# ADM 11 ADM 12 & ADM 24E

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61.26.641 - 2 - 3 - 4 - 5 Telex 332484 Lear Siegler video display terminals with elegant High Touch<sup>TM</sup> style. Ergonomically designed to provide you with the most comfortable, convenient work environment possible.





# LEAR SIEGLER Quality and reliability you trust. High Touch style you'll prefer.



Have you ever noticed that the more high technology is used in a workplace, the more the workers add their own human touches? Plants, pictures, macrame, even funny coffee cups. Anything that helps to soften that interface between the operator and the machine.

We noticed. And we did something about it. We designed our terminals with



Lear Siegler's new VersaPrint™ 500 Series printers combine with Lear Siegler video display terminals and popular PCs hard copy output.

elegant High Touch™ style. From the desktop up, they give people and technology a better working relationship.

### Engineered from the human point of view.

Ergonomics is the successful physical interaction between man and machine. And it is the reason the High Touch video display terminals were designed...to make working conditions easier and more pleasant.

There's more to ergonomics than simply tacking on a few faddish features as an afterthought. We put our thinking in up front, and spent a long time studying the way humans relate to computers. And we came up with a whole new way for computers to relate to humans.

The result is terminals that're downright considerate.

## A terminal that's comfortable to operate is a terminal that cuts down operator errors.

It's a fact...when it comes to a long session at the terminal keyboard, comfort and ease increase productivity. The easier a video display terminal is on your



Monitor tilts and swivels to almost any position. All models available with 12 or 14 inch screens.

eyes, your back, and your nerves, the more you'll be able to get done. And with a lot fewer errors. Simply stated, the ADM 11, 12, and 24E video displays will provide you with the most comfortable, convenient work environment possible.

## A monitor that twists and turns so you don't have to.

Dozens of little touches add up to the convenience and comfort of High Touch. For example, we put the power "on/off" switch and contrast control in front where they're easy to reach.

All High Touch video display terminals have a monitor that tilts and swivels, so you can assume your most natural, comfortable position while working at the terminal. And that will help your eyes and muscles feel much better in the long run.

The monitor not only tilts and swivels, it clicks positively into almost any position. With other tilt-and-swivel terminals, the cables always seem to reposition the monitor the moment you have it positioned just the way you want it.

The clean, crisp display features a large character matrix on an easy-to-read non-glare screen...made even easier to read by the hooded bezel which shades the screen from the glare of overhead lighting.

## A keyboard that feels good makes you look good.

The keyboard is the primary interface between you and your computer. So we designed each High Touch keyboard to make data entry easy and natural.

The stylish, low-profile keyboard, with its long six-foot (1.8 m) coiled cord, lets you put the keyboard almost anywhere. It gives you all the freedom you need to work comfortably at your workstation. The lightweight,

tapered design supports your hands in a natural typing position for greater accuracy. You can even change the keyboard angle with its built-in tilt mechanism. No wonder our keyboards meet the rigid DIN-standards for operator comfort and convenience.



Low profile DIN-standard keyboard with adjustable tilt.

## High Touch keyboards make it difficult to make an error.

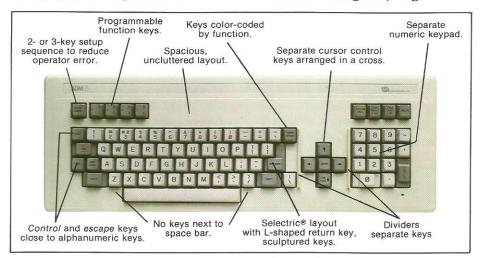
Whichever terminal you choose--the ADM 11, ADM 12, or ADM 24E--you'll get a High Touch keyboard that helps simplify your job. Because our uncluttered keyboards, with their logical and physical separations

On the ADM 24E, the top row of function keys, and their corresponding legends on the display's 25th line, are alternately color-coded for quick reference. And the edit keys are logically located directly above the cursor control keys, for fast, precise editing from that display management key group.

#### Lear Siegler's ADM 11, 12, and 24E-the American Dream Machines

When it comes to terminal technology, Lear Siegler is the historic leader with the largest installed base of video display terminals. We continuously implement state-of-the-art technology in an ever-expanding line, broader than any other major manufacturer.

Lear Siegler High Touch terminals are made in America-designed, engi-



between key groupings, improve your efficiency.

On the ADM 11 and ADM 12, for example, you'll find the separate cursor control keys logically arranged in a cross pattern for ease of use without looking; the keys are positioned relative to the direction of cursor motion.

We placed the control and escape keys close to the alphanumeric keys, where you'd just naturally expect to find them.

neered, manufactured and shipped from Anaheim, California. Which gives us complete control over reliability and performance. It's product dependability you can count on. With this total, on-shore capability, and a complete, worldwide network of sales and service centers, OEMs as well as end-users can be assured of the best local support available in the industry.

That's why they're called the American Dream Machines.

## ADM<sup>™</sup>11

#### **Conversational Terminal**

Here's a VDT that's right at home with a variety of computers, ranging from desk top units on up to the mainframes. Its conversational operation can handle the fastest computer transmissions--up to 19,200 baud--without handshaking.

To give you outstanding screen highlighting capabilities, the ADM 11 features the four most widely used screen attributes non-embedded reduced intensity, plus blinking, reversed video, and blanking. Its line erase and page erase features save computer time. And with its complete business graphics capability, you can easily build forms and charts on the display to help manage data in your own simple, easy-toread format.

The four function keys on the ADM 11 are shiftable to perform eight functions to reduce your keyboard work. And they're all programmable and optionally non-volatile. Plus, labels showing what these function keys do can be displayed on the 25th message line for fast reference.

The ADM 11 has two non-volatile Set-Up modes-

one for Operator Conveniences; the second is a slightly more complex System Parameters mode for the supervisor. This bi-level set-up mode reduces operator errors.

During set-up,

During set-up the features to be selected are displayed in English

on the screen's 25th status line. So you can change and select features without losing the data already on the screen.

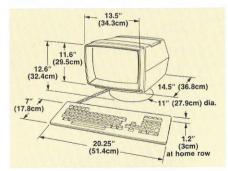
The ADM 11 also provides four different print modes. By connecting your printer to the auxiliary port, data can be printed out directly from the ADM 11 a page at a time or a line at a time. And the host computer can send data to just the screen, just the printer, or to both. The ADM 11 can also recognize a busy signal from the printer, and signal the host to stop sending data.

The ADM 11 video display offers lots more, too, like optional international character sets for your worldwide requirements; a 1536 byte data input buffer; and a 256 keystroke buffer in the keyboard that even the fastest typist cannot overrun.

The ADM 11 is compatible with the Lear Siegler ADM 3A and ADM 5. ADDS Viewpoint and Regent 25, Hazeltine 1400, 1420 & 1500, and DEC VT52 compatibility is also available.

The ADM 11 video display terminal. Proof that High Touch is also High Tech.

Dimensions of the ADM 11 and ADM 12 video display terminals





## ADM<sup>™</sup>12 **Editing Terminal**



horizontal, 158-column by 24line format to give you a wide column worksheet. This worksheet can be scrolled back and forth across the screen, so you can view the entire page. Or you can move

> individual lines instead of the entire page as data is being entered. Word pro-

cessing appli-ADM 12's vertical, 80-column

cations are handled by the by 48-line page capability, which can also be scrolled up and down for review.

What's more, you can define a scrolling region on the ADM 12 display, which lets you "lock in" data in one region as a reference while scrolling through data in another region at the same time.

With all this specialized capability, the ADM 12 is doubly impressive in general data applications with its standard two-page, 80 x 24 display memory. You can shift back and forth between two stored pages of data. And with this capability, the host computer can transmit up to a 48-line message to the terminal with no data being lost.

Function keys on a terminal can save you time, and make your data workload a lot easier. That's why the ADM 12 has 16 programmable function keys, shiftable to do 32 functions...all non-volatile, so they remain stored even when the terminal is off.

The ADM 12 provides five visual attributes for display highlighting, including underline, blink, blank, reduced intensity, and reverse video. All are selectable as embedded or non-embedded.

There's more, too. Like smooth and jump scroll capability. Six edit keys, which are "soft" so they can be programmed to transmit any code you need. Even single key transmit and edit operations.

All these capabilities, with stylish, High Touch engineering. The ADM 12 is just the terminal you've been

waiting for.

Physical specifications of the ADM ADM 11 and ADM 12 video display

Power Requirements: Standard: 115 VAC±10%, 60 Hz, 50 watts nominal.

Optional: 230 VAC ±10%, 50 Hz, 50 watts Heat Dissipation: 160 BTU/hour.

Operating Environment: 5° to 40°C (41° to 104°F); 5% to 95% relative humidity, noncondensing.
Weight: 25.3 lbs.

A number of specialized applications require more capabilities than a normal video display terminal can even offer. Financial spreadsheets, flow charts, and letters need a terminal with a variable-format display memory.

Like our ADM 12 video display. It gives you the ability to build pages longer and wider than a normal, 80 x 24 video display. And this conversational/block mode terminal gives you the most popular smart terminal features on the market today.

The variable-format display memory lets you construct the screen format that's exactly what you need for your application. For financial applications, the ADM 12 can store data in a





Lear Siegler's ADM 24E is

The standard features you'll

find on the 24E will amaze you.

the top-of-the-line High Touch style terminal that gives you everything you need...very smart

features in an ergonomic

Like its 48 lines of display

memory...a real plus in word

processing applications. With

be optionally increased to 96 lines), you can determine your

or two page lengths. Which means, for example, you can

30 lines for the second page.

Then, through your 24-line

this display memory (which can

own display parameters for one

construct a 66-line format on the

first page, and use the remaining

display "window", you can scan up and down through the entire

96-line format stored in memory.

Its non-embedded visual

attributes highlight your display

without taking up a character on

housing.

## ADM<sup>®</sup>24E

#### **Host Programmable Terminal**

underline, and double-wide characters. These attributes may also be selected as embedded. Its protected fields capability saves you time in re-building display formats. The ADM 24E also provides complete business graphics capability.

International character sets are standard on the ADM 24E.

Its 16 user programmable.

non-volatile function keys are shiftable to 32 functions. And the terminal's 25th status line can be used to display legends for each of the 16 function keys.

Besides the selectable light or dark display background, the ADM 24E's innovative "Highlight" background lets you present data on a reduced intensity background to help you

see the display boundaries. And it even provides horizontal splitscreen capability, a bi-directional auxiliary port, and selectable NUL and DEL suppression.

The ADM 24E is also designed with the OEM in mind, with complete flexibility. The ADM 24E can easily be molded around your specific applications to give you a customized terminal.

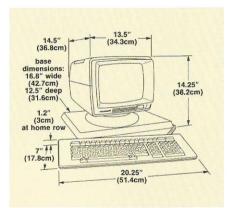
The ADM 24E logic board provides up to 56K of either RAM or ROM program space, so vou can either plug in your own programs or downline-load them from the host.

And because the structure of the standard program allows custom routines to be "flagged" through set-up and run when required, the ADM 24E will save you hours of valuable programming time.

Display memory can be expanded up to 22K for access by OEM programs.

The ADM 24E with High Touch style. Any way you look at it, it's a smart buy.

Dimensions and physical specifications of the ADM 24E video display terminal.



#### **Physical Specifications**

**Power Requirements:** 

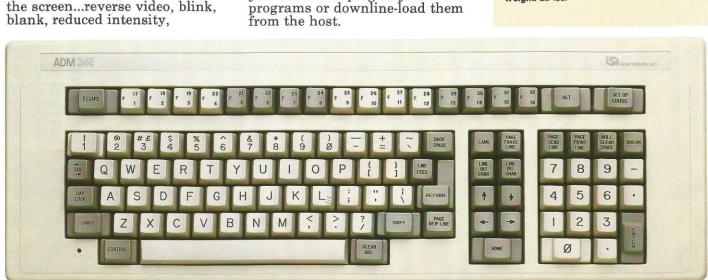
Standard: 115 VAC ±10%, 60 Hz, 70 watts nominal. Optional: 230 VAC ±10%, 50 Hz, 70 watts

nominal.

Heat Dissipation: 220 BTU/hour.

Operating Environment: 5° to 40°C (41° to 104°F); 5% to 95% relative humidity, noncondensing.

Weight: 28 lbs.



## Specifications ADM 11, ADM 12 & ADM 24E

specifications	ADM 11	ADM 12	ADM 24E	
DISPLAY				
CRT Screen:	12-inch (30.5 cm) or optional 14-inch (35.6 cm) diagonal, green or amber phosphor with non-glare surface. (All models)			
CRT Console:	Tilt and Swivel mechanism 360° s back of vertical. Removable base. (A	swivel capability; tilt, 5° forward to 15° NDM 11 & 12)	Tilt and Swivel mechanism 360° swivel capability; tilt, 5° forward to 15° back of vertical.	
Horizontal Refresh Rate:	17.7 kHz.	17.7 kHz.	19.5 kHz.	
/ertical Refresh Rate:	50 or 60 Hz, selectable, depending of	on line frequency. (All models)		
Display Format:	One page of 1920 characters. 80 characters per line x 24 lines, plus a 25th line for Terminal Status, Host Messages, or Set-Up Mode.	80 characters/line x 24 lines display, plus a 25th line for Terminal Status, Host Messages, or Set-Up Mode. Memory provides selection of two pages of 80 char./line x 24 lines or one page of 158 x 24.	80 characters/line x 24 lines display, plus a 25th line for Terminal Status, Host Messages, Set-Up Mode, or Function Key Legends. Memory provides 80 char./line x 48 lines std.; optional 80 x 96.	
Character Matrix:	7x10 dot matrix with descenders.	7x10 dot matrix with descenders.	7x11 dot matrix with 2 dot descenders, in a 9x12 field.	
Character Field:	8x11 dot matrix.	8x11 dot matrix.	9x12 dot matrix.	
Cursor:	8x11 steady or blinking block; can be turned off or on.	8x11 steady or blinking, block or underline; can be turned off or on.	9x12 steady or blinking, block or underline; can be turned off or on.	
Character Sets:	128 displayable characters including control codes. Optional international character sets include: French, German, Swedish, Finnish, Danish, Norwegian, and Spanish. (ADM 11 & 12)		128 displayable characters including control codes. Selectable international character sets include USASCII, UKASCII, French, German, Swedish, Finnish, Danish, Norwegian, Spanish and Katakana. Greek/Math Symbols also available	
Business Graphics:	Block Graphics, Wide Point Graphics, and Line Drawing Characters. (All models)			
Display Background:	Dark	Light or dark (selectable).	Dark, light or highlight (a faint ligh background with light characters), selectable.	
Visual Attributes:	Four attributes; non-embedded reduced intensity plus embedded blink, blank, reverse video. Can be used individually or in combinations.	Five attributes, selectable as embedded or non-embedded reduced intensity, underline, blink, blank, and reverse video.	Six attributes, selectable as embedded or non-embedded. Reverse video, reduced intensity, underline, blink, blank, and double wide.	
Scrolling:	Jump Scroll	Selectable Jump or Smooth Scroll, Vertical or Horizontal.	Selectable Jump or Smooth Scroll, Vertical.	
Horizontal Split Screen:	N/A	User definable scrolling region. (ADI	M 12 & 24E)	
Cursor Movement:	Absolute cursor addressing, and rea	ad cursor capabilities. (All models)		
KEYBOARD FUNCTIONS				
Keyboard:	keys, Selectric®-type layout. Calculator format numeric keypad. Two tone keycaps, by function; rib dividers to separate three keypads. 11° keyboard tilt mechanism. Keys are auto-repeating (15 chars. per second). 256 lay character keystroke buffer. (ADM 11 & 12)		Detached, low-profile, DIN standard with six-foot coiled cord. Sculptured keys, Selectric®-type layout. Calculator format numeric keypad. Two tone keycaps, by function. 11° keyboard tilt mechanism. Keys are autorepeating (15 chars. per second). 256 character keystroke buffer.	
Keyboard Layout:	QWERTY - Typewriter Pairing. QWERTY - Teletype Pairing. AZERTY for French and QWERTZ for German - optionally available. (ADM 11 & 12)		QWERTY - Typewriter Pairing. QWERTY'- Teletype Pairing. AZERTY for French and QWERTZ for German - selectable in Set-Up Mode.	
Numeric Keypad:	14 keys, 0 through 9, enter, comma, period, and minus. 0 and enter keys are double-size. (All models)			
Cursor Control:	Up, down, left, right, home arranged in a "cross" pattern. Return, Line Feed, New Line, Backspace, Tab and Back Tab. (ADM 11 & 12)		Up, down, left, right, home arranged in a "square" pattern. Return, Line Feed, New Line, Backspace, Tab and Back Tab.	
Function Keys:	Four programmable function keys, shiftable to eight functions, each transmitting up to an 8-character sequence. Non-volatile optional.	16 function keys, shiftable for 32 functions, that transmit a user-programmable sequence. Non-volatile.	16 function keys, shiftable for 32 functions, that transmit a user-programmable sequence. Each function key also has a programmable legend displayable on the 25th line for easy identification of functions. Non-volatile.	
Two Levels of Non-Volatile Set-Up Mode:	Two levels of set-up mode for operator and supervisor. No dip switches - Terminal functions are selectable from the keyboard, or remotely from the host. Features selectable in Set-Up Mode include: Key-Click, Communications Charactertistics, Replacement Characters, and more. (All models)			
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#### Specifications — ADM 11, ADM 12 & ADM 24E

(Continued)

Specifications	ADM 11	ADM 12	ADM 24E
EDITING			
Edit Operations:	Clear screen, erase to end of line/page. Editing can be from the keyboard or host.	Clear screen, erase to end of line/page (all or unprotected only), line insert/delete, character insert/delete, insert mode. Line or page editing. Editing can be from the keyboard or host. Six edit keys are user-programmable, and shiftable for 12 functions.	Clear screen, erase to end of line/page (all or unprotected only), line insert/delete, character insert/delete, insert mode. Line or page editing. Editing can be from the keyboard or host.
Tabs:	Tab Key transmits HT code.	Typewriter tabs or tab/back tab to protected field. (ADM 12 & 24E)	
Protect Mode:	N/A	Screen formatting of unprotected and protected fields displayed in a selectable attribute. (ADM 12 & 24E)	
Program Mode:	For displaying received control characters. (All models)		
Programming Expansion Capability:			Fully programmable. 22K of display RAM and 54K of RAM or ROM available for OEM applications. Can be downline-loaded by a host.
COMMUNICATIONS			
Modes of Operation:	Conversational, half or full duplex, Conversational, half or full duplex; block or local. (ADM 12 & 24E) or local.		
Handshaking:	X-On/X-Off, DTR or none - selectab	le (All models)	
INTERFACES:			
Primary Port:	RS-232C, serial asynchronous ASCII communications. 20mA and RS-422 optional. (All models)		
Data Rates:	300, 600, 1200, 2400, 4800, 7200, 960	0 and 19,200. (ADM 11 & 12) 75, 110, 134.5, 150, 300, 600, 1200, 1800, 2400, 3600, 4800, 7200, 9600 and 19,200	
Word Structure:	1 start bit, 7 data bits, 1 parity bit (odd, even, mark, space or none - selectable), and 1 stop bit. (ADM 11 & 12)  1 start bit, 7 data bits, 1 parity bit (odd, even, mark, space, or none selectable), and 2 stop bits.		
Auxiliary Port:	Serial RS-232C port for page print a	nd transparent print. (ADM 11 & 12)	Bi-directional buffered printer port.
Transmission Format:	Character-by-character (Conversation Mode).	Character-by-character (Conversation Mode); line, message, or page; all data or unprotected only; formatted or unformatted (no line termination characters), (Block Mode). (ADM 12 & 24E)	
Input Buffer:	1536 bytes.	1000 bytes.	1400 bytes.
Data Flow Control:	X-On/X-Off. DTR (Pin 20), or none, may be used to indicate the terminal Busy/Ready status. No handshaking needed up to 19,200 baud in standard use.	X-On/X-Off. DTR (Pin 20), or none, may be used to indicate the terminals Busy/Ready status. (ADM 12 & 24E)	
Answerback Menu:	Optional.	Programmable.	Programmable.
Terminal Compatibility:	ADM 3A, ADM 5. ADDS Viewpoint & Regent 25, Hazeltine 1400, 1420 & 1500, DEC VT52 also available.	ADM 3A, ADM 5, ADM 31, ADM 32.	ADM 3A, ADM 5, ADM 31, ADM 32, ADM 42.
Options:	Amber phosphor 14" screen Answerback memory Non-volatile function key memory Current Loop interface RS-422 interface International keycap/ character generator sets: French/AZERTY, German/ QWERTZ, Swedish, Finnish, Danish, Norwegian, and Spanish/QWERTY teletype pairing.	Amber phosphor 14" screen Current Loop interface RS-422 interface International keycap/ character generator sets: French/AZERTY, German/ QWERTZ, Swedish, Finnish, Danish, Norwegian, and Spanish/QWERTY teletype pairing.	Amber phosphor 14" screen 96 line display memory 2K print buffer 4K print buffer Extension port Current Loop interface International keycap sets: USASCII, UKASCII, French/ Swedish, Finnish, Danish Norwegian, Spanish/ QWERTY teletype pairing, Katakana. Greek/Math symbols also available.

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Specifications subject to change without notice.



