TECHNICAL NOTE 07-97

MOBILE MAP PLUS SYSTEM ADDITION OF ACCESS DISPLAY

DATED SEPTEMBER 1, 1997 REVISED FEBRUARY 16, 1998

BACKGROUND

Mobile Map Plus (MMP) Radio-Graphic Display Units have typically provided alarm conditions of secure and alarm for each input in the system. The display contains a combination red-green solid state LED lamp which is green when the alarm input is secure and flashing red when the input is in alarm. An internal audible alarm sounds whenever a alarm conditions is present. An acknowledge push button silences the audible but does not affect the alarm display.

There are sometimes requirements for the additional display of an Access alarm input condition. The Access condition typically shows that the alarm input has been placed in an non-operational (access) condition. The inclusion of the Access condition as well as the Secure and Alarm conditions requires the graphic display alarm lamps to operate in a special way. The interconnection requirements to operate the access condition and the graphic display lamp operation is discussed in this technical note.

INTERCONNECTION

The alarm/secure condition of the MMP displays require one alarm input for each alarm input in the system. The access condition requires the addition of one "access" input for each alarm input requiring the access feature. Therefore, when calculating the required number of MMP encoder alarm inputs, there is one required for each alarm input and one is required for each zone access input. Continue to observe the maximum inputs for each MMP encoder (secure-alarm and access) up to the maximum number of 64 inputs total. If all inputs require access, the maximum number of alarm inputs per system is 32. Contact the factory for larger systems.

DISPLAY INDICATIONS

The addition of the access lamp requires some changes in the alarm lamp display indications. The two types of displays that are normally connected to the MMP system are the compact radio-graphic displays and the control room displays. The following is a description of the display lamp operation for each:

Compact Radio-Graphic Displays

1. Alarms are indicated using one multi-color lamp per zone.
    A. Secure is indicated by a solid green lamp.
    B. Alarm is indicated by a flashing red lamp.
    C. Access is indicated by solid red and green lamp segments which appears as a solid orange lamp.
    D. Changes in alarm signaling (red/green) will not be displayed as long as the access condition is present.
    E. The access condition is maintained by a constant input on the access input for that input.

2. Audible alarms are present during input alarms only.
   A. The audible can be silenced by pressing the top mounted acknowledge push button.
   B. Subsequent alarms or changes in alarm condition will activate the audible alarm again.

Control Room Displays

1. Each alarm zone contains two lamps, red and green
   A. Secure is indicated by a solid green lamp.
   B. Alarm is indicated by a flashing red lamp. The green lamp is extinguished.
   C. Access is indicated by solid illuminated condition of both the red and green lamps.
   D. Changes in alarm signaling (red/green) will not be displayed as long as the access condition is present.
   E. The access condition is maintained by a constant input on the access input for that input.

2. Audible alarms are present during zone alarms only (optionally available).
   A. The audible can be silenced by pressing a panel or remote mounted acknowledge push button.
   B. Subsequent alarms or changes in alarm condition will activate the audible alarm again.

Alarm and Access Zone Calculations

1. There is a total of 64 inputs per MMP alarm encoder. When the access function is utilized, there can be a maximum number of 32 accessed inputs and therefore a maximum number of 32 alarm inputs. A greater number of alarm inputs requires additional equipment. Please contact the factory.

2. For practical purposes there can be any number of access inputs up to the maximum of 32. The total of up to alarm inputs plus access inputs must not exceed 64 per system.

3. When ordering a system including the access feature, the alarm inputs requiring access must be provided at the time of order. Special EEPROM programming is required for each remote display.

4. A special interface may be required for interconnection of the alarm and access inputs from the alarm system to the MMP encoder. Please contact the factory for additional information.

Operation

1. *Power up*
   When power is applied to the display, the power up self test is activated with all alarm lamps (w/o access) flashing red and all lamps with access solid orange, and the audible sounding approximately four times.

2. *Self Test*
   The individual display self test will operate in the same manner as the standard display. Upon turn-on or on pressing the lamp test button, the display will blink all lamps red and the audible alarm will sound approximately four times.

3. *Sequential System Test*
   The sequential alarm input test, when activated at the encoder, will sequentially test all alarm inputs *and* all inputs programmed for access indication. When activated, the alarms will cycle through all the alarm inputs in order starting with zone 1 and then cycle through all inputs with access program, starting at the lowest input number. Alarm inputs will flash red and access inputs will be solid orange.

4. *Activation of Access Indication*
   The Access condition must be activated by the central control equipment in order to be indicated at the remote display. Upon activation the access condition will be shown by the solid orange lamp for that input and audible alarm will sound indicating a change in the alarm input status. The audible alarm is silenced by pressing the acknowledge button.
   Note: If a remote display panel has been turned off for any time, it will not show the access, or alarm conditions, until the next supervision signal is sent to the display, approximately two minutes with the current software program.

   If you have any questions, on need any further information, please contact **CDT** through our website (www.cdtco.com) or by telephone.