FACILITIES GUIDANCE

Scoreboards for international tournaments

VER. 01

1   Introduction

Most modern hockey stadiums have large video walls or digital scoreboards that are used to broadcast match highlights and other announcements. They also serve a vital purpose in terms of safety, as they can be used to transmit video and text instructions to the stadium public in the event of an emergency.

This guide describes the requirements of scoreboards installed at venues hosting top level hockey. It is based on the requirements of FIH Tier 1 events. Venues hosting tournaments organised by other others (continental championships, etc) should ensure any scoreboard provide meets the needs of the specific event.

2   Video screen display requirements

- Large Format LED Digital Scoreboard and Integrated Video Display Screen;

- Minimum screen size of 6.5m x 4.4m, with minimum resolution of 6,000 LED/^{2} and minimum intensity of 4,000 cd/m^2;

- Minimum useable screen surface is 23m^2;

- Control Panel, plus video interface control panel and PC linking to Technical Official's Booth

The video screen should be able to indicate the varying specific times as required for international hockey matches. This type of information is as follows:

The following time periods are to be used in all Matches:

Match time: 4 quarters of 15:00 minutes

Quarter time break: 2:00 minutes between 1st and 2nd quarters and 3rd and 4th quarters

Half time break: 10:00 minutes between 2nd and 3rd quarters

Penalty corner delay: 40" to 00" countdown for when a PC is awarded (Note: Match clock stopped by Technical Official)

Goal scored delay: 40" to 00" countdown for when a goal is scored (Note: Match clock stopped by Technical Official)

Shoot out: 8:0"countdown to 00" for each shoot–out; must show the time in at least tenths of seconds)

3 Video screen display functions

Purpose	Format	Function
To show Match score (goals)	00 : 00	To count up in single digits for each team from 0 : 0
To show team names	Free text	To display team names above score e.g. ARG NZL etc.
To show match time	MM:SS	To count down from: • 15:00 for each quarter; • 2:00 for quarter and three quarter time • 10:00 for half time; • 8:00" (seconds) for a shoot–out to be performed (showing at least tenths of a second); In the last minute of a Match, it is desirable the clock counts down in seconds and tenths of seconds.
To show Goal / Penalty corner delay	SS	To count down from 40" to 00" (seconds)
To show pre–Match time	MM:SS	To count down from 30:00 to 00:00 (minutes and seconds).
To show actual time	HH:MM	As and when required, or when no other display is in use
To indicate the appropriate quarter of the Match	Q1, Q2, Q3 Q4	
To show status of team video umpire referrals	Red and green dots	To display as green when a team has their referral, or red once a team has lost their referral
To show TX feed	Video	To show live or replay TX from Match
To display graphics		To show other graphics, advertisements, Match information etc. as required
To display free text (desirable but not essential)	Free text	To show team lists, umpires names, flash messages and any other text messages as required before, during and after a Match
To indicate the end of a Match period	Audible signal	To make a loud audible sound (hooter) automatically and instantly when the clock reaches 00:00; the sound is to be short, sharp and loud

Display before a Match

The scoreboard can be used to show video replay, advertisements, graphics etc., but should have a count–down clock running to show minutes left until the teams leave the pitch for the pre–Match protocol (e.g. from 30:00 to 00:00), and desirably, also be able to display each team list (starting line–up and substitutes), team officials (Coach and Manager) and the names of the umpires and technical officials.

The Match clock must have the ability to be set / reset to any minute as required.

Display during a Match

The scoreboard must display the:

- team names,
- the Match score,
- the quarter and the clock in running down mode.

The clock should display period time countdowns as required. The 40 second countdown clock should be shown in addition to the Match time countdown clock, and they should operate independently of each other.

Video replays can be shown as appropriate (e.g. goals, lead up to penalty corners etc.), and other graphics shown at set piece play (e.g. flash messages for a PC, yellow card, or to indicate a goal is scored etc).

Note: there is no need to show substitutions as these occur frequently throughout the Match.

Display during Shoot–Outs

If the Match goes to a shoot–out, the displayed score should return to 0 : 0 and only converted goals should be shown.

A separate graphic should be used which shows 5 circles below each team name with the score at the end. A successful goal should turn the circle green and the score should increase by +1. An unsuccessful attempt (no goal) should turn the circle red and the score should be unchanged. It is necessary to show this graphic more than once if the teams remain equal after the first series of 5.

The scoreboard clock must display a countdown time of 8 seconds with a loud, audible hooter sounding immediately when the time reaches 00". This clock should be located in the same position as the 40 second PC / goal countdown clock.

Display after a Match

The scoreboard should show the final result. It is desirable that the scoreboard also shows the list of goal scorers' names, types of goal (FG, PC, PS) and the minutes when goals were scored.

3   Display operation

The scoreboard should be controlled from the technical official's booth, with the following functions:

Clock: Start, stop, reset, time set functions required.

Audio: Automatic loud audible tone (hooter) when the countdown clock reaches 00:00 during any Match period or shoot–out.

Scoreboard: + and – goals required on each side.

Video Umpire Referrals: To include indication of video umpire referrals per team. This is indicated by a circle beside each team name. The circle remains green to indicate a team is still eligible for a referral, but is shown as red once that team no longer has the opportunity to ask for a video referral.

4   Flash Messages (desirable but not essential)

Ideally scoreboards will enable the following messages to be displayed at specific occasions during a Match:

Message During Regulation Time: • Goal • Penalty Corner • Penalty Stroke	Video Umpire Referral • Goal • No Goal • Penalty Stroke • No Penalty Stroke	Team Referral: • Goal • No Goal • Penalty Corner • No Penalty Corner • Penalty Stroke • No Penalty Stroke • No advice possible
During shoot–outs: • Goal • Save • Miss	Umpire Referral: • Goal • No Goal • Penalty Stroke • No Penalty Stroke • No Shoot–out re–take • Penalty Stroke • No Penalty Stroke • No advice Possible	Team Referral • Goal • No Goal • Shoot–out re–take • No Shoot–out re–take • Penalty Stroke • No Penalty Stroke • No advice possible

All of the above messages can be accompanied by an appropriate sting (music / audio bite); as allowed by the specific competition regulations.

FIH