

Chapter Four

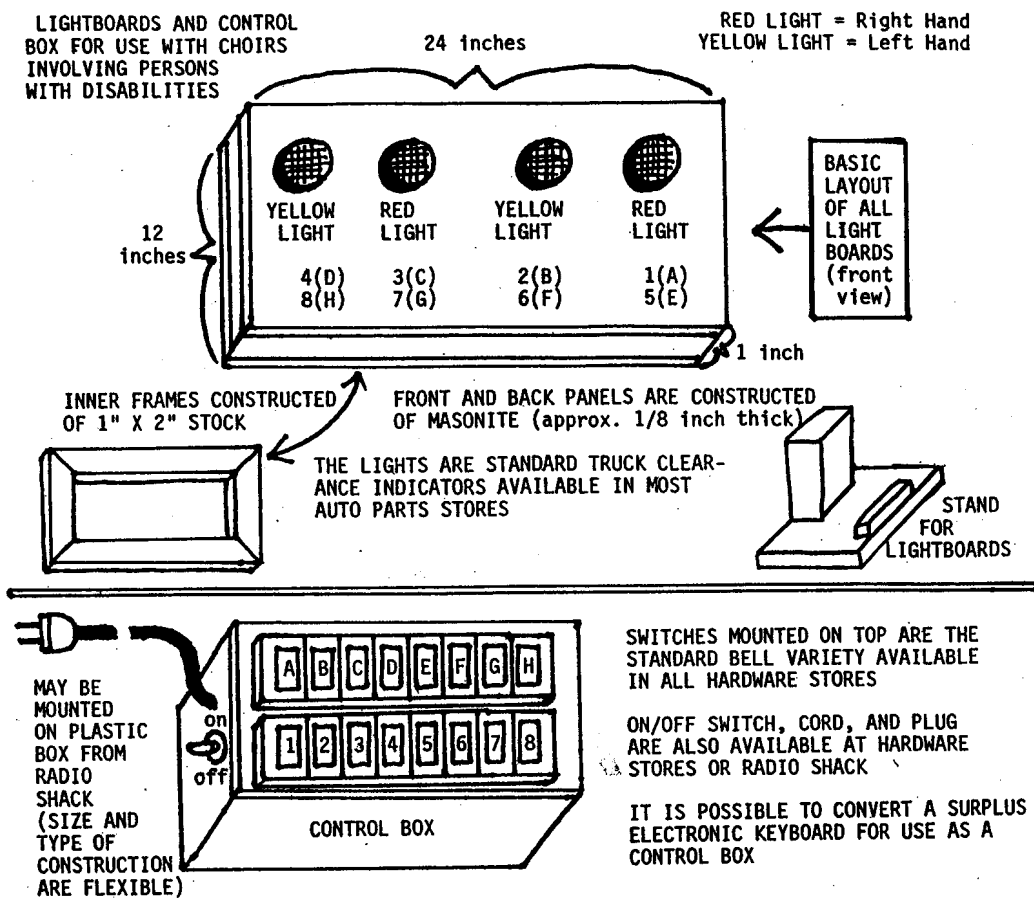
Light boards - an option worth considering Building your own set of light boards Arranging music for light boards Advantages and limitations



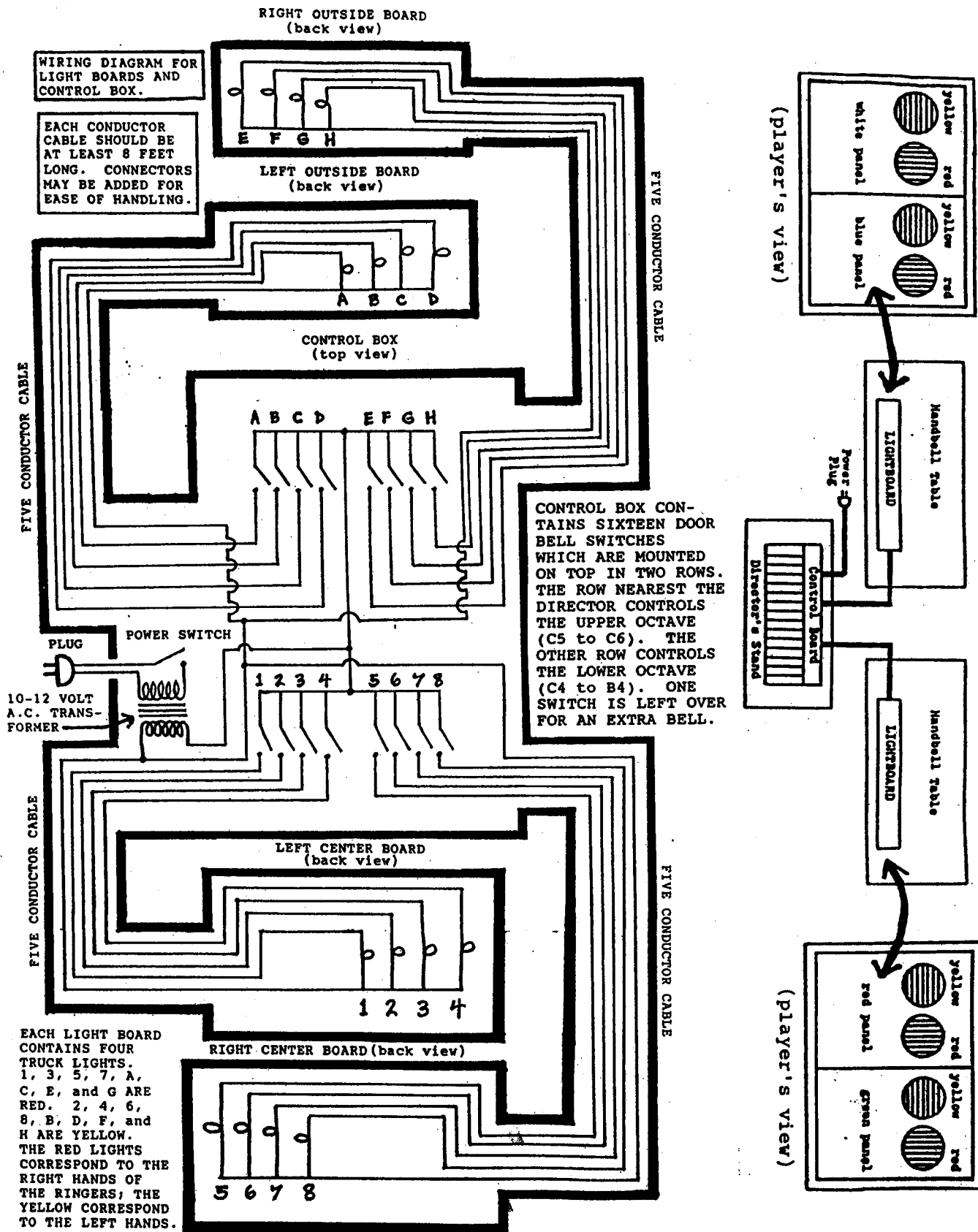
Light boards - an option worth considering

Basically, light boards are a set of lights (truck lights from the auto store to be exact) that are controlled from a set of switches similar to a keyboard. In some situations others have actually used electronic keyboards to control light boards. Each ringer responds to a set of two lights - a yellow on the left and a red on the right.

Building your own set of light boards



The diagram below may seem a little complex at first glance, but your favorite handy-person can probably make sense of it.



Arranging music for light boards

The use of light boards will be more effective if you take into consideration the statements below:

- (1) Players may or may not be able to damp effectively. Carillon style (sustained tone) arrangements should be used.
- (2) Because of clashes caused by the absence of damping, harmony should be limited to two or three note combinations. A large chord may be used effectively at the end of a piece.
- (3) A single line melody with occasional harmony is a good option.
- (4) Players are not usually able to change bells during a piece. The notes available are limited to the number of lights in the system.
- (5) Fast rhythms are not possible. Quarter note and slower rhythms should be used most of the time.

In carillon style ringing melodies predominate. Harmony (if used) occurs on strong beats and to fill rhythmic space under longer melody notes, as shown in this example:

The example shows a musical score in 4/4 time. The treble clef staff contains a melody of quarter and eighth notes, with some notes tied across measures. The bass clef staff provides harmonic support with chords and single notes on strong beats. The word "etc." is written to the right of the staff.

Large harmonic clusters between chords with only one or less common tones should be avoided. **Simplicity** is the key word.

The example shows two musical phrases side-by-side. The first phrase, labeled "not recommended", shows a treble clef staff with a large, complex chord cluster that overlaps with a bass clef staff chord, creating a dense and potentially clashing sound. The second phrase, labeled "recommended", shows a treble clef staff with a simpler chord that shares only one or two notes with the bass clef staff chord, creating a clearer and more harmonious sound.

Because of the limitations of the ringers and the challenge to the director it is best to make arrangements in a style that is simple and direct. Useful tools for this type of arrangement include **open chords** and **parallel tenths**.

Open Harmony creates a very listenable combination of tones, and the principle is very simple. The middle tone of the first chord in each measure below is transferred to the octave below.

The image shows a musical score for a piano exercise. It consists of two staves: a treble clef staff and a bass clef staff. The exercise is divided into four measures, each with a chord symbol above it: C, F, G, and Am. In each measure, the treble staff contains two chords: a 'Close' chord and an 'Open' chord. The 'Open' chord is formed by taking the middle note of the 'Close' chord and moving it down an octave to the bass staff. For example, in the C chord measure, the 'Close' chord has notes C4, E4, G4, and the 'Open' chord has notes C3, E4, G4. The bass staff shows the middle note of the first chord in each measure being moved down an octave.

Kum-Ba-Yah

Open Harmony and Parallel Sixths

The image shows two systems of musical notation for the piece 'Kum-Ba-Yah'. Each system consists of a treble clef staff and a bass clef staff. The first system shows a melody in the treble staff and a bass line in the bass staff. The second system continues the melody and bass line. The arrangement uses open harmony and parallel sixths throughout, creating a simple and direct sound.

On the next page is an example of an arrangement that uses parallel sixths throughout. This type of structure lends itself to playing without a score, since the following melody notes with harmony notes is very basic.

God Is So Good

Parallel Sixths

Advantages and limitations

In my several years as music director for the state school chapel I found the light boards very useful, because:

- (1) I found that I could usually improvise a prelude for handbells based upon the first hymn of the service.
- (2) The appearance of the light boards from the audience perspective is very normal (looks like music stands).
- (3) I found that during the singing of hymns and songs, my assistant could improvise compatible sounds based upon pentatonic scales.

The problems associated with the light boards, which were generally overcome in some manner, were as follows:

- (1) Switches must be played almost one beat ahead of the actual production of sound.
- (2) Beyond pressing switches ahead of time, the response time of each individual ringer was different.
- (3) On a few occasions we performed outside the chapel, and moving and setting up the light boards in new environments was sometimes a challenge.