Scoreboard Operator's Instructions

MPC Control

Model Code # 008-3261

Overlay K2-28



Some features on the keyboard overlay may not be included on the particular model being operated.

Instructions for models: 4407-Hockey 4410-Hockey 4411-Hockey 4430-Hockey 4440-Hockey 4445-Hockey 4455-Hockey 4455-Hockey 4460-Hockey 4465-Shots on Goal



Instructions for models: 4507-Hockey 4510-Hockey 4510-D-Hockey 4511-D-Hockey 4530-Hockey 4550-Hockey 4550-D-Hockey 4555-Hockey 4555-D-Hockey 4560-Hockey 4565-Shots on Goal

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Introduction

Welcome to the new MPC control now operating over 500 Nevco scoreboard model variations. It's loaded with advanced operating features that will simplify and enhance the operation of your scoreboard system. Some of the features include:

- New, large, bright and easy to read dot matrix LED display.
- Lithium battery powered memory will maintain all the scoreboard information when turned off, unplugged or after a power failure, even if you only use the control once a year. Under normal conditions it will last in excess of 10 years, so you won't have to worry about replacing it. We recommend storing the control in a cool, dry place because extreme heat will shorten the life of the battery. Even if the battery is no longer functional, you can still operate the scoreboard(s); however the control no longer remembers or stores programs.
- Four user programmable automatic start up programs. This feature allows you to set the control now for future basketball, football, track, volleyball, wrestling, baseball, hockey games or any combination. Simply change the overlay to the sport you desire and select the correct single digit program number and you are ready to play.
- An interval timer and horn (primarily used in junior hockey).
- An automatic time out timer with optional warning horn and an option to display it on the scoreboard timer.
- Tenth second displayed on the scoreboard timer during the last minute when counting down.
- An alternate time on/off switch on the MPC. This switch is provided in case your remote TCS-1 hand-held switch is lost, stolen or broken. When the TCS-1 switch is plugged into the control it disables the alternate time on/off switch.
- Set the time of day on the scoreboard(s) clock, by using the Aux Timer feature located in the Clock Modes, it will keep accurate time even after disconnecting the control.

Overlay K2-28

	HORNMISC. SHOTCLOCK MODESSETTIMEPNLTY OFFPNLTY INSERTTIMETIMERPNLTY OFFINSERTTIMEHOME GOALHOME SHOTSPNLTY CLEARHOME PNLTYGUEST GOALGUEST SHOTSPNLTY PNLTYGUEST PNLTYGUEST GOALGUEST PNLTYGUEST PNLTYGUEST GOALGUEST PNLTYGUEST PNLTY				
Enter Model Code	Start Up Procedure The traveling display prompts you to ENTER A MODEL CODE, START WHERE TURNED OFF LAST or USE AN AUTO START PROGRAM. To enter a model code, use the example below. If a power failure happens during a game, answer YES to START WHERE TURNED OFF LAST. If someone programmed the control, select the program number from the Auto Start Program Chart. EXAMPLE: Image: 0 Image:				
	The display asks if you want to use Shot Clocks. If not I NO and go to the Penalty Time Out question. If you do I YES The display will show: SHOT TIME ##				
	Different sports use various times for Shot Time. Enter the Shot Time you use. The maximum is 69 seconds. EXAMPLE: 1 C 4 1 C 5 Display now shows: O.B. TIME ## This prompts you to enter the Out Of Bounds Time which is usually 5 to 10 seconds.				
Set Out Of Bounds Time	Always enter two digits. EXAMPLE: I C O C 5 If there is no Out Of Bounds Time rule, enter the same time as the Shot Time so either O.B. or S.T. sets the correct time. The display pow asks: IUSE DENALTY TIME OUT? PDESS (YES) OP (NO)				
Penalty Time Out The display now asks: USE PENALTY TIME OUT? PRESS 'YES' If you press YES, the PNLTY ON OFF key will allow you to stop the penalty without stopping the main time. Pressing this key will alternately turn the perimers on and off. If you press NO, the penalty timers will only start and sto main timer. The display now shows: 0:00.0 45 DN					
	If you answered NO to the shot clock question the display will show: 0:00.0 DN The shot clock operation will be explained later on. For now, don't worry about it. Disconnect the shot clock control cable from the back of the MPC control. This prevents the shot clock horns from blowing while you become familiar with the main timer.				

	HORN SHOT CLOCK SET 7 8 9 YES					
	GOAL SHOTS CLEAR PNLTY 1 2 3 SCORE					
	GUEST GUEST PNLTY GUEST EDIT PNLTY BLANK O GUEST SCORE					
Main Time	To set the clock, you must start with the SET key then the TIME key. Now enter the time (including the colon) you want. If the display is correct, press the YES key. If not correct, press NO and start over with the SET key.					
	EXAMPLE: B SET B TIME					
	Display now shows: TIME					
	₽\$ 8 P\$:					
	Display now shows: TIME 8:					
Period	Display now shows: PERIOD 0					
	Now you must enter the PERIOD . (i.e. 1)					
	Display now shows: 8:00.0 DN					
	If shot clocks are used the display shows: 8:00.0 45 DN					
	As you see by the example, you don't enter zeros that are not significant. In fact, to set the time to zero, all you have to enter is the colon.					
	Now plug the remote hand-held "time switch" into the outlet on either side of the control or use the (ALT TIME SW) located on the control next to the display. Turn "ON" and away it goes					
	NOTE: If the remote hand-held switch is plugged into the control it will disable the (ALT TIME SW) on the control.					
Tenths of Second	If time is set at ten minutes or more you will notice the control displays the tenths of second when it switches from 10:00 to 9:59.9 even though it will not display on the scoreboard until the last minute. You can even set the tenths of second. Try this example:					
	嘧 SET 喀 TIME now 喀 8 喀:喀 0 喀 0 喀 5 喀 YES					
	Display now shows: PERIOD 1					
	Now you must enter the PERIOD . (i.e. 1)					
	Display now shows: 8:00.5 DN					
Entry Error	If shot clocks are used the display shows: 8:00.5 45 DN					
-	If an unacceptable entry is made, the display will show: ENTRY ERROR					
	This will remain on for about 2 seconds and then return to the TIME display. While the ENTRY ERROR display is present the control will not accept any entries.					
	If you forgot the colon when setting the time the display will show: NO COLON					
	You can return to the time display any time except while ENTRY ERROR is displayed by pressing the TIME key.					

Overlay K2-28 Operator's Instructions MISC. SHOT TIME CLOCK MODES 9 7 8 YES HORN SET TIME PNLT PNLTY 4 5 6 NO TIME ON OFF TIMER HOME HOME PNI TY HOME HOME 1 2 3 GOAL SHOTS CLEAR PNLTY SCORE GUEST GUEST PNLTY GUEST PNLTY GUEST BLANK 0 GOAL SHOTS EDIT The horn sounds automatically when the clock reaches zero. It sounds a minimum of 2 Second Horn 2 seconds. Turning the clock to time "OFF" stops the horn after the 2 second minimum. The control "beeper" also sounds. Sometimes the automatic horn is not desirable. Automatic Horn B SET B HORN Try this: Display now shows: **AUTO HORN? VES** or **VES** NO If you answered **NO** the horn will not sound when the time reaches zero. If you change your mind, do it again and answer **YES**. This can be done at any time. The control "beeper" will always sound. Score Entries **Check Point** If you followed the procedures to this point, the scoreboard should be blank except for the timer and period. If not, go back through and we'll wait until you get back to this point. HOME Ok, now 🞼 Adding to Score SCORE The display now shows: **HOME** + Now R 2 The display now shows: **HOME** +2 The scoreboard displays a "2" in the HOME SCORE. Repeat this a few times. It can add any number for you from 1 to 9. But, what if you add too much? Sorry, you **Correcting Score** can't subtract. Use the SET key. SET then B HOME SCORE Now enter any amount you wish. Naturally, **GUEST SCORE** also works this way. Again, to return to the **TIME** display, press the **TIME** key. The HOME and GUEST SHOTS operate the same as HOME and GUEST SCORE. Shots on Goal The **HOME** and **GUEST GOAL** are alternate on off. The **Horn** is just as simple.

	HORN SHOT TIME CLOCK SET 789 YES			
	TIME PNLTY PNLTY TIME 456 NO			
	HOME HOME PNLTY HOME CLEAR PNLTY 1 2 3 HOME SCORE			
	GUEST GUEST PNLTY GUEST PNLTY BUILTY BLANK O GUEST SCORE			
	Shot Clock Operation			
	First, set some time on the main clock. If you answered YES to the SHOT CLOCK question:			
	The display will look something like this: 8:00.0 45 DN			
	If you answered NO to the SHOT CLOCK question, turn the control off and follow the startup procedure for using shot clocks.			
SCS-4 Hand-Held Switch	The top "O.B S.T." switch on the SCS-4 hand-held switch is center off, two position momentary. Pressing the right side of the switch (S.T.) causes the shot clocks to set the shot time (i.e. 45 seconds). Pressing the left side of the switch (O.B.) sets the shot clocks to out of bounds time (i.e. 05 seconds). Time does not start counting down until the operator releases the switch and the game timer is on.			
	Depressing the "HOLD" switch causes the shot time to stop counting while holding the switch. Some rules of play require the suspension of shot time under certain circumstances. The control display shows parentheses around the shot time when the "HOLD" switch is pressed.			
Blowing Horn	When shot time reaches zero, the shot clock horns sound. Turning the main time off stops the shot clock horns after the 2 second minimum. Resetting the shot clocks stops the horns immediately.			
Out of Bounds Time	The "O.B." switch operates like the "S.T." switch except it will cause the shot clock to go to the "OUT OF BOUNDS TIME" you set after the "SHOT TIME" . If there is no "OUT OF BOUNDS TIME" rule, use the same time as the SHOT TIME . Then it won't matter which switch you use.			
Correcting Shot	To correct the shot time, use the main control. Try this:			
Time	MISC. SET S SHOT			
	TIME			
	The display will show: SHOT TIME ##			
	Enter any 2 digit number up to 69. If you want to turn the shot clocks off, press BLANK instead of a number. The shot clocks will blank and the shot clock time will disappear from the control display. Pressing either "S.T." or "O.B." returns the shot clocks to normal operation. Setting MISC. SHOT TIME will not change the programming of the SCS-4 switch.			

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	HORN MISC. SHOT TIME CLOCK MODES SET 7 8 9 YES					
	TIME PNLTY ON TIME PNLTY TIME 4 5 6 NO					
	HOME HOME PNLTY HOME CLEAR PNLTY 1 2 3 HOME SCORE					
	GUEST GUEST PNLTY GUEST PNLTY BLANK O GUEST SCORE					
	Penalty Timer Operation					
Twenty Six Pen- alties	The control is capable of handling up to 26 players per team and up to 5 penalties for each one of the 26 players. When a penalty time runs out it will be removed from the scoreboard. If another penalty is to be served it will automatically be placed on the scoreboard and begin counting. The penalties run off in the order they were entered. If you try to enter more than 26 players per team or more than 5 penalties per player, the display on the control will show -OUT OF MEM- .					
Set Penalty Time	To set a penalty time: SET then Now enter the time the same as when you set the main time. You will then be prompted to enter the player number to be associated with that penalty. Try this: SET HOME HOME THE THE SET HOME THE THE AND THE THE SET FOR THE THE POLLTY					
Player Number	The display now shows: PLAYER Now 🖙 2 then 🖙 3 The display will look something like this: 8:00.0 45 DN HOME Now 🖙 PNLTY The display now shows: H1 2:00 23					
	This means that HOME penalty #1 is set at 2:00 for player 23. Set at least five penalty times and watch them as they count down. When penalties one and two run out, penalties three and four move up and then penalty five will move up when either penalty three or four runs out.					
Editing Penalties	If you wish to edit the 2:00 penalty time for player 23, press the HOME PNLTY key until the penalty for player 23 is displayed on the control. PNLTY Now PLTY EDIT the display shows: EDIT (Y - N) This gives you one chance to change your mind. If you pressed this key by accident then simply press NO and nothing will happen. If you do want to edit that penalty time press YES and enter the time (example 1:00) you wish and press YES. The display now shows: H1 1:00 23					
Inserting a Pen- alty	The PNLTY INSERT key is helpful when you missed a player when entering multiple penalties. Press the HOME or GUEST PNLTY key until you display the position you want to insert the player. PNLTY Now INSERT the display shows: INSERT (Y - N)					

	HORN SHOT CLOCK MODES SET 789 YES					
	TIME PNLTY OUT ON INSERT TIME 456 NO					
	HOME HOME PNLTY HOME CLEAR PNLTY 1 2 3 HOME SCORE					
	GUEST GUEST PNLTY GUEST PNLTY BLANK O GUEST SCORE					
Inserting a Penalty (cont.)	This gives you one chance to change your mind. If you pressed this key accidentally then simply press NO and nothing will happen. If you do want to insert a penalty, press YES and enter the time (example 1:00) you wish and press YES .					
	The display now shows: PLAYER					
	Enter the player number you missed. The player you entered is now in that position and all other penalties are moved down.					
Clearing a Penalty	If you wish to remove a penalty time from the system, display it on the control display and press PNLTY CLEAR .					
	The display now shows: CLEAR (Y - N)					
	This gives you one chance to change your mind. If you pressed this key accidentally then simply press NO and nothing will happen. If you do want to clear that penalty time press YES and it's gone. If another penalty is set to run after the one you just cleared it will automatically take its place.					
Penalty Time Out	If you answered YES to the penalty time out question after entering the model code the PNLTY ON OFF key will allow you to stop the penalty timers without stopping the main time. Pressing this key will alternately turn the penalty timers on and off.					
Time Out Timer						
Two Types	The MPC control has two ways of using the time out timer. One automatically starts when the scoreboard is switched to time "OFF" . The other is an automatic time out timer, with an optional warning horn you can set using the CLOCK MODES features. The automatic time out timer can be displayed on the scoreboard clock, if you desire. Let's play with the different options.					
	Start the clock running then turn it to time off. TIME OUT					
	TIMER Now switch to time "ON".					
Reset	As you just found out the display returns to the main timer when the time is started again. If you press the TIME OUT TIMER key while the time is "ON" nothing will happen. If you are in time "OFF" and another time out is called, how do you get the time out timer back to zero with the time is "ON" ? Use the SET key.					
	SET then B OUT					
	TIMER The display resets to 00:00 and starts counting up again					
Automatic Time Out Timer	Now, let's try the automatic time out timer.					

	OUT ON FF INSERT TIME 456 NO					
	HOME HOME PNLTY HOME CLEAR PNLTY 1 2 3 HOME SCORE					
	GUEST GUEST PNLTY GUEST PNLTY BNLTY BLANK O GUEST SCORE					
	SET then B HODEO					
	Answer NO until the traveling display shows:					
	USE AUTOMATIC TIME OUT HORN? PRESS 'YES' OR 'NO'					
	略YES Then 略1略0略0					
Warning Horn	The traveling display now shows:					
5	USE TIME OUT WARNING HORN? PRESS 'YES' OR 'NO'					
	Let's VES					
	The traveling display now shows: WARNING SS					
	You may set any time up to 59 seconds. This causes the horn to sound before the time out is actually over.					
	EXAMPLE: 🖙 1 🖙 5					
Time Out Timer On	Timer On The traveling display now shows:					
Scoreboard	DISPLAY TIME OUT ON SCOREBOARD? PRESS 'YES' OR 'NO'					
	It's your option whether or not to display it on the scoreboard.					
	VES then VES TIME					
	Start the clock running then turn it to time off.					
	TIMER					
Horn Blows	The scoreboard clock is now a time out timer. When time out timer reaches 0:15 seconds the scoreboard horn sounds for 1 1/2 seconds, then again when the time					
	reaches 00:00 . (The scoreboard horn sounds even if you chose not to display the time out timer on the scoreboard clock.) The main time outematically reanness are					
	the scoreboard clock. The control's display continues to show the time out timer					
	starting at 00:00 and counting up.					
Shortening Time Out	Pressing the TIME key while the automatic time out timer is running will shorten the time to the WARNING HORN (i.e. 15 seconds). Turning the main timer on returns the main time to the control display and the scoreboard clock.					
Resetting	If you make an error when entering any of the features, don't worry, you can reset all of these features by pressing SET then CLOCK MODES .					
Operating Other Scoreboards	If you wish to operate this scoreboard for Basketball, other overlays are available for this purpose. In fact, this control (with proper overlay and model code) operates all the scoreboards in the current Nevco line.					
Alt. Model Code	If you choose not to display the tenth second on the scoreboard clock when the time					
	reaches 1:00 use the following model code 009-3261 .					

Clock Modes		
Features	Description	
AUTOMATIC TIME OUT TIMER HORN SET WARNING HORN	Program the amount of time out time allowed. Warns you when there are only a few more seconds left on a time out.	
DISPLAY TIME OUT ON SCOREBOARD	The Automatic Time Out Timer can be displayed on the score- board's main timer.	
SET AUX TIMER CHANGE DIRECTION OF MAIN CLOCK SWITCH TO BRIGHT OR DIM SET INTERVAL TIMER	Can be used as a second timer or a time of day clock. Changes the clock direction to count up or down. Allows you to brighten or dim the scoreboard lights. Lets you set the scoreboard horn to blow every 1 to 9 minutes. This is primarily used by junior hockey.	
DISPLAY TIME OF DAY ON MAIN TIMER	This allows the option of using the main timer for a 24 hour clock. You can use this for many things.	
CLOCK TO STOP AT SPECIFIED TIME	When clock is in up count mode you can specify a time at which the clock will stop and blow the horn.	

Clock modes are not critical to the normal operation of the scoreboard but control extra features the MPC has to offer. After the model code is entered, the microprocessor sets the clock to the down count mode unless the clock is used for race timing such as track or swimming. If the scoreboard you are operating is for outdoor use, the control prompted you for bright or dim display after you entered the model code. All indoor scoreboards are set to bright automatically. Pressing the **CLOCK MODES** key advises you of current clock modes. Try this before we go on.

It told you the **PERIOD** #, display is either **BRIGHT** or **DIM**, the **AUX TIMER** is off, **AUTO HORN IS ON** and the current **MODEL CODE** # being used. **AUX** is short for "**auxiliary**" and will be discussed later.

For now try this: IS SET IS

CLOCK	
MODES	

The display begins asking a series of questions. It asks if you want to switch to **DIM** or **BRIGHT**. If you press **YES** the operation will be performed. If you press **NO** the display will ask another question until it runs out of things to ask. If you want to change the direction the clock counts for a special application you may do this by setting the **CLOCK MODES**.

Now, more about the **"AUX TIMER"**. An auxiliary timer is provided for your use in any way you wish. In some models this timer displays on the scoreboard. It can be used for time of day or minutes and seconds counting up or hours, minutes and seconds counting down. When displaying minutes and seconds the timer may run continuously or start and stop with the remote hand-held time switch or the alternate time switch.

Once one of the modes has been selected it cannot be changed unless you turn the **AUX TIMER** off and turn it back on again. When the **AUX TIMER** is on, the order in which the control asks questions when setting **CLOCK MODES** will be changed to ask questions about the **AUX TIMER** first.

Let's talk about the **TIME OF DAY** clock. You can use this before the game starts, during half time or any time you wish when the game time is not required or running. Go ahead and set the time of day on the Aux Timer, answer **YES** to **DISPLAY TIME OF DAY ON MAIN TIMER**, now shut the control off and disconnect it. The **TIME OF DAY** remains on the scoreboard clock keeping accurate time until the control is plugged back in and set up for the next game.

Rather than go into great detail about setting the **AUX TIMER** we encourage you to experiment with the different modes so you are familiar with all of them. The control will prompt you with questions as you proceed.

Once you have the **AUX TIMER** on, it displays alternately with the main timer by pressing the **TIME** key. You will think of many uses for the **AUX TIMER**. One of these may be to set the **AUX TIMER** to count up and stop with the main timer at the beginning of a playing period. By this method the time **"into"** the game of notable events is determined by looking at the **AUX TIMER**.

Auto Start Programs

There are many features available with your MPC control which require setup by the operator. To simplify this procedure you can store four different automatic start programs. The MPC stores this information by recording each key pressed.

A special model code is used to prepare your MPC control for storing an auto start program. When you turn the MPC control on, the traveling display may show:

START WHERE TURNED OFF LAST? PRESS 'YES' OR 'NO'

If above display appears 😰 NO

If an auto start program was stored previously the traveling display will show:

USE AN AUTO START PROGRAM? PRESS 'YES' OR 'NO'

If above display appears **NO** The display now prompts you to enter a model code. Enter the following model code.

BB	0 🖙 1	I 📭 1	rð 1	B 1	B
-	-				

The display now shows: **PROGRAM** #

The MPC control has memory to hold four (#1 - #4) different auto start programs. This means you can store information that automatically sets up your scoreboard(s) for four different circumstances. Careful, if you pick a program number that was previously stored, this new one will take its place.

Let's try one. 😰 1

The display again asks you to enter a model code. This time enter the model code for the particular scoreboard you wish to setup. Setup all information you normally would, including all the **CLOCK MODES** options you desire. The control will remember every key you pressed except the **ENTRY ERROR** message that appears on the display when you press the wrong key. The memory will hold 250 key strokes in each of the four possible programs. When the setup is complete, **turn the control off**.

The key sequence has been saved in memory under the **PROGRAM** # you selected. Don't forget the program # you use for each setup.

When you turn the MPC control on, the traveling display will show:

USE AN AUTO START PROGRAM? PRESS 'YES' OR 'NO'

Reg YES

The display again shows: **PROGRAM** #

rs 1

The control remembered everything you entered for **PROGRAM # 1** and automatically prepared the scoreboard for the game.

Hints:

If you use the aux timer for **TIME OF DAY** you will want your auto start program to end at the point where the time of day is to be entered. **CLOCK MODES** features do not have to be selected in the order they appear. Save the aux timer for last.

If you are in doubt about what the auto start program did, press the **CLOCK MODES** key. The traveling display advises you of the model code and other information about the scoreboard set up.

If you do not want some operators of the scoreboard to tamper with the auto start programs don't tell them about this model code.

To completely erase an auto start program, follow the above procedures for making an auto start program. After entering the program number turn the MPC control off.

A chart is provided on the next page for you to write a description of the four different programs for later reference. You may wish to make a copy of the chart in case you change your mind at a later date.

Five (5) Year Guarantee

Nevco scoreboards are guaranteed for a period of five (5) years from the date of invoice against defects in workmanship or material and will be replaced or repaired without cost to the owner provided the equipment or parts (which includes LED segments) are returned postage-paid to the Nevco factory. Shipping back to the owner will be surface postage prepaid except if air or special method of return is specified, then shipping will be freight collect. Lamp bulbs are excluded from this guarantee. No charges for time or material used by others in making repairs or corrections will be paid by Nevco Scoreboard Company. Guarantee void if: any alteration or service, other than unplugging modules or controls, is performed without Nevco factory authorization; or if the equipment shall have been connected to incorrect power, or is improperly grounded or improperly installed. Equipment which is subjected to accident, neglect, abuse, misuse or other natural disasters, including but not limited to: fire, wind, lightning, flood is not covered by this guarantee.

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Auto Start Program Chart

Program # 1 Model Code

Program # 2 Model Code

Program # 3 Model Code

Program # 4 Model Code

REQUEST FOR SERVICE		PARIS
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Scoreboard Serial #			
Service: Module(s) Serial #			
Service: Control(s) Serial #			
Person to Contact: Phone #			
Comments:			
Parts Request			
QuantityPart No.Description			
1			
2			
3			
4			
5			
Bill To: Order #			
P.O. Box #			
Street			
CityZip Code			
Return To:			
Street			
CityStateZip Code			
Ship Via			
Make a copy of this form to order parts needed and / or to return with item to be serviced.			

NOTES