Scoreboard Operator's Instructions
MPCX2 Basketball Control

Since 1934

Retain this manual in your permanent files

These Instructions are for the Following Models:

LED models:				Incandescent models:	
2700	2600	2500-D	200	2400	9410
2702	2610	2500	230	2400-A4	
2710	2615	2500-A4-D	9510	2440	
2712	2640	2500-A4	9515	2440-A4	
2715	2650	2540	9710	2450	
2740	2670	2540-A4	9715	2460	
2750	2675	2550-D	EOP		
2752		2550			
2760		2560			
2770					
2772					
2775					
2780					
2781					
2785					

> **Note:** Some features may not be available on some models.
>
> May not be compatible with certain older scoreboards

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
To view or receive the most recent copy of the Guarantee, please visit our website, www.nevco.com
or call 1-618-664-0360

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|---|
| **NEVCO, Inc.**
301 East Harris Avenue
Greenville, IL 62246-2151 USA |
| USA TOLL-FREE 800-851-4040
CANADA TOLL-FREE 800-461-8550
International Telephone: +1-618-664-0360 |
| Website: www.nevco.com
Email: info@nevco.com |

HORN

PERIOD / SCORE (also functions as Escape)

Selects HOME or GUESTS (for Scoring and for use with Special Multifunction key)

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

SET TIME

OPTIONS key
Allows you to:
Clear Scoreboard
Edit Electronic Team Names
Time Up/Down
Set Brightness of Scoreboard
Enable / Disable Auto Horn
Activate Time Of Day (shows on scoreboard when control is off)
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

Special Multifunction key
Provides access to these features:
NEXT POSSESSION
PLAYER NUMBER
PLAYER FOULS
TEAM FOULS
BONUS
TIMEOUTS LEFT

TIME ON

TIME OFF

MPCX2 BASKETBALL CONTROL (front view)

Belt Clip

Battery Compartment Cover (2 x AA)

MPCX2 CONTROL (rear view)

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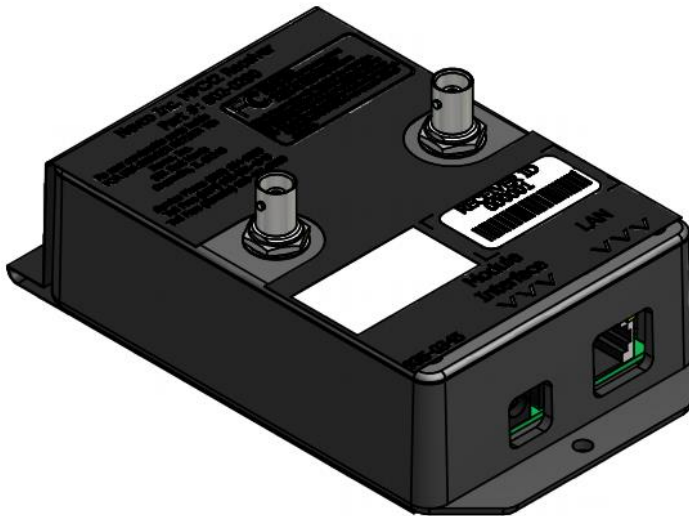
MPCX2 Receiver for use with scoreboards that pre-date x6xx outdoor and x7xx indoor scoreboards. (Boards that have coax input only)

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.*

TABLE OF CONTENTS

STARTUP GUIDE

Note: It is assumed here that the control has been configured for the correct scoreboard type and the control has been linked to the desired receiver(s). Both functions are explained in the setup guide that comes with a new control (See the MPCX2 Control / Receiver setup procedure below for more information). It is assumed that the receiver is powered ON.

To Start a New Game

Press (ON/OFF)   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*

> MPCX2 v01.00
> 2.4 GHz

> Scanning

Next the display will show the period, the time status and the score.
Note: *The cursor indicates the active function.*
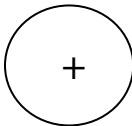
> Q: 1   0.0   OFF
> Home: 0   Gst: 0

Press (OPTIONS)   The control will display

> Clear Scoreboard
> Press (+)

Press (+)   to clear the scoreboard data.

> Scoreboard
> Cleared

Press (PERIOD SCORE)   to go to the main screen.
Note: The period is automatically set to 1.

> Q: 1   0.0   OFF
> Home: 0   Gst: 0

To Set the Time

Press (SET TIME)   to set the time (Minutes).

> Set Time:
> 00:00.0   DN

Use the "+" or "-" keys to enter the desired number of minutes and the "Set Time" button to advance the cursor.
Note: *Hold the key down for fast advance.*

> Set Time:
> 12:00.0   DN

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

> Q: 1   12:00 OFF
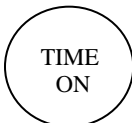> Home: 0   Gst: 0

To Set the Period

Press

(PERIOD SCORE)

The control will display

Use the "+" or "-" keys to enter the desired period.

```
Q: 1    12:00  OFF
Home:  0   Gst:  0
```
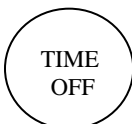
To Start the Timer

Press

(TIME ON)

The control will display

```
Q: 1    12:00   ON
Home:  0   Gst:  0
```

To Stop the Timer

Press

(TIME OFF)

The control will display

```
Q: 1    11:55  OFF
Home:  0   Gst:  0
```

To Add to the Score

Press (PERIOD SCORE) then (HOME) or (GUESTS) then (+)

```
Q: 1    11:55  OFF
Home:  2   Gst:  3
```
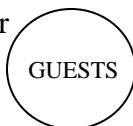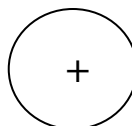
Note: The cursor indicates whether home or guest is selected.

You are now ready for the game to begin.

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

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

ON/OFF

ON/OFF

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, it shows Period 0 and 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.

> Q: 0   0.0   OFF
> Home: Gst:

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.

MAIN screen

```
Q: 1     0.0     OFF
Home:  0   Gst:  0
```

MAIN
The main screen shows the **Period**, the **Timer Status**, and the **Scores**. You must use this screen if you want to change the Period or Scores. Press PERIOD / SCORE any time to return to this screen. The cursor indicates the currently selected function. Use the HOME, GUESTS, or PERIOD / SCORE keys to select the function, then, use the "+" or "-" keys to change its value and send it to the scoreboard. You should keep this screen displayed during the game.

Accessed
by
pressing

PERIOD /
SCORE

PERIOD SCORE

Selects the main screen.
From this screen use the "+" or "-" keys to change the period.
Note: The <u>cursor</u> indicates the selected function.

```
Q: 1     0.0     OFF
Home:  0   Gst:  0
```

HOME

Use the "Home" or "Guests" keys to select the team whose data you want to change.

```
Q: 1     0.0     OFF
Home:  0   Gst:  0
```

GUESTS

```
Q: 1     0.0     OFF
Home:  0   Gst:  0
```

+   **-**

Then use the "+" or "-" keys to change the data for the selected feature.
Note: *Hold the key down for fast advance.*

```
Q: 1     0.0     OFF
Home:  0   Gst:  1
```

TIME ON	Turns the time ON. **Note:** A time must first be entered in order for time to start decrementing.

```
Q: 1      8:15     ON
Home:   0  Gst:   1
```

TIME OFF	Turns the time OFF.

```
Q: 1      8:10    OFF
Home:   0  Gst:   1
```

HORN	Sounds the horn. **Note:** Does not change the control display. **Note:** *Hold key down to extend duration.*

MULTI-FUNCTION screen

MULTI-FUNCTION
This Multi-function screen provides access to Next Possession as well as Player Number, Player Fouls, Team Fouls, Bonus, and Timeouts Left. Use the Multi-function key to step thru functions and screens. The cursor will indicate the selected function. Use the HOME or GUESTS keys to select the team. Use the "+" or "-" keys to update the selected functions value and send it to the scoreboard.

Accessed by pressing

POSS
FOULS
BONUS
T.O.L.

POSS
FOULS
BONUS
T.O.L.

This multifunction key is used to access the following functions. Each press of this key moves you to the next function.
Note: You can abort the list at any time by pressing PERIOD / SCORE.

Next Possession
Home   Guests

Use the "Home" or "Guests" keys to toggle the possession indicators.
Note: *Pressing the team that currently has possession will blank possession.*

Next Possession
Home <   Guests

Next Possession
Home   > Guests

Player Number: _
Player Fouls:

Enter the player's jersey number.
Note: *Hold the key down for fast advance.*

Player Number:
Player Fouls: _

Enter the player fouls.

Team Fouls
Home: _   Guest:

Use the "Home" or "Guests" keys to select the team, then use the "+" or "-" keys to increment or decrement the team fouls.

Bonus
Home:0   Guest:0

Use the "Home" or "Guests" keys to toggle thru Bonus 1, Bonus 2, and Bonus 0 for the proper team.

Timeouts Left
Home: Guest: _

Use the "Home" or "Guests" keys to select the team, then use the "+" or "-" keys to change the data for the selected team.

SET TIME screen

Set Time:
00:00.0   DN

Accessed by pressing

SET TIME

SET TIME
This screen is for **setting the time**. (Timer must be stopped). The cursor indicates the Minutes, Seconds, or Tenths of Seconds as being selected. Use the SET TIME key to step to the desired element of time, then, use the "+" or "-" keys to change its value and send it to the scoreboard.
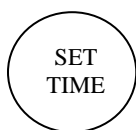**Note:** To change the direction the timer will count, use the OPTIONS menu.

Note: The SET TIME key is only active if the time is stopped.

Press

SET TIME

Allows you to set the number of minutes in the te[ns] place.
Use the "+" or "-" keys to enter the desired numb[er] minutes in the tens place.
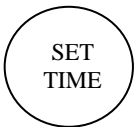
Set Time:
10:00.0   DN

Press

SET TIME

again to set the number of minutes in the ones place.
Use the "+" and "-" keys to enter the desired number of minutes in the ones place.
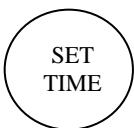
Set Time:
12:00.0   DN

Press

SET TIME

again to set the tens place of a second:
Use the "+" and "-" keys to enter the desired number of seconds in the tens place.
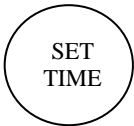
Set Time:
12:30.0   DN

Press

SET TIME

again to set the ones place of a second:
Use the "+" and "-" keys to enter the desired number of seconds in the ones place.

Set Time:
12:34.0   DN

Press

SET TIME

again to set the tenths of a second:
Use the "+" and "-" keys to enter the desired number of tenths of a second.

Set Time:
12:34.5   DN

Note: *Some scoreboard models may not display tenths of seconds.*
Note: *Press PERIOD / SCORE any time to return to the main screen.*

Note: Some timers will display tenths of seconds while others display only whole seconds. In all cases the time is divided into fractions of a second for greater accuracy. It may be possible to start and stop the time and see no change in the displayed time even though several fractions of a second may have been counted off. The fractions of seconds are always cleared when a new time is set.

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

(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 cursor 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 (+) | |
| Home 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 _ | 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 (-)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 (+)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:

(HOME)   (+)   (-)   (GUESTS)
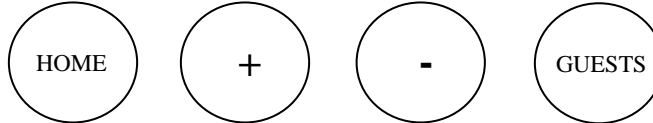
    a.   Segment timer - (Segment time) (+) (-) (Auto Horn)

    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.

The Network Analyzer allows the user to see the number of receivers connected and see the integrity of the network in percentage.

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

Setting Scoreboard Model

| (OPTIONS) | 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 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. (The serial number is in the battery door on a segment timer)

Record Receiver ID's Here

Step 2. Install the receiver(s) into the scoreboard and power up the receiver(s) that are to be used.

    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.

Standard Type
MPCX2 RX Barcode
Receiver ID

Coax Input Type
MPCX2 RX Barcode
Receiver ID
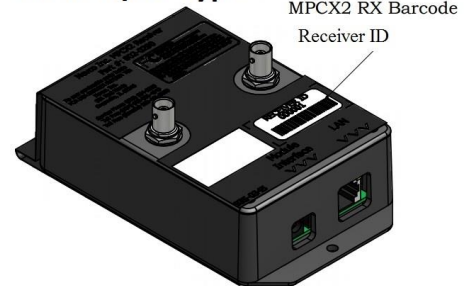
Step 3. Wait approximately 15 seconds after the receiver has been turned on before turning on the MPCX2 controller in order to allow enough time for the receiver to be initialized.

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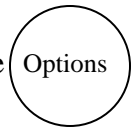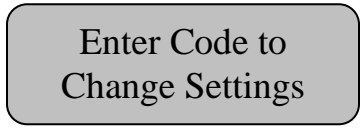Add Another?
(+)YES   (-)NO
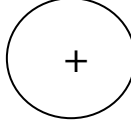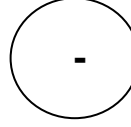
Step 8. If additional receivers are to be added then select (+) and repeat steps 5 through 6. If additional receivers do not need to be added then select (-) and the controller will be reset.

Setting the Control for Your Model of Scoreboard

This procedure is not necessary if you have one of the following models:
> 1500, 1510, 1530, 1535, 1550, 1600, 1610, 1630, 1635, 1650, 1000, 1010, 1030, 1035, 3500, 3502, 3504, 3514, 3515, 3516, 3520, 3525, 3534, 3550, 1632, 96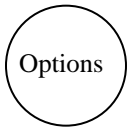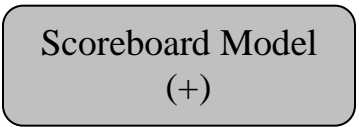05, 9505, 9715, 9515, 3400, 3402, 3404, 3414, 3415, 3416, 3425, 3434, 9405, 9550, SCD-5, SCD-7, S60-LED, S60, SCD-4. And for any sport except Soccer: 2700, 2710, 2715, 2740, 2750, 2760, 2770, 2775, 2600, 2610, 2615, 2640, 2650, 2670, 2675, 2500-D, 2500, 2500-A4-D, 2500-A4, 2540, 2540-A4, 2550-D, 2550, 2560, 200, 230, 9510, 9715, 9515, 9710, 2400, 2400-A4, 2440, 2440-A4, 2450, 2460, 9410

Step 1.   Turn the control on by pressing (ON/ OFF)

Step 2.   Press the (Options) button until the display reads [Enter Code to Change Settings]

Step 3.   Enter the "Code" with the buttons in the sequence (HOME) (+) (-) (GUESTS)
   a.   Segment timer - (Segment time) (+) (-) (Auto Horn)
   b.   Shot Clock/Pitch Time/Delay Of Game - (Reset 1) (+) (-) (Reset 2)

Step 4.   Continue pressing the (Options) button until the display reads [Scoreboard Model (+)]

Step 5.   Press the (+) key to select the scoreboard model shown in the table below.

Step 6.   Press the (Options) key to exit the menu.

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
Football	3500, 3502, 3504, 3514, 3515, 3516, 3520, 3525, 3534, 3550, 1632, 9605, 9715, 9505, 9515, 3400, 3402, 3404, 3414, 3415, 3416, 3425, 3434, 9405	**Type A** (+)
	7504, 7505, 7516, 7520, 7524, 7525, 7530, 9505, 9515, 7404, 7405, 7416, 7424, 7425, 7430, 9405, 3602, 3604, 3614, 3615, 3616, 3617, 3618, 3619, 3620, 3621, 3625, 3634, 3650, 3655, 3656, 7604, 7614, 7624, 7605, 7615, 7625, 7616, 7620, 7630, 7631, 7632	**Type B** (+)
	All 36XX, 76XX, and 86XX boards	**X6XX** (+)
	3680, 3685, 3688, 7680, 7685 (Reorders Intelligent Caption to Ball On, Down, To Go, Quarter)	**X6XX Legacy** (+)
Soccer	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** (+)
	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, 9710, 9715	**Type H** (+)
SCD / DGT / PCD	SCD-5, SCD-7A, SCD-T7A, SSC-7, SSC-T5, SSC-T9, S60-LED, S60, SCD-4	**Shot Clock** (+)
	DGT-6	**Delay Of Game** (+)
	DGT-5, DGT-2, 3020	**Legacy DOG** (+)
	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
Baseball	1000, 1010, 1030, 1035, 1500, 1510, 1530, 1535, 1550	**Standard** (+)
	1003, 1006, 1503, 1506, 1508, 1540, 1603, 1604, 1606, 1608, 1609	**Score by Inn** (+)
	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** (+)
	1603, 1604, 1606, 1608, 1609	**X6XX by Inn**
Pitch Count	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** (+)
	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** (+)
Segment Timer	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** (+)
	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	**Type 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	**Type F** (+)
	All X6XX boards with timers	**X6XX** (+)

TROUBLESHOOTING CHART

Problem	Cause		Solution
Scoreboard will not turn ON when control is turned ON	Receiver not working or receiver/scoreboard not powered up		Cycle power to receiver/scoreboard
	Control signal weak	Battery level low	Replace batteries
Control continues to search after an unusually long time	Check signal strength (see Options menu) Out of Range	Control in a poor location	Make sure the control is in clear line of sight of the scoreboard
			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.
			Link the control to this scoreboard or group (see Options Menu)
Cannot turn the time ON	Didn't sync up		Power control OFF, then ON
Control is ON but scoreboard/timer is OFF (data is changing on control)	No power to scoreboard		Check all switches, breakers, and fuses
	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 and run Network Analyzer to determine and document connection integrity. 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
Scoreboard is ON – Control is OFF	Batteries were removed while scoreboard ON		Install batteries -- power ON
	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   or   https://support.nevco.com/contact/

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 (multiple times a second)	The receiver is in the network and connected. The receiver may appear to not be blinking due to it blinking very quickly. If the receiver is connected to Scorbitz through the Ethernet jack, then it will blink more visibly.
Blinking Slow (approximately once a second)	The receiver is not connected but connection attempts are being made. Each slow blink is a 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
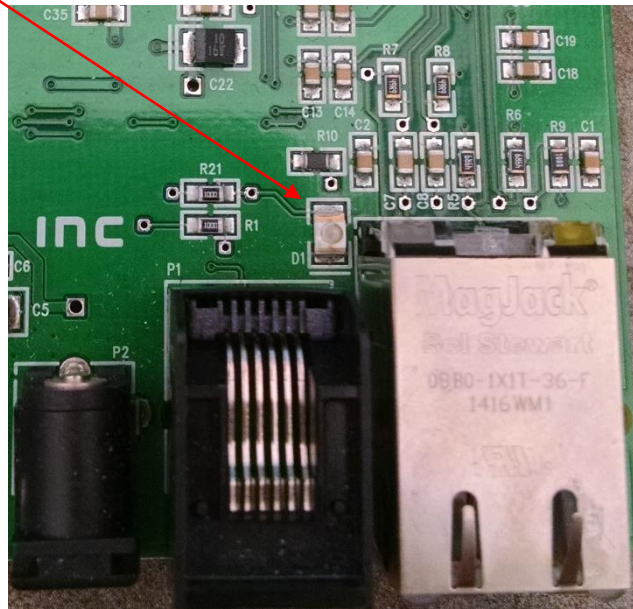
RECEIVER IDENTIFICATION ON POWERUP

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)

o   Electronic Team Name and Caption Support

o   Tactile confirmation of key pressed

o   High visibility transflective display

o   Convenient wireless operation

o   Built in wireless signal strength meter

o   Power conservation circuitry

o   Built in battery meter

o   Long battery life

o   Uses inexpensive, readily available AA batteries

o   Sealed keyboard

o   No slip grip

o   Ergonomic single hand operation

o   Internal antenna

o   Mate multiple controls to same scoreboard

o   Operate multiple scoreboards

o   Retrofits to existing wired installations

Specifications

Size:

Approximately 3¼" x 5½" x ⅞"

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: Remove AA batteries from the X2 controller when it is not going to be used for a prolonged period of time.

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.