# Scoreboard Operator's Instructions MPCX2 Segment Timer Control





**Since 1934** 

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Rev: 8/27/2015 135-0249

# **These Instructions are for the Following Models:**

LED models:			Incandesc	ent models:	
27xx 26xx 25xx 4755 4555-D 1520 1525 1515 1620 1625 1615 1632 SEG-14 SEG-18	9505 9510 9515 9520 9605 9610 9620 9710 9715 SCD-5 SCD-T5 SCD-T7 DGT-6 DGT-6	3500 3502 3504 3514 3515 3516 3520 3525 3534 3550 3555 36xx	7504 7505 7516 7520 7524 7525 7530 76xx 86xx SSC-T5/T9 56xx 200 230  me features may not be avaion some models.	24xx 3020 3400 3402 3404 3414 3415 3416 3425 3434 3455	9405 9410 7404 7405 7416 7424 7425 7430 SCD-4 DGT-2 S60 1415 1020 1025
		May not be co	mpatible with certain older sco	preboards	

# **Thank You**

# Thank You for choosing NEVCO. We appreciate your business.

The following instructions will help you become familiar with the operation and features of the scoreboard system.

Please take a few minutes to study this manual, and to practice with the control. If you ever have any questions or comments, please call or email us.

#### **NEVCO GUARANTEE**

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Scroll forward and backwards through segments Saves changes to segments when editing Skips through segments when running

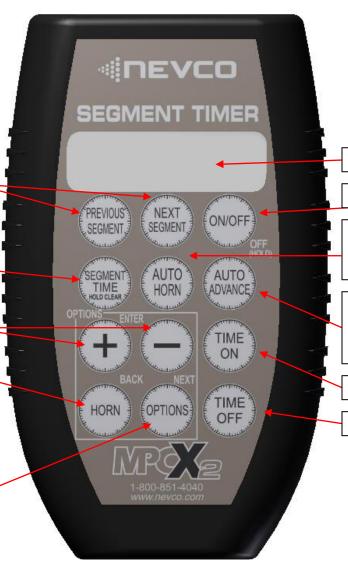
SEGMENT TIME, press once to change minutes, press twice to change seconds. Hold to clear segment.

Add to or Subtract from the selected feature / also used to select options

HORN KEY, causes immediate manual sounding of the horn.

#### OPTIONS key

Allows you to:
Insert a Segment
Set Brightness of Scoreboard
Check Battery Level
Check Signal Strength
Link Control to Receiver Network
Select Scoreboard Model Type



LCD Display (16 characters x 2 lines)

Power ON / OFF Switch

Toggles the Auto Horn setting for the current segment. When enabled the horn will sound when a segment completes.

Toggles the Auto Advance setting for the current segment. Auto Advance is where the segment timer will start counting down the next segment when the current one completes.

TIME ON

TIME OFF

MPCX2 Segment Timer CONTROL (front view)



MPCX2 CONTROL (rear view)



MPCX2 Receiver for use with outdoor x6xx and indoor x7xx scoreboards.



MPCX2 Receiver for use with scoreboards that pre-date x6xx outdoor and x7xx indoor scoreboards. (Boards that have coax input only)

**NOTE:** This version can also be used in addition (but not simultaneous operation) to a W6 system for dual operation by connecting the W6 receiver or wired coax of the MPC-5/6 connection to the coax input of the X2 receiver.

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#### **SEGMENT TIMER**

#### Introduction

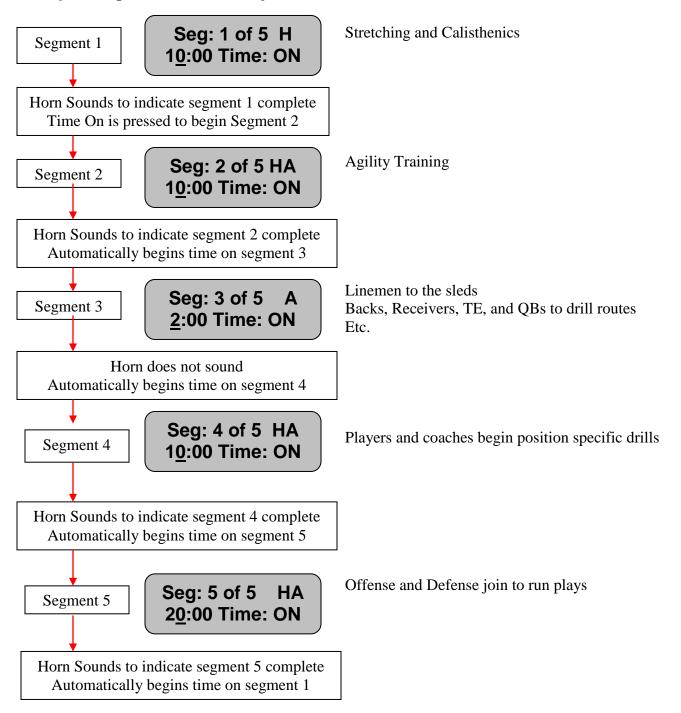
A segment timer is used for pacing organized practices. Typically, a segment consists of a practice event (playbook time, running drills, breaks, etc) that is run for a set period of time. Once the time has expired, a new segment is entered and the drill changes. The segment timer will count down from the programmed segment time to zero. The Segment timer control has a maximum of 40 segments.

The MPCX2 Segment Timer Control controls the Portable Segment Timer and compatible Nevco scoreboards. The MPCX2 Segment Timer Control can also be used to run segments on a compatible Nevco scoreboard. The segment number displays in the "Home Score" position and the time displays in the main time position.

# Display



# **Example Segment Timer Project**



# **MODEL TYPE**

The Scoreboard settings on the segment timer change the MPCX2 to be compatible to different (compatible) Nevco scoreboard types. There are two settings (Type E and Type F) that are specifically for the segment timer. These two change the display options for the segment timer.

# Model Type Compatibility

#### **Indoor**

Scoreboard Model
Type A (+)

For Models 27xx, 26xx, 25xx, SEG-14, SEG-18, 9510, 200, 230, SCD-T7, SCD-7, SCD-T5, SCD-5, SCD-4, 9515, S60-LED, S60, 4755, 4555-D, 9710, 24xx, 9410,

#### 3000 Series

Scoreboard Model
Type B (+)

For models 3500, 3502, 3504, 3514, 3515, 3516, 3520, 3525, 3534, 3550, 9505, DGT-5, 9405, 3020, 3400, 3402, 3414, 3415, 3416, 3425, 3434, 3455, and 9515

#### 7000 Series

Scoreboard Model
Type C (+)

For models 7504, 7505, 7516, 7520, 7524, 7525, 7530, 9505, DGT-5, 9405, 7404, 7405, 7416, 7424, 7425, 7430, DGT-2, and 9515

#### 1000 Series

Scoreboard Model Type D (+) For Models 1520, 1525, 1515, 9505, 9405, and 9515

### **Standalone Timer**

Scoreboard Model
Type E (+)

For Models SEG-14 and SEG-18

#### **Standalone Segment only**

Scoreboard Model
Type F (+)

For Models SEG-14 and SEG-18

#### **X6XX Series**

Scoreboard Model X6XX (+)

For Models X6XX

# Model Type Display Functionality

#### Scoreboard

Indoor (A), 3000 Series (B), 7000 Series (C), 1000 Series (D), and X6XX all display the same on a scoreboard.

- The segment number is recorded in the home score section of the scoreboard.
- Segment time is displayed and counts down in the main time area.
- Auto Horn works the same if the compatible scoreboard has a horn

#### **Segment Timer**

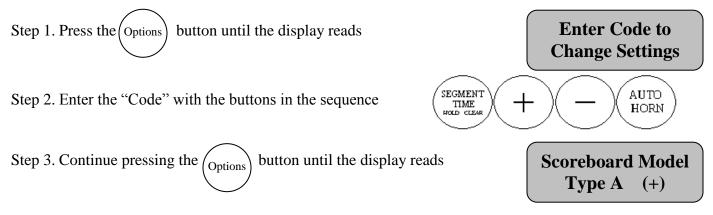
Standalone Timer (E) and Standalone Segment (F) display different data on the segment timer. *Standalone Timer* (E)

- Flashes the current segment for the first 5 seconds of the segment
- Displays 2 digits of segment time after flashing.
  - o If time is above a minute the display will display the minutes in the segment
  - o If time is below a minute the display will count down the seconds

Standalone Segment (F)

- Displays the current segment
- Display flashes current segment for the final 10 seconds of the current segment

# Changing Model Types



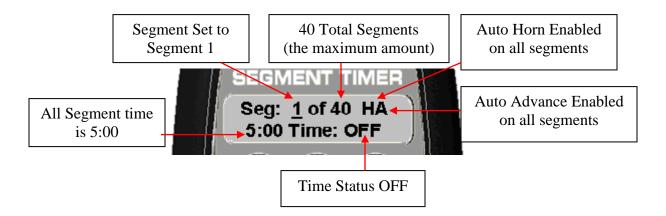
Step 4. Press the  $\stackrel{+}{\smile}$  button to toggle thru the scoreboard models until desired model type is displayed

Step 5. When desired model type is displayed press PREVIOUS SEGMENT, NEXT SEGMENT, SET TIME, TIME OFF, or TIME ON to select model type and save it.

# **FACTORY SETTINGS**

# Segment Timer Project

The Segment timer MPC-X is preprogrammed with a full segment timer project from the factory. Following is the project settings:



# Scoreboard Settings

The scoreboard settings preprogrammed into the control are the brightness setting and the scoreboard model type setting.

- Display Brightness is set to bright
- Scoreboard model type is set to type A (Indoor)

# **STARTUP GUIDE**

# To Begin

**Note:** It is assumed here that the control has been linked to the desired receiver(s) and, the MPCX2 is configured to the scoreboard/timer being used. This function is explained in the setup guide that comes with a new control. It is assumed that the receiver is powered ON.

Press



The control will display a greeting while it establishes communications with its receiver(s). (Up to 20 seconds). **Note:** *v01.00 for example, indicates the software version of the control* 

Finally, the display will show the Segment (Seg), the total number of segments, the current segment time, and time status **Note:** The cursor indicates the active function.

MPCX2 v01.00 2.4 GHz

**Scanning** 

Seg: 1 of 40 HA <u>5</u>:00 Time: OFF

# <u>To Insert a Segment</u>

Time must be off to insert a segment

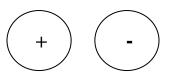


To insert a segment first press "OPTIONS" the first option to come up will be to insert a segment.



Press the "+" and new segment will be placed at the end and will be copied from the previously last segment.

Note: A segment cannot be inserted (added) if there are already 40 segments.



After inserting a new segment the time in minutes of the inserted segment is immediately modifiable by pressing the "+" or "-" buttons.



To modify seconds in this process

**Note:** Each segment has maximum time limit of 99 minutes and 59 seconds.

Setting a time of 0:00 on a segment will delete the current segment being modified *and* all segments after it

To do this using this segment first set the time to 0:00

Then press NEXT SEGMENT or PREVIOUS SEGMENT

Insert Segment Press (+)

Seg: 1 of 2 H 5:00 Time: OFF

Seg: 1 of 2 H <u>5</u>:00 Time: OFF

Seg: 1 of 40 HA 5:00 Time: OFF

Seg: 6 of 40 HA <u>0</u>:00 Time: OFF

Seg: 5 of 5 HA 5:00 Time: OFF

# To Edit a Segment

Time must be off to edit a segment

Press



or

NEXT

SEGMENT

until "Seg: 1" displays or select segment desired to edit

Seg: 1 of 40 HA 0:31 Time: OFF

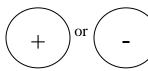
Press



This will allow adjustment for the minute's section of the segment timer.

Seg: 1 of 40 HA <u>0</u>:31 Time: OFF

Use the



keys to enter the desired number of minutes

Press



This will allow adjustment for the second's section

Seg: 1 of 40 HA 0:31 Time: OFF

**Note:** Hold the key down for fast advance

Press the "Next Segment" key to save your segment and update the segment timer

# To Start the Timer

Press



The control will display

Seg: 1 of 40 HA 0:31 Time: ON

# To Stop the Timer

Press



The control will display

Seg: 1 of 40 HA <u>0</u>:31 Time: OFF

Please consult the following sections of this manual for more details, functions, and feature

# **KEYBOARD FUNCTIONS**

#### **GREETING** screen

# MPCX2 v01.00 2.4 GHz

# **Scanning**

#### **GREETING**

When the control is Powered ON, the greeting showing the **type of control**, **the software version**, **and the frequency it is broadcasting.** It will then display **scanning** for the remaining time until the control establishes communications with its receiver(s). (May take up to 20 seconds)

Accessed by pressing





When you are done using the control turn it OFF to conserve batteries by holding down the OFF key for 2 seconds.

**Note:** In multiple controller setups. Verify that the second to last controller is powered off before powering off the last controller so that the receiver gets the power off command.

**Note**: Always power ON the receiver(s) (scoreboard(s)) first, and wait a few seconds for the receiver(s) to initialize (red LED illuminates) before powering ON the control. If the control is already ON, turn it OFF, wait a few seconds, and then turn it back ON.

**Note:** If, when the main screen appears, the scoreboard remains dark and does not respond to the control, then the receiver was not found. Power the control OFF, make sure all associated receivers are powered ON, and power on the control again. Please allow time for each control to complete its powering ON process (main screen appears) before turning ON another control.

**Note:** If the scoreboard fails to respond to the control, power the control OFF, wait a few seconds, and then try again. Please allow time for each control to complete its powering ON process (main screen appears) before turning ON another control.

Seg: <u>1</u> of 40 HA 0:31 Time: OFF

#### **MAIN**

The main screen shows the selected **Segment**, **Total Segments**, **Auto Horn** state, **Auto Advance** state, **Time**, and **Time** status.

Main screen options change depending on the state of the control. Therefore this section will be split into three sections.

- 1. Time ON
- 2. Time OFF
- 3. After SKIP connection or not connected.













#### 1. Time ON

Following are the MPCX2 controls with time set to ON

#### Segment Selection

When selecting a segment when time is ON, the segment timer will flash which segment it is currently on for 5 seconds then continue counting down the segment time.



Cycles segment timer forward to the next segment. Press to save changes to segment IE auto horn, and auto advance.



Cycles segment timer backward to the previous segment. Press to save changes to segment IE auto horn, and auto advance.

Seg: 2 of 40 HA 0:31 Time: ON

#### Segment Editing

Segment editing is disabled when time is on. The following functions lead to the "Time Off To Edit" screen

SEGMENT TIME HOLD CLEAR

This function is disabled while time is on

Time Off To Edit Press (+)

#### **Setting Segment Function Options**

Segment function options are:

<u>Auto Advance</u> – Enables the segment to automatically advance to the next segment when the time is completed. If it is not enabled then the segment will advance to the next segment, but the time will be set to OFF.

Auto Horn – When a segment completes that has "Auto Horn" enabled the horn will sound



**HORN** 

Adds or removes auto advance to the highlighted segment If auto advance is off and the segment completes, time will display as OFF until Time On is pressed

Adds auto horn to the highlighted segment

# Seg: 2 of 40 A 0:31 Time: ON

Seg: <u>2</u> of 40 H <u>0</u>:31 Time: ON

Removing a Single Segment



Hold to delete current segment. Each segment number will go down by 1 (2 is now 1 etc) and total segments will decrease by one each time this is done.

Seg: 1 of 39 HA <u>0</u>:20 Time: ON

Inserting a Segment



To insert a segment first press "OPTIONS" the first option to come up will be to insert a segment.

Press the "+" and a new segment will be copied from the last segment and added to the segment list in the last segment spot.

Insert Segment Press (+)

Seg: 1 of 40 HA 0:31 Time: ON

Horn Function



Sounds the horn

Time Function



Turns the time off

Seg: 1 of 40 HA 0:31 Time: OFF

MPCX2 Power function



Turns the control and segment timer off

#### 2. Time Off

Following are the MPCX2 controls with the time set to OFF

#### Segment Selection



Cycles segment timer forward to desired segment Press to save changes to segment IE time, auto horn, and auto advance.



Cycles segment timer backward to desired segment. Press to save changes to segment IE time, auto horn, and auto advance Seg: 2 of 40 HA 0:31 Time: OFF

#### Setting Time

Follow these steps to set the time on each segment desired to use.



One press of the SET TIME button will highlight the minutes of the current segment to be edited

Seg: 1 of 40 HA 0:31 Time: OFF



Additional presses will toggle between editing minutes and seconds of the selected segment

Seg: 1 of 40 HA 0:31 Time: OFF



Use the "+" or "-" keys to change the time settings for minutes or seconds

Seg: 6 of 40 HA <u>5</u>:31 Time: OFF

**Note:** Hold the key down for fast advance



**Note:** Each segment has maximum time limit of 99 minutes and 59 seconds.

Setting a time of 0:00 on a segment will delete the current segment being modified *and* all segments after it

To do this using this segment first set the time to 0:00

Then press NEXT SEGMENT or PREVIOUS SEGMENT

Seg: 6 of 40 HA <u>0</u>:00 Time: OFF

Seg: 5 of 5 HA <u>0</u>:28 Time: OFF

#### Removing a Segment



Hold to delete current segment. Each segment number will go down by 1 (2 is now 1 etc) and total segments will decrease by one each time this is done.

Seg: 1 of 39 HA 0:20 Time: OFF

#### Clearing Multiple Segments

Clearing multiple segments will delete the current segment selected *and* all segments after it To clear segments go through the *setting time* process and set the time to 0:00

If all segments are cleared the MPCX2 will default to

Seg: 1 of 1 HA <u>5</u>:00 Time: OFF

#### Inserting a Segment



To insert a segment first press "OPTIONS" the first option to come up will be to insert a segment.

Insert Segment Press (+)



Press the "+" and a new segment will be copied from the last segment and added to the segment list in the last segment spot.

Seg: 1 of 2 HA <u>5</u>:00 Time: OFF

#### Setting Segment Function Options

Segment function options are:

<u>Auto Advance</u> – Enables the segment to automatically advance to the next segment when the time is completed. If it is not enabled then the segment will advance to the next segment, but the time will be OFF.

<u>Auto Horn</u> – When a segment completes that has "Auto Horn" enabled the horn will sound.



Adds or removes auto advance to the highlighted segment If auto advance is off and the segment completes time will display as OFF until Time On is pressed



Adds auto horn to the highlighted segment

Seg: 2 of 40 A <u>0</u>:31 Time: OFF

Seg: <u>2</u> of 40 H <u>0</u>:31 Time: OFF

# Horn Function



Sounds the horn

# Time Function



Turns time on the segment timer.

Seg: 1 of 40 HA <u>0</u>:31 Time: ON

# MPCX2 Power function



Turns the control and segment timer off

#### 3. After SKIP connection or not connected.

Following are the MPCX2 controls when not linked to a receiver

**Note:** Hold the lower left button on start up to skip connection on start up. The controller will also time out if a receiver is not present and will display the main menu.

#### Segment Selection

With no link to a receiver segment selection is functionally to select a segment to modify.



Cycles segment timer forward to desired segment Press to save changes to segment IE time, auto horn, and auto advance.

Seg: 2 of 40 HA <u>0</u>:31 Time: OFF



Cycles segment timer backward to desired segment.

Press to save changes to segment IE time, auto horn, and auto advance

#### Setting Time

Follow these steps to set the time on each segment desired to use.



One press of the SET TIME button will highlight the minutes of the current segment to be edited

Seg: 1 of 40 HA 0:31 Time: OFF



Additional presses will toggle between editing minutes and seconds of the selected segment

Seg: 1 of 40 HA 0:31 Time: OFF



Use the "+" or "-" keys to change the time settings for minutes or seconds

Seg: 6 of 40 HA 5:31 Time: OFF

Note: Hold the key down for fast advance

-

**Note:** Each segment has maximum time limit of 99 minutes and 59 seconds.

Setting a time of 0:00 on a segment will delete the current segment being modified *and* all segments after it

To do this using this segment first set the time to 0:00

Then press NEXT SEGMENT or PREVIOUS SEGMENT

Seg: 6 of 40 HA <u>0</u>:00 Time: OFF

Seg: 5 of 5 HA <u>0</u>:28 Time: OFF

#### Removing a Segment



Hold to delete current segment. Each segment number will go down by 1 (2 is now 1 etc) and total segments will decrease by one each time this is done.

Seg: 1 of 39 HA 0:20 Time: OFF

#### Clearing Multiple Segments

Clearing multiple segments will delete the current segment selected *and* all segments after it To clear segments go through the *setting time* process and set the time to 0:00

If all segments are cleared the MPCX2 will default to

Seg: 1 of 1 HA <u>5</u>:00 Time: OFF

#### Inserting a Segment



To insert a segment first press "OPTIONS" the first option to come up will be to insert a segment.





Press the "+" and a new segment will be copied from the last segment and added to the segment list in the last segment spot.

Seg: 1 of 2 HA <u>5</u>:00 Time: OFF

#### Setting Segment Function Options

Segment function options are:

<u>Auto Advance</u> – Enables the segment to automatically advance to the next segment when the time is completed. If it is not enabled then the segment will advance to the next segment, but the time will be OFF.

<u>Auto Horn</u> – When a segment completes that has "Auto Horn" enabled the horn will sound.



Adds or removes auto advance to the highlighted segment If auto advance is off and the segment completes time will display as OFF until Time On is pressed





Adds auto horn to the highlighted segment

Seg: <u>2</u> of 40 H <u>0</u>:31 Time: OFF

#### Horn Function



Sounds the horn

#### **MPCX2** Power function



Turns the control and segment timer off



# **Options Menu**

Several option settings are available to fine tune the scoreboard system to your needs. These settings are saved in the control. They are remembered even if the control is turned OFF or the batteries removed. When a control turns ON the scoreboard, these settings are sent to the scoreboard and are used to define how it operates. This allows each coach or group to have their own control with its unique option choices, thus eliminating the need to set up the options every time the scoreboard is used. For example, Brightness (Baseball – day time) (Soccer – night time).

It is also possible to use more than one control to operate the scoreboard. For instance, the Time can be controlled by one person while someone else operates the rest of the scoreboard with another control.

#### **Standard Options**



The options key can be used to access the following features. Each press of the options key moves you to the next option screen.

**Note:** In this illustration the <u>cursor</u> indicates the default factory settings.

**Note:** You can return to the main screen at any time by pressing PERIOD / SCORE.

Clear Scoreboard Press(+) Allows you to clear the scoreboard data.

**Note:** The period will be set to 1, scores will be set to 0, and all other data are set to blank.

Edit ETN Press(+)

Allows you to edit the Electronic Team Name for both Home and Guest.

**Note:** *The ETN can only be edited when time is stopped.* 

Guests ETN Press (+)

**Note:** After pressing the "+" key to get into the ETN menu, press the "Options" button to switch between Home and Guest ETN's.

Home ETN Press (+)

Home ETN

Use the "+" to go increment the alphabet and the "-" key to decrement the alphabet. Use the "Options" button to advance the cursor.

**Note:** *Hold the key down for fast advance.* 

Time Up/Down		
(+)Up	( <u>-</u> )Down	

Allows you to set the direction the timer will count.

**Note**: *In baseball the Time Up/Down control is in the At Bat / Time button.* 

Brightness (<u>+</u>)HIGH (-)LOW

Allows you to select the Brightness Level of the scoreboard. (High or Low)

Auto Horn (+)On (-)Off Allows you to enable or disable the automatic horn. (Sounds for about 4 seconds when time has expired).

**Note:** *In baseball the Auto Horn control is in the At Bat / Time button.* 

Set Time of Day Press (+) Turns the control OFF and blanks all scoreboard functions except Time. Uses the displayed time as the set time if it is a valid Time Of Day. Otherwise blanks the entire scoreboard.

**Note:** Not all scoreboard models support Time Of Day and thus not all controllers will display Time of Day.

Battery Level L>>>>>H Reports the condition of the batteries in the control.

**Note:** "Low Battery!!!" Will display when it is approaching time to change batteries. When 0 bars of battery life are left the batteries must be replaced immediately.

Signal Strength L>>>>>H

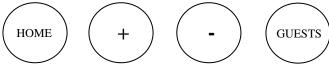
Allows you to check signal strength when connected to a receiver. Used as an indication of reliability of communications. Affected by distance, battery condition, obstructions and signal interference.

#### **Advanced Options**

Enter Code to Change Settings

This menu option allows you to access settings that affect how the control operates. Generally, these settings need not be changed and should only be changed by an experienced operator or under direction from the Nevco Service Department.

Press the following key sequence:



- a. Segment timer (Segment time) (+) (-) (Auto Horn)
- b. Shot Clock/Pitch Time/Delay Of Game (Reset 1) (+) (-) (Reset 2)

to gain access to the following additional menu items.

Or

Press the OPTIONS key to return to the main screen.

Link Menu Press (+) This menu option allows the user to add a receiver ID, delete a receiver ID, and to view the status of which ID's are programmed and enabled or disabled. Press the button to scroll through the different link menus.

Please refer to sections "Mating a New Control to Receiver(s)" and "Adding, Deleting or Enabling/Disabling Receiver ID's" for detailed instructions.

Add a Rec ID Press (+) Delete a Rec ID Press (+) View Rec ID's Press (+)

#### **Setting Scoreboard Model**



The next press of the options key will display one of the following screens. It indicates which of the scoreboard model series the control is currently configured to operate. Use the "+" key to toggle thru the scoreboard models. Press the OPTIONS key again to exit the options routine.

The last scoreboard series displayed will become the new control configuration.

Scoreboard Model

Refer to the Scoreboard Model table found below for the appropriate scoreboard model to be used with your scoreboard.

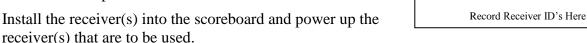
# MPCX2 Control / Receiver setup procedure

Before using the MPCX2 control it must be mated to the receiver(s) and set for the model of scoreboard that you wish to operate.

# Mating a New Control to Receiver(s)

Step 2.

Step 1. Record the receiver(s) ID's located on the receiver box before installation for future reference. Multiple receivers can be used with multiple controllers all on the same network.



- a. Standard Installation Uses the RJ12 output of the receiver.
- b. Rain Type Box Installation Uses the coax output of the receiver and a 9VDC power supply.





- Step 3. Wait approximately 15 seconds after the receiver has been turned on before turning on the MPCX2 controller in order to allow enough time for the receiver to be initialized.
- Step 4. Insert the batteries included with the MPCX2 control or turn the control ON by pressing

ON/ OFF

The display will read:

Enter Rec ID: 000000

Step 5. Enter in the receiver ID's located on the receiver box using the controller keypad buttons (NEXT) to move the cursor and (+) or (-) to increment or decrement each digit.

When done press the (BACK) button in the lower left corner.

Step 6. The screen will then prompt with.

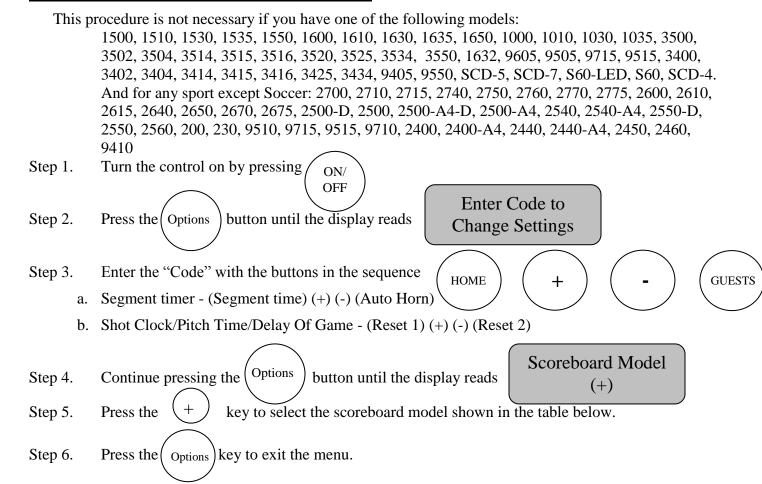
Reset Now? (+)NOW (-)LATER

- Step 7. Pressing + will reset the controller. Pressing will allow additional receiver ID's to be entered into the controller and will display the message.

  Add Another?

  (+)YES (-)NO
- Step 8. If additional receivers are to be added then select + and repeat steps 5 through 6. If additional receivers do not need to be added then select and the controller will be reset.

#### **Setting the Control for Your Model of Scoreboard**



#### **Multiple Receivers and Controllers**

Both multiple controllers and receivers can be on the same network.

#### **Multiple Controllers**

For example, one person with a controller can control Game Time and another person with a separate controller can control Game Score of the same game on the same scoreboard. Multiple controllers can be used for any combination of game data.

If a second controller is powered on after the first powered on controller has been initialized, then the second controller will be configured with the same Scoreboard Model described in the "Setting the Control for Your Model of Scoreboard" section.

#### **Multiple Receivers**

Multiple receivers can be used on the same network. One example could be separate scoreboards for the same game or in the case of basketball one receiver controls the scoreboard while other receiver(s) control the shot clock(s).

MPCX2 Control	Scoreboard Model	Screen to Select	
	3500, 3502, 3504, 3514, 3515, 3516, 3520, 3525, 3534, 3550, 1632, 9605, 9715, 9505, 9515, 3400, 3402, 3404, 3414, 3415, 3416, 3425, 3434, 9405	<b>Type A</b> (+)	
Football	7504, 7505, 7516, 7520, 7524, 7525, 7530, 9505, 9515, 7404, 7405, 7416, 7424, 7425, 7430, 9405, 3600, 3602, 3604, 3614, 3615, 3616, 3617, 3618, 3619, 3620, 3621, 3625, 3634, 3650, 3655, 3656, 3658, 7604, 7614, 7624, 7605, 7615, 7625, 7616, 7620, 7630, 7631, 7632	<b>Type B</b> (+)	
	All 36XX, 76XX, and 86XX boards	<b>X6XX</b> (+)	
	3680, 3685, 3688, 7680, 7685 (Reorders Intelligent Caption to Ball On, Down, To Go, Quarter)	X6XX Legacy (+)	
	1515, 9505, 9515, 1615, 1632, 9605, 9715, 1415	Type A (+)	
	1520, 1525, 9505, 9515, 1620, 1625, 9605, 9715, 1020, 1025, 9405, 9410	Type B (+)	
	3502, 3504, 3514, 3515, 3516, 3520, 3525, 3534, 3550, 3555, 9605, 9505, 9715, 9515, 3402, 3404, 3414, 3415, 3416, 3425, 3434, 3455, 9405	Type C (+)	
	7504, 7524, 9505, 9515, 9605, 9715, 7404, 7405, 7424	Type D (+)	
Soccer	7604, 7605, 7614, 7615, 7616, 7620, 7624, 7625, 7630, 7631, 7632, 3600, 3602, 3604, 3614, 3615, 3616, 3617, 3618, 3619, 3620, 3621, 3625, 3634, 3650, 3655, 7505, 7516, 7520, 7525, 7530, 9505, 9515, 9715, 7405, 7416, 7425, 7430, 9405, 9410, 3680, 3685, 3688, 7680, 7685, 8601, 8602	Type E (+) Supports Intelligent Captions	
	200, 230, 24xx, 25xx, 26xx, 27xx, 9510, 9515, 9710, 9715	Type F (+)	
	3656, 3657	Type G (+) Supports Intelligent Captions	
	4455, 4465, 4755, 4555, 4565, 4765	Type H (+)	
	SCD-5, SCD-7A, SCD-T7A, SSC-7, SSC-T5, SSC-T9, S60-LED, S60, SCD-4	Shot Clock (+)	
	DGT-6	Delay Of Game (+)	
SCD/DGT	DGT-5, DGT-2, 3020	Legacy DOG (+)	
/ PCD	SEG-14,SEG-18	Segment Timer (+)	
	9520, 9620	Pitch Timer (+)	
Tennis	9550 Set one control to each of 6 courts => 9650 Set one control to each of 6 courts => 9651B 9652B	Standard Current Court: 1 New Court: 2	

MPCX2 Control	Scoreboard Model	Screen to Select
	1000, 1010, 1030, 1035, 1500, 1510, 1530, 1535, 1550	Standard (+)
	1003, 1006, 1503, 1506, 1508, 1540, 1603, 1604, 1606, 1608, 1609	Score by Inn (+)
Baseball	1020, 1025, 1515, 1520, 1525, 9505, 9515, 9605, 9715	With Timer (+)
	1615, 1620, 1625, 1632, 3656, 3680, 3685, 3688, 7616, 7680, 7685, 8601, 8602	X6XX Timer (+)
	1600, 1609, 1610, 1630, 1635, 1640, 1650, 3656, 3680, 3685, 3688, 7680, 7685, 8601, 8602	X6XX Standard (+)
	PCD-(A, 08, 10, 16, 18) With Models 1000, 1010, 1030, 1035, 1500, 1510, 1530, 1535, 1550	Standard (+)
	PCD-(A, 08, 10, 16, 18) With Models 1003, 1006, 1503, 1506, 1508, 1540, 1603, 1604, 1606, 1608, 1609	Score by Inn (+)
Pitch Count	PCD-(A, 08, 10, 16, 18) With Models 1015, 1020, 1025, 1515, 1520, 1525, 9505, 9515, 9605, 9715	With Timer (+)
	PCD-(A, 08, 10, 16, 18) With Models 1615, 1620, 1625, 1632, 3656, 3680, 3685, 3688, 7616, 7680, 7685	X6XX Timer (+)
	PCD-(A, 08, 10, 16, 18) With Models 1600, 1609, 1610, 1630, 1635, 1640, 1650, 3600, 3656, 3680, 3685, 3688, 7680, 7685	X6XX Standard (+)
Basketball, Volleyball, Wrestling, or Hockey	No setting required	Type A (+)
V	27xx, 26xx, 25xx, SEG-14, SEG-18, 9710, 9510, 200, 230, SSC-7, SSC-T5, SSC-T9, SCD-7A, SCD-T7A, SCD-T5, SCD-5, SCD-4, 9715, 9515, S60-LED, S60, 4755, 4555-D, 24xx, 9410,	Type A (+)
Segment Timer	3500, 3502, 3504, 3514, 3515, 3516, 3520, 3525, 3534, 3550, 36xx, 1632, 9605, 9505, DGT-6, DGT-5, 9405, 3020, 3400, 3402, 3414, 3415, 3416, 3425, 3434, 3455, 9515, 9715	<b>Type B</b> (+)
	36xx, 76xx, 7504, 7505, 7516, 7520, 7524, 7525, 7530, 9605, 9505, DGT-6, DGT-5, 9405, 7404, 7405, 7416, 7424, 7425, 7430, DGT-2, 9515, 9715	Type C (+)
	1520, 1525, 1515, 9505, 1620, 1625, 1615, 9605, 9715, 9405, 9515	Type D (+)
	SEG-14 and SEG-18 Segment Time only	Type E (+)
	SEG-14 and SEG-18 Segment Number only	<b>Type F</b> (+)
	All X6XX boards with timers	<b>X6XX</b> (+)

# TROUBLESHOOTING CHART

Problem Cause Solution

	Receiver not working	or		
Scoreboard will not turn ON when control	Receiver not working or receiver/scoreboard not powered up		Cycle power to receiver/scoreboard	
is turned ON	Control signal weak	Battery level low	Replace batteries	
Control continues to search after an	Check signal strength (see Options menu)	Control in a poor	Make sure the control is in clear line of sight of the scoreboard	
unusually long time	Out of Range	location	Move closer to scoreboard	
Data won't change on control	Control is linked to extra unwanted receivers or wanted receivers are not powered ON.		Use the Options Menu to check the receivers the control is linked to and the receivers on its list.	
Control display shows incorrect information	Control is not linked to this scoreboard		Find and use the control for this scoreboard.	
Cannot turn the time ON			Link the control to this scoreboard or group (see Options Menu)	
	Didn't sync up		Power control OFF, then ON	
Control is ON but scoreboard/timer is	No power to scoreboard		Check all switches, breakers, and fuses	
OFF (data is changing on control)	Bad connection between Receiver and scoreboard module		Check all cables and connections	
Scoreboard/timer is ON but does not respond to control	Control and receiver are not communicating		Turn control OFF, then ON to establish communications	
My control will not operate scoreboard (Out of Range)	Poor connection with bad line of sight to the scoreboard or distance is too great.		Return to a closer location with direct line of sight and verify Signal Strength. If that does not work then cycle power to controller	
I cannot set the time	The time is running		Stop the time first	
Cannot turn the time ON	Time at 0.0 and set to count down		Set some time on the clock	
	Batteries were removed while scoreboard ON		Install batteries power ON	
Scoreboard is ON – Control is OFF	Batteries were completely discharged while scoreboard is on		Cycle power at scoreboard	
Not all controls of a multi-control scoreboard system will operate the scoreboard	Multiple controllers were powered on at the same time and not all connected		Power cycle the controllers that are not operating the scoreboard.	
Scoreboard connected to MPCX2 is displaying data in the wrong places, incorrect data, or horn constantly sounds.	Control is not configured for correct scoreboard model series		Reconfigure the control (see options menu)	
	•			

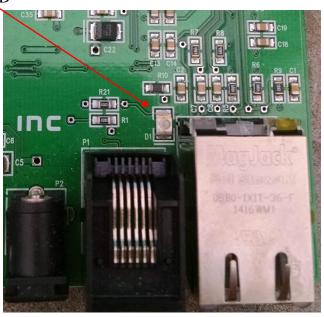
If the problem persists please contact the Nevco Service Department. 800-851-4040

# **LED STATUS**

The receiver has a red status LED next to the RJ12 and Ethernet jack. It can be used to diagnose the status of the MPCX2 receiver.

LED Status	MPCX2 Connection Status
Solid On	The receiver is powered on, but a connection attempt has not yet been made, or a connection attempt was unsuccessful.
Blinking Fast	The receiver is in the network and connected. The receiver may appear to not be blinking due to it
(multiple times a second)	blinking very quickly. If the receiver is connected to Scorbitz through the Ethernet jack, then it will blink more visibly.
Blinking Slow	The receiver is not connected but connection attempts are being made. Each slow blink is a
(approximately once a second)	connection attempt. If the receiver is intended for the network and it is flashing slowly but never connects then verify that the receiver list in the MPCX2 control is correct.
Solid Off	The receiver is not powered on. It is also possible that the receiver is powered on but for some reason the LED has been turned off. If this is suspected to be the case then cycle power to the receiver and the LED should turn on after a brief delay.

#### MPCX2 receiver status LED



# RECEIVER IDENTIFICATION ON POWERUP

On powerup the receiver connected to the OCM will identify itself by flashing from the most significant 2 digit numbers to the least significant 2 digit numbers. For example, a receiver with ID 123456 will flash 12, 34, and then 56 on power up. This is used to distinguish which X2 receiver is connected to which OCM's without having to open up the scoreboard.

#### **Features**

#### **MPCX2 Control:**

- o Small and light weight (fits in or clips to pocket)
- Electronic Team Name and Caption Support
- Tactile confirmation of key pressed
- High visibility transflective display
- Convenient wireless operation
- o Built in wireless signal strength meter
- o Power conservation circuitry
- Built in battery meter
- o Long battery life
- Uses inexpensive, readily available AA batteries
- Sealed keyboard
- No slip grip
- Ergonomic single hand operation
- Internal antenna
- Mate multiple controls to same scoreboard
- Operate multiple scoreboards
- o Retrofits to existing wired installations

# **Specifications**

#### Size:

Approximately  $3\frac{1}{4}$ " x  $5\frac{1}{2}$ " x  $\frac{7}{8}$ "

#### Weight:

5½ oz. (including batteries)

#### Keypad:

12 keys

#### Display:

32 character LCD

#### **Power requirements:**

Two AA cells (included)

#### **Operating distance:**

1000 feet (Clear line of sight)

#### **Receiver Output:**

One BNC connector (2 loads with up to 1000 ft. coax each)

#### **Operating temperature:**

0°F to 150°F

#### **Certifications:**

FCC part 15 Class B CE RoHS

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- —Increase the separation between the equipment and receiver.
- —Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- —Consult the dealer or an experienced radio/ TV technician for help.

The user is cautioned that changes and modifications made to the equipment without the approval of Nevco could void the user's authority to operate this equipment.

This class B digital apparatus meets all requirements of the Canadian Interference- Causing Equipment Regulations.

Cet appareil numerique de la classe B repecte toutes les exigences du Reglement sure le materiel brouller du Canada.



WARNING: To satisfy FCC RF exposure requirements for mobile transmitting devices, a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during device operation. To ensure compliance, operations at closer than this distance is not recommended. The antenna used for this transmitter must not be co-located in conjunction with any other antenna or transmitter.