is capable of driving 2 to 4 displays remote from itself. Any Micro Comm series display can be utilized with this unit.

### Features:

- Latched inputs
- Cross wire protected
- Self testing
- Alternate message
- Passing chime output
- Micro Comm output
- Self-contained
- Error detection and correction feature

## TO ORDER: - SPECIFY SDCDU - X X X X



### SIGNAL VOLTAGE:

- "A" = POSITIVE 6-20VAC/DC, 24 VAC
- "B" = POSITIVE 24-48VDC, 48VAC
- "C" = POSITIVE 120VAC
- "D" = POSITIVE 125VDC
- "E" = NEGATIVE 6-20VDC
- "F" = NEGATIVE 24-48VDC
- "G" = NEGATIVE 125VDC

### SIGNAL FORMAT:

- "1" = SINGLE LINE/FLOOR \*
- "2" = BINARY
- "3" = UNITS & TENS \*
- "4" = GRAY CODE
- "5" = INVERTED BINARY
- "6" = SPECIAL

### BUILD:

- "B" = with BOX & COVER
- "X" = no BOX or COVER

### DRIVE CAPABILITY:

- "0" = DRIVES UP TO 2 POSITION INDICATORS
- "1" = DRIVES UP TO 4 POSITION INDICATORS

### NOTE:

1. Derate 50% on VF display.
- \*2. May need additional decoder card.



# SHAIO-XXXXXXXX

Ver. 3 Rel. 01/05/2012

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 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 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

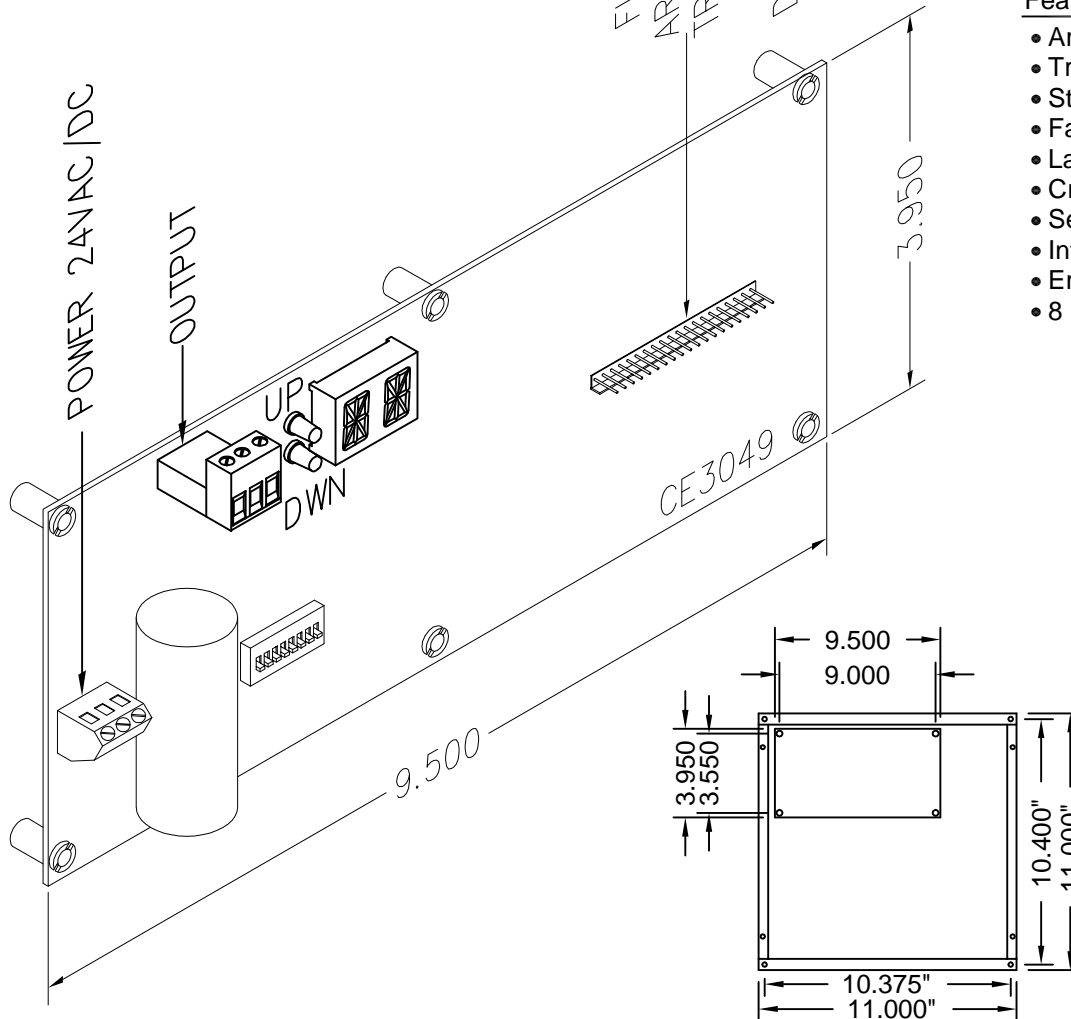
**ARRIVAL ARROW VOLTAGE (next direction)**  
 "A" = + 6 - 20 VDC, 6 - 24 VAC  
 "B" = + 24 - 48 VDC, 24 - 48 VAC  
 "C" = 120 VAC  
 "D" = ± 125 VDC  
 "E" = - 6 - 48 VDC  
 "F" = - 24 - 48 VDC  
 "G" = - 125 VDC

**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

INPUTS FOR  
 FLOOR SIGNALS  
 ARRIVAL ARROWS  
 TRAVEL ARROWS  
 MESSAGES  
 DOOR STROBE



NOTE:

\* 1. May require external decoder board.

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

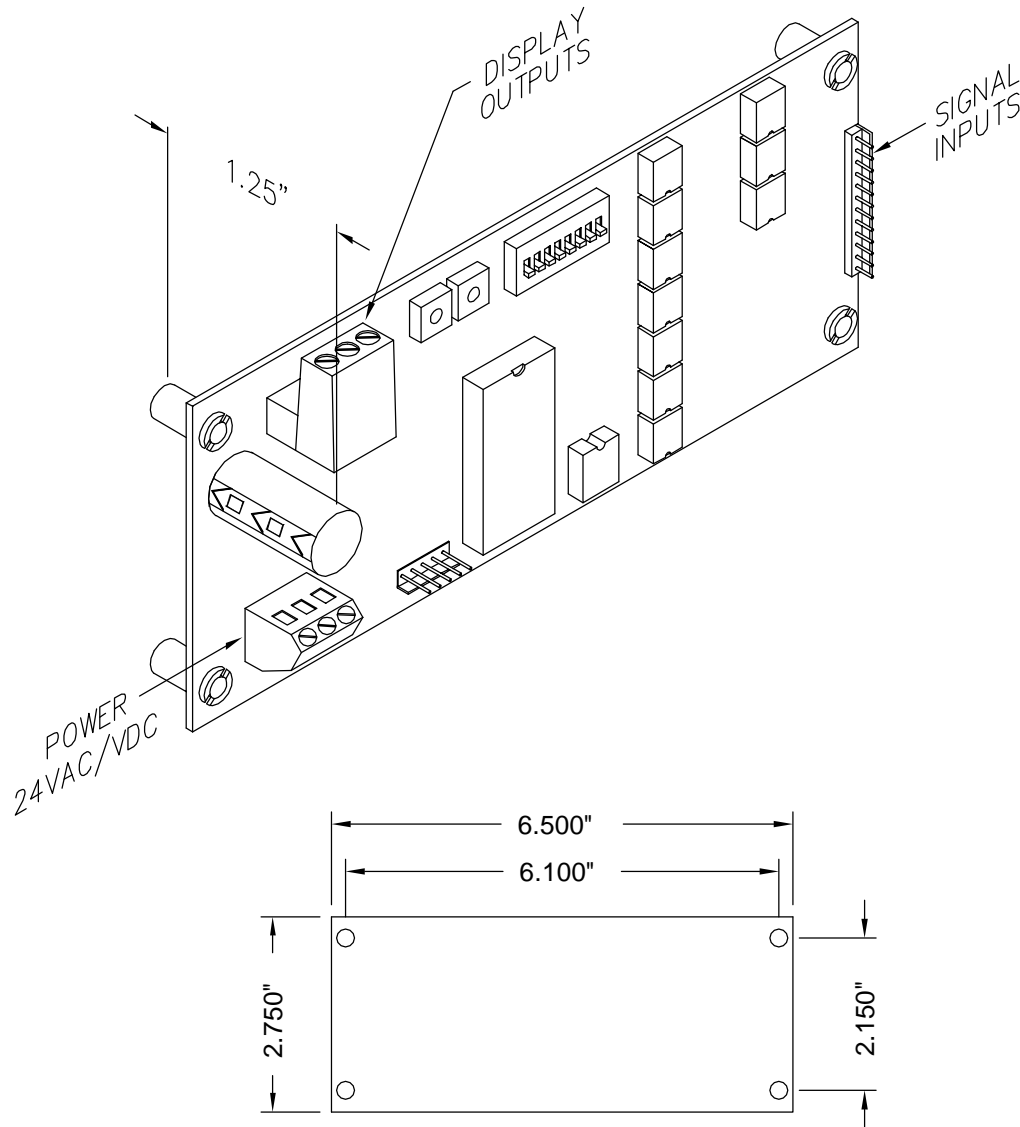


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# SHCDUE-XXX

Ver. 1 Rel. 06/18/02

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 DRIVERS



## CONTROL DRIVER BOARD

This unit was designed to be a compact low voltage display driver board. The board is capable of driving up to 30 displays remote from itself. The number of displays driven is subject to the power supply provided. Any Micro Comm series can be utilized with this unit.

### Features:

- Latched inputs
- Cross wire protected
- Self testing
- Alternate message
- Passing chime output
- Remote Display
- Self-contained
- 24 volt power supply
- Error detection and correction feature
- 8 Inputs & Up/Down

### TO ORDER: - SPECIFY SHCDUE - X X X

#### SIGNAL VOLTAGE:

- "A" = POSITIVE 6-20VAC/DC, 24 VAC
- "B" = POSITIVE 24-48VDC, 48VAC
- "C" = POSITIVE 120VAC
- "D" = POSITIVE 125VDC
- "E" = NEGATIVE 6-20VDC
- "F" = NEGATIVE 24-48VDC
- "G" = NEGATIVE 125VDC

#### SIGNAL FORMAT:

- "1" = SINGLE LINE/FLOOR \*
- "2" = BINARY
- "3" = UNITS & TENS \*
- "4" = GRAY CODE
- "5" = INVERTED BINARY
- "6" = SPECIAL

#### BUILD:

- "B" = with BOX & COVER
- "X" = no BOX or COVER

#### NOTE:

- \*1. May need additional decoder card.
2. If a special voltage is required, please consult factory.

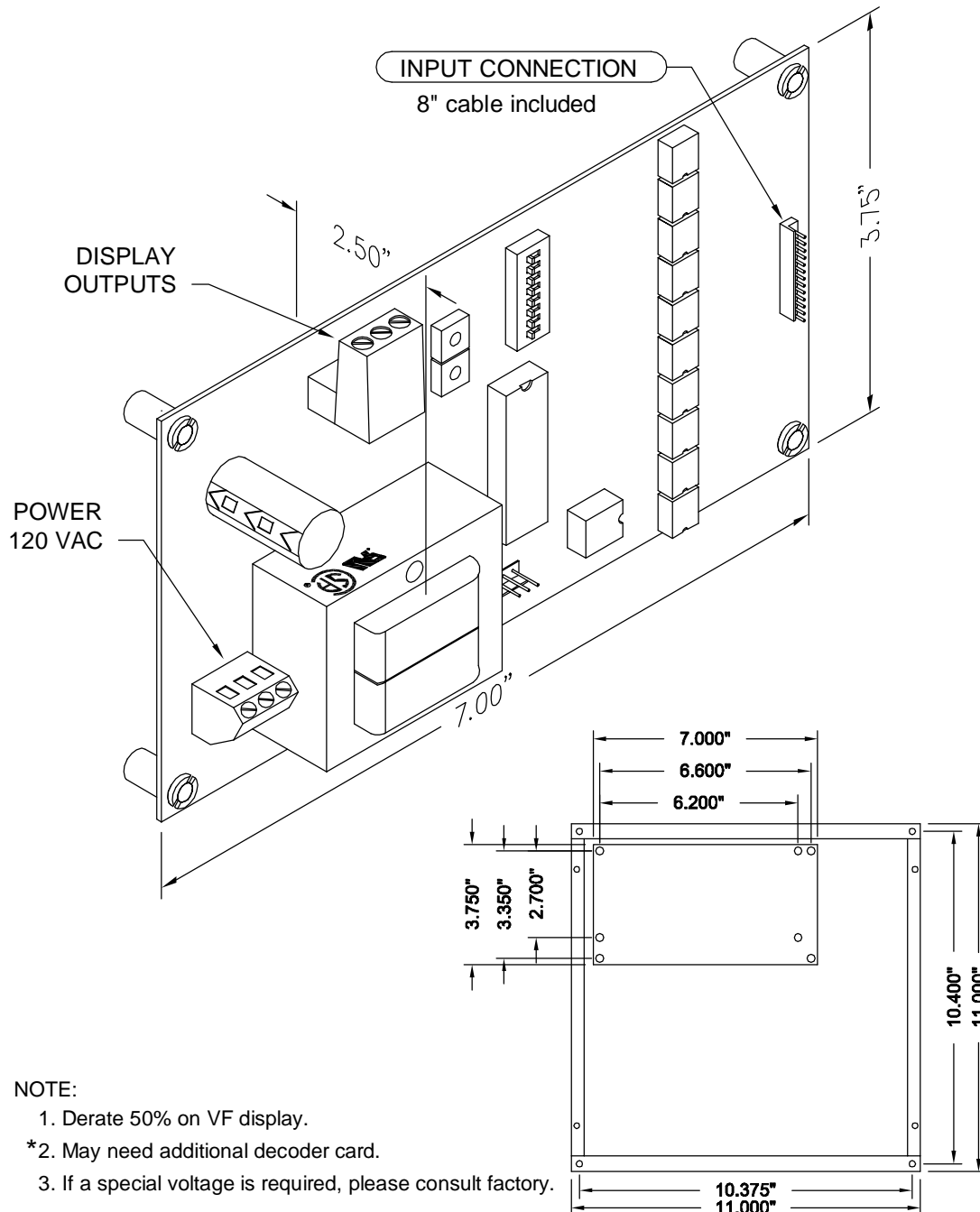


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# SMCDU-XXX

Ver. 2 Rel. 07/18/07

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 DRIVERS



- NOTE:
1. Derate 50% on VF display.
  - \*2. May need additional decoder card.
  3. If a special voltage is required, please consult factory.

## CONTROL DRIVER BOARD

This unit was designed to be a compact display driver board. The board is capable of driving 4 displays remote from itself. Any Micro Comm series display can be utilized with this unit.

### Features:

- Latched inputs
- Cross wire protected
- Self testing
- Alternate message
- Passing chime output
- Remote display
- Self-contained
- Error detection and correction feature
- UL listed
- **Fullwave Bridge AC/DC inputs**
- 8 Inputs & Up/Down

### TO ORDER - SPECIFY SMCDU - X X X

#### SIGNAL VOLTAGE:

- "A" = POSITIVE 6-20VAC/DC, 24VAC
- "B" = POSITIVE 24-48VDC, 48VAC
- "C" = POSITIVE 120VAC
- "D" = POSITIVE 125VDC
- "E" = NEGATIVE 6-20VDC
- "F" = NEGATIVE 24-48VDC
- "G" = NEGATIVE 125VDC

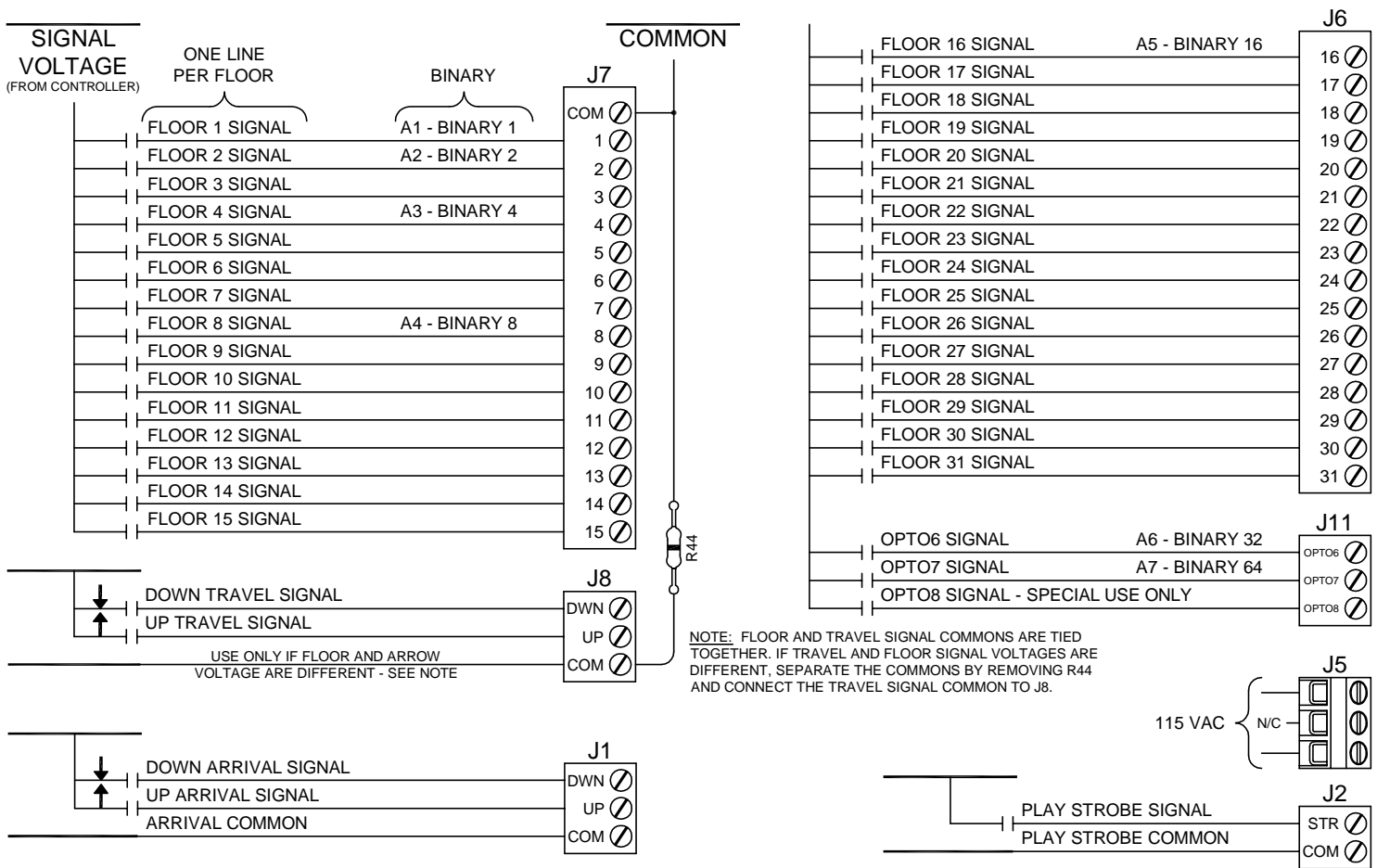
#### BUILD:

- "B" = with BOX & COVER
- "X" = no BOX or COVER

#### SIGNAL FORMAT:

- "1" = SINGLE LINE/FLOOR \*
- "2" = BINARY
- "3" = UNITS & TENS \*
- "4" = GRAY CODE
- "5" = INVERTED BINARY
- "6" = SPECIAL





### BINARY FLOOR CHART

### BINARY BITS

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