

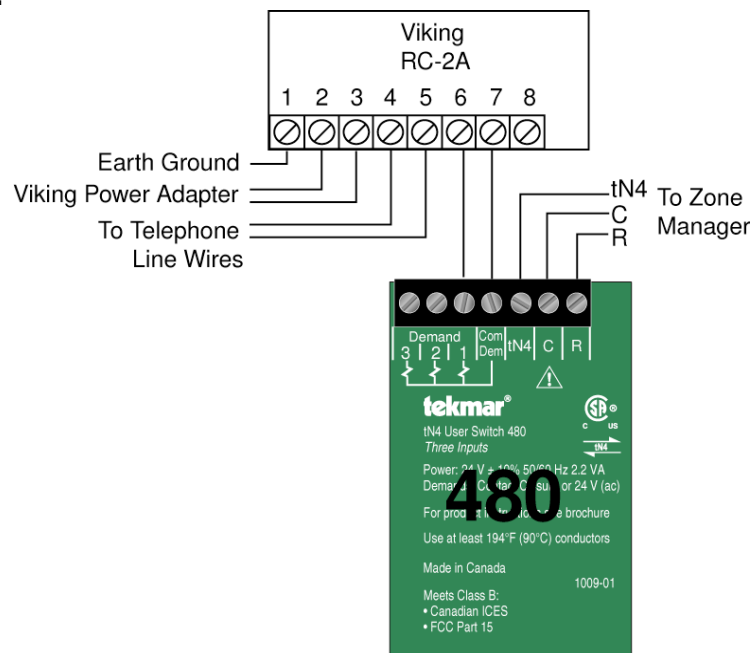
## User Switch Remote Communication Using Telephone Switches

The use of a telephone switch allows building occupants to change the tN4 scene remotely using a telephone. This is very common request for vacation properties. The most common application is to change the tN4 scene from Away (2) to the normal scene (1) using a telephone. In order to do this, a User Switch 480 is required to be together with a telephone switch. Recommended telephone switches include:

- Viking Electronics, model RC-2A Remote Touch Tone Controller, [www.vikingelectronics.com](http://www.vikingelectronics.com) Phone: 715-386-8861
- Control Products Inc., model Deluxe FreezeAlarm FA-D2, [www.controlproductsinc.com](http://www.controlproductsinc.com) Phone: 952-361-4101

**Important Note:** Should the User Switch 480 be placed into the Away scene (2) using the telephone switch, the telephone switch position *must* be changed back to the Normal scene (1) using the telephone switch, even if the customer should press one of the three buttons on the User Switch to change the tN4 scene. Failure to do so will result in the tN4 scene becoming unsynchronized with position of the relay contact.

### Viking RC-2A Wiring:



**Viking RC-2A Settings:**

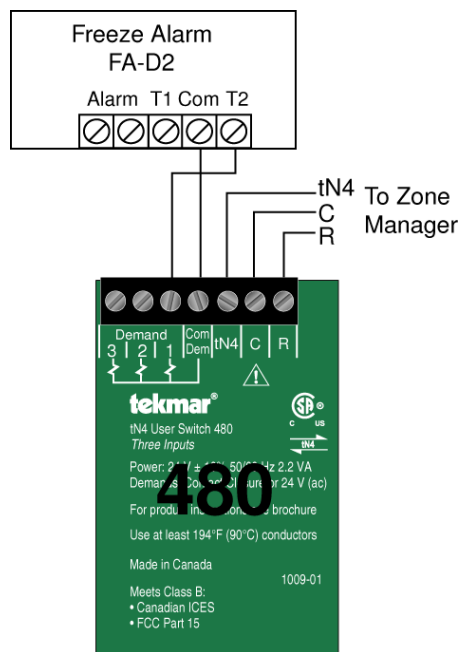
DIP Switch	1	2	3	4	5	6	7
Position	OFF	ON	OFF	OFF	OFF	ON	ON

Note: Set the RC-2A entry code switches to prevent unauthorized tampering with the tN4 system. Do not set any entry code switches to positions C or D.

**Viking RC-2A Operation:**

- 1) Customer dials telephone number to access the telephone switch.
- 2) The RC-2A answers on the 6<sup>th</sup> ring, and a single beep will be heard.
- 3) Dial "\*" followed by the three digit entry code switch number.
- 4) Dial "10" to energize the relay and enter the Away scene (2). Two beeps will be heard.  
Dial "19" to de-energize the relay and return to the Normal scene (1). One beep will be heard.
- 5) Dial "8" to end the session. Three beeps will be heard. It is also possible to hang up to end the session.

**FreezeAlarm FA-D2 Wiring:**



**FreezeAlarm FA-D2 Settings:**

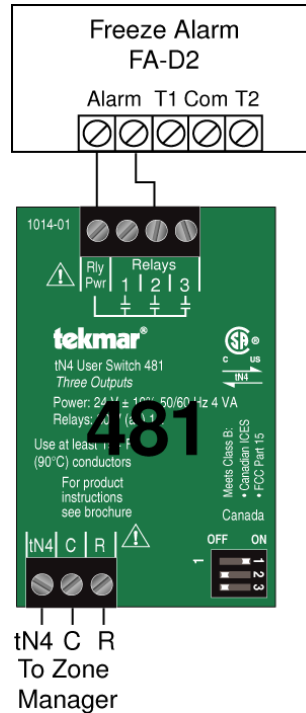
The FA-D2 is programmed using voice prompt menus. Program the FA-D2 using the included instructions. It is recommended that the security code be set to prevent unauthorized tampering of the tN4 system.

**FreezeAlarm FA-D2 Operation:**

- 1) Customer dials telephone number to access the telephone switch.
- 2) Dial the four digit security code following by the "#" button.
- 3) Dial "2" to change the remote switch status.
- 4) Dial "0" to change to the T2 position and enter the Away scene (2).  
Dial "0" to change to the T1 position and enter the Normal scene (1).
- 5) Dial "9" to return the main menu or hang up to end the session.

**FreezeAlarm FA-D2 Alarm:**

The FA-D2 also includes an alarm input that can receive a dry contact closure. The User Switch 481 has three relay contacts that can be used to provide an alarm warning should a critical error occur on the tN4 system that prevents the heating system from operating.



The User Switch 481 has 3 DIP switches that must be set as follows:

DIP Switch	1	2	3
Position	ON	OFF	OFF

Whenever a critical alert occurs, the User Switch 481 closes relay 2 that activates the alarm input on the FreezeAlarm FA-D2, which in turn can dial up to 3 different phone numbers to warn that a problem exists on the tN4 system that requires immediate attention. It is suggested that the building owner, building maintenance, or tN4 installer be contacted in order to correct the error.

Sincerely yours,

Jay Vath  
tekmar Control Systems Ltd.