



## System Programming and Use Instructions for STR™ Digital-Dial Entry Station(s) using the BRK16 16-Station Relay Card(s) and BRA Controller Board

### APPLICATION

The STR™ BRK16 series digital-dial entry stations allow digital-dial capability and electronic directory display for up to three (3) entrance stations and up to 120 interior stations. Because of its almost universal capabilities, these digital-dial stations can be used with almost any type of multi-family intercom and/or video-intercom system.

### PROCEDURE

1. Read installation instructions for each unit to determine equipment location and installation method.
2. Install equipment and wiring.
3. Check wiring and connect. Observe all local and national electrical and building codes.
4. Apply power and check operation.

### HOUSING INSTALLATION AND EQUIPMENT LOCATION

#### DIGITAL ENTRY/INSIDE STATION(S)

Locate entry station(s) where needed at convenient speaking height, about 4.5 feet (137cm) from the finished floor, or on a desktop (with or without a privacy handset).

#### REMOTE STATION(S)

Locate remote station(s) at convenient speaking height, about 4.5 feet (137cm) from the finished floor, or on a desktop (depending upon type of remote station used).

#### SYSTEM POWER SUPPLY UNIT(S)

Connect as per system wiring diagram(s). Observe all local and national electrical and building codes.

#### SYSTEM WIRING

Connect as per system wiring diagram(s). Observe all local and national electrical and building codes.

Route cable away from AC power wiring, transformers, fluorescent lights, light dimmers or other electrical devices. Protect cable from damage. Shielded cable should be used if AC interference is a concern, or if cables cannot be run adequately spaced away from any source of electrical interference.

#### CONNECTIONS

Before connecting, make certain wires are free from shorts or grounds. Make all connections as shown on system wiring diagrams, as per the system manufacturer.

### FINISH INSTALLATION

1. Install stations on housings (where appropriate). Do not overtighten screws.
2. Observe all local and national electrical and building codes.

### GENERAL PROGRAMMING INFORMATION

1. This system can be programmed manually, by using the digital-dial keypad at each entry station (see page 3), or it can be programmed by using a Windows PC or Laptop, connected to each entry station, using the STR™ uploader software and connecting cable (see page 4).
2. Programming must be done at EACH ENTRY STATION separately, and individually. For this reason we highly recommend using the STR™ uploader software, especially when first programming all of the resident's names into each entry station, or for large buildings.
3. The PC or Laptop used for programming must have an RS232 (serial) port and 9-pin 'Din' type connector.
4. The RS232 (serial) cable from the PC/Laptop to the should have a female connector on one end and a male connector on the other. The 9 pins must be connected 1 to 1, 2 to 2, 3 to 3, 4 to 4, 5 to 5, 6 to 6, 7 to 7, 8 to 8 and 9 to 9, in case you need to find or make a proper connecting cable.

### CALLING REMOTE STATION

1. Once each entry station is programmed, you can place a call to an indoor station.
2. If the display is not ready to accept a call, press 'C' button to Clear the display.
3. Either press the 4-digit code to call the inside station and press the BELL SYMBOL button, or use the Up/Down Arrows to select the Name/Appt. to call and press the BELL SYMBOL button.
4. When using the code number, you do not need to enter all 4-digits. For example to call code 0023 you can enter 23 and then press the BELL SYMBOL, or you can enter 0023 and then press the BELL SYMBOL. It will work either way.
5. If you make a mistake when calling, press the 'C' button to Clear the display and start again.

**NOTE:** The Alpha Communications®/STR™ warranty is void if this equipment is installed or used in any manner other than described in this manual.

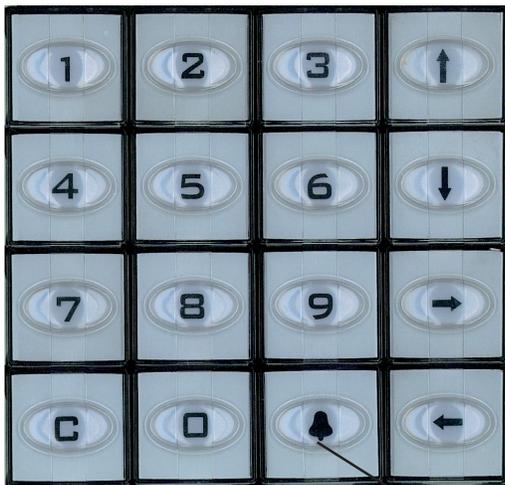
**DB1 Main Processing Board**  
located behind Display and Keypad modules

**Typical System  
Component Layout**

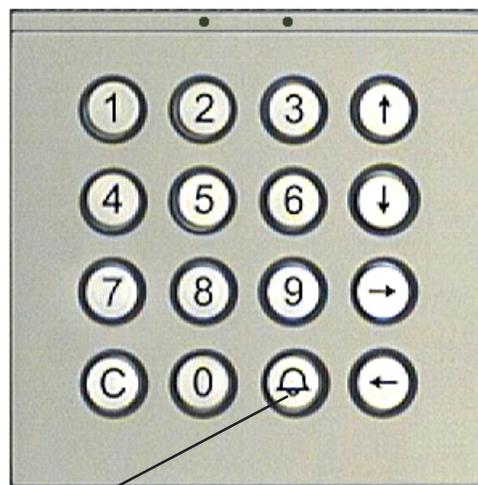
- Connector for DB1 Digital Display
- 4-Position Programming 'Dip' Switch
- 9-Pin 'DIN' Connector for connection of programming cable
- Connector for EMDB1 or EMVDB1 Digital Keypad



**EMDB1 Type (standard)  
Keypad Unit**



**EMVDB1 Type (vandal-resistant)  
Keypad Unit**



**CALL (BELL SYMBOL) BUTTON**

# HOW TO PROGRAM THE STR™ DIGITAL-DIAL ENTRY STATION(S)

## USING THE STATION KEYPAD (MANUAL MODE)

1. Please remember that this programming must be done at EACH ENTRY STATION, individually.
2. Set the four (4) pin 'DIP' switch (see page 2), all to the OFF (down) position, in order to enter programming mode.
3. Press the Up or Down Arrow (doesn't matter which one), one time, and the Appt. list will be shown on the digital display module.
4. Select the Name or Appt. No. you would like to change, by using the Up/Down Arrows.
5. Press keypad button #2, in order to begin the programming session, and to change the Name/Appt. No. The cursor will indicate the first letter of the Name. For your information, the associated 3-digit relay no. associated with that Name/ Appt. is shown right below the Appt. No.
6. Now press the Down Arrow button to go down with the cursor until you reach the line with the letter you would like to use.
7. Press the Right Arrow button until you reach the letter you want to select.
8. By pressing the button with the BELL SYMBOL you save the letter, and the letter will be placed in front of the existing name.
9. By using the Arrow buttons, move the cursor to the position where the letter should be placed.
10. Repeat above steps 6 thru 9 to change all of the letters in the name, up to a maximum of 11 letters for one name.
11. In order to change the 4-digit Appt. No. (which is placed beside the name) move the cursor to the first number by using the Arrow buttons.
12. If, for example, you want the Appt. No. 0051, press '0', press the BELL SYMBOL and then move to the next position of the Appt. No., then press '0', press the BELL SYMBOL, move to the next position of the Appt. No. and press '5', press the BELL SYMBOL, move to the next position of the Appt. No., press '1' and then press the BELL SYMBOL.
13. Press button 'C' to store the Name and Appt. No. you just programmed.
14. When you are done programming and are ready to leave the programming mode, set PIN #1 on the four (4) pin 'DIP' switch to the ON (up) position, and all 3 other switches to the OFF (down) position.

# HOW TO PROGRAM THE STR™ DIGITAL-DIAL ENTRY STATION(S)

## USING A PC OR LAPTOP (COMPUTERIZED MODE)

1. Please remember that this programming must be done at EACH ENTRY STATION, individually.
2. Using the STR™ Uploader Software provided and your PC or Laptop, enter all of the Names and corresponding Appt. Nos. into the stored software database, without the programming cable connected to the DB1 control board.
3. Set the four (4) pin 'DIP' switch (see page 2), all to the OFF (down) position, EXCEPT FOR SWITCH #2 which must be in the ON (up) position.
4. Connect the programming cable to your PC/Laptop and plug it into the 9-pin 'DIN' connector on the DB1 control board (see page 2). Connect the female cable end to the PC/Laptop and the male cable end to the DB1 connector.
5. Using the STR™ Uploader Software provided and your PC or Laptop, upload the names to the DB1 control board.  
NOTE: you will see the upload progress shown, until it is 100% done. Programming must be 100% complete at each entry station, or the system will not function properly.
6. You can easily add, change or delete names in your database at any time, and re-upload to each entry station.
7. When you are done programming and are ready to leave the programming mode, set PIN #1 on the four (4) pin 'DIP' switch to the ON (up) position, and all 3 other switches to the OFF (down) position.
8. Press the 'C' button to Clear the display.