



cincinnati time systems

Model 2000 Ethernet Installation Instructions

Description

Figure 1 shows how all of the system components are connected on a single Ethernet Terminal setup. (Note: Figures are not to scale).

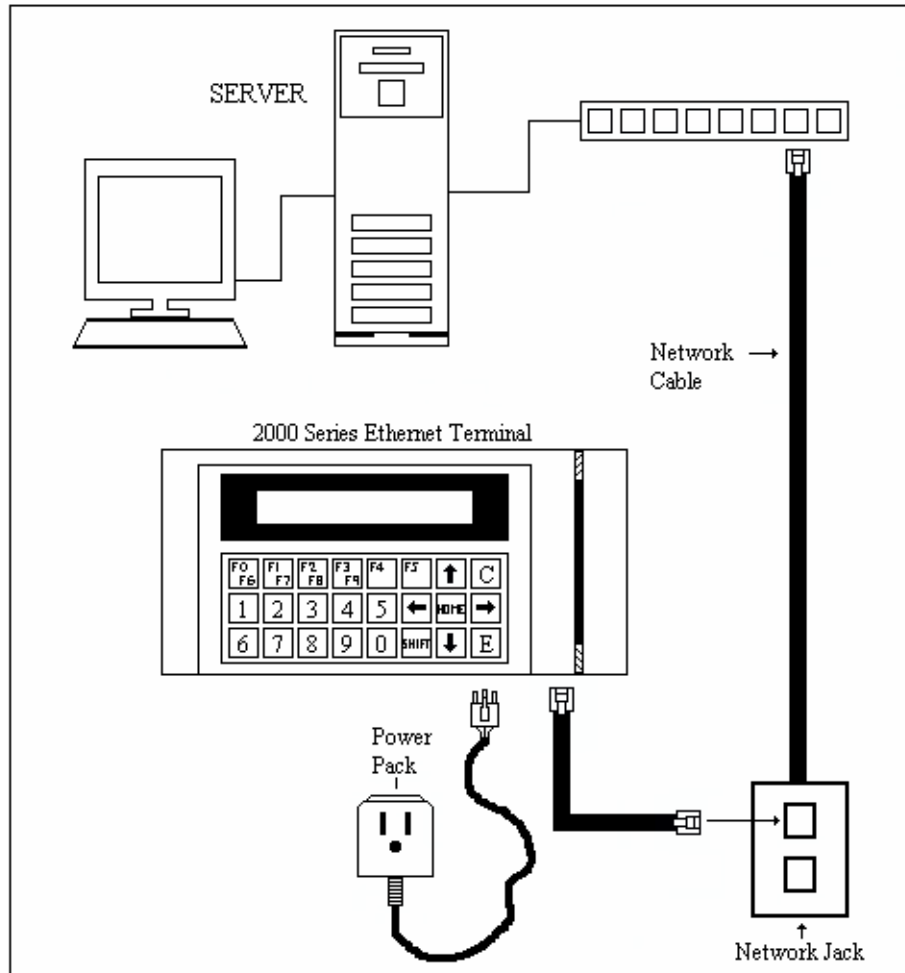


Figure 1

Installing the Terminal

- As you install the system, refer to Figure 1 in addition to the other figures mentioned below.

STEP 1

Determine a mounting site for the Terminal, which should have a Network jack and cable installed next to where the Terminal will be mounted.

STEP 2

The Terminal's Wall Mount Base can be attached to any flat surface that is in good condition. Care should be taken to place it in a location where the Terminal will not be bumped. The base of the Terminal should be about 4 feet (48 inches) from the surface of the floor in an area where lighting will not cause glare on the Terminal's display (Figure 2). A 120 VAC outlet should be located within 5 feet of the Terminal.

STEP 3

Using the keys provided, unlock the Terminal and separate it from the Wall Mount Base. Remove any Snap Modules that are installed in the Base and put them aside for now. Locate the 4 mounting holes on the inside of the Base to mark the wall for the locations of the screws. Make sure the Wall Mount Base is level. Remove the Base from the wall and prepare the wall (if necessary); for example, drill pilot holes or tap holes. Place the Base on the wall and mount it using appropriate screws and anchors to secure it to the wall (Figure 2).

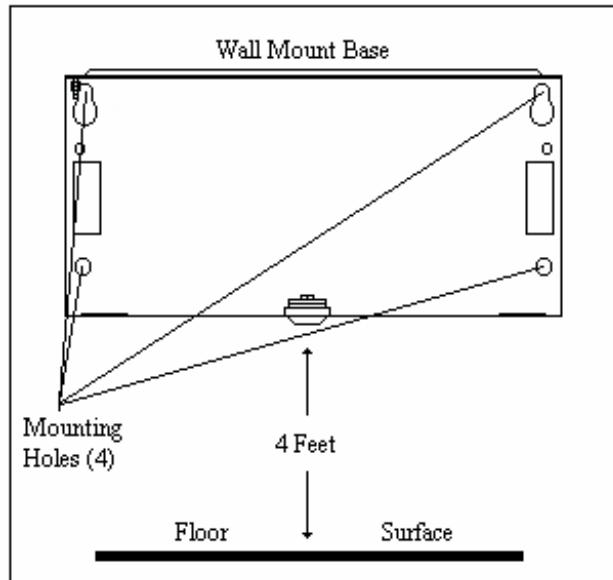


Figure 2

STEP 4

Locate a desired Cable Access knockout on the Mounting Base. Feed the one end of the Network cable, DC plug for the power pack, and any wires for the Relay (if applicable) through a knockout (Figure 3). Plug the other end of the Network cable into the Network jack by the Terminal (Figure 3).

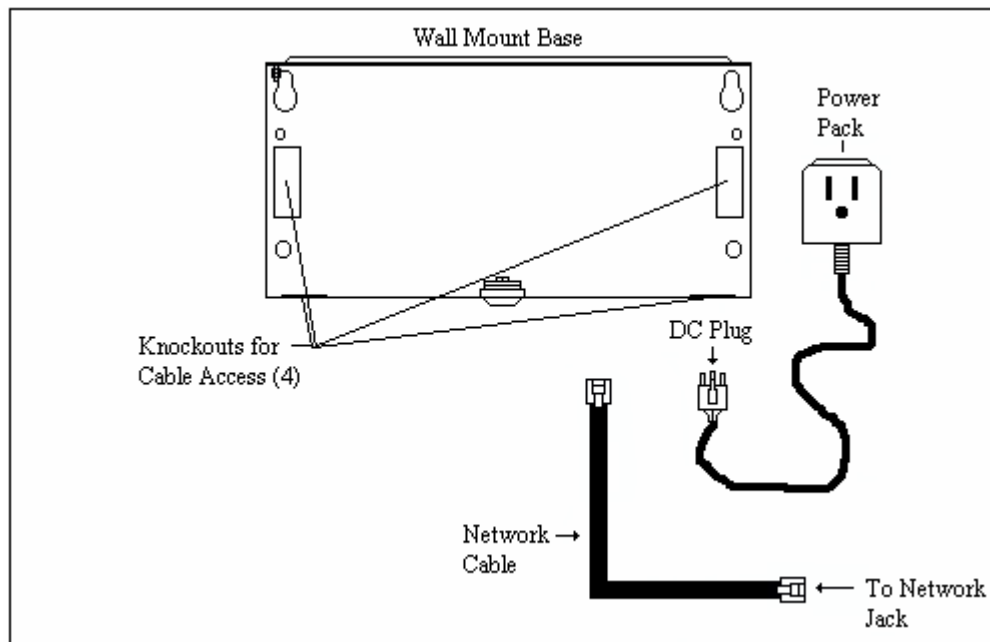


Figure 3

STEP 5

Depending on the configuration of the Terminal that was ordered, there are 1 or 2 Snap Modules to be re-installed into the Wall Mount Base. Starting from the right side of the Base, insert the LINC Ethernet Snap Module. If a UPS Battery Module was ordered, then insert it to the left of the LINC Ethernet Module (Figure 4).

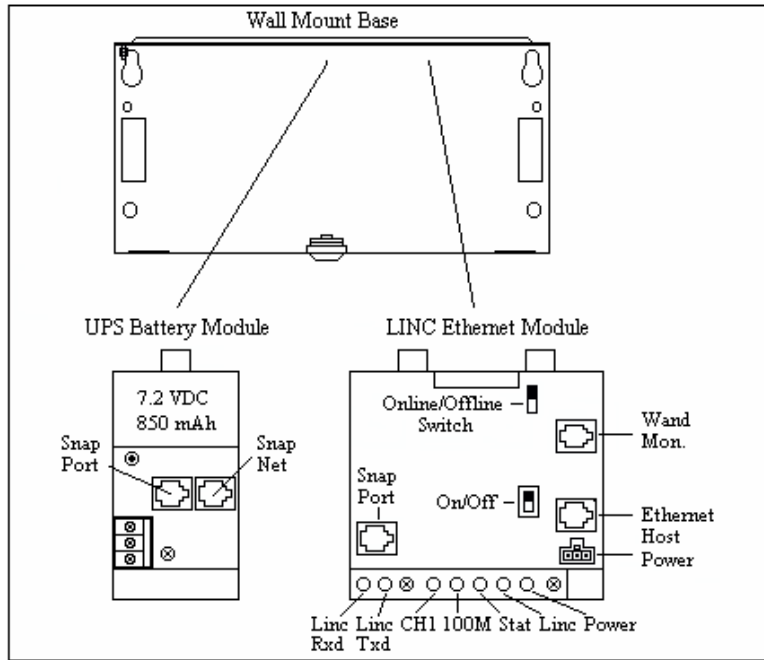


Figure 4

STEP 6

The diagram below shows how all of the Snap Modules connect to each other and to the Terminal. Depending on the configuration of the Terminal that was ordered, follow the diagram below on connecting the LINC Ethernet Snap Module and optional UPS Battery Module to the Terminal. (For example, if only a LINC Ethernet Snap Module was ordered, plug one end of the Network cable into the Network jack and the other end into the Ethernet Host port on the LINC Module. Then connect one end of the 8 conductor Comm / Power cable to the Snap Port on the LINC Module and the other end into the Snap Term port on the Series 2000 Terminal (Figure 5)).

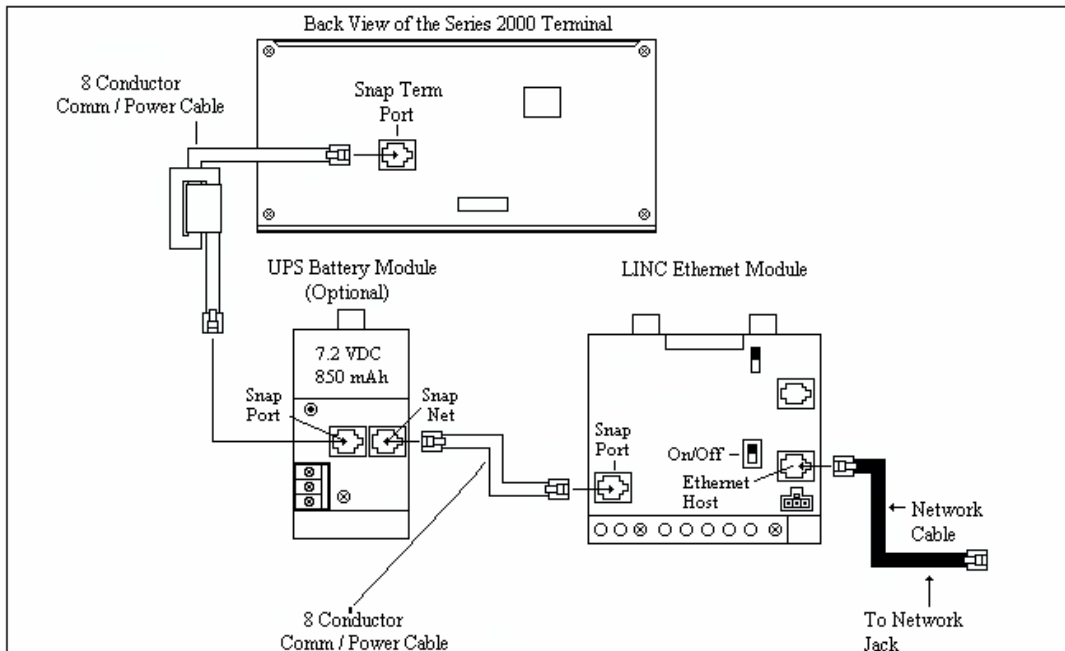


Figure 5

STEP 7

If the configuration of the Terminal includes a UPS Battery Module and the Relay is to be used, follow the Relay Connection Chart on Figure 6 on how to connect the wires to either ring bells or for door access.

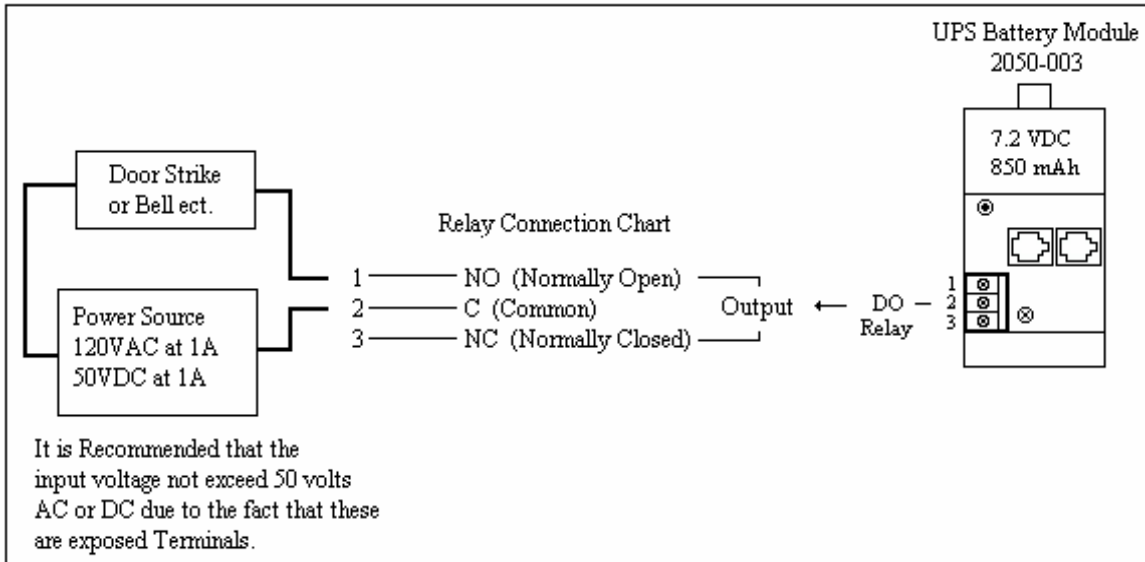


Figure 6

STEP 8

On the LINC Ethernet Module, move either the Online / Offline switch to the “Offline” position or the Use / Test switch to the “Test” position and move the On / Off switch to the “ON” position (Figure 7). Plug the DC Plug from the power pack into the Power connector on the LINC Ethernet Module (Figure 7).

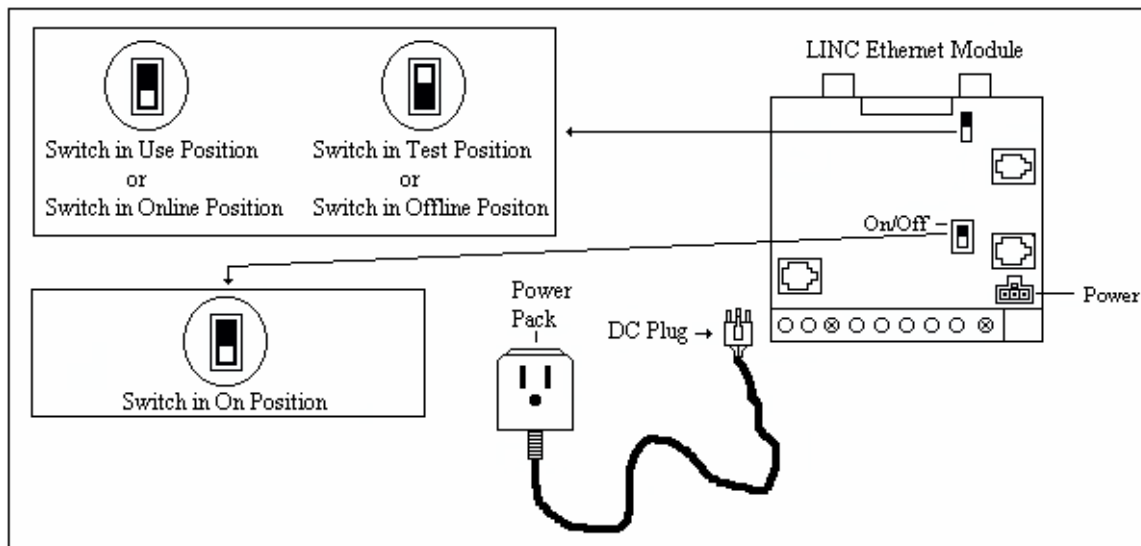


Figure 7

STEP 9

Place the Terminal over the Wall Mount Base and use the key to lock it in place.

STEP 10

Plug the Terminal's Power Pack into a 120 VAC outlet (Figure 1). The Terminal will run a series of self-tests and prompt "Setup Mode?" on the top line of the display. The bottom line of the display shows the Baud Rate, Parity, Host Delay, Terminal Address, Protocol Option, and the type of Reader (Figure 8).

```
Setup Mode?  
19,O,HD0,A00,NO,BC
```

Figure 8

STEP 11

Press the "E" key once on the Terminal and the prompt "BAUD RATE" appears on the top line of the display (Figure 9). The bottom line of the display will have an underline under the current setting. The default Baud Rate setting is 19200. If it is not at 19200, press either the up or down arrow keys on the Terminal until it reads "19" then press the right arrow key on the Terminal.

```
BAUD RATE  
19,O,HD0,A00,NO,BC
```

Figure 9

STEP 12

The prompt on the top line of the display should now read "PARITY" (Figure 10). The bottom line of the display will have an underline under the current setting. The default Parity setting is "ODD". If it is not "ODD", press either the up or down arrow keys on the Terminal until it reads "O" then press the right arrow key on the Terminal.

```
PARITY  
19,O,HD0,A00,NO,BC
```

Figure 10

STEP 13

The prompt on the top line of the display should now read "HOST DELAY" (Figure 11). The bottom line of the display will have an underline under the current setting. The default Host Delay is "0". If it is not "0", press either the up or down arrow keys on the Terminal until it reads "0" then press the right arrow key on the Terminal.

```
HOST DELAY  
19,O,HD0,A00,NO,BC
```

Figure 11

STEP 14

The prompt on the top line of the display should now read "ADDRESS" (Figure 12). The bottom line of the display will have an underline under the current setting. The default Address is "00". Press the up arrow key on the Terminal until it reads "01". Press the right arrow key on the Terminal.

```
ADDRESS  
19,O,HD0,A00,NO,BC
```

Figure 12

STEP 15

The prompt on the top line of the display should now read “PROTOCOL OPTION” (Figure 13). The bottom line of the display will have an underline under the current setting. The default Protocol Option is “NO”. If it is not “NO”, press either the up or down arrow keys on the Terminal until it reads “NO” then press the right arrow key on the Terminal.

```
PROTOCOL OPTION
19,O,HD0,A01,NO,BC
```

Figure 13

STEP 16

The prompt on the top line of the display should now read “READER” (Figure 14). The bottom line of the display will have an underline under the current setting. If the Reader type is not correct, press the up or down arrow keys on the Terminal until it reads the correct type of Reader. (For example, Figure 14 below shows that the Reader is set to “BC” which is for a Barcode Reader. If the Terminal has a Magnetic Stripe Track II Reader, then the setting on the Terminal would be set for “M2”, for a Biometric Reader, the setting on the Terminal would be set for “BIO”, for a Proximity Reader, the setting on the Terminal would be set for “PROX”). Press the “HOME” key on the Terminal and the top line of the display will again read “Setup Mode” with the correct settings on the bottom line.

```
READER
19,O,HD0,A01,NO,BC
```

Figure 14

STEP 17

Press the down arrow key until the prompt on the top line of the display reads “Utilities?”. Press the “E” key once. Then continue to press the down arrow key on the Terminal until the prompt on the top line of the display reads “UTILITIES” and “Ethernet Utilities?” on the bottom line (Figure 15).

```
UTILITIES?
Ethernet Utilities?
```

Figure 15

STEP 18

Press the “E” key once on the Terminal. The Terminal will go out and read the LINC Module and prompt “Terminal IP” on the top line of the display and the default IP Address on the bottom line (Figure 16). Using the numbers on the keypad, type in the correct Terminal IP Address, then press the “E” key on the Terminal. (If the Terminal IP Address is unknown, check with the Customer’s MIS Dept. for the correct Terminal IP Address).

```
Terminal IP
xxx.xxx.xxx.xxx
```

Figure 16

STEP 19

The prompt on the top line of the display should now read “Terminal Port” and the default values on the bottom line (Figure 17). Using the numbers on the keypad, type in “03001” then press the “E” key on the Terminal.

```
Terminal Port
xxxxxx
```

Figure 17

STEP 20

The prompt on the top line of the display should now read “Subnet Mask” and the default values on the bottom line (Figure 18). If the default values are to be changed, then use the up and down arrow keys on the keypad to put in the correct values for the Subnet Mask. (If the values are unknown, check with the Customer’s MIS Dept. for the correct Subnet Mask. Press the “E” key on the Terminal.

```
Subnet Mask
xxx.xxx.xxx.xxx
```

Figure 18

STEP 21

The prompt on the top line of the display should now read “Gateway IP” and the default values on the bottom line (Figure 19). If a Gateway IP Address is to be used, then using the numbers on the keypad type in the correct values for the Gateway IP Address. If a Gateway is not being used, then the values should be all zeros. If they are not all zeros, then use the numbers on the keypad and type in all zeros, then press the “E” key on the Terminal.

```
Gateway IP
xxx.xxx.xxx.xxx
```

Figure 19

STEP 22

The prompt on the top line of the display should now read “Host IP” and the default values on the bottom line (Figure 20). If the values are not all zeros, then use the numbers on the keypad and type in all zeros, then press the “E” key on the Terminal.

```
Host IP
xxx.xxx.xxx.xxx
```

Figure 20

STEP 23

The prompt on the top line of the display should now read “Host Port” and the default values on the bottom line (Figure 21). If the values are not all zero’s, then use the number keys on the keypad and type in all zero’s, then press the “E” key on the Terminal.

```
Host Port
xxxxxx
```

Figure 21

STEP 24

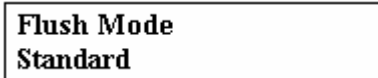
The prompt on the top line of the display should now read “TCP/UDP Mode” and “TCP” on the bottom line (Figure 22). If it is not set to “TCP”, then press either the up or down arrow keys on the keypad until it reads “TCP” then press the “E” key on the Terminal.

```
TCP/UDP Mode
TCP
```

Figure 22

STEP 25

The prompt on the top line of the display should now read “Flush Mode” and “Standard” on the bottom line (Figure 23). If the bottom line is not set to “Standard”, then press either the up or down arrow keys on the keypad until it reads “Standard” then press the “E” key on the Terminal.

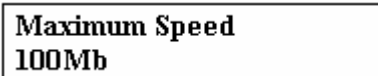


```
Flush Mode
Standard
```

Figure 23

STEP 26

The prompt on the top line of the display should now read “Maximum Speed” and “100Mb” on the bottom line (Figure 24). If the Network connection to this Terminal is 100Mb then press the “E” key on the Terminal. If the Network connection to this Terminal is 10MB then press either the up or down arrow keys on the keypad to change it, then press the “E” key on the Terminal.

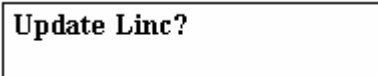


```
Maximum Speed
100Mb
```

Figure 24

STEP 27

The prompt on the top line of the display should now read “Update Linc?” (Figure 25). Press the “E” key on the Terminal and the message “Linc Updated” will be on the display for about 3 seconds, then the top line of the display will again read “Setup Mode” with the correct settings on the bottom line.

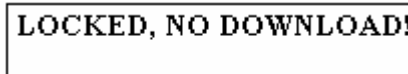


```
Update Linc?
```

Figure 25

STEP 28

Use the key to open up the Terminal from the Wall Mount Base. On the LINC Ethernet Module, move either the Online / Offline switch back to the “Online” position or move the Use / Test switch back to the “Use” position (Figure 7). The Terminal will go through another series of self-tests and the prompt “LOCKED, NO DOWNLOAD!” will be displayed on the top line of the display (Figure 26). Place the Terminal back over the Wall Mount Base and use the key to lock it in place.



```
LOCKED, NO DOWNLOAD!
```

Figure 26

* This completes the Ethernet Installation of the Model 2000 Terminal. The rest of the Terminal programming will be done on the PC in the Time & Attendance software.