

Shot Clock Installation and Usage



Installation of Portable Shot Clocks

- Placement (from the 2019-2021 Ringette Canada Rulebook:
 - The display unit shall be mounted behind and above the end boards, and should be no higher than the top of the glass, in line with the free pass dots to the goalkeeper's left.
 - The position of the display units relative to the goal should be identical in each end zone
- Other factors to consider
 - Avoid gates used by players or rink equipment
 - Location of electrical outlets and available extension cords
 - Avoid placing cords across the gate used by the ice resurfacers
 - Avoid running cords at floor level where they may encounter heavy pedestrian traffic or participants in skates
 - Consider any obstructions on the rink glass (advertisements, lettering etc.)
- At some rinks, the assistance of rink staff may be required due to working at heights regulations
- If replacing a malfunctioning installed shot clock, the displays of the malfunctioning clock should be turned off, un-plugged or covered

See instruction sheets below for commonly used models of portable shot clock.

Installed Shot Clocks



Most of the rinks used regularly for Ringette now have permanently installed shot clocks. These may either be tied to the game clock/scoreboard or independent. Independent shot clocks

- are essentially permanently mounted portables
- typically use a wireless remote
- operate exactly the same as a portable of the same model

Shot clocks tied to the scoreboard typically

- Start and stop automatically with the game clock (controlled by the timekeeper).
- Use a wired remote
- Cannot be used to time an intermission or time out as it can only run when the game clock is running

Details of installations vary considerably. A few notes to consider are

- Depending on the model, installed shot clocks are enabled either by plugging the remote into the scoreboard controller (Nevco units), or by an "option" or "setting" on the scoreboard controller (OES units). See the instructions for the controller being used.
- Some installations have a run/hold switch which can hold the shot clock while the game clock is running.
- When the shot clock is supposed to be held (end of a period, during warm up etc), the operator may have to hold the shot clock by continuously pressing reset if there is no hold switch
- Some remotes for Nevco units can be pressed to the left or right. These are usually both set to 30 seconds but could be different. Check both before using.

For shot clocks connected to Nevco scoreboard controllers:

- This shot clock is run by the scoreboard controller. A wired remote must be plugged into the port on the left hand side of the timekeeper's control panel. The wired remote is kept either by the rink crew in the Zamboni garage or in the timekeepers both (I have found it on the floor, at least once). Please ensure that the wired remote is the one with a momentary switch, and not an on-off switch (the latter remote can be used by the timekeeper).
- The wired remote will usually be recognized by the controller when plugged in. Just enter "30" and "yes" when prompted.
- If the wired remote is not recognized by the controller, turn off the scoreboard, turn it back on, enter "no" to the question about starting where it left off and answer the various questions ("yes" to wireless, "yes" to shot clock etc.)
- With this set up, the shot clock will start and stop with the scoreboard. The s/c operator only needs to worry about resets.
- To disable the shot clock, turn off the scoreboard, un-plug the shot clock remote and restart the unit (full re-initialization).

OES Stand-Alone Shot Clocks



This model of clock is installed at several arenas in the Ottawa area and is also used as a portable.

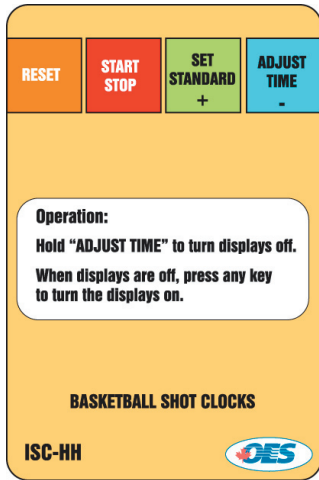
Operation:

- Orange Button: Reset. Pressing this button will reset the clock to 30 seconds. If the clock is stopped when reset, it will remain stopped displaying 30. If running when reset, it will reset to 30 seconds and keep running.
- Red Button: Start/Stop. Pressing once will start the clock if stopped, and stop the clock if running.
- Green Button: This is used to program the unit and should not be touched.
- Blue Button: Press and hold this button for 2 seconds to blank the displays. This should be done at the end of each period when there is less time remaining in the period than on the shot clock, and after each game as these units do not shut themselves down after a period of inactivity

Notes

- These units are known for occasionally missing resets from the remote. The shot clock operator should observe the clocks to ensure that they actually did reset. Avoid pressing harder on the button as that will only damage the remote.

ISC-HH Intelligent Controller Basketball Shot Clock Instructions



ISC-HH Operation

The ISC-HH is an independent controller. It is not tied into any OES controller or system - it is a stand alone. The shot clocks are not linked to any of the functions of the game timer (ie - Time left of game), and runs independently.

The ISC-HH is battery operated. A battery should provide several games of operation. When the shot clocks displays start ignoring ISC-HH commands, it is time to replace the battery. If the ISC-HH is not used for several days, removing the battery will extend its life.

Shot Clock Displays

Because the ISC-HH does not have a display, the shot clock displays will offer the operator visuals to ensure proper operation. The display has two digits and two indicator lights to the right of the digits. When the displays are on, the indicator lights illuminate as follows:

- When neither of the indicator lights are illuminated, the shot clock is stopped and in timer mode.
- When only the lower indicator light is illuminated, the shot clock timer is on.
- When only the upper indicator light is illuminated, the shot clock timer is stopped and in adjust current time mode.
- When both the indicator lights are illuminated, the shot clock timer is stopped and in adjust standard time mode. Standard time is that in which the shot clock is reset to.

Switching Shot Clocks Displays OFF/ON

- When the shot clock displays are off, press any key to turn them on. Units will turn on with the shot clock time set to standard time and stopped.
- When the shot clock displays are on, press and hold the "ADJUST TIME" key until the display blanks.

Shot Clock Operation

- To start/stop shot clock timer: Press the "START STOP" key. The lower indicator light will illuminate when the timer is on.
- To reset the shot clock time to the standard time: Press the "RESET" button.
- To Keep the Shot Clock Time at standard time, either:
 - Stop the timer, per instruction above or,
 - Press and hold the "RESET" key.

Note: To save battery life in the ISC-HH, stopping the timer is the preferred method.

- To adjust The Standard Shot Clock Time (Time Shot Clock is reset to)
 - Ensure timer is stopped.
 - Press the "SET STANDARD" key. Both indicator lights will illuminate.
 - Press "+" (Same key as "SET STANDARD" key) or "-" (Same key as "ADJUST TIME"). Each key press will increment / decrement the standard time by one. The standard time can be adjusted from 1 to 99.
 - When finished adjusting the standard time, press either "RESET" or "START STOP" key. The shot clock time will change back as it was before entering set standard mode.
- To adjust current running time:
 - Ensure timer is stopped.
 - Press the "ADJUST TIME" key. The top indicator light will illuminate.
 - Press "+" (Same key as "SET STANDARD" key) or "-" (Same key as "ADJUST TIME"). Each key press will increment/decrement the time by one. The current time can be set from 1 up to the standard time.
 - When finished adjusting time, press either "RESET" or "START STOP" key.

Neptune Dynamics Portable Shot Clocks



Most of the portables in use in Eastern Region are of this type although the style of horn can vary. They are typically provided with a white hard-sided carrying case which has room for the 2 clocks, horns, power supplies, extension cords and remote.

Assembly/Setup

- This unit has built-in hooks to hang it on the arena glass. When in the case, these are pinned together with the units face-to-face.
- The horns are mounted on a bracket which should be attached to the unit using a pin before hanging the unit on the glass
 - Use caution to avoid pinching the horn wires in the bracket (this can easily happen) as they can easily be damaged.
 - The horn should be plugged into the unit (see photo above)
- Once the unit is in position on the glass, connect the power supply and plug in.

Operation

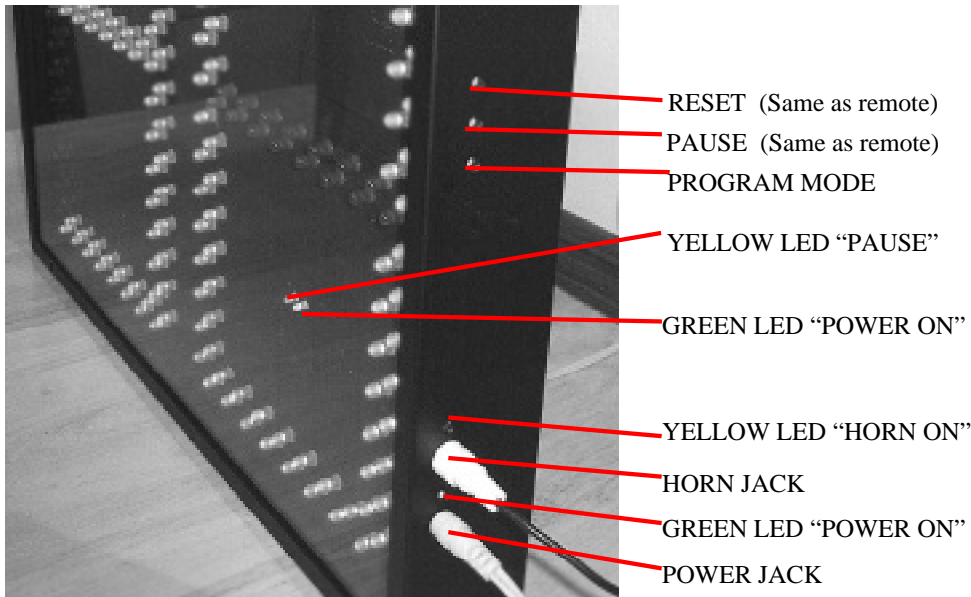
- Red Button: Start/Stop. Pressing once will start the clock if stopped, and stop the clock if running.
- Grey Button: Reset. Pressing this button will reset the clock to 30 seconds AND start it running. To reset to 30 seconds and hold, press the Grey button, followed by the Red.
- Pressing a button twice rapidly can confuse these units. If this occurs, wait a second or two and reset.
- When changing the battery in the remote, be careful not to accidentally change the slide-switches used to set the remote code.

Notes

- These clocks are known for going out of sync (when the signal from the remote reaches only one of the two displays). To minimize this, the remote should be held away from the operators body and pointed toward centre ice so that there is a clear path for the signal to both displays.
- If replacing batteries in a wireless remote, be careful not to disturb any configuration switches that may be present (or the remote will no longer communicate correctly).

NDL

PORTABLE SPORTS SHOT CLOCK



Indicator LEDs identify clock status. The green LEDs show the clock display unit has power. The yellow LED on the front shows "pause". The yellow LED on right side shows "Horn On".

The display is designed to blank about 4 minutes after the last button press. The time displayed on the clock is not cleared. When the pause button is pressed again, the clock will re-illuminate and continue counting.

Timing range can be pre-set from 0-99 seconds. Once set, the range will remain at that value until the range is changed. To change the range you will need to use the 3 holes on the side. Use a pen to press the buttons. To enter "Program Mode", press and hold the bottom button and then apply power by plugging in the power supply. Hold until digits flash. Use the middle button to advance to desired time. Then press the top button. The clock is now programmed. The clock will re-start and function at this new range. (Note: Clocks must be programmed separately.)

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The Neptune Dynamics Ltd. Portable Sports Shot Clock is designed for simple assembly and use. The clocks have convenient brackets for hanging which also serve as the siren mounts and for latching the two clocks together for safe transportation and storage.

The battery-powered remote control provides a convenient method for the shot clock keeper to pause and reset the clocks. As radio waves are blocked by metal objects, the hand-held remote control should be kept in an open area approximately equal distances from each clock. Button presses should be deliberate, not quick pecks at the remote. **The 9-volt battery should be fresh.** Weak batteries may cause poor synchronization.

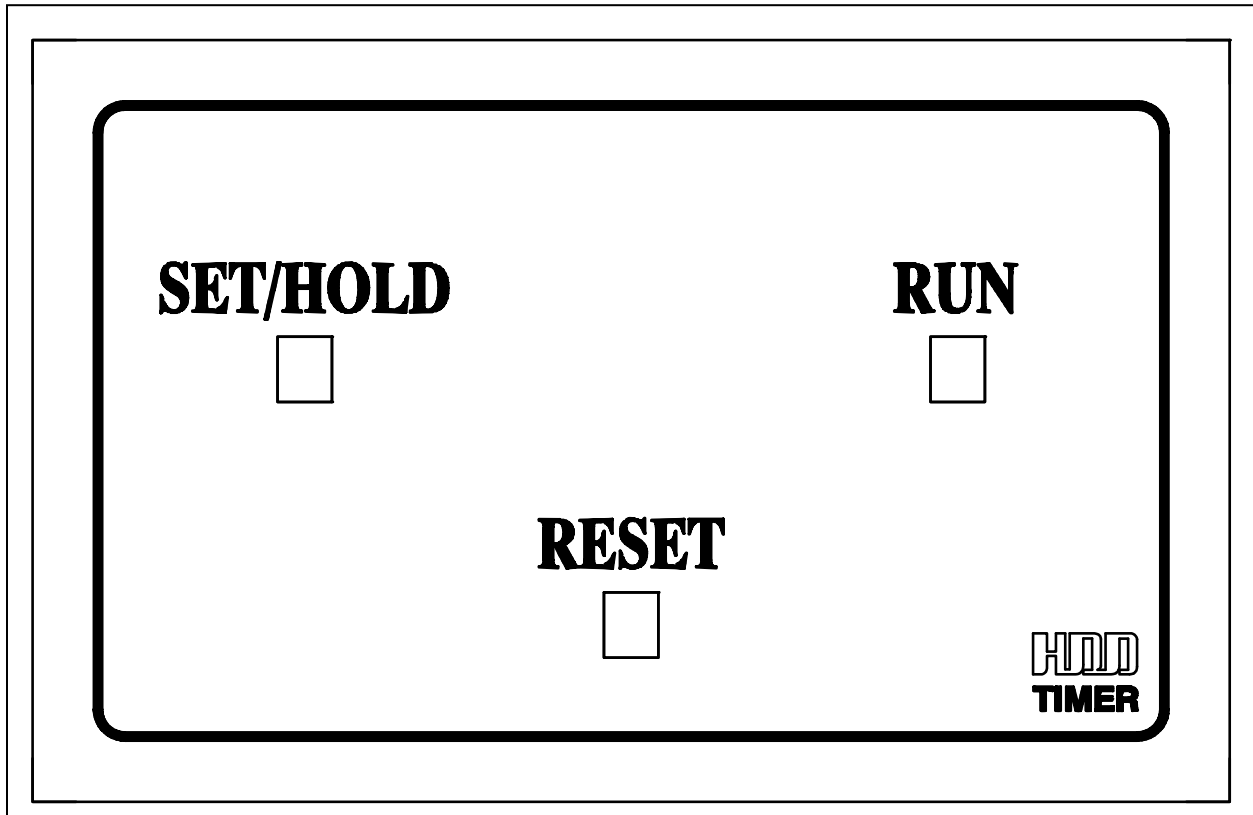
The mounting brackets on the top of the clock provide a place to attach the sirens. The quick release pin is used to anchor the mount to the bracket. These same pins are used to hold the two clocks together face to face when not in use. The pins should be installed from the outside edge of the clock facing inwards. The sirens do not need to be removed from the clocks for storage.

Connecting the clock is a simple matter of connecting the siren and the power cords. The siren cord plugs into the upper jack on the right hand side of the clock. Note that this plug is a 12 VDC power source while the horn is on. **DO NOT plug speaker equipment into this socket.** The power cord plugs into the lower jack on the right side of the clock and provides 12 Volts DC. (The center pin is positive.)

Made in Canada

No other known installations in the Ottawa area

Operations Guide



Basic Operation

RUN - Starts the timer

SET/HOLD - Stops the timer

RESET - Resets and stops the timer

Adjusting the Reset Value

1. Press **RESET** until the sign blanks, there should be a beep
2. Press and hold **RUN** to adjust the right digit (1's)
3. Press and hold **SET/HOLD** to adjust the left digit (10's)
4. When the desired reset value is displayed, press **RESET** until a beep is heard. The reset value should now be changed.

Displaying a Test Pattern

1. Push and hold **RUN** while turning on the power
2. Keep **RUN** pressed for a few seconds, until the test pattern appears
3. The test pattern consists of digits counting up in one second intervals
4. Press **RESET** to end the test pattern