Cat. No. MC1-20C2

LED 1 Line
Message Centers

Up to 51 Characters

MC1 Series

The Edwards MC1 Series of Message Centers are indoor rated multi-color LED communication centers. They may be used as a single stand-alone message center or can be networked into a plant wide communication system. When networked, one message can be transmitted from the controlling computer software to the serial computer interface on all the message centers within the facility or discrete messages can be sent to specific addresses within the communication network of messages centers.

The units may be wall or ceiling mounted using the supplied hardware. Designed for indoor communication in commercial and industrial environments, Edwards Message Centers can display production goals and performance, safety goals and performance, changes in employee benefits, company announcements and achievements as well as boost morale through employee recognition. May be used in commercial establishments from stores to restaurants to assist with internal and external communications.

Hand Held Remote Programmer

A 54 key hand held remote control keyboard with easy to understand programming instructions is supplied with each Edwards Message Center. MC-RP (supplied with each unit). Batteries included.

Accessories

Infrared message loader with 3 foot cable and 9V battery — MC-RIRL. Wall or ceiling mount bracket — MC4-CWMK

For Message Center Software & Hardware Accessories please see pages 7-18 to 7-25.

FEATURES

> Stores up to 81 messages

> 100,000 Hr. multi-color LED lamp technology

> Five message speed settings

> 26 message operation modes

> Built-in animations

> 1 month typical memory retention

> Built in real-time clock, 12 or 24 hour format

> Built in serial computer interface-RS232 and RS485

> Addressable

> Password protected

> Power cord with 3 prong plug

> Continuous message entry with automatic centering in any mode

## AGENCY APPROVALS

> ETL Listed to ANSI/UL 1950 Second Edition (US)

> Can/CSA-22.2 No. 950-M89 (Can)

> FCC Part 15 Class A

D-04

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TECHNICAL INFORMATION

Cat. No.	MC1-15C2	MC1-15R2	MC1-20C2	MC1-20C3	MC1-30C3
Dimension A	28 7/8" (733mm)	28 7/8" (733mm)	37 3/4" (959mm)	57 3/8" (1457mm)	84 3/8" (2143mm)

3 1/2" (89mm)
2 7/8" (73mm)
3 7/8" (98mm)
3" (76mm)
1/2" (13mm)
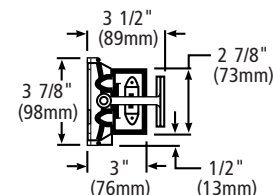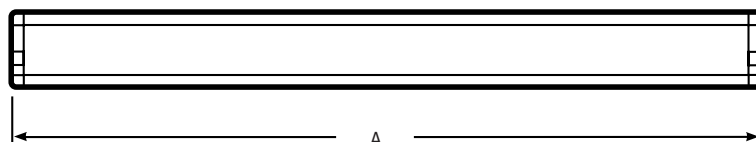
Cat. No.	A	B	C	D	E	F
MC1-14C4	2 1/4" (57mm)	3 1/8"" (79mm)	2 5/8" (67mm)	3" (76mm)	3 7/8" (98mm)	4 3/8" (111mm)
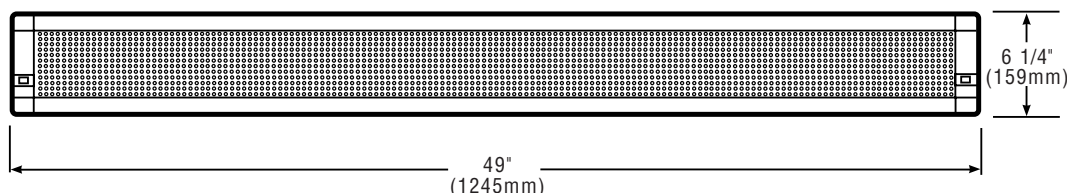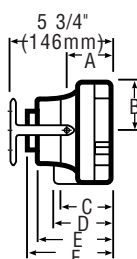
5 3/4" (146mm)

6 1/4" (159mm)

49" (1245mm)

Cat. No.	Power	No. characters	Character size / Array	Pixel size diameter x center to center spacing	Pixel Color	Weight	Max. viewing distance w/ largest font*	Message capacity	Operating environment	Case dimensions/ display dimensions
MC1-15C2	120V AC ± 10% 40 watt max.	30 in condensed rotate mode, 15 in all other modes	2" Array 90 x 7 pixels	.2" x .3"	8 colors and 3 rainbow effects	6.25 lbs.	100 ft	81 different messages can be stored & displayed 6,000 characters	32-120ºF 0-95% relative humidity non-condensing	28.9" L 2.1" D 4.5"H/ 2.1"H 27"L
MC1-15R2					Red					
MC1-20C2	120V AC ± 10% 40 watt max.	24 in condensed rotate mode, 20 in all other modes	2.1" Array 120 x 7 pixels	.2" x .3"	3 colors and 3 rainbow effects	4.7 lbs.	100 ft	81 different messages can be stored & displayed 28,000 characters	32-120ºF 0-95% relative humidity non-condensing	37.7" L 2.9" D 3.8" H/ 2.1" H 36" L
MC1-20C3	120V AC ± 10% 40 watt max.	34 in condensed rotate mode, 20 in all other modes	3.1" Array 120 x 7 pixels	.276" x .45"	8 colors and 3 rainbow effects	12.5 lbs.	150 ft	81 different messages can be stored & displayed 29,500 characters	32-120ºF 0-95% relative humidity non-condensing	57.4" L 3.8" D 5.5" H/ 3.1" H 54" L
MC1-30C3	120V AC ± 10% 50 watt max.	51 in condensed rotate mode, 30 in all other modes	3.1" Array 180 x 7 pixels	.276" x .45"	8 colors and 3 rainbow effects	17 lbs.	150 ft	81 different messages can be stored & displayed 28,500 characters	32-120ºF 0-95% relative humidity non-condensing	84.4" L 3.8" D 5.5" H/ 3.1" H 81" L
MC1-14C4	120V AC ± 10% 100 watt max.	27 in condensed rotate mode, 14 in all other modes	4.0" Array 80 x 7 pixels	.35" x .57"	8 colors and 3 rainbow effects	13.25 lbs.	200 ft	81 different messages can be stored & displayed 30,000 characters	32-120ºF 0-95% relative humidity non-condensing	49" L 4.25" D 6.25" H/ 4" H 45.6" L

*Fonts available Block (sans serif), decorative (serif), upper /lower case, slim/wide and international character sets on all except MC1-15C2, MC1-15R2 and MC1-14C4

Edwards Signaling & Security Systems®

D-04

LED 2 Line Message Centers

Up to 40 Characters

MC2-20R07

FEATURES

> Two lines of 7" LED characters

> Stores up to 81 messages

> 100,000 hr. LED technology

> 5 variable speed settings

> 25 message modes

> 10 day typical memory retention

> Built in real-time clock, 12 or 24 hour format

> Built in serial computer interface- RS232 and RS485

> Addressable

> Easy to use push button operation to set time/date and display on/off

> Attractive ABS case design

> Continuous message entry with automatic centering in any mode

> Hand held remote (ordered separately)

AGENCY APPROVALS

Safety

> EN 60950

> C120V power supply is UL Listed/CSA Certified

EMI

> FCC ClassB

The Edwards MC2-20R07 is designed specifically for high-priority messaging. With the message center, you can communicate critical, time-sensitive information specifically to individuals who need it - when they need it. Your messages will be received at the appropriate time, without the delay and clutter often associated with memos, bulletin board announcements and e-mail.

Because of its size, the MC2-20R07 is also suited for delivering advertising messages for products or services to customers waiting for tellers or at point-of-sale terminals. In addition, it delivers information to visitors, clients and patients in lobbies and waiting rooms.

Using light, color and motion that's guaranteed to attract attention, the MC2-20R07 lets you communicate important messages on a on-to-one basis. They can be strategically placed inside help-desk and customer service work stations/cells, offices, information desks, and lobbies so that priority data is immediately and easily available. Whether you're updating a plant supervisor with a production run change or several customer service representatives with individual call waiting/cue information, the applications for the MC2-20R07 are unlimited.

The MC2-20R7 stands directly on a desktop or counter. The units may be wall mounted using the supplied hardware. For use indoors in commercial and industrial environments.

Applications
• Display real-time system status information and alerts
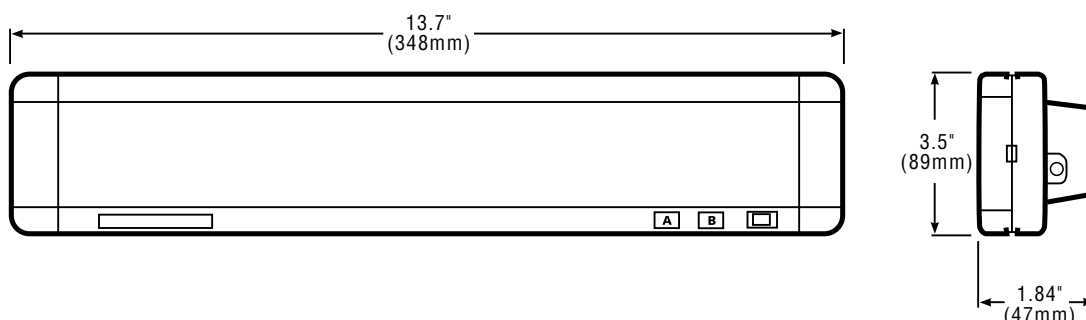• Communicate to customers in lobby/waiting areas

TECHNICAL INFORMATION

13.7"
(348mm)

3.5"
(89mm)

A B

1.84"
(47mm)

Cat. No.	Power	No. characters	Character size / Array	Pixel size diameter x center to center spacing	Pixel Color	Weight	Max. viewing distance w/ largest font*	Message capacity	Operating environment	Case dimens./ display Dimens.
MC2-20R07	120V AC + 1-10% 60 Hz 35 watt max.	Min. of 40 characters standard width (2 lines of 20)	.7" Array 120 x 7 pixels per line	.07" x .1"	Red	Display 21 oz. AC Adapter 19 oz.	35 ft	81 different messages can be stored & displayed 6,000 characters	32-120°F 0-50°C	13.7" L 1.84" D 3.5"H/ 12"L 1.7"

*Fonts available Block (sans serif), decorative (serif), upper /lower case, slim, wide, double wide and international character set

- Communicate messages directly to supervisory personnel in the office, plant, shipping/receiving, etc. regarding meetings, announcements, schedule changes, policy updates, sales and quality reports and more

- Display critical real-time production information such as efficiency levels, production schedules/changes, system status information and alerts, and other select data

- Transmit emergency announcements, department objectives, financial and sales goals, weather updates, etc.

- Communicate operation instructions

Hand Held Remote Programmer (ordered separately)
A 54 key hand held remote control keyboard including batteries with easy to understand programming instructions is available — MC-RP

Accessories
Infrared Message Loader with 3 foot cable and 9V battery —
MC-RIRL

For Message Center Software & Hardware Accessories please see pages 7-18 to 7-25.

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Cat. No. MC2-60C2

LED 2 Line Message Centers

Up to 120 Characters

MC2 Series

FEATURES

> Stores up to 81 messages

> 100,000 Hr. Multi-color LED Lamp Technology

> Five message speed settings

> 26 message operation modes

> Built-in animations

> 1 month typical memory retention

> Built in real-time clock, 12 or 24 hour format

> Built in serial computer interface- RS232 and RS485

> Addressable

> Password protected

> Power cord with 3 prong plug

> Continuous message entry with automatic centering in any mode

AGENCY APPROVALS

> ETL Listed to ANSI/UL 1950 Second Edition (US)

> Can/CSA-22.2 No. 950-M89 (Can)

> FCC Part 15 Class A

The Edwards MC2 Series of Message Centers are indoor rated multi-color LED communication centers. They may be used as a single stand-alone message center or can be networked into a company wide communication system. When networked, one message can be transmitted from the controlling computer software to the serial computer interface on all the message centers within the facility or discrete messages can be sent to specific addresses within the communication network of messages centers.

The units may be wall or ceiling mounted using the supplied hardware. Designed for commercial and industrial indoor communication, Edwards Message Centers can display production goals and performance, safety goals and performance, changes in employee benefits, company announcements and achievements as well as boost morale through employee recognition. May be used in commercial establishments from stores to restaurants to assist with internal and external communicatons.

Hand Held Remote Programmer
A 54 key hand held remote control keyboard with easy to understand programming instructions is supplied with each Edwards Message Center. MC-RP (supplied with each unit). Batteries included.

Accessories
Infrared Message Loader with 3 foot cable and 9V battery — MC-RIRL

Ceiling or wall mount bracket — MC4-CWMK
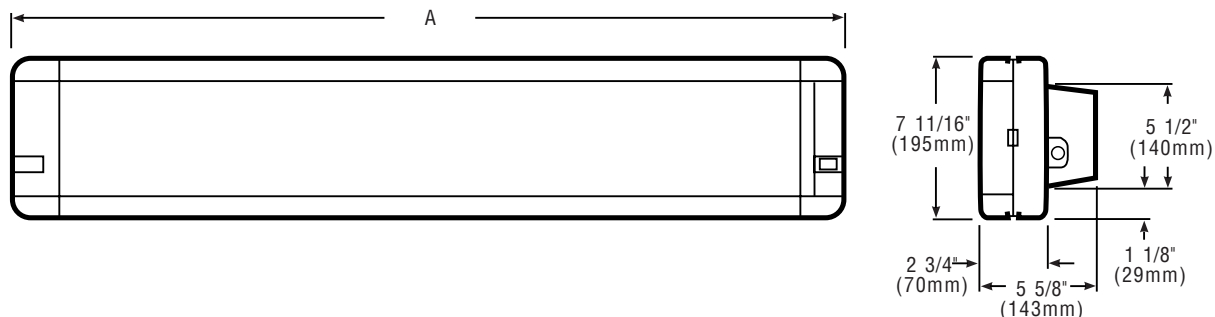
Double sided hanging bracket — MCDSHB

Three sided mounting bracket — MC3SMK

D-04

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Edwards Signaling & Security Systems®

TECHNICAL INFORMATION

A

7 11/16" (195mm)

5 1/2" (140mm)

1 1/8" (29mm)

2 3/4" (70mm)

5 5/8" (143mm)

Cat. No.	MC2-60(C or R)2	MC2-80(C or R)2	MC2-100(C or R)2	MC2-120(C or R)2
A Dimension	40 1/8" (1019mm)	52 1/8" (1324mm)	64 1/8" (1629mm)	76 1/8" (1934mm)

Cat. No.	Power	No. characters min/typ/max	Character size Array	Pixel size diameter x center to center spacing	Pixel Color	Weight	Max. viewing distance w/ largest font*	Message capacity	Operating environment	Case dimen./ display Dimen.
MC2-60C2	120V AC ± 10% 120 watt max.	One line 10/12/15 Two line 40/40/60	One line 4.8" Two line 2.1" Array 120 x 16 pixels	.2" x .3"	Each pixel can be red, green or amber	18.5 lbs.	200 ft	81 different messages can be stored & displayed 28,000 characters	32-120ºF 0-95% relative humidity non-condensing	40.1" L 5.5" D 7.7"H/ 4.8"H 36"L
MC2-60R2					Red					
MC2-80C2	120V AC ± 10% 120 watt max.	One line 14/16/20 Two line 52/52/80	One line 4.8" Two line 2.1" Array 160 x 16 pixels	.2" x .3"	Each pixel can be red, green or amber	24.5 lbs.	200 ft	81 different messages can be stored & displayed 28,000 characters	32-120ºF 0-95% relative humidity non-condensing	52.1" L 5.5" D 7.7" H/ 4.8" H 48" L
MC2-80R2					Red					
MC2-100C2	120V AC ± 10% 120 watt max.	One line 18/20/25 Two line 66/66/100	One line 4.8" Two line 2.1" Array 200 x 16 pixels	.2" x .3"	Each pixel can be red, green or amber	31 lbs.	200 ft	81 different messages can be stored & displayed 28,000 characters	32-120ºF 0-95% relative humidity non-condensing	64.1" L 5.5" D 7.7" H/ 4.8" H 60" L
MC2-100R2					Red					
MC2-120C2	120V AC ± 10% 180 watt max.	One line 20/24/30 Two line 80/80/120	One line 4.8" Two line 2.1" Array 240 x 16 pixels	.2" x .3"	Each pixel can be red, green or amber	37.5 lbs.	200 ft	81 different messages can be stored & displayed 28,000 characters	32-120ºF 0-95% relative humidity non-condensing	76.1" L 5.5" D 7.7" H/ 4.8" H 72" L
MC2-120R2					Red					

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EDWARDS
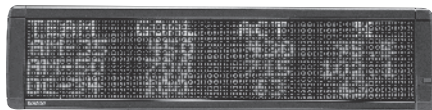
Cat. No. MC4-120C1

LED 4 Line Message Centers

Up to 200 Characters

MC4 Series

FEATURES

- > Stores up to 81 messages
- > 100,000 Hr. multi-color LED lamp technology
- > Five message speed settings
- > 20 message operation modes
- > 1 month typical memory retention
- > Built in real-time clock, 12 or 24 hour format
- > Built in serial computer interface- RS232 and RS485
- > Addressable
- > Password protected
- > Thermostatically controlled fans for cooling
- > Temperature probe included
- > Flexibility of 1 - 4 line message
- > Continuous message entry with automatic centering in any mode
- > Power cord with 3 prong plug supplied
- > Extruded Aluminum Case

AGENCY APPROVALS

- > ETL Listed to ANSI/UL 1950 Second Edition (US)
- > Can/CSA-22.2 No. 950-M89 (Can)
- > FCC Part 15 Class A

The Edwards MC4 Series of Message Centers are indoor rated multi-color LED communication centers. They may be used as a single stand-alone message center or can be networked into a company wide communication system. When networked, one message can be transmitted from the controlling computer software to the serial computer interface on all the message centers within the facility or discrete messages can be sent to specific addresses within the communication network of messages centers.

The units may be wall, ceiling or counter mounted using the supplied hardware. For use in commercial material handling and industrial environments.

Designed for indoor alerting, advising and communicating, Edwards Message Centers can display production goals and performance, safety goals and performance, changes in employee benefits, company announcements and achievements as well as boost morale through employee recognition. May be used in commercial establishments from stores to restaurants to assist with internal and external communications.

Hand Held Remote Programmer
A 54 key hand held remote control keyboard including batteries with easy to understand programming instructions is supplied with each Edwards Message Center — MC-RP (supplied with each unit)

Ordering Options
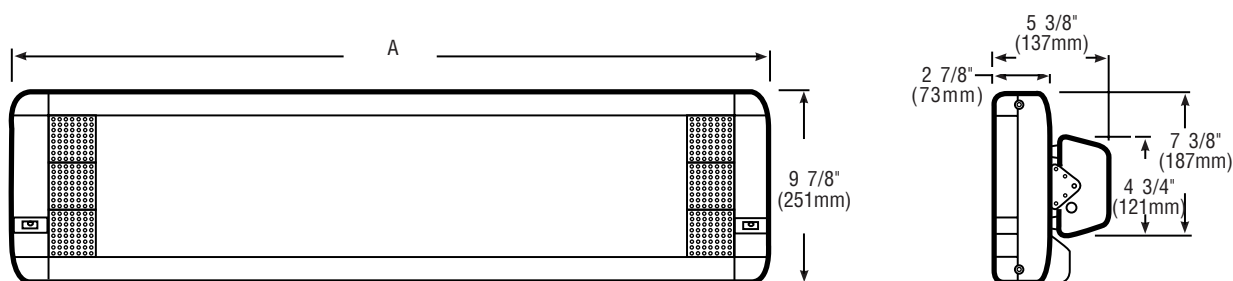Optional indoor enclosure rated NEMA4 Dust and Hose Down — Add "–4" suffix to catalog number

Optional indoor enclosure rated NEMA4X Dust, Hose Down, and Corrosion — Add "–4X" suffix to catalog number

D-04

7-8

Edwards Signaling & Security Systems®

TECHNICAL INFORMATION

A

5 3/8"
(137mm)

2 7/8"
(73mm)

7 3/8"
(187mm)

4 3/4"
(121mm)

9 7/8"
(251mm)

Cat. No.	MC4-120C1	MC4-160C1	MC4-200C1
A Dimension	40 1/4" (1022mm)	52 1/4" (1327mm)	64 1/4" (1632mm)

Cat. No.	Power	No. characters min/typ/max	Character size Array	Pixel size diameter x center to center spacing	Pixel Color	Weight	Max. viewing distance w/ largest font*	Message capacity	Operating environment	Case dimens./ display Dimens.
MC4-120C1	120V AC ± 10% 180 watt max.	One line 10/12/15 Two line 40/40/60 Three line 60/60/90 Four line 96/96/120	One line 7.2" Two line 3.0" Three line 2.1" Four line 1.5" Array 120 x 24 pixels	.2" x .3"	Each pixel can be red, green or amber	20 lbs.	350 ft	81 different messages can be stored & displayed 28,000 characters	32-120ºF 0-95% relative humidity non-condensing	40.2" L 5.4" D 10"H/ 7.2"H 36"L
MC4-160C1	120V AC ± 10% 180 watt max.	One line 14/16/20 Two line 52/52/80 Three line 78/78/120 Four line 128/128/160	One line 7.2" Two line 3.0" Three line 2.1" Four line 1.5" Array 160 x 24 pixels	.2" x .3"	Each pixel can be red, green or amber	26 lbs.	350 ft	81 different messages can be stored & displayed 28,000 characters	32-120ºF 0-95% relative humidity non-condensing	52.2" L 5.4" D 10" H/ 7.2" H 48" L
MC4-200C1	120V AC ± 10% 180 watt max.	One line 18/20/25 Two line 66/66/100 Three line 99/99/150 Four line 160/160/200	One line 7.2" Two line 3.0" Three line 2.1" Four line 1.5" Array 200 x 24 pixels	.2" x .3"	Each pixel can be red, green or amber	32 lbs.	350 ft	81 different messages can be stored & displayed 28,000 characters	32-120ºF 0-95% relative humidity non-condensing	64.2" L 5.4" D 10" H/ 7.2" H 60" L

*Fonts available Block (sans serif) decorative (serif), upper /lower case, slim, wide

Accessories

Infrared loader with 3 foot cable and 9v battery — MC-RIRL

Double Sided Hanging Bracket for the MC4 Series Message Centers — MCDSHB

Three Sided Mounting Kits for the MC4 Series Message Centers — MC3SMK

Ceiling or Wall Mounting Kit for MC4 Series Message Centers — MC4-CWMK
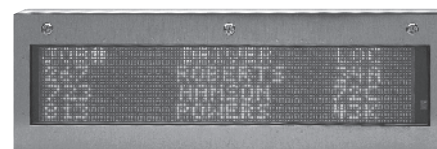
Cat. No. MC4-120C1-4X

For Message Center Software & Hardware Accessories please see pages 7-18 to 7-25.

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Cat. No. MC8-16C1   Cat. No. MC8-16C1-1

LED 8 Line
Lobby Message Center

MC8-16C1 Series

FEATURES

> Stores up to 30 pages of messages

> 100,000 Hr. Multi-color LED Lamp Technology

> Upper and lower case characters

> Timed text features

> 1 month typical memory retention

> Built in real-time clock, 12 or 24 hour format

> Built in serial computer interface- RS232 and RS485

> Addressable

> Keypad controller

> Power cord with 3 prong plug supplied

AGENCY APPROVALS

> ETL Listed to ANSI/UL 1950 Second Edition (US)

> Can/CSA-22.2 No. 950-M89 (Can)

> FCC Part 15 Class A

The Edwards MC8-16C1 Message Center is an indoor rated multi-color LED communication center. It may be used as a stand-alone message center or can be networked into a company wide communication system. When networked, one message can be transmitted from the controlling computer software to the serial computer interface on all the message centers within the facility or discrete messages can be sent to specific addresses within the communication network of messages centers.

The unit has a solid oak case and is designed for free standing floor installation but is supplied with wall mounting brackets if that style mounting is required. For use indoors in commercial and industrial environments.

Designed for indoor communication, this Edwards Message Center is designed for installation in company lobbies to greet guests and provide them with information at a glance. Such information may include meeting room assignments, safety goals, changes in employee benefits or other company announcements. May also be used in commercial establishments such as stores and restaurants to assist with internal and external communications.

Hand Held Remote Programmer
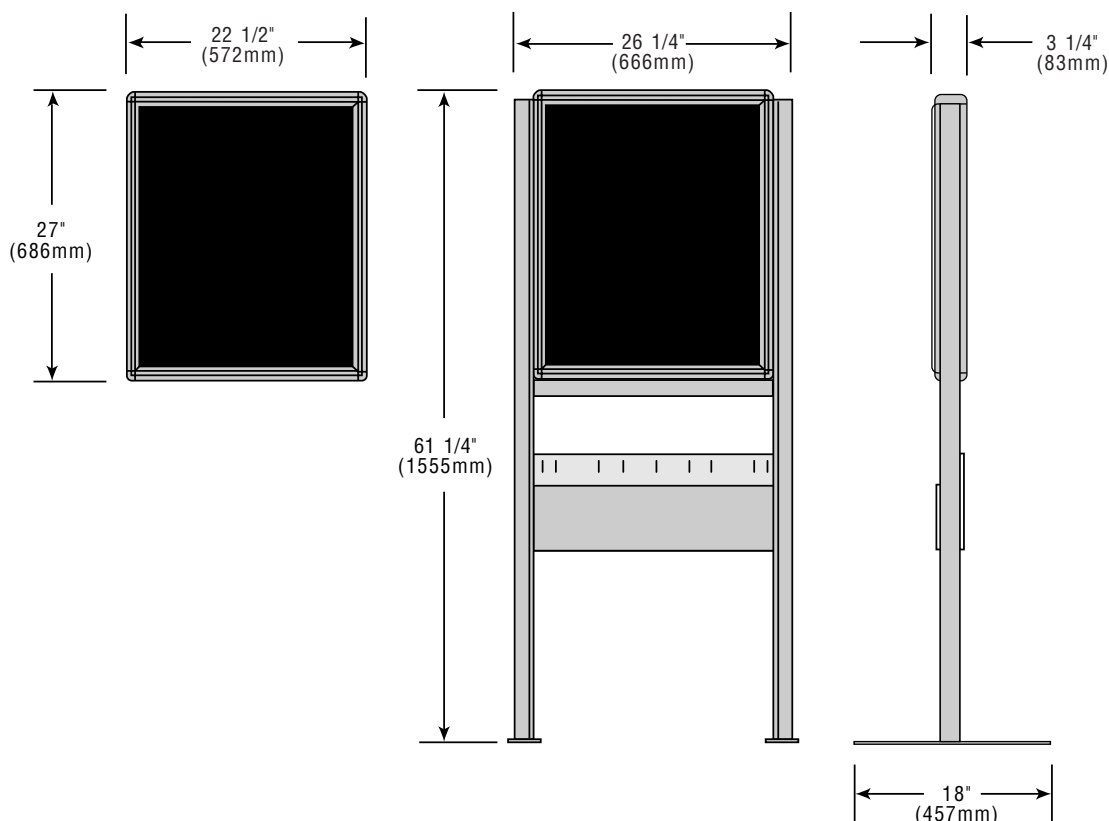A 54 key hand held remote control keyboard with easy to understand programming instructions is supplied with each Edwards Message Center — MC-RP (supplied with each unit). Batteries included.

D-04

Edwards Signaling & Security Systems®

TECHNICAL INFORMATION

22 1/2"
(572mm)

26 1/4"
(666mm)

3 1/4"
(83mm)

27"
(686mm)

61 1/4"
(1555mm)

18"
(457mm)

Cat. No.	Power	No. characters	Character size Array	Pixel size diameter x center to center spacing	Pixel Color	Max. viewing distance w/ largest font*	Message capacity	Operating environment	Case dimens/ display dimens
MC8-16C-1	120V AC ± 10% 180 watt max.	8 lines of 16 characers each	1.4"	.2" x .2"	3 colors	70 ft	26 pages of messages	32-95°F 0-95% relative humidity non-condensing	27" L 61" D
MC8-16C1-1	120V AC ± 10% 180 watt max.	8 lines of 16 characers each	1.2"	.2" x .2"	3 colors	60 ft	30 pages of messages		17 3/4" L 72" H

*Fonts available: sans serif, upper/lower case, small sans serif   **Reflects floor stand feet

Accessories

Windows® compatible software for down loading discrete messages
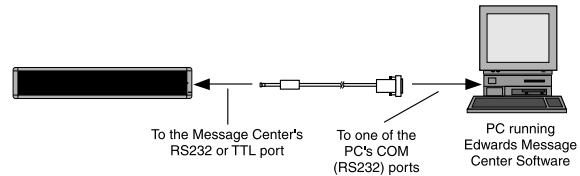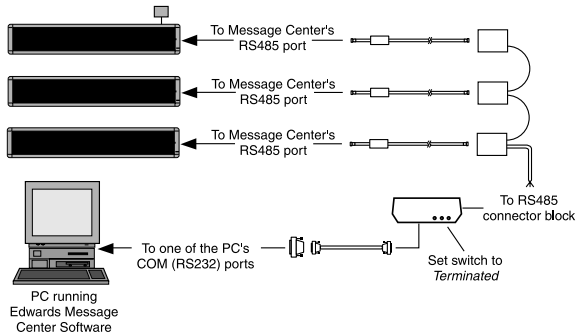
— order MCN-1-0.

Infrared message loader with 3 foot cable and 9V battery — order
MC-RIRL.

For Message Center software & Hardware Accessories please see pages 7-18 to 7-25.

Windows is a registered trademark of Microsoft Corporation

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Message Center Hardware & Networking Accessories

MULTIPLE MESSAGE CENTERS

To Message Center's RS485 port

To Message Center's RS485 port

To Message Center's RS485 port

To RS485 connector block

To one of the PC's COM (RS232) ports

Set switch to *Terminated*

PC running Edwards Message Center Software

To the Message Center's RS232 or TTL port

To one of the PC's COM (RS232) ports

PC running Edwards Message Center Software

RS485 ACCESSORIES

MCNMNARJ11485 - Modular Network Adapter. Used in an RS485 Network. Allows a network drop (MCN485-RJ11-8 or MCN485-RJ11-1) to be connected to an Edwards Message Center.

MCN485CB2EOLT - RS232 to RS485 Converter Box. Unit is supplied with 2 end-of-line terminators and power supply. Used when more than one message center is needed on the same network.

MCN485EOLTCB - End-of-line terminator. In an RS485 network, an EOL terminator must be used at each end to ensure proper operation.

MCN485CBAC - Converter Box power supply adapter. 120VAC input, 9 volt output. Used to power MCN485CB2EOLT Converter Box.

MCN485NRB - RS485 Network repeater box. Supports an additional 32 drops on an RS485 network.

MCN485-RJ11-8 - 8 ft, 4 conductor RS485 network drop. Used in conjunction with a MCNMNARJ11485. One required for each message center in an RS485 network to ensure proper operation.

MCN485-RJ11-1 - 1 ft, 4 conductor RS485 network drop. Used in conjunction with a MCNMNARJ11485. One required for each message center in an RS485 network to ensure proper operation.

MCN485-1000 - 1000 ft spool of RS485 cable.

MCN485-100 - 100 ft length of RS485 cable.

MCN485BB-8 - 8 ft RS485 cable. Used to interconnect 2 Edwards Messages Centers when connected back-to-back.

RS232 ACCESSORIES

MCN23225FRJ11 - 25 pin sub-D/6 position RJ11 Adapter. This is used to convert 25 pin Serial output on a PC to an RJ11 connection.

MCN2329FRJ11 - 9 pin sub-D/6 position RJ11 Adapter. This is used to convert a 9 pin Serial output on a PC to an RJ11 connection.

MCN2329F-25M - 9 pin female/25 pin male RS232 Adapter. Used to connect 25 pin Serial output on a PC to a 9 pin RS232 cable.

MCN232-6PRJ11 - 6 position coupler for connecting RS232 cable together.

MCN232-RJ11-25 - 25 foot, 6 conductor RS232 cable. Used to connect Serial output on PC to a Message Center.

MCN232-RJ11-50 - 50 foot, 6 conductor RS232 cable. Used to connect Serial output on PC to a Message Center.

MCN485MODCB - 10 foot, 25 pin female/9 pin male, type "B9" RS232 cable. Used to connect receiving modem to an RS232 to RS485 Converter Box (MCN485CB2EOLT).

MCN485CB2323A9 - 10 foot, 9 pin female/9 pin male, type "A9" RS232 cable. Used to connect Serial output of a PC to an RS232 to RS485 Converter Box

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Nurse Call Annunciators

Audible and Visual Signals

7042

The Edwards 7042 Nurse Call Annunciator provides easy to read indications. Partitioned lamp and socket assemblies prevent cross-lighting of the translucent indicator windows. Each window is individually back lighted. A gentle tone buzzer, with a silencing switch, provides an audible indication. When the switch is in the off position, buzzer operation is prevented.

Flush or surface mount units for large audio/visual call and alarm systems. For use at hospital nurse stations and other centralized locations. Wall box is sold separately.

FEATURES

> 12, 24 and 50 window sizes

> Provides both visual and audible signals

> Gray enamel finish with hinged door

SPECIFICATIONS

> 24V AC (Use Cat. No. 88-50 or 88-100 transformers. See page 11-5)

Silencing Switch

Surface Wall Box
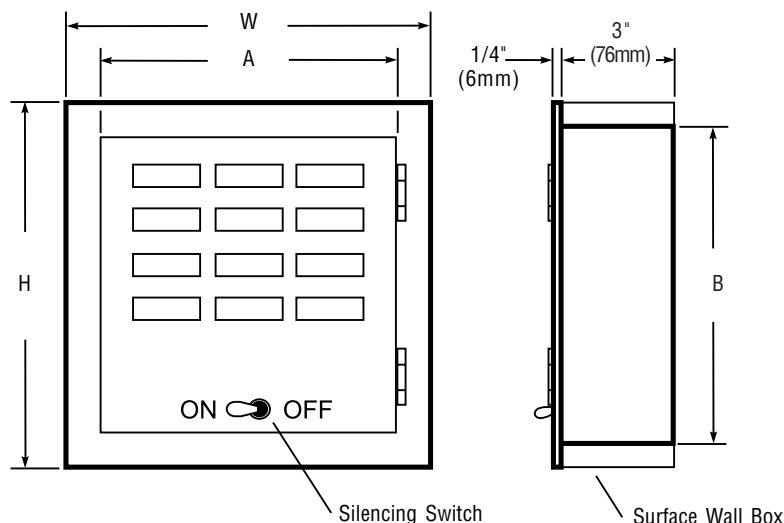
Cat. No.	Wall Box	Indications	Arrangements Down	Across	Size No.	W	H	A	B
7042-12	Flush - P-029566 Surface - P-047701-0111	12	4	3	1	13 1/2" (343 mm)	12 1/4" (311 mm)	11 1/2" (292 mm)	10 1/4" (260 mm)
7042-24	Flush - P-029568 Surface - P-047701-0112	24	8	3	2	16 1/2" (419 mm)	16 1/2" (419 mm)	14 1/2" (368 mm)	14 1/2" 368 mm)
7042-50	Flush - P-029570 Surface - P-047701-0113	50	10	5	3	19 1/2" (495 mm)	20 1/2" (521 mm)	17 1/2" (445 mm)	18 1/2" (470 mm)

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D-04

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Message Center Reception Displays

Standard & customized models available

FEATURES

> Up to 30 pre-programmable pages of text

> Timed text features, allowing relevant pre-programmed information to be shown at a particular time and day

> Freestanding, wall-mounted and desktop models

> Available in a range of text colors and brightness

> Space is available on the unit for your logo or text

> Simple, easy-to-use programming options

Edwards' elegant, eye-catching reception displays can enhance your lobby area, providing clear visual communication to customers and employees alike. These dynamic, colorful, variable-message signs draw the customer's attention to the information you wish to communicate. Customers can choose from a wide range of standard units, or have a display customized to their specifications.

Reception displays provide up to 30 pre-programmed pages of text which can be programmed to be shown at a particular time and day. Styles include freestanding totems, wall-mounted displays or desk top units which are available in a range of text colors and brightnesses. Space is available on the unit to add your company logo or text.

Simple, easy-to-use programming options include windows-based software, which can be linked to an existing network, or a keypad controller. Multiple displays can be controled from a central PC.

Edwards reception displays are a perfect solution to enhance the aesthetics of your reception area, reduce congestion in busy areas and provide an effective method of communication. Displays are ideal for company receptions, hotels, restaurants, cinemas, conference centers, financial institutions, country clubs, colleges and universities, and retail applications.

Message Center Production Displays

Completely customized to meet any specifications

In addition to our standard Message Center models, Edwards also offers electronic signs which are available in several character heights, colors and configurations, and can be custom-designed according to your particular requirements. Edwards comprehensive industrial product range includes production efficiency boards, health and safety displays, pager systems and distribution systems.

Production boards provide real time information on rate and efficiency of production. They can either interface with a PLC, a network or can be updated individually (as separate displays/units), depending on the customers' needs. These displays are proven to boost productivity levels, leading to increased output.

Edwards health and safety boards increase employee awareness of health and safety issues and help prevent accidents in the workplace. They are integral to the provision of relevant information on areas such as current accident rate, time since last accident and information on health and safety policies, ensuring accurate, up-to-date information is readily available for employees.

An Edwards display distribution system can provide accurate information for busy distribution warehouses. The system ensures that the relevant employees are aware of receipts and deliveries of products, thereby reducing possible miscommunication.

Edwards systems can be supplied with standard, easy to use software, or customized software solutions. Communication systems include RS232, RS485 or ethernet. Edwards industrial signs are provided in robust, weatherproof housings, manufactured to IP65 standards.

FEATURES

> PLC compatible

> RS232, RS485, fibre optic, GSM, line modem or ethernet networks

> Standard or customized programming software

> Weatherproof housings meet IP65 standards

> Blue, yellow, red, green, amber or multi-color character colors

> Standard, superbright, highbright or ultrabright character settings depending on the color

> Character height ranging from .63" (16mm) to 17.72" (450mm)

> Maximum viewing distance 984 ft (300m)

> Weatherproof housings meet IP65 standards

Latching Annunciator

9704 Series

FEATURES

> 4 - 16 zones expandable to 100

> Individual latching alarm per zone

> LED power-on indicator

> Polycarbonate viewing window

> Beige finish

SPECIFICATIONS

> Filtered and regulated 100 mA auxiliary DC outputs

> Audible 120 PPM tone signal

> Built-in battery charger

> Class B alarm initiating circuits, supervised when configured for normally open operation

> Field programmable initiating circuits for normally open/closed circuit operation

> Form C dry alarm contacts

OPERATING CONTROLS

> Reset switch

> Master bypass switch

> Signal silence switch

> Individual zone bypass switch

The 9704 Latching Annunciator is designed to monitor windows, doors, equipment, or indicate an emergency condition. When a monitored door or window is opened, equipment starts up or fails, or an emergency is initiated from a classroom or apartment, the 9704 will provide both a visual and audible warning.

The panel is designed for surface mounting, but may be semi-flush mounted with the optional semi-flush mounting trim kit. The 9704 is supplied complete with backbox, key-locked door, control switches, indicator lamps, end-of-line resistors and battery charger. A 120V AC to 16V AC, 30VA transformer (Edwards 598 or equal), and standby battery must be purchased separately.

Auxiliary modules may be added. See page 7-32 for 9704 Options and Accessories.

PANEL OPERATION

The 9704 has four modes of operation: normal, alarm, optional trouble, and bypass mode.

D-04

Edwards Signaling & Security Systems®

DESIGN CRITERIA

Stand Alone Systems

Each pre-configured 9704-4001 through -4004 series is supplied with a self-contained 585 mA power supply, from which the zone modules obtain operating power. Providing no additional auxiliary modules or remote signaling appliances are added to the system, the power supply will perform adequately.

Depending on the number of modules added and on other system loading, one or more Cat. No. 9704-2012 Power Supply Extenders may be required to provide additional power to the system. All pre-configured 9704 Series Annunciators may be expanded to 28 zones without requiring a Power Supply Extender provided that no Auxiliary Modules are used and no additional loads are connected to the system.

Systems Utilizing Auxiliary Modules or Remote Signaling Appliances

Each pre-configured 4001-4004 series is supplied with a self-contained 585 mA power supply, from which

the zone modules obtain operating power. When auxiliary modules or remote signaling appliances are added to the system the total amperage consumption of the complete system must not exceed 585 mA. Current consumption requirements in excess of 585 mA will require the addition of a 9704-2012, 1,000 mA power supply extender to ensure proper operation of all system components.

Based on a Power Supply Output of 585 mA, 113 mA is available for future system expansion, exclusive of wire line losses. System power supply consumption in excess of 585 mA would require the addition of a power supply extender.

APPLICATIONS

The 9704 is ideally suited for use in apartment complexes, nursing homes, schools, medical clinics, small offices and manufacturing facilities, and restaurants.
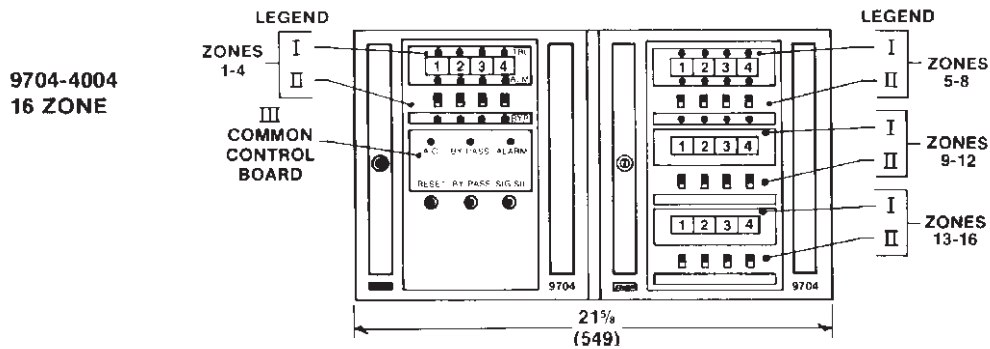
Cat. No.	No. of Zones	VA Requirements at 16V AC	Dimensions Height	Width	Depth	Weight
9704-4001	4	30	12 1/4" (310mm)	10 1/4" (260mm)	3 1/4" (80mm)	10 lbs (4.5kg)
9704-4002	8	30	12 1/4" (310mm)	21 5/8" (550mm)	3 1/4" (80mm)	21.5 lbs (9.8kg)
9704-4004	16	30	12 1/4" (310mm)	21 5/8" (550mm)	3 1/4" (80mm)	22.5 lbs (10.2kg)

Cat. No.	Description	Power Supply Output	System Consumption	Component Consumption*	Available Amperage
9704-4001	4 Zone Annunciator	585 mA	96 mA	N/A	489 mA
9704-4002	8 Zone Annunciator	585 mA	192 mA	N/A	393 mA
9704-4004	16 Zone Annunciator	585 mA	384 mA	N/A	201 mA
9704-2003	4 Zone Adder Module	N/A	N/A	96 mA	N/A
9704-2004	Trouble Module	N/A	N/A	40 mA	N/A
9704-2005	Trouble and alarm output module	N/A	N/A	72 mA	N/A
9704-2006	Trouble alarm output and relay module	N/A	N/A	148 mA	N/A
9704-2007	Alarm output and relay module	N/A	N/A	108 mA	N/A
9704-2050	Eight zone annunciator	N/A	N/A	64 mA**	N/A

*Based on 100% function demand, all zones of module active simultaneously
**Based on 50% function demand

Edwards® 9704 Latching Annunciator System Configuration

9704-4001 4 ZONE

LEGEND

I — OPTIONAL-INDIVIDUAL ZONE TROUBLE LEDs

II — INDIVIDUAL ZONE ALARM LEDs
ZONE BY-PASS SWITCH
ZONE BY-PASS LED

III — COMMON ALARM LED
MASTER BY-PASS LED
A.C. POWER LED
SIGNAL SILENCE SWITCH
MASTER BY-PASS SWITCH
RESET SWITCH

10⅜ (264)

Double K.O.'S FOR 1/2 & 3/4" CONDUIT 5 PLACES
10 1/16 (256)
12 (305)
3 3/8 (86)
COMPONENT MTD DEAD FRONT SWINGS DOWN FOR READILY ACCESSIBLE FIELD TERMINALS

7/32 DIA-4 MTG (6) HOLES
10 1/14 (260) MTG
ENCLOSURE BACK VIEW
6 (152) MTG

9704-4002 8 ZONE

LEGEND
ZONES 1-4 — I, II
III — COMMON CONTROL BOARD

LEGEND
I, II — ZONES 5-8

21⅝ (549)

9704-4004 16 ZONE

LEGEND
ZONES 1-4 — I, II
III — COMMON CONTROL BOARD

LEGEND
I, II — ZONES 5-8
I, II — ZONES 9-12
I, II — ZONES 13-16

21⅝ (549)

Edwards® 9704 Latching Annunciator Typical Wiring Diagram

COMPONENT IDENTIFICATION
1. Common Control Module
2. 4-Zone Module
3. Auxiliary Module
   (A) Trouble Module
   (B) Trouble & Alarm Output Module
   (C) Trouble, Alarm Output & Relay Module
   (D) Alarm Output & Relay Module
4. Optional Stand-By Battery

TYPICAL WIRING DIAGRAM
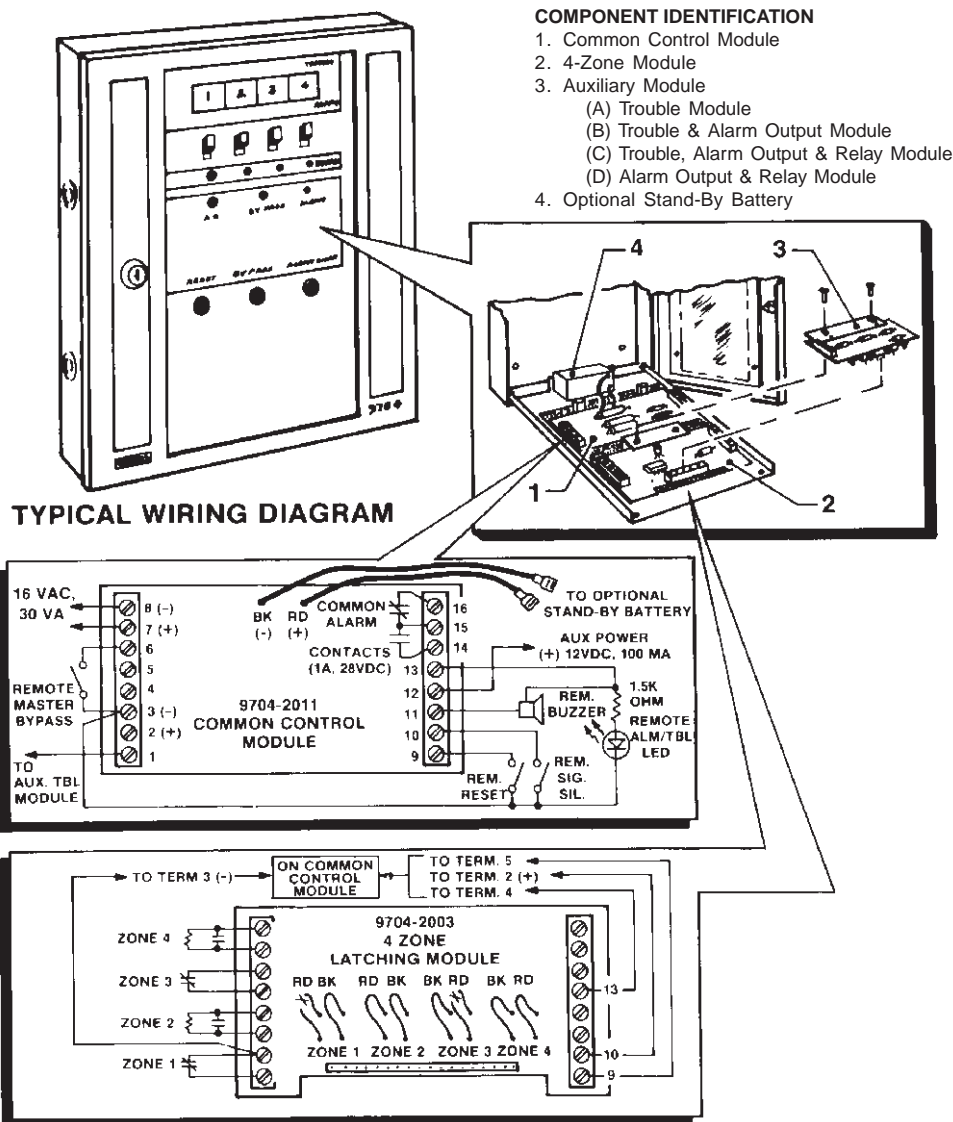
Cat. No. 9704-2011 Common Control

- Input Voltage Requirement: 16V AC, 30VA
- Maximum Output: 585 mA at 12V DC
- Auxiliary Output: Filtered, regulated, 100mA at 12V DC
- Common Alarm Relay Contacts:
  Form C, rated at 1 A at 28V DC
- System Operating Voltage: 12V DC nominal
- Main Output Fuse Rating: 1 A
- Auxiliary Output Fuse Rating: 0.25 A

Four zone modules are supplied factory wired with normally open initiating circuits requiring 22K ohm end-of-line resistors, which are supplied with the annunciator. Circuits may be individually converted to normally closed circuits by cutting the applicable red jumper wires on the modules. (The end-of-line resistors are not used on nor-mally closed circuits.) A module may be configured for a combination of normally open and normally closed circuits.

Zones may be operated on a mixed basis as illustrated. The red jumpers of zones 1 and 3 have been cut, converting the zones to normally closed circuits. Zones 2 and 4 remain uncut and will operate as normally open circuits.

It is recommended that No. 22 gauge wire be utilized for initiating and signaling circuits, with a maximum wire run of 6,000 feet (1828.8 m) per zone and a maximum resistance per initiating circuit of 200 ohms. In noisy environments, shielded wiring is recommended.

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9704 Series Latching Options & Accessories

AUXILIARY MODULES

Each 4 zone module will accept one plug-in auxiliary module. Power is supplied to the auxiliary module from the 4 zone module.

Cat. No. 9704-2004 Trouble Module
Provides a non-latching LED for open circuit trouble annunciation-for each zone of a 4 zone module.

Cat. No. 9704-2005 Trouble & Alarm Output Module
Provides a non-latching LED for open circuit trouble annunciation and an alarm output circuit for each zone of a 4 zone module. Each alarm output circuit for each zone of a 4 zone module. Each alarm output circuit (transistor) will sink 100 mA at 12V DC to drive external devices such as a relay or LED. An alarm output operates when the associated zone of the 4 zone module alarms.

Cat. No. 9704-2006 Trouble Alarm Output & Relay Module
Provides a non-latching LED for open circuit trouble annunciation, an alarm output circuit, and an alarm relay for each zone of a 4 zone module. Each alarm output circuit (transistor) will sink 80 mA at 12V DC to drive external devices such as a relay or LED. Each alarm relay provides Form C contacts rated at 1A at 28V DC which may be used for external on/off control functions. An alarm output circuit and an alarm relay will operate when the associated zone of the 4 zone module alarms.

Cat. No. 9704-2007 Alarm Output & Relay Module
Provides an alarm output circuit and an alarm relay for each zone of a 4 zone module. Each alarm output circuit (transistor) will sink 80 mA at 12V DC to drive external devices such as a relay or LED. Each alarm relay provides form C contacts rated for 1A at 28V DC which may be used for external on/off control functions. An alarm output circuit and an alarm relay will operate when the associated zone of the 4 zone module alarms.

POWER SUPPLY EXTENDER

Cat. No. 9704-2012 One-Amp Power Supply Extender
When required, the power supply extender provides 1 amp (800 mA if standby battery is used) at 12V DC to system components. Supplied complete with AC LED and 12V battery charger. Requires additional Edwards 598 (or equal) 30 VA transformer. See Catalog Page 11-3 for 590 Series Transformers. Power supply extender must be mounted in a separate enclosure. Enclosure, deadfront, and battery are ordered separately.

TRANSFORMERS
See applicable catalog pages for the following.
• Cat. No. 598 120/16V (30VA)
• Cat. No. 598Y 240/16V (30VA)

SECONDARY POWER SOURCE
• Cat. No. 12V4A battery

AUXILIARY MODULES
• Cat. No. 9704-2004 trouble module (40mA)
• Cat. No. 9704-2005 trouble and alarm output module (72mA)
• Cat. No. 9704-2006 trouble alarm output and relay module (148mA)
• Cat. No. 9704-2007 Alarm output and relay module (108mA)

SYSTEM EXPANSION MODULES
• Cat. No. 9704-2003 4 Zone adder module (96mA)
• Cat. No. 9704-2012 Power extender

Message Center Network Adapters

MCNET, MSS100, MSS485

> TCP/IP ready

> Ease of connection

> 10Base-T RJ45/CAT5/HUB network systems user only

> Remote configuration

> 3 serial solutions available

The Edwards Network Adapters provide an economical way to add Edwards Message Centers to an existing LAN. Create a Message Center network, by attaching message centers to an existing Ethernet LAN with one or more serial servers (MSS485, MSS100 or the MCNET Ethernet Adapter). No need to run separate cables to individual displays. Communicate with your Message Center across the room or around the world!

ETHERNET CONNECTIONS

MCNET Ethernet Adapter
• Allows you to connect a Message Center to your 10Base-T TCP/IP network

• Needs no external power supply (powered by your Message Center)

MSS100
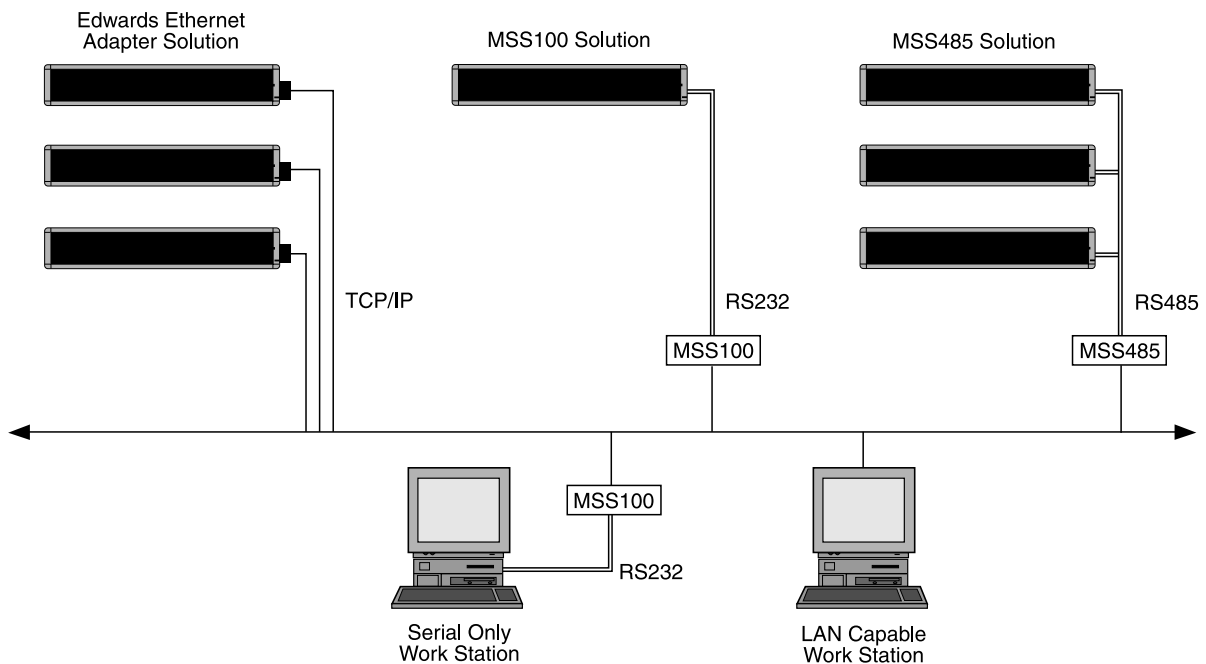• Allows you to connect a Message Center to your 100Base-T or 10Base-T TCP/IP networks

• Allows non "TCP/IP-ready" software to display communicate with Message Centers on TCP/IP networks

• RS232 serial interface

• Requires external power

MSS485
• Allows you to connect a RS485 Network of Message Centers to your 10Base-T TCP/IP network

• Requires external power

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Edwards Signaling & Security Systems®

TECHNICAL INFORMATION

Edwards Ethernet
Adapter Solution

MSS100 Solution

MSS485 Solution

TCP/IP

RS232

RS485

MSS100

MSS485

MSS100

RS232

Serial Only
Work Station

LAN Capable
Work Station

Case Dimensions	Approx. Weight	Operating Temperature	Humidity Range	Serial Interface	Network Interface
3.75"L x 2.5"D x 1.0"H (95.25mmL x 63.5mmD x 25.4mmH)	6.5 oz (182 g)	5° to 50°C (41°-122°F)	10% - 90% noncondensing	RS232 10BaseT	Ethernet

Message Networking Center Software

Multiple Sign Connectivity

MCN-1-0

SYSTEM REQUIREMENTS

> MS/PS DOS 486 or compatible computer (a Pentium® PC is recommended for optimal performance) or a Macintosh PowerPC

> 3.5" floppy diskette drive

> Hard disk

> VGA monitor (256 colors required for emulation)

> RS232 serial port

OPERATING SYSTEM

> Compatible with Windows 3.1®, Windows 95/98®, Windows NT® and MacIntosh PowerPCs*

Operating as the command console, the **Site Manager** application controls your Edwards Message Centers anywhere on your connected network. Group multiple Message Centers into logical departments (sites) such as manufacturing, customer service, lobby, etc. Send different messages to each logical group or to any of your Message Centers. The application allows you to:

• Create groups of Message Centers
• Transmit different messages to each group or individually as required
• Configure your communications parameters
• Configure the type of message center (one line, two line, etc.)
• Launch the message editor from the site manager control panel
• Create and update counter files for automated count down functions
• Schedule the time and date messages should be displayed

The **Message Editor** lets you create custom messages to be displayed on any Edwards Message Center.

• Create new messages with the integrated editor
• Imbed any of the special commands in your message
• Access pre-programmed messages
• Create messages with custom graphics & special fonts
• Add function commands to your messages like Roll, Scroll, Wipe, etc.
• Access the Message Emulator from the command menus
• Send a single message to a specific site or all sites at once

The **Message Emulator** lets you preview your messages on your computer screen before you send them to the selected Message Center and eliminates the guesswork of formatting your messages.

The **Diagnostic Application** quickly retrieves relevant technical information about your Edwards Message Centers anywhere on your connected network. In addition you can:

• Perform lamp tests
• Clear memory contents
• Change Message Center Addresses
• Query specific Message Centers
• Transmit information to specific Message Centers
• Broadcast test messages

Message Center Connectivity:
Text String Activation

Message Center Protocol

Edwards protocol document allows your Edwards Message Center to communicate directly with any device that has a serial port, such as PLCs (programmable logic controllers), or your desktop PC. This allows you to post real time information, production quotas or important company information from your own software application.

Features Supported

- Set and display time and date
- Set run schedules for particular messages
- Control text with color, font and character height
- Read status from any message center
- Special functions (rotate, scroll, flash, etc.)
- Address messages for specific message centers

Text String Requirements

- Communicating device such as a PC or PLC must have either a RS232 or RS485 communication output
- Software being utilized must be capable of transmitting an ASCII text string through the communication output.

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Message Center Connectivity:
Hand Held Wireless Remote

CABLED NETWORK WITHOUT A PC

- Message centers are interconnected using RS485 cable.
- Message centers are programmed utilizing the hand held remote control.
- Most basic way of networking multiple message centers.

	Cat. No.	Description
A	MCN485EOLTCB	End-of-line (EOL) terminator
B	—	Ferrite (ferrite towards sign; incl. w/cable)
C	MCN485-RJ11-8	8 foot, 4-conductor RS485 cable
	MCN485-RJ11-1	1 foot, 4-conductor RS485 cable
D	MCNMNARJ11485	Modular Network Adapter
E	MCN485-1000	RS485 cable 1000 foot spool
F	MC-RP	Infrared Remote Control keypad

Note: The internal jumper must be set for RS485 operation

To Message Center's RS485 port
To use a Remote Control, point it at a sign's infrared receiver window
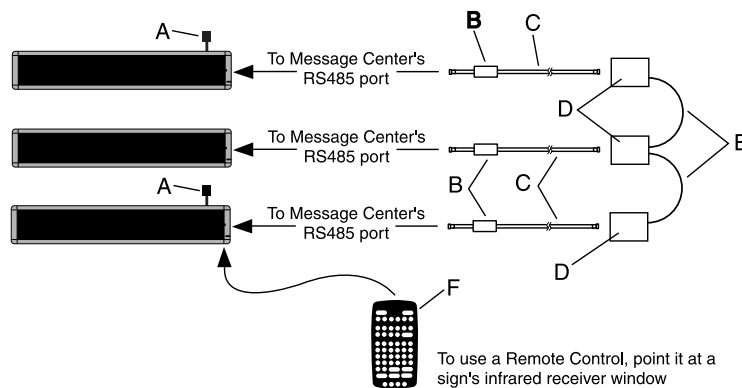
Edwards Networking Software

RS232 - SINGLE MESSAGE CENTER

- This connection method is usually a serial port (communications port) on your computer or a communication *output* on a PLC.
- Limited to one drop (Device)
- Wiring distance is limited to 50 feet

OTHER RS232 ACCESSORIES

- **MCN2329F-25M** — 9 pin female/25 pin male adapter
- **MCN232-6PRJ11** — 6 position coupler for interconnecting RS232 cable

- **MCN485MODCB** — 10 foot, 25 pin female/9 pin male, type "B9" RS232 cable
- **MCN485CB232A9** — 10 foot, 9 pin female/9 pin male, type "A9" RS232 cable

	Cat. No.	Description
A	—	Ferrite (ferrite towards sign; incl. w/cable)
B	MCN232-RJ11-25 MCN232-RJ11-50	25 foot, 6-conductor RS232 cable 50 foot, 6-conductor RS232 cable
C	MCN23225FRJ11 MCN2329FRJ11	25 pin sub-D/to 6 pos. RJ11 adapter 9 pin sud-D/6 pos. RJ11 adapter

Note: The internal jumper must be set for RS232 operation

To the Message Center's RS232 or TTL port | To one of the PC's COM (RS232) ports | PC running Edwards Message Center Software

Edwards Signaling & Security Systems®
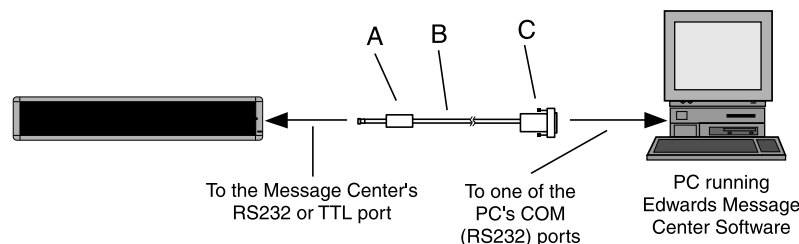
Message Center Connectivity:
Networking Software

RS485 MULTIPLE MESSAGE CENTERS

- More than one device may be connected to the network.

- An RS485 Network is made up of smaller 32 drop networks.
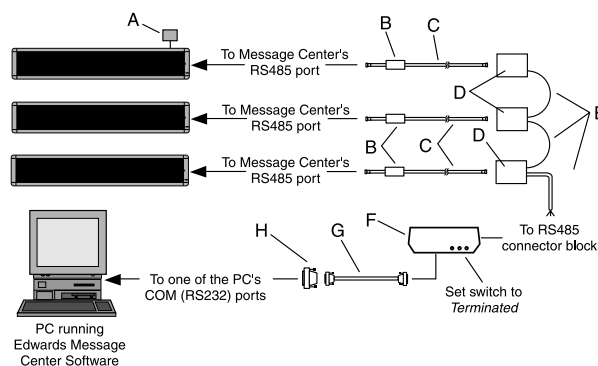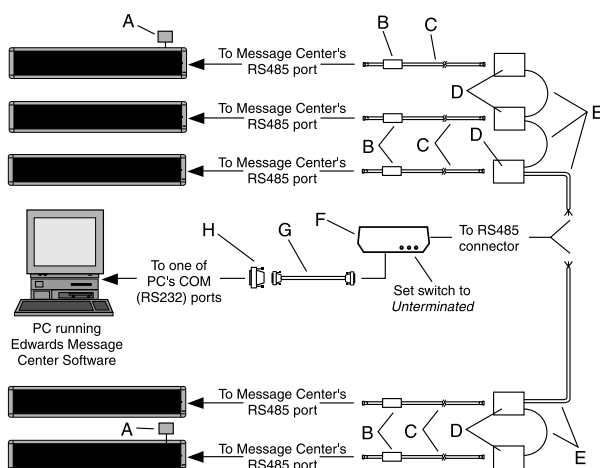
- A repeater box is required when more than 32 "Network Drops" are Needed

- Each repeater box is capable of supporting and additional 32 drops.

- The Maximum size for an RS485 Network is 255 drops.

- Each repeater box, converter box and message center count as one drop each.

- Each 32 drop network has a wiring limitation depending on the baud rate (data transmission rate).
  — 9600 baud - 4,000 feet max.
  — 4800 baud - 8,000 feet max.
  — 2400 baud - 10,000 feet max.
  — 1200 baud - 10,000 feet max.

OTHER RS485 ACCESSORIES

- **MCN485CBAC** - converter box power supply adapter. 120V AC input, 9 volt output

- **MCN485NRB** - RS485 network repeater box. Supports an additional 32 drops

- **MCN485BB-8** - 8 ft. RS485 cable used for back to back configurations

	Cat. No.	Description
A	MCN485EOLTCB	End-of-line (EOL) terminator
B	—	Ferrite (ferrite towards sign; incl. w/cable)
C	MCN485-RJ11-8	8 ft, 4-conductor RS485 cable
	MCN485-RJ11-1	1 ft, 4-conductor RS485 cable
D	MCNMNARJ11485	Modular Network Adaptor
E	MCN485-1000	RS485 cable 1000 ft spool
F	MNC485CB2EOLT	Converter Box with 2 EOL terminators
G	MCN485CB232A9	10 ft, 9 pin-to-pin, type 'A9' RS232 cable
H	—	Serial port DB25-to-DB9 RS232 adapter (may be required by your computer)

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Message Center Connectivity:
Dry Contact Closure

PLC (Programmable Logic Controller)

Any Edwards Message Center can be activiated us-
ing a PLC. There are two requirements:

1. The PLC *must* have an RS232 or RS485 **commu-
    nications output.**

2. The PLC must be capable of outputing an ASCII
    text string through its communications output.

For single Message Center connection use RS232
wiring method. For multiple Message Center opera-
tion use RS485 wiring method.

A PLC can be used to send a complete message to
one or more Message Centers. Or the PLC can acti-
vate a previously loaded message in one or more
Message Centers. A PLC can be used to monitor
conditions on a factory floor, production line or pro-
cess control and translate to an output that sends a
message to or activates a pre-loaded message in any
Edwards Message Center.

SINGLE MESSAGE CENTER
RS232 WIRING METHOD

To the Message Center's
RS232 or TTL port

RS232 Jack
(9 PIN D-SUB)
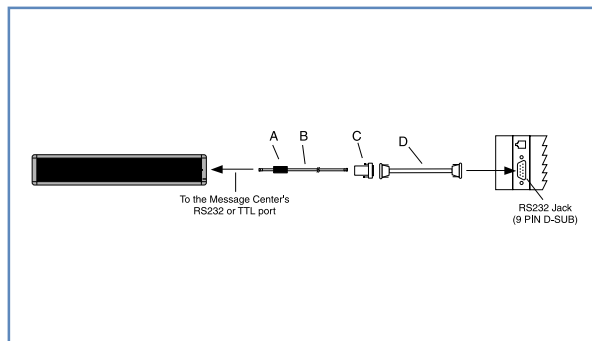
	Cat. No.	Description
A	—	Ferrite (ferrite towards sign; incl. w/ cable)
B	MCN232-RJ11-25	25 ft, 6-conductor RS-232 cable
	MCN232-RJ11-50	50 ft, 6-conductor RS-232 cable
C	MCN2329FRJ11	9 Pin D-Sub/to 6 pos RJ11 adapter
D	MCN485CB232A9	10 ft, 9 pin-to-9 pin, type 'A9' RS232 cable

NOTE: Set internal message center jumper to RS232

MULTIPLE MESSAGE CENTERS
RS485 WIRING METHOD

To the Message Center's
RS232 or TTL port

RS232 Jack
(9 PIN D-SUB)
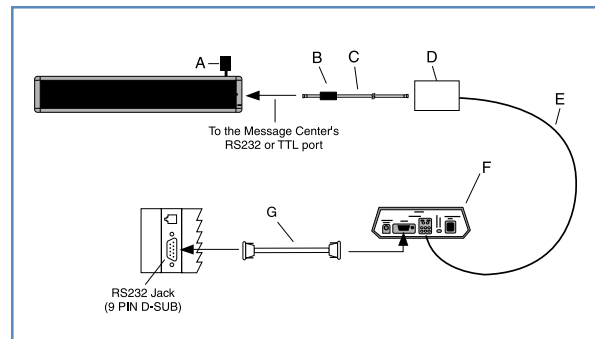
	Cat. No.	Description
A	MCN485EOLTCB	EOL Termination
B	—	Ferrite (ferrite towards sign; incl. w/ cable)
C	MCN485-RJ11-8	8 ft, 4-conductor RS-485 cable
	MCN485-RJ11-1	1 ft, 4-conductor RS-485 cable
D	MCNMNARJ11485	Modular network adapter
E	MCN485-1000	1000 ft spool of RS485 cable
F	MCN485CB2EOLT	Converter box w/2 EOL terminators
G	MCN485CB232A9	10 ft, 9 pin-to-9 pin, type 'A9' RS232 cable

NOTE: Set internal message center jumper to RS485

PLC TECHNICAL BULLETINS

(Available at www.edwards-signals.com)

970520 - How to display text messages using a PLC.

970521 - Activating preloaded messages using a
PLC.

970522 - Activating messages using a dry contact
closure

Message Center Connectivity:
Dry Contact Closure

Edwards MCDI Series Text Message Annunciator Driver

OPERATING MODES

Discrete Fixed - Displays message assigned to a contact closure as long as contact is closed.

Momentary Trigger - Displays message assigned to a contact closure until a new message is activated.

Binary Coded Decimal (BCD) - Reads the BCD value of the inputs and runs the message assigned to that number

Binary - Reads the binary value of the inputs and runs the message assigned to that number

Counter - Count is incremented/decremented using contact closures.

Figure 1: Connect a PC to the CPU Module.

*25-foot RS232 cable
or
50-foot RS232 cable

To a serial COM port

RJ11-to-DB25 adapter
or
*RJ11-to-DB9 adapter
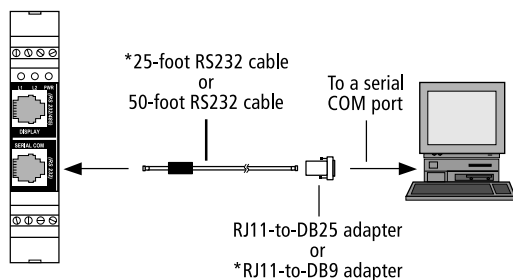
*Included with the Message Center Software MCN-2-0

Figure 2: Networking a single message center (unshielded).

1-foot RS485 cable
or
8-foot RS485 cable

Maximum=8 ft.
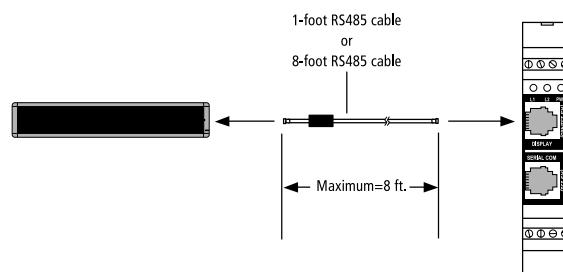
Figure 3: Networking one or more message centers (shielded)

RS485 cable

NOTE:
When Message Centers are networked to the CPU Module all the signs must be the same model when Message Center Software MCN-2-0 is used.

1-foot RS485 cable
or
8-foot RS485 cable

To next message center

Modular Network Adapter

Maximum = 4000 feet (@ 9600 baud)

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Message Center Connectivity:
Ethernet

Print Server (NetportExpress PRO) Solution

• Message Centers appear as printers on the Network

• Main Advantage - uses an existing network

• Utilizes Edwards Message Center Software

• Print server application will only work with Windows 95 (It has the ability to capture a printer)

• Limited to 3 print servers on the network.
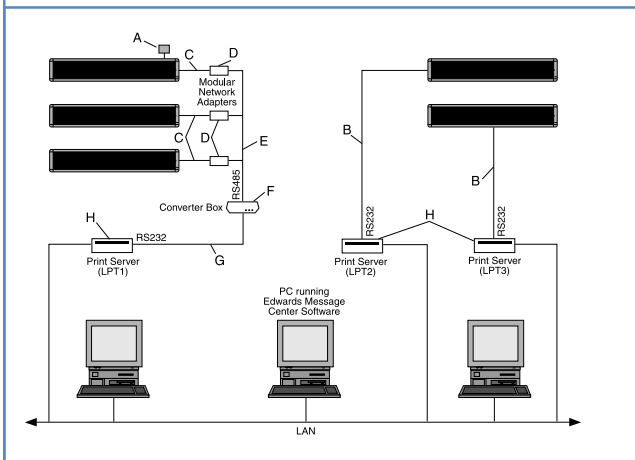
	Cat. No.	Description
A	MCN485EOLTCB	End-of-line (EOL) terminator
B	MCN232-RJ11-25	25 ft, 6-conductor RS-232 cable
	MCN232-RJ11-50	50 ft, 6-conductor RS-232 cable
C	MCN485-RJ11-8	8 ft, 4-conductor RS485 cable
	MCN485-RJ11-1	1 ft, 4-conductor RS485 cable
D	MCNMNARJ11485	Modular Network Adapter
E	MCN485-1000	RS485 cable 1000 foot spool
F	MNC485CB2EOLT	Converter Box w/ 2 EOL terminators
G	MCN485CB232A9	10 ft, 9 pin-to-9 pin, type 'A9' RS232 cable
H	—	Netport Express PRO or equal print server
I	—	Serial port DB25-to-DB9 RS232 adapter (may be required by your computer)

MCNET Ethernet Adapter Solution (Page 7-12)

• Allows you to connect an Edwards Message Center a 10BASE-T TCP/IP Network.

• Needs no external power supply, because of this it will work for only the following Edwards Message Centers:

• MC1-15C2, MC1-15R2, MC1-20C3, MC1-30C3, MC2 indoor Message Centers, MC4 Message Centers.

• One required for every Message Center on the network.

MSS100 Solution (Page 7-12)

• Allows you to connect an Edwards Message Center a 100BASE-T or 10BASE-T TCP/IP network.

• Requires external power source therefore all Message Centers will work with it.

• Allows a computer with only serial ports to communicate via a TCP/IP network, like a modem.

• Allows non "TCP/IP-ready" software (Edwards Message Center Software) to communicate with Edwards Message Centers on TCP/IP networks.

MSS485 Solution (Page 7-12)

• Allows a network of up to 256 Edwards Message Centers to be connected via an RS485 network to a 10BASE-T TCP/IP network.

• Requires an external power source.

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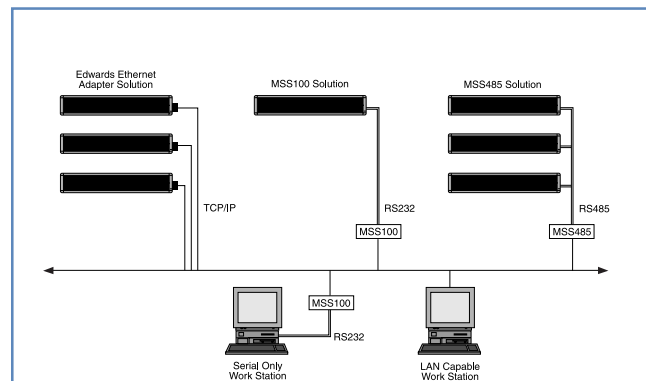
Message Center Connectivity:
Other Applications

Modem Networks

Connecting a Single Message Center to a Modem Network

To the Message Center's
RS232 or TTL port

PC running
Edwards Message
Center Software

To one of the PC's
RS232 or TTL port

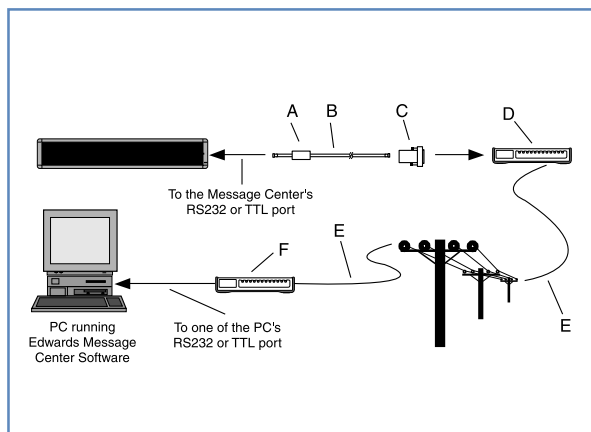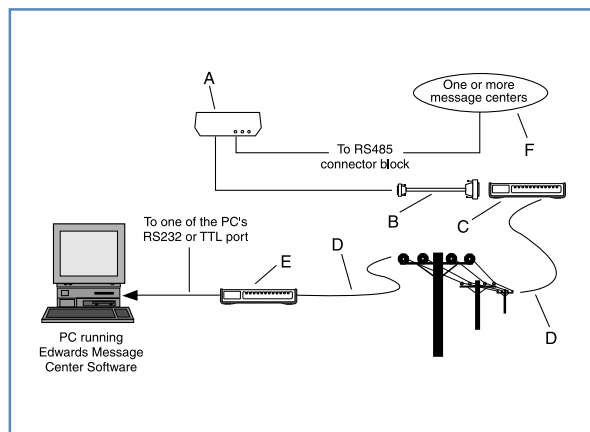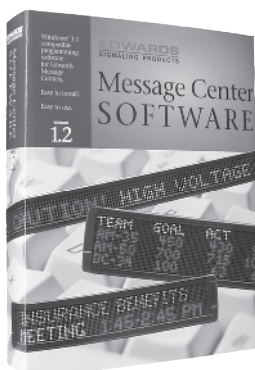|	Cat. No.	Description
A	—	Ferrite (ferrite towards sign; incl. w/cable)
B	MCN232-RJ11-25 MCN232-RJ11-50	25 foot, 6-conductor RS232 cable 50 foot, 6-conductor RS232 cable
C	—	25 pin sud-D/to 6pos. RJ11 Modem Adapter (Pacesetter p/n 2370-0002) This part is available through: Pacesetter Communications, Inc. 1020 Cedar Avenue / St. Charles, IL 60104 630-377-8811 (phone) info@pace-seter.com
D	—	Receiving Modem* * If you are using a high-speed modem (14.4K and above) to receive messages, your modem may have to be told to "slow down" by sending it special commands. Though these commands vary from modem to modem, the following set of commands work for US Robotics Sportster modems: **AT&H0** (Disables transmit data flow control.) **AT&R1** (Disables receive data flow control.) **AT&B0** (Sets modem's serial port to connect rate.) **AT&W0** (Makes the above changes permanent.) Also, your modem should be set to ignore DTR and to answer on the first ring (DIP switches 1 and 5 on US Robotics Sportster modems, or **ATS0=1** for many other modems.)
E	—	Phone Line
F	—	Transmitting modem (internal or external)

Connecting Multiple Message Centers to a Modem Network

One or more
message centers

To RS485
connector block

To one of the PC's
RS232 or TTL port

PC running
Edwards Message
Center Software

	Cat. No.	Description
A	MCN485CB2EOLT	Converter Box w/ 2 EOL terminators
B	MCN485MODCB	10 foot, 25 pin-to 9 pin, type 'B9' RS232
C	—	Receiving Modem* * If you are using a high-speed modem (14.4K and above) to receive messages, your modem may have to be told to "slow down" by sending it special commands. Though these commands vary from modem to modem, the following set of commands work for US Robotics Sportster modems: **AT&H0** (Disables transmit data flow control.) **AT&R1** (Disables receive data flow control.) **AT&B0** (Sets modem's serial port to connect rate.) **AT&W0** (Makes the above changes permanent.) Also, your modem should be set to ignore DTR and to answer on the first ring (DIP switches 1 and 5 on US Robotics Sportster modems, or **ATS0=1** for many other modems.)
D	—	Phone Line
E	—	Transmitting modem (internal or external)
F	—	Refer to Connecting Multiple Signs to a Cabled PC Network

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Message Networking Center Software

Multiple Sign Connectivity

MCN-1-0

SYSTEM REQUIREMENTS

> MS/PS DOS 486 or compatible computer (a Pentium® PC is recommended for optimal performance) or a Macintosh PowerPC

> 3.5" floppy diskette drive

> Hard disk

> VGA monitor (256 colors required for emulation)

> RS232 serial port

OPERATING SYSTEM

> Compatible with Windows 3.1®, Windows 95/98®, Windows NT® and MacIntosh PowerPCs*

Operating as the command console, the **Site Manager** application controls your Edwards Message Centers anywhere on your connected network. Group multiple Message Centers into logical departments (sites) such as manufacturing, customer service, lobby, etc. Send different messages to each logical group or to any of your Message Centers. The application allows you to:

• Create groups of Message Centers
• Transmit different messages to each group or individually as required
• Configure your communications parameters
• Configure the type of message center (one line, two line, etc.)
• Launch the message editor from the site manager control panel
• Create and update counter files for automated count down functions
• Schedule the time and date messages should be displayed

The **Message Editor** lets you create custom messages to be displayed on any Edwards Message Center.

• Create new messages with the integrated editor
• Imbed any of the special commands in your message
• Access pre-programmed messages
• Create messages with custom graphics & special fonts
• Add function commands to your messages like Roll, Scroll, Wipe, etc.
• Access the Message Emulator from the command menus
• Send a single message to a specific site or all sites at once

The **Message Emulator** lets you preview your messages on your computer screen before you send them to the selected Message Center and eliminates the guesswork of formatting your messages.

The **Diagnostic Application** quickly retrieves relevant technical information about your Edwards Message Centers anywhere on your connected network. In addition you can:
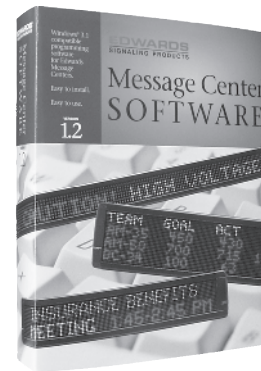
• Perform lamp tests
• Clear memory contents
• Change Message Center Addresses
• Query specific Message Centers
• Transmit information to specific Message Centers
• Broadcast test messages

D-04

Message Center Software

Single Sign Connectivity

MCN-2-0

SOFTWARE KIT INCLUDES

> CD-ROM

> Installation guide

> 25 foot RS232 cable

> PC adapter for RS232 cable

Edwards MCN-2-0 provides one-on-one message center programming. This version does not contain the networking features of MCN-1-0 networking software.

MCN-2-0 allows a user to view the message exactly as it will appear on the message center. This is made possible through a unique configuration utility. This utility will identify the message center connected to your PC and configure the program to the correct number of lines, available font sizes, available colors, etc.

This software takes the guess work out of creating messages. It can be used in conjunction with the MC-RIRL for multiple message centers that are not networked together.

Used with the MCDI Text Message Annunciator Driver

SYSTEM REQUIREMENTS

> PC with CD-ROM and mouse

> VGA or SVGA monitor

> 16 MB RAM or greater

> MS/PS DOS 486 or compatible computer (a Pentium PC is recommended fo optimal performance)

OPERATING SYSTEM

> Compatible with Windows 95/98 or NT 4.0 operating system

* Must use SoftWindows 96 or Virtual PC emulation software to operate on MacIntosh PowerPCs.

Windows 3.1, Windows 95 an Windows NT are registered trademarks of Microsoft Corporations. SoftWindows is a trademark of Insignia Solutions, Inc.
Virtual PC is a trademark of Connectix Corporation Pentium is a registered trademark of Intel Coorporation

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Text Message Annunciator Driver

MCDI Series

> 5 distinct operating modes

> Sourcing or sinking input

> DIN rail mounting

> RS485 output

> 5 message operation modes

> Operates with dry contact closure

> Activate previously loaded messages

> Activation of messages using simple on/off contacts

The Edwards MCDI Series Text Message Annunciator Driver allows dry contact activation of any Edwards Message Center. It may be used to activate messages loaded in a single message center or a message in multiple message centers. A contact closure instructs the CPU to transmit an activation message to the message center through its RS485 communication output.

OPERATING MODES

Discrete Fixed

• Displays messages assigned to a particular contact closure as long as contact is closed.

• Multiple messages can run simultaneously

• Maximum of 32 messages can be activated from 32 inputs

Momentary Triggered

• Displays the message assigned to a particular contact closure until a new message is activated

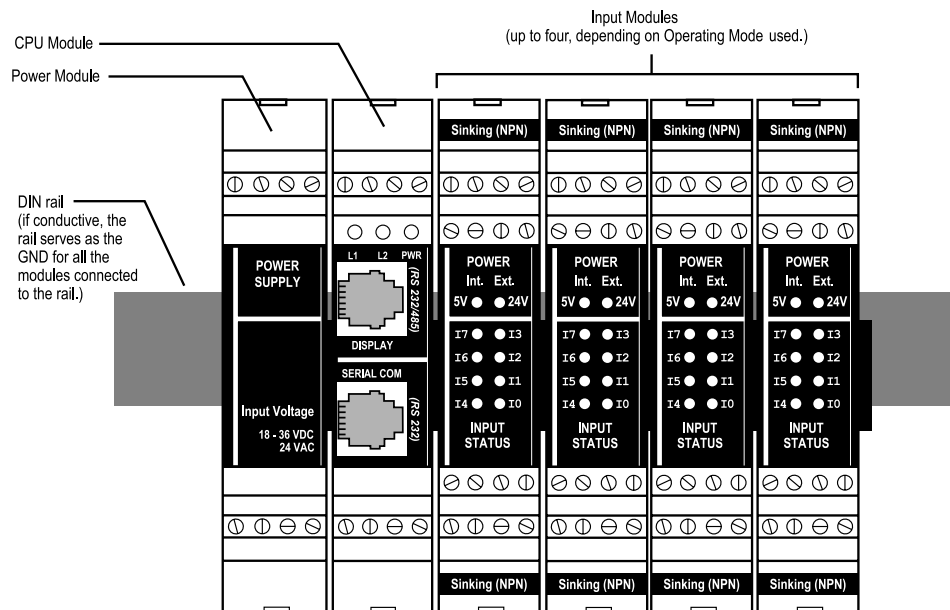• Maximum of 32 messages can be activated from 32 inputs

Binary Coded Decimal (BCD)

• CPU reads the BCD value of inputs I0-I7 and determines the proper message to run.

• Maximum of 80 messages can be activated from 8 inputs

Binary

• CPU reads the binary value of inputs I0-I7 and determines the proper message to run.

• Maximum of 80 messages can be activated from 8 inputs

Edwards Signaling & Security Systems®

TECHNICAL INFORMATION

Input Modules
(up to four, depending on Operating Mode used.)

CPU Module

Power Module

DIN rail
(if conductive, the rail serves as the GND for all the modules connected to the rail.)

OPERATING MODES (continued)

Counter

• CPU refreshes the count each time a command is processed.

• Increment/decrement in 1's, 10's, 100's, 1000's or 10,000's

• Max value +/- 2, 147, 483, 647

• Max of 8 inputs (1 input mod.)

SOFTWARE

• **MCN-2-0** - Message Center Software

PART NUMBERS

• **MCDI-SOM** - Sourcing input kit, consists of MCDI-CPU, MCDI-INPSOM, MCDI-PS

• **MCDI-SIM** - Sinking input kit, consists of MCDI-CPU, MCDI-INPSOM, MCDI-PS

• **MCDI-INPSOM** - Sourcing input module (8 inputs)

• **MCDI-INPSIM** - Sinking input module (8 inputs)

• **MCDI-PS** - Power supply module (18 - 32V DC, 24V AC)

• **MCDI-CPU** - CPU module

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