



# NC505 Additional Receiver Installation Instructions

Tek-CARE®500 Wireless Emergency Call System

IL834  
Section E  
Rev. 1 - 09/2006

## FEATURES OF THE NC505

- Supervises up to 64 uniquely addressed transmitters (points).
- Sixteen independent, dry contact, form-C outputs.
- Multiple addresses may be assigned to one output.
- Functions independently of emergency call head-end equipment.
- Outputs configurable for latching, momentary or follow.
- Status of all outputs visually indicated on unit.
- Screw terminals for easy termination of field wiring.
- All wiring exits from hidden recess for clean, professional appearance.
- Tamper switch built-in for supervision by third-party alarm system.
- Programmed without laptop or computer. (Requires NC515 Programmer, included with the NC500SK Site Survey Kit.)
- Dry contact output for fault indications (tamper, low battery, etc.).
- Made in the U.S.A.

## BEFORE SETTING UP THE NC505

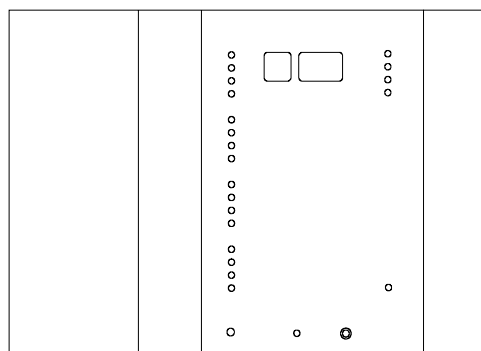
The Tek-CARE®500 Wireless Emergency Call System can accept signals from any transmitter, regardless of that transmitter's System ID or Point Number. When using the NC505, all transmitters on the same NC505 must have identical System IDs, and unique Point Numbers from 01 to 64. Multiple NC505s may be used with one system, each programmed with a unique System ID.

The NC505 requires access to power, so install it near an outlet. For best reception, the unit should be centrally located. Designed for indoor use only, 32°F–140°F (0–60°C) with non-condensing relative humidity not to exceed 90%. Access Code, if lost, cannot be circumvented without loss of programming. Programming is not lost during power failure. Outputs 1–4 cannot be configured for GLOBAL activation.

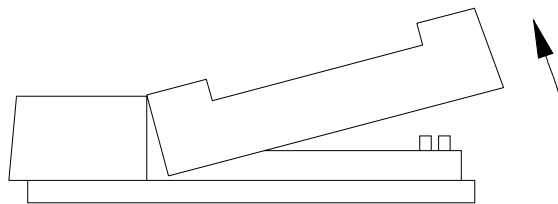
### Obtain the System ID of existing transmitters:

- The System ID is the first two digits of the Transmitter ID. Example: Transmitter AD20 has system ID of "AD."
- The System ID must be identical for all transmitters used with the NC505.
- The System ID is in hexadecimal. The NC505 is programmed in decimal. Use the chart in Figure 2 to make the

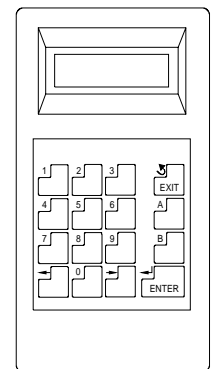
Figure 1—NC505 Additional Receiver and NC515 Programmer



NC505 Additional Receiver (closed)



NC505 Additional Receiver (opening)



NC515  
Programmer

conversion.

**Obtain the Point Numbers of existing transmitters:**

- The Point Number is the last two digits of the Transmitter ID. Example: Transmitter AD20 has a Point Number of “20.”
- The Point Number is unique to each transmitter that has the same System ID.
- The Point Number is in hexadecimal. The NC505 is programmed in decimal. Transmitter addressing begins at 0, while the NC505 begins at 1. Use the chart in Figure 3 to make the conversion.

**Do you want the NC505 to supervise transmitters?**

- Usually the emergency call system supervises transmitters.
- Low check-in times will lower transmitter battery life.
- High check-in times will increase the vulnerable failure window.

**Which outputs will the 64 points (transmitters) trigger?**

- Each point can trigger *one* output.
- Multiple points can be assigned to each output.
- The output will not reset until the calls for all assigned points have been handled.

**How will outputs be configured?**

- GLOBAL responds to that condition system-wide.
- LATCHING will not reset until the NC505 is reset.
- MOMENTARY will reset itself after a preset time (1–9 seconds).
- FOLLOWER will reset as soon as the call is gone (default).
- Outputs are dry Form-C, rated for 30VDC/1A, 28VAC/0.5A.

**Receiver Setup**

- Apply power to the NC505, as shown in Figure 5.
- Connect programming cable (using 1/8" jack) between the NC505 and the NC515.
- Enter the access code on keypad. (Default: 3446.)
- Press the left arrow key to display “RCVR SETUP” prompt and press ENTER.
- Enter the System ID (converted to decimal using Figure 2) and press ENTER.
- Press the right arrow key to select Point Supervision (Yes/No) and press ENTER.
- Use numeric keys to select inactive time (1–9).
- Use the right arrow key to select “HOURS / MINUTES” and press ENTER.
- Enter a new access code or press ENTER to leave unchanged.
- Press ENTER at “VISION COMPATIBLE” prompt, leaving

this option set to “NO.”

- Press EXIT to return to main menu.

**Output Setup**

If MOMENTARY is selected for any of these options, you will be prompted for the “MOMENTARY OUTPUT TIME” (1–9 seconds).

- Press the right arrow key to display the “OUTPUT SETUP” prompt and press ENTER.
- Use the left and right arrow keys to select the desired trigger action and press ENTER.
- Repeat for the next point. If no change is desired, press ENTER to advance.
- Use the left and right arrow keys to select the desired Alarm Output behavior and press ENTER.
- Use the left and right arrow keys to select the response to a Tamper Output signal and press ENTER.
- Use the left and right arrow keys to select the response to a Low Battery signal and press ENTER.
- Use the left and right arrow keys to select the response to an Inactive Output signal and press ENTER.

**Input Setup**

- Press the right arrow key to display the “PROGRAMPT” prompt and press ENTER.
- Enter the Point Number (converted to decimal using Figure 3) at POINT NUMBER (1–64) and press ENTER.
- Press ENTER at the “EXT SWITCH TYPE” prompt. (Default: N.O.)
- Press ENTER at the “END OF LINE RESISTOR” prompt. (Default: No.)
- Press ENTER at the “USE INTERNAL CONTACT” prompt. (Default: No.)
- Use the left and right arrow keys to select the desired check-in time and press ENTER.
- Use the left and right arrow keys to select the output this transmitter triggers and press ENTER.
- Press ENTER to confirm, or press A to review/change the settings.

- Press A to save the configuration and activate the point.
- Repeat this process for each point (transmitter) you have.

## PROGRAMMING GLOSSARY

**Access Code**—Password needed to access programming functions. (4-digit number).

**Alarm**—Valid transmission received from a transmitter indicating a change of state.

**Check-In Time**—Point-specific interval during which a transmitter must signal to prevent *fault*. (Supersedes MAX TIMEINACTIVE.)

**Clear Faults**—Clears latched *fault* indication after fault condition has been handled.

**Close**—To connect contacts.

**Com**—“Common.” This point is connected to “N.C.” output until the output is activated, at which time it connects to “N.O.” output.

**Delete Point**—Erases point-specific configuration of any programmed Point Number (01–64).

**Disabled**—Not assigned to any address.

**End of Line Resistor**—Loading resistor placed at the end of a chain of devices. Not used in this system.

**External Contact**—Contact located outside a transmitting device (e.g., reed switch). Not used in this system.

**Fault**—General trouble condition usually indicating loss of signal from a transmitter.

**Follower**—Output activates only while a call exists.

**Form “C”**—Contact composed of both normally open and normally closed output.

**Global Output**—Output activates for this condition on any programmed transmitter.

**Internal Contact**—Contact located within a transmitting device.

**Latching**—Output activates & remains activated until the NC505 RESET button is pressed.

**Lo Batt**—Low battery condition. A warning that a battery

should be changed soon.

**Max Time Inactive**—System-wide interval during which transmitters must signal to prevent *fault*.

**Momentary**—Output activates for a preset number of seconds.

**N.C.**—Normally closed. Contact opens upon call condition. Connects to COM.

**N.O.**—Normally open. Contact closes upon call condition. Connects to COM.

**Open**—To disconnect contact.

**Output**—Form “C” dry contact used to trigger external devices in response to a call.

**Output Setup**—Configuring the output’s response to a valid call condition.

**Point Number**—Unique numeric identity assigned to a transmitter (last two digits of the Transmitter ID).

**Program Point**—Configure the point number, status, behavior and reaction to a call.

**Point Status**—Signal condition upon last activation/use of point.

**Rcvr Setup**—System-wide settings of the NC505.

**Signal Level**—Peak level of received and decoded signal.

**Signal Margin**—Difference between ambient noise level and signal level.

**Supervision**—Automatic monitoring of transmitter condition via periodic signaling.

**System ID**—Numeric system identity assigned to a transmitter (first two digits of the Transmitter ID).

**Tamp**—(Tamper) Transmission usually indicates that a unit’s case has been opened.

**Tamper Output**—N.C. output used to signal that a unit’s case has been opened.

**Test Outputs**—Toggle state of outputs to simulate triggering via a valid call condition.

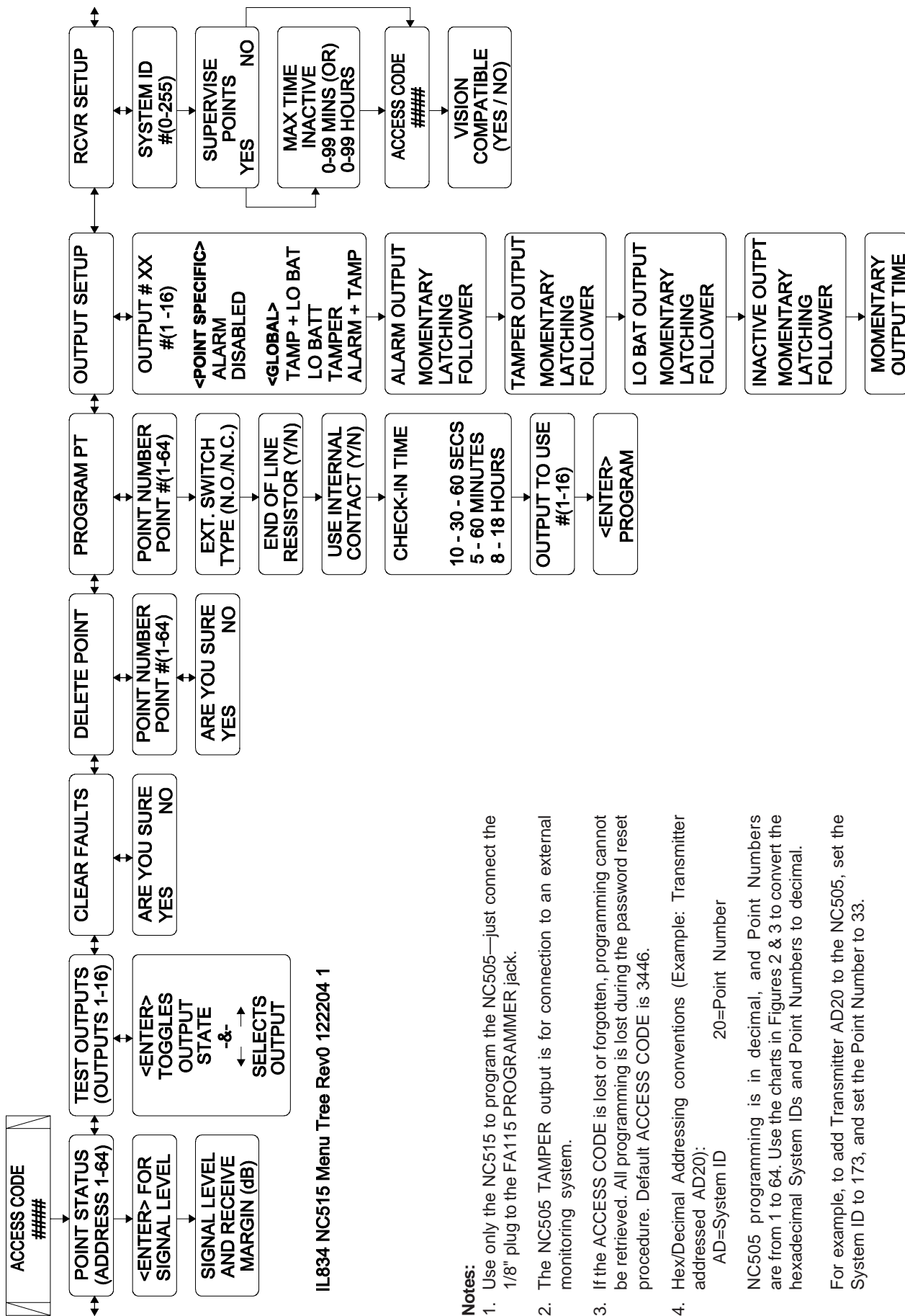
**Trigger Action**—Activity which triggers an output.

**Unsupervised**—Periodic transmissions are not expected from the transmitter.

**Vision Compatible**—Not used in this system.



Figure 4—NC515 Programmer Menu Tree

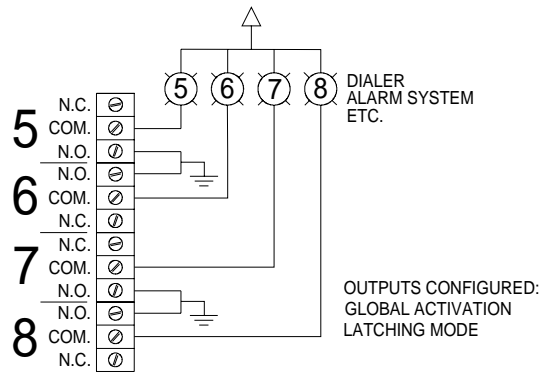
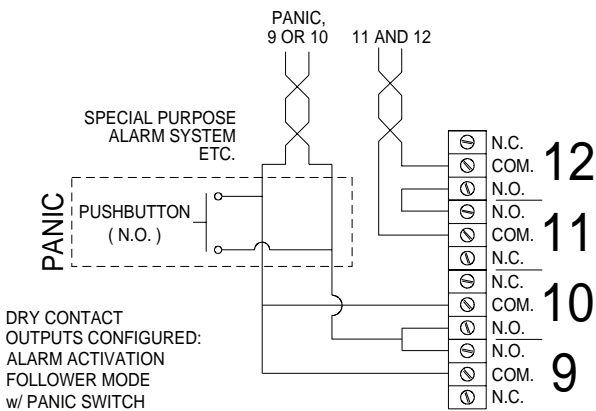
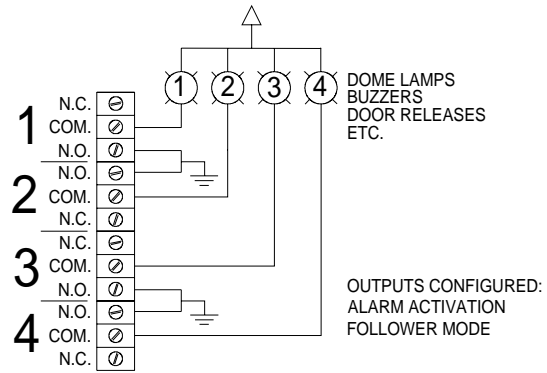
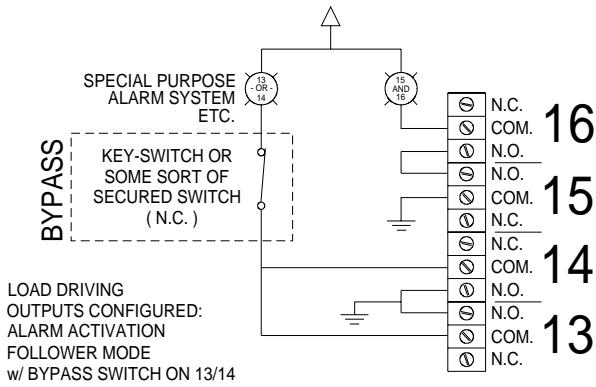
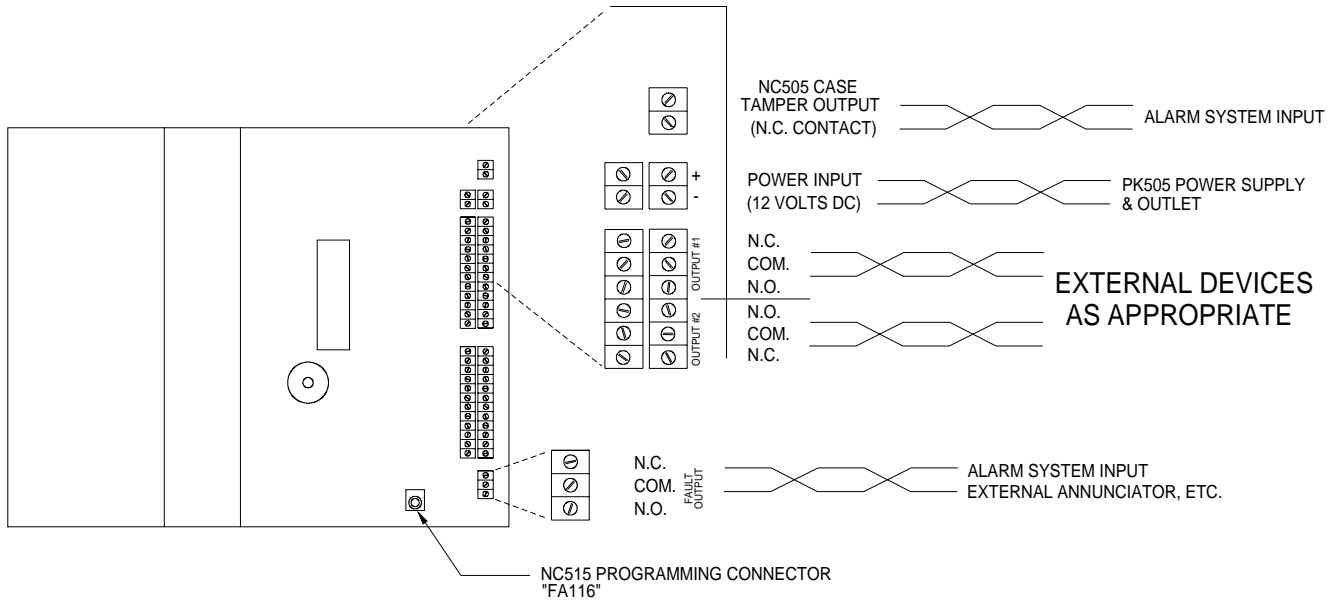


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**Notes:**

1. Use only the NC515 to program the NC505—just connect the 1/8" plug to the FA115 PROGRAMMER jack.
2. The NC505 TAMPER output is for connection to an external monitoring system.
3. If the ACCESS CODE is lost or forgotten, programming cannot be retrieved. All programming is lost during the password reset procedure. Default ACCESS CODE is 3446.
4. Hex/Decimal Addressing conventions (Example: Transmitter addressed AD20):  
AD=System ID                      20=Point Number  
NC505 programming is in decimal, and Point Numbers are from 1 to 64. Use the charts in Figures 2 & 3 to convert the hexadecimal System IDs and Point Numbers to decimal.  
For example, to add Transmitter AD20 to the NC505, set the System ID to 173, and set the Point Number to 33.

# Figure 5—NC505 Wiring Diagram



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