TekTone®
SOUND & SIGNAL

NC325SW Versus Interface Software Installation Instructions

IL761
Section E
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INTRODUCTION

The NC325SW Versus Interface Software provides the necessary software support between a Versus Information System (VIS) and TekTone®'s Tek-CARE® NC300II Nurse Call System. Using a network connection, the interface sends presence data from badges worn by staff members (nurses and aides) from the VIS to the Tek-CARE® NC300II system for presence registry. Staff members simply walk into a patient room to register presence—they do not need to find or activate a presence device—an infrared signal from the staff member's Versus badge to the room sensors automatically triggers a presence registry in the room.

Sensors must be located in patient rooms for presence registry, and in corridors for check-out, or these functions will not operate correctly. Refer to the IL715 Tek-CARE® NC300II manual and the Versus Information System's manual for details on configuration and operation of these separate systems. This manual describes installation and operation of TekTone®'s NC325SW software, which provides the interface between the two systems.

SYSTEM OPERATION

Presence Registry

This is triggered when a staff member wearing a Versus badge enters a patient room. There are two types of registry supported by the Tek-CARE® NC300II Nurse Call System:

Nurse Presence: The patient room number is displayed in green in the *Nurse* column on the master station's VGA monitor. The room's green dome lamp (if installed) will light steadily.

Aide Presence: The patient room number is displayed in yellow in the *Aide* column on the master station's VGA monitor. The room's yellow dome lamp (if installed) will light steadily.

Presence Cancellation

When a staff member leaves a patient room and enters the corridor, presence indication is automatically cancelled: The patient room number is removed from the *Nurse* or *Aide* Column on the master station's VGA monitor, and the associated yellow or green dome lamp (if installed) turns off.

Staff Service Request

When a request for nurse or aide service is placed at a master station, the patient room number flashes in the Nurse (green) or Aide (yellow) column on the master station's VGA monitor, and the same-colored dome lamp flashes outside the patient room. When a nurse or aide walks into the patient's room, the corresponding service request is cancelled and the nurse or aide's presence is registered, as previously described.

Call Response

When a patient initiates a routine, personal attention or priority call, a staff member responds by walking into the patient's room. This cancels the call and staff's presence is registered as previously described.

Nurse and Aide Follower

See the IL715 Tek-CARE® NC300II manual for specific details about this feature. The NC325SW Versus Interface Software's automatic presence registration replaces manual check-in for the Nurse and Aide Follower feature.

Nurse and Aide Audio Paging

See the IL715 Tek-CARE® NC300II Manual for specific details about this feature. The NC325SW Versus Interface Software's automatic presence registration replaces manual check-in for the Nurse and Aide Audio Paging feature.
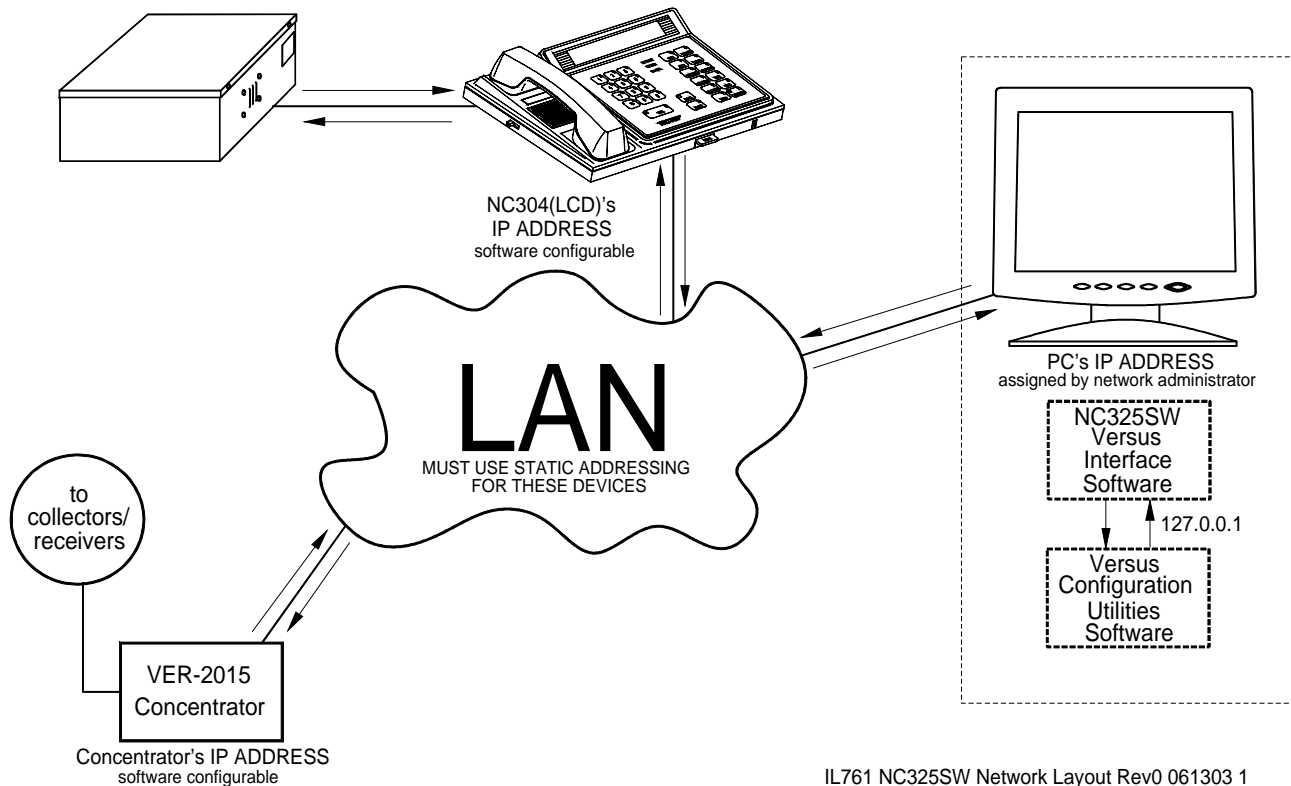
INSTALLATION AND SETUP

LAN Configuration

Connect the host computer, the Versus Information Systems VER-2015 Concentrator and the TekTone® NC304/LCD Master Station to a network. See *Figure 1* for further details. The host computer must be running at all times, and IP addresses must be static (not dynamically assigned).

Versus Information System Software

Before installing the TekTone® NC325SW Versus Interface Software, install and configure the Versus Information System on your PC—specifically the *econ.exe*, *server32.exe* and *senrec.exe* programs. (See the *Versus Information System Configuration Utilities Manual* for details.) Use the same room numbering scheme for the VIS sensors as is used on the Tek-CARE® NC300II Nurse Call System.

Figure 1—NC325SW Network Layout

NC304(LCD)'s
IP ADDRESS
software configurable

LAN
MUST USE STATIC ADDRESSING
FOR THESE DEVICES

to collectors/ receivers

PC's IP ADDRESS
assigned by network administrator

NC325SW
Versus
Interface
Software

127.0.0.1

Versus
Configuration
Utilities
Software

VER-2015
Concentrator

Concentrator's IP ADDRESS
software configurable

IL761 NC325SW Network Layout Rev0 061303 1

Room & Sensor Affiliation

To interface the Versus Information System (VIS) with the Tek-CARE® NC300II, the VIS sensors must be affiliated with the Tek-CARE® NC300II's room numbering system. (Tek-CARE® NC300II can be configured with either default room numbering or architectural room numbering.)

To enable presence cancellation, assign an unused Tek-CARE® NC300II room number to corridor sensors. For example, on a system that uses 3- or 4-digit dialing, you might assign room number 0463 to corridor sensors—if address 63 on port 4 is available. See IL715 Tek-CARE® NC300II Manual for more information about port addressing and dialing methods.

First, obtain the Tek-CARE® NC300II room number of each room that contains a VIS sensor. If no written record exists, use the Tek-CARE® NC300II **View a Zone** and **View a Patient Station** functions to determine this information; refer to the IL715 Tek-CARE® NC300II Manual for more information. If needed, create a written record using the *Room & Sensor Affiliation Worksheet* included in this manual.

Second, obtain the sensor number assigned to each VIS sensor by the Versus Information System. If no written record exists, use the VIS *senrec.exe* utility's **Walking Setup** option to determine this information; refer to the Versus Information System manual for more information.

Finally, configure the Versus Information System to affiliate the Tek-CARE® NC300II room numbers with the corresponding VIS sensor numbers:

• Use the VIS *senrec.exe* utility's **Edit Receivers** option to add Tek-CARE® NC300II room numbers to the *Room Name* column of the room list. (*Figure 2* is an example of a completed room list.)

• Use the VIS *senrec.exe* utility's **View All Collectors** option to affiliate each VIS sensor number (in the *Sensor* column) with the correct Tek-CARE® NC300II room number (in the *Receiver* column). This is the room and sensor affiliation list that both the Versus Information System and the NC325SW Versus Interface Software use to affiliate rooms to sensors. Uncheck the **Translated Sensors** box so that the room and sensor affiliation list displays actual sensor numbers. (*Figure 3* is an example of a partially completed room and sensor affiliation list.)

NC325SW Versus Interface Software Setup & Operation

To install TekTone® NC325SW Versus Interface Software, insert the CD into the CD-ROM drive. Click "Install Software" on the autorun screen that appears. (If autorun is disabled, click "start" and type *D:\setup.exe*—where D is the letter of your CD-ROM drive.) Then follow the on-screen prompts.

Figure 2—Completed Room List
(VIS *senrec.exe* utility's **Edit Receivers** option)

Room List

	Receiver #	Room Name	Room Phonetic	Phone #	Speaker	Lock	Type
▶	1	0100	Room 0100		0	0	Normal
	2	0106	Room 0106		0	0	Normal
	3	0101	Room 0101		0	0	Normal
	4	0102	Room 0102		0	0	Normal
	5	0103	Room 0103		0	0	No Display
	6	0104	Room 0104		0	0	Normal
	7	0205	Office		0	0	Normal
	8	0107	Room 0107		0	0	Normal
	9	0108	Room 0108		0	0	Normal
	10	0109	Room 0109		0	0	Normal
	11	0110	Room 0110		0	0	Normal
	12	0111	Room 0111		0	0	Normal
	13	0112	Room 0112		0	0	Normal
	14	0113	Room 0113		0	0	Normal
	15	0114	Room 0114		0	0	Normal
	16	0115	Room 0115		0	0	Normal
	17	0200	Break Room		0	0	Normal

Sort By
○ Room Name
● Receiver #

Order
● Ascending
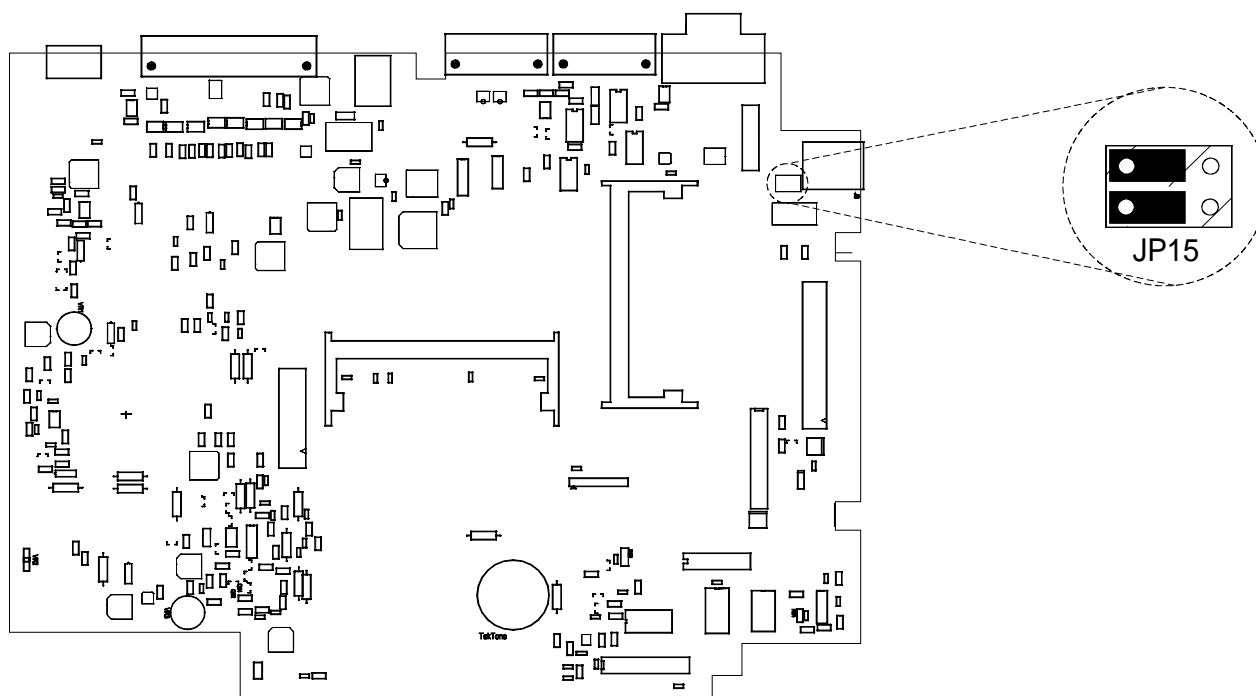○ Descending

Starting Receiver #: 1

Add Receiver

Remove Last Receiver

Done

Figure 3—Partially Completed Room and Sensor Affiliation List
(VIS *senrec.exe* utility's **View All Collectors** option)

Sensor and Receiver Configuration Utility
File

	Collector	Sensor	Receiver	Type
▶	C1	17	0110	IR Sensor
	C1	18	0113	IR Sensor
	C1	20	0112	IR Sensor
	C1	24	0114	IR Sensor
	C1	33	0108	IR Sensor
	C1	34	0107	IR Sensor
	C1	36	0109	IR Sensor
	C1	40	0111	IR Sensor
	C1	49	0115	IR Sensor
	C1	50	0200	IR Sensor
	C1	52	0	IR Sensor
	C1	56	0	IR Sensor

☒ Translated Collectors   ☐ Translated Sensors   Done

Figure 4—NC304(LCD) LAN Port Jumper Settings

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IL761 NC304(LCD) LAN Port Jumper Settings Rev0 062703 1

NC304 Series Master Station Setup

Connect the PC that is running both VIS and the NC325SW Versus Interface Software to a network. Connect NC304(LCD) Master #1 to the same network using standard CAT5 cable from the master station's LAN port to the nearest network port (hub, wall jack, etc.). Master #1 passes the information it receives from VIS to the Tek-CARE® NC300II central equipment, which then sends it to the system's other master stations. NC304(LCD) Master #1 must share the same subnet mask as the PC running the VIS and the NC325SW software.

Determine the PC's IP address and write it here:

_____

NC304(LCD) Software Version: Verify that NC304(LCD) Master Station software includes *main.exe* dated 4-23-2003 or later and *central.bin* dated 4-8-03 or later. If the software version is lower, return the master station to the factory for an upgrade. See IL715 Tek-CARE® NC300II Manual to determine the software version.

Master #1 Shunt Settings: Verify that NC304(LCD) Master Station #1 shunts are placed as shown in *Figure 4,* to utilize the LAN connection.

Set Master #1's IP Address: Obtain a network IP address from the facility's network administrator for NC304(LCD) Master Station #1 and write it here:

_____

After obtaining master #1's IP address, program it into NC304(LCD) Master Station #1. First, place master #1 at a DOS prompt as follows:

1. Connect a PS/2 keyboard to the PS/2 port on master #1.

2. Press MENU, **6, #** on master #1 to activate the keyboard.

3. Press **F11** on the keyboard and enter the username and password as directed. Default username is: ADMIN. Default password is: X.

4. Press **3** to select "3 Exit to DOS Level" on the displayed menu. This halts master #1 and displays a C:\> prompt.

Next, display and/or change the IP address of NC304(LCD) Master Station #1 as follows:

1. Type **cd\lan\sockets** and press ENTER after the C:\> prompt.

2. Type **type socket.cfg** and press ENTER after the C:\LAN\SOCKETS> prompt. Master #1's IP address will be displayed. (Factory default is 200.200.200.188.)

3. To leave master #1's IP address unchanged, press CTRL+ALT+DEL to reboot master #1. Skip steps 4–14 and continue with the *Initiate NC325SW Versus Interface Software* section.

4. To change master #1's IP address, type **sconfig.exe** and press ENTER after the C:\LAN\SOCKETS> prompt.

5. Type **1** and press ENTER to select "Continue Configuration."

6. Type **1** and press ENTER to select "Network Card."

7. Type **1** and press ENTER to select "Static Addressing."

8. Type the new IP address, as assigned by the facility's network administrator, and press ENTER.

9. Type **0** as the "default gateway address" and press ENTER.

10. Type **0** to skip "primary DNS address" and press ENTER.

11. Type **0** to skip "secondary DNS address" and press ENTER.

12. Type **0x60** as the "interrupt vector" and press ENTER.

13. Type **10** as the "network card's IRQ" and press ENTER.

14. This message should be displayed: *Successfully created Sockets/DOS configuration file(s)*. Press CTRL+ALT+DEL to reboot master #1.

Initiate NC325SW Versus Interface Software: The first time communication is established, and whenever the host computer's network IP address changes, the NC325SW software must be initiated.

First, connect a keyboard to NC304(LCD) Master #1. Press MENU, **6, #** on master #1 to activate the keyboard.

Next, verify that all appropriate VIS software (at minimum, *econ.exe* and *server32.exe*) and the NC325SW software are open and running. The NC325SW window will appear similar to *Figure 5*.

Then, using the keyboard connected to NC304(LCD) Master #1, press MENU, **7** to select "7 Initiate Locator Link." Type the IP address of the PC running VIS and NC325SW and press ENTER. After a brief pause, the information box will clear.

At this point, communication has been established between the VIS and the Tek-CARE® NC300II Nurse Call System. The NC325SW window looks similar to *Figure 6*, and the *Client Interface Status* has changed to "Connection established."

The Tek-CARE® NC300II Nurse Call System will now receive presence registration information from the Versus Information System and then display it. Perform a thorough walk-through test of the system to verify that it is operating in accordance with the *System Operation* section of this manual.

The NC325SW Versus Interface Software Window
Information in the NC325SW window is displayed in three sections, as follows:

Database Server Interface: This section verifies access to various tables within the VIS software. The *Server Info* box is locked out during normal operation and must not be changed except by qualified network personnel. During normal operation, the *Status* box displays "Connection Complete." Use the *Server Requests* box to request specific tables; they are displayed in the *Server Responses* window.

Client Interface: This section verifies and displays communication between the NC325SW Versus Interface Software and the NC304(LCD) Master Station (client). During normal operation, *Status* displays "Connection established."

Badge Server Interface: This section monitors activity of the VIS Badge Server. This section is locked out during normal operation and must not changed except by qualified network personnel. During normal operation, the *Status* box displays "Connection Complete."

TROUBLESHOOTING

If communication cannot be established between any or all aspects of this interface, verify these conditions:

- The Versus Information System must be up and running properly. If the VIS is not working properly, see appropriate Versus documentation.

- The Tek-CARE® NC300II Nurse Call System must be up and running properly. If the nurse call system is not working properly, see the IL715 Tek-CARE® NC300II Manual.

- Check the host computer's network IP address and verify that it corresponds to the network IP address displayed at the NC304(LCD) when communication is established.

- Whenever *any* changes are made to the room/address configuration, and whenever the Tek-CARE® NC300II Nurse Call System is reset for any reason, do the following:

  1. Shut down and restart the NC325SW Versus Interface Software

  2. Press the reset button on the bottom of NC304(LCD) Master #1.

  3. After the master #1 completes the boot process, press MENU, **7** to select "7 Initiate Locator Link."

  4. If the displayed IP address is correct, press #. (If not, see the **Initiate NC325SW Versus Interface Software** section.)

  After a brief pause, communication will be re-established between the Versus Information System and the Tek-CARE® NC300II Nurse Call System.

Figure 5—NC325SW Window Before Initiation

TekTone NC325SW Versus Interface

Version

Database Server Interface

Server Info:
Server IP: 127.0.0.1
Server Port: 2000
[Update]

Status [Connection Complete]

Server Requests
○ Badge
○ Receiver
○ Locate
○ Name
[Request]

Client Interface
Status [In listen mode]

Server Responses
```
15:19:30 BadgeTableDump50445»LL»4»0»LL»0»6»7»4»0»0»0»0»0»0»0»0»0»0»-1»
15:19:30 BadgeTableDump50598»BL»4»0»BL»0»6»7»4»0»0»0»0»0»0»0»0»0»0»-1»
15:19:30 BadgeTableDump50747»CM»4»0»CM»0»6»7»4»0»0»0»0»0»0»0»0»0»0»-1»
15:19:30 BadgeTableDump50853»DC»3»0»DC»0»6»7»4»0»0»0»0»0»0»0»0»0»0»-1»
15:19:30 End of BadgeTableDump
15:20:01 LocationChange50366»01 17»KM»Kevin»McClamon»524-9967»6»0104» »3701401089»49»7/10/2003 3:20:01pm»7/10
```

Badge Server Interface

Status [Connection Complete]
Badge Server IP [127.0.0.1] [Update]
Badge Server Port [2500]

```
LiveBadges»50366»01 15»3701401089»49»|
LiveBadges»50366»01 17»3701401089»49»|
LiveBadges»50366»01 18»3701401089»49»|
LiveBadges»50366»01 19»3701401089»49»|
LiveBadges»50366»01 1A»3701401089»49»|
LiveBadges»50366»01 1B»3701401089»49»|
```

Figure 6—NC325SW Window After Initiation

TekTone NC325SW Versus Interface

Version

Database Server Interface

Server Info:
Server IP: 127.0.0.1
Server Port: 2000
[Update]

Status [Connection Complete]

Server Requests
○ Badge
○ Receiver
○ Locate
○ Name
[Request]

Client Interface
Status [Connection established]
```
15:13:41 Inbound: DatabaseUpdate»292»0536»4
15:13:41 Inbound: DatabaseUpdate»363»0643»5
15:13:42 Inbound: DatabaseUpdate»434»0750»6
15:13:42 Inbound: DatabaseUpdate»505»0857»7
```

Server Responses
```
15:13:42 ReceiverTableDump13»0112» »0»Alpha Micro Room»0»1»
15:13:42 ReceiverTableDump14»0113» »0»Sales Back»0»1»
15:13:42 ReceiverTableDump15»0114» »0»John Office»0»1»
15:13:42 ReceiverTableDump16»0115» »0»Bob and Gina»0»1»
15:13:42 ReceiverTableDump17»0200» »0»Dave Office»0»1»
15:13:42 End of ReceiverTableDump
```

Badge Server Interface

Status [Connection Complete]
Badge Server IP [127.0.0.1] [Update]
Badge Server Port [2500]

```
LiveBadges»50366»01 0B»3701401089»36»|
LiveBadges»50366»01 0C»3701401089»36»|
LiveBadges»50366»01 0E»3701401089»36»|
LiveBadges»50366»01 01»3701401089»36»|
LiveBadges»24245»01 08»3700807681»33»|
LiveBadges»50366»01 02»3701401089»36»|
```

Room & Sensor Affiliation Worksheet

Architectural Room #	Tek-CARE®NC300II Default Room # (if used)	Versus Sensor #	Architectural Room #	Tek-CARE®NC300II Default Room # (if used)	Versus Sensor #