

**Operation  
Manual**

**SyncroVision** ®  
**Model 3S**

***Control***  
***Vision*** INC.



**PRELIMINARY**

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## 1. Introduction

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Figure 1.0

SyncroVision is designed for observation of high-temperature processes that are not as bright as arc welding or plasma spray. SyncroVision uses the intense pulse of visible light coming from the xenon strobe to create the video image. High-temperature processes such as those found in steel mill operations or ceramic refractory processes, are normally quite difficult to monitor with the human eye or conventional picture taking equipment. The process detail is submerged within the luminous envelope of heat or flame. When one attempts to use a video or photographic camera, the field of interest is further degraded by the excess sensitivity of the medium, causing over or under exposed areas, delimiting contrast in of the subject. With steel making in particular, one looking to inspect the surface of the freshly poured metal slab can expect to see the bright surface with most of the detail lost in the bright glow of heat and flame.

The goal with SyncroVision is to capture a video image of the subject using intense lighting provided by a strobed light source rather than using the light from the process itself. Also through special optical filtering the image is enhanced giving the user a useful picture of the desired subject matter for research, quality, or process control. This manual describes the SyncroVision system and it's uses in incorporating the use of the xenon strobe units, to obtain these detailed pictures.

Thank-you for your interest in SyncroVision. We at Control Vision Inc. are always eager to assist you in optimizing the SyncroVision's performance for your particular application. We encourage you to call us when contemplating a new application or when encountering a problem. Our goal is to provide innovative vision solutions for science and industry. To this end, if you have any questions or comments regarding SyncroVision or this manual, please feel free to contact us via the following methods:

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