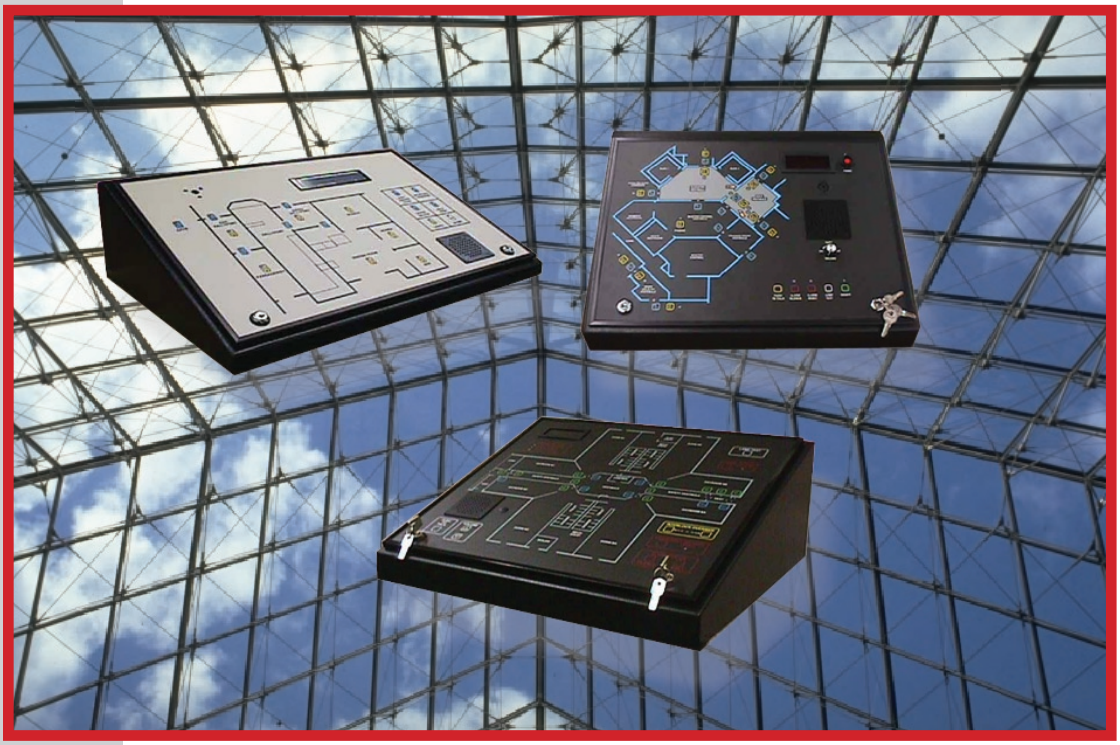
SPECIFICATION SHEET

Auto-Face V
Touch Switch and Indicator Panel



The **Auto-Face V Touch Switch and Indicator Panel** combines both operator inputs and visual annunciation in one attractive and economical display panel. Operator inputs are through touch activated dome switches located below the graphic display surface. Indication is through long-life high intensity LEDs. The durable front surface can be a colorful graphic representation or a simple tabular or liner information display. The **Auto-Face V** panels are ideal for security door control and other control applications that require annunciation, indication and operator interface.

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SPECIFICATION SHEET

DESIGN DATA

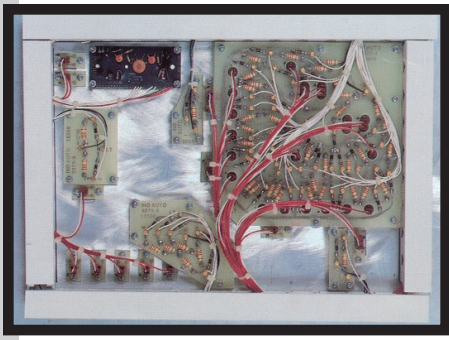
The graphic surface of the **Auto-Face V** display panel is a multicolored 7-mil polyester film protected by a 6-mil vinyl laminated overlay. The graphic artwork can be either black lines and text with multicolored background or colored lines and text with black background. Colors for the graphic are selected from ADI's chart of 22 standard colors. Custom colors may be specified to meet design or architectural requirements. Holes are drilled in the .125" irridited aluminum substrate for all LEDs and switches. The graphic film is bonded to the aluminum substrate with a 0.10" epoxy board layer sandwiched between the film and the aluminum substrate.

The switches and LEDs do not protrude through the polyester film, which creates a front surface resistant to spills and easily cleaned. An attractive clear or black anodized aluminum frame enhances and protects the edge of the panel.

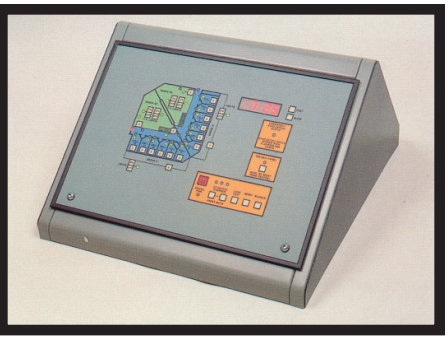
The touch switches can be replaced from the rear of the panel. The touch switch is attached to the aluminum substrate with machine screws. Switch contact configuration is momentary, normally open, single pole. Switches are rated at 40mA at 24VDC with a life expectancy of 5 million operations. Activation force for the switches is 220 grams, with travel of .015 inches. The average effective operating force for the control switch is 325 grams when installed in a control panel.

High intensity LEDs are used and can be furnished in red, green, amber, and yellow. Blue or bicolor LEDs are available, also. Typical LED size is T-1¾. Each LED is socket mounted on a printed circuit board. Voltage dropping resistors for operation at 24 VDC, 12 VDC, or 5 VDC and diodes for LED test are mounted on the LED printed circuit board. LED printed circuit board is mounted to the rear of the aluminum substrate with machine screws.

An ADI Z-Card microprocessor controller system can scan the switches, illuminate the LEDs, and provide inputs and outputs to a host computer via an RS232, RS422 or RS485 serial line. **Auto-Face V** panels also can be specified as wired to terminals or as unwired; both allow for connection by the customer to a programmable controller.



Interior View



Console Top Control Panel

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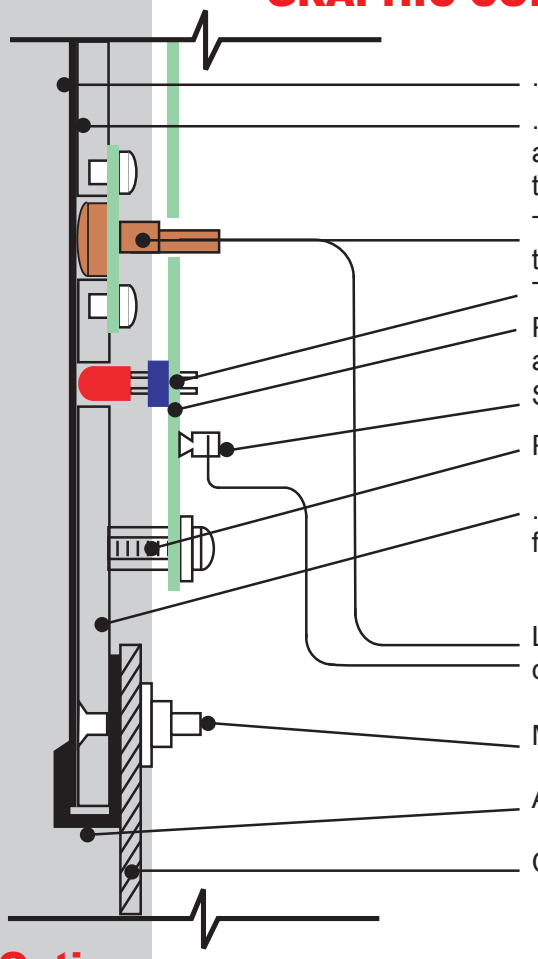
GRAPHIC CONSTRUCTION DETAIL



.006" vinyl laminated non-glare protective overlay

.007" multi-colored polyester graphic film bonded to a .010" rigid epoxy board sub layer which is bonded to an aluminum substrate

Touch switch, with push-on 2-pin connector, screwed to the aluminum substrate

T-13/4 LED socket mounted to a pcb

Printed circuit board (pcb) with dropping resistors and diodes for LED test

Solder type LED input turret

Pressed-in standoffs for mounting screws

.125" clear irridited aluminum substrate with holes for touch switches and LEDs

LEDs and touch switches wired to terminal strip(s), connector(s), or directly to a controller

Mounting studs

Anodized extruded aluminum T1 trimedge

Custom built enclosure designed by ADI

Options

Automation Displays Inc. can supply panels with many of the features listed below.

Electrical

- LED test switch
- Multiple commons
- Audible alarm
- RS232/RS422/RS485 serial interface
- ADI Z-Net interface
- Mounting and wiring of customer furnished driver assemblies
- DC power supplies/DC convertors,
- 24 VDC standard, other voltages available
- Digital readout displays
- Clock displays
- UL 508 Listing

Mechanical

- Control panel mounting
- Hinged cover
- Flush mount or surface mount backbox
- Rack mount
- Stainless steel frame
- Stainless steel backbox
- NEMA 12
- Custom desktop turrets
- Custom colored anodized aluminum frame

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SPECIFICATION SHEET

ENGINEER/ARCHITECT SPECIFICATION
AUTO-FACE V TOUCH SWITCH AND INDICATOR CONTROL PANEL

1.0 General

This specification defines the basic construction and components for an AUTO-FACE V multi-colored graphic annunciator and control panel.

2.0 Construction

The control panel shall be constructed of aluminum with a polyester graphic film and vinyl laminated overlay that is non-yellowing, durable and scratch resistant. LEDs shall be mounted on custom printed circuit boards (PCBs). All wiring to the PCBs shall be made on solder turrets. Switches and LEDs shall be socket mounted or have connectors for easy replacement.

3.0 Graphic
3.1 Graphic Colors

The film overlay shall be a graphic as shown in the architect's plan with black legends and colored background areas. The graphic shall be 7-mil photographic film, having all accent colors applied to the backside of the film. The panel supplier shall furnish a color chart with a minimum of 22 accent colors for architect selection.

3.2 Graphic Surface

The graphic surface (polyester film) shall be bonded to the aluminum substrate with an adhesive that has been proven not to delaminate in similar applications. The adhesive shall achieve 100% bonding without any creases, bumps, or blemishes in the working surface (face) of the graphic. The working surface of the graphic shall be vinyl with a non-glare finish. Translucent openings shall be made in the overlay for backlit indication. Backlit areas shall be subdued until the lamp is illuminated. The illumination of any indicator shall be clearly visible from any normal viewing angle in front of the working surface of the graphic.

3.3 Epoxy Board

A .010" rigid epoxy board sub-layer shall be installed between the polyester film surface and the .125" aluminum substrate. The rigid epoxy board shall protect the polyester film from the sharp edge of the switch cutouts in the aluminum substrate.

4.0 Substrate

The .125" aluminum substrate shall have holes for LEDs (light emitting diodes) and switches. LEDs and switches shall not protrude through the polyester film overlay. The aluminum substrate shall have holes drilled and tapped for switch and indicator mounting from behind the panel. The aluminum substrate shall have a clear irridited finish to prevent oxidation.

5.0 Indicators

The indicators shall be high intensity LEDs, T-1¾ in size, and rated for normal operation at a current of 20 mA. The LEDs shall have an operating life of a minimum of 170,000 hours of continuous or pulsed operation. The body and lens of the LEDs shall be constructed of high impact plastic. The LEDs shall be socket mounted in .062" printed circuit cards constructed of epoxy glass material, NEMA Type FR-4, Grade 10. Resistors and diodes, for current limiting and LED test, shall be mounted on the printed circuit boards. Solder type, pressed in terminals, shall be provided for electrical connections to the LEDs. Test lamp switch (when specified) shall illuminate all lamps simultaneously when activated.

6.0 Switches

The switches shall be momentary, normally open, with a contact rating of 40 mA at 24 VDC. The switches shall have a life expectancy of 5,000,000 operations when operated at the rated current and voltage. The switches shall be round and of the touch activated type, requiring a movement of .015" and an activation force of 220 grams. The effective operating force of the switches when installed in a panel shall be 325 grams +/- 100 grams. The switches shall be replaceable from the rear of the panel. A push-on two-wire connector shall be provided with each switch for making electrical connection.

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