

# DX2000 ULTIMATE TIMER



## INSTALLATION AND PROGRAMMING INSTRUCTIONS

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## INTRODUCTION

**Please read all instructions carefully and completely before attempting to program the timer.**

There are three ways to program your DX2000 timer for car wash use.

- 1: Push button programming.
- 2: Remote control programming.
- 3: Info-Key programming.

See individual sections for detailed instructions on that particular method of programming.

Basic timer programming is divided into two sections:

Message Section

Operating Setup Section

Each section is individually accessible.

### **Special Features**

**Courtesy Time:** Also called restart. Allows the customer to restart timer with one coin after time has run out.

**Bonus Time:** Allows you to give the customer more time per coin after a pre-set number of coins has been deposited. Any coins added after the pre-set number of coins has been deposited will receive "bonus coin time" until time expires.

**Secondary Output:** Timer has a secondary output that will turn on or off based on the time of day or based on the sunrise and sunset.

**Inventory Manager:** With inventory manager you can view as many or as few of the items in the inventory as you desire.

### **Terms used in instructions**

**"Standby"** as referred to throughout these instructions means that unit is displaying the welcome message and is ready to operate.

**"Token"** settings are for special applications only. Contact DIXMOR Enterprises or your distributor for more detailed information.

**"Prompt"** While in the various programming modes, if no buttons are pushed for 5 seconds a prompt will scroll across lower portion of display telling you what to do next. Push any button to stop prompt then continue programming.

**"Reset"** While in any programming mode, if no buttons are pushed for 1&1/2 minutes timer will automatically reset to standby.

**"Default Setting"** Refers to the factory settings already in your timer. These Default settings are shown throughout the instructions on pages 6,7,8&9 and are underlined, and the complete default settings are shown on the "Programming Worksheet" which is the last page in instruction manual.

## MESSAGE SECTION ITEMS

Welcome message: What the timer will display while in standby

Choice # 0 - No message. Timer will be blank.

# 1 - Custom message #1

# 2 - Custom message #2

# 3 - "Wash starts after X:XX minutes of time purchased"

# 4 - "Please deposit coins or tokens"

# 5 - "Please deposit X coins to start"

Pre-Start message: What the timer will display as coins are deposited.

Choice # 0 - Coins in (01:IN, 02:IN, 03:IN, etc.)

# 1 - Time purchased (00:40, 01:20, 02:00, etc.)

# 2 - Coins in and time purchased.

Coin-Add message: What the timer will display when coins are added while the timer is running.

Choice # 0 - No message, timer changes to new time

# 1 - Custom message #1

# 2 - Custom message #2

# 3 - "Added xx:xx thank-you"

Alert message: What the timer will display during last minute of timing.

Choice # 0 - No change in display. Timer counts down normally.

# 1 - Left zeros flash

# 2 - "Last Min." flashes where left zeros would be

Restart message: What the timer will display during courtesy time.

Choice # 0 - Restart feature turned off

# 1 - Custom message #1

# 2 - Custom message #2

# 3 - "Deposit coin to continue"

# 4 - "XX sec left to add coin"

Good-Bye message: What the timer will display when timing is completed.

Choice # 0 - No message. Timer will return to welcome message.

# 1 - Custom message #1

# 2 - Custom message #2

# 3 - "Have a nice day"

# 4 - "Thank-You"

# 5 - "Please come back again"

Note: good-bye message will run three times, then timer will return to standby.

## **OPERATING SET-UP SECTION ITEMS**

Time to start: Enter amount of **time** required to start wash. (Adj. from 00:00 to 99:59)

Time till bonus: If used, enter amount of **time** required after which coins added will receive bonus time. (Adj. from 00:00 to 99:59)

Timer per coin: Enter amount of **time** given per coin. (Adj. from 00:00 to 99:59)

Bonus coin time: If used, enter amount of **time** given per coin after required time till bonus has been reached. (Adj. from 00:00 to 99:59)

Time per Token: Enter amount of **time** per token. (Used in special applications only)

Bonus Token time: Enter amount of **time** for bonus token. (Used in special applications )

Token Type: Enter type of pulse used for token recognition. (Set to **No Tokens** for normal use.)

Choices: **No Tokens**

**Long**

**Multi**

Alert Mode: Enter choice for last minute warning

**20 beeps** (horn will sound for 10 sec. at 1:00 left)

**10 beeps** (horn will sound for 5 sec. at 1:00 left)

**continuous** (horn will sound continuous for last minute)

**no signal**

On Coin In: Enter choice to **beep** or **no horn** as coins are deposited.

On Last Coin: Enter choice to **delay** (2 sec) or **start** timing when turn on price is reached.

Bonus Mode: Enter choice of using (**enabled**) or not using (**disabled**) bonus time.

Courtesy Time: If used, enter amount of **time** customer will have to restart timer using one coin.

Courtesy: Enter choice to **keep** or **clear** bonus time feature during courtesy time.

Password 1: Enter **4 digit** code to be used for system programming with remote control.

Password 2: Enter **4 digit** code to be used to view inventory with remote control.

Password 3: Enter **4 digit** code to be used for remote control turn on of timer output.

Set Date: Set **month and day**

Set Year: Set **current year**

Daylight Savings **On**: Set to **on** or **off**. When set to **on** clock will automatically adjust time to daylight savings time.

Set Clock: Set **current time of day**

Note: Passwords are adjustable from **0000** to **9999**. Numbers are not individually adjustable. To adjust numbers, hold down S2 to count up or S3 to count down until you reach the desired number ; EXAMPLE ; You want 5678 as your password. Hold S2 down and the numbers will count up rapidly till you reach 5678. This way is closer than counting backwards to 5678.

## Timer Programming using the Pushbuttons

Note: While programming in the message section or the operating set-up section, if no buttons are pushed for 5 seconds a prompt will appear across the bottom portion of the display telling you what to do. Any time this prompt is on you can stop it by pushing any button.

Program switch 2 will cause numbers to move up.

Program switch 3 will cause numbers to move down.

Holding either button in will cause numbers to move up or down rapidly.

Pushing S1 at any place in this section will return timer to standby.

### Programming the message section

Push S2 to get into message section. Push S2 or S3 to set to desired message number.

Push S4 to move on to next message.

#### WITH WORKSHEET IN HAND

PUSH	DISPLAY SHOWS	YOUR CHOICE	SET WITH
S2	Welcome Message <u>5</u>	_____	S2 or S3
S4	Pre-Start Message <u>2</u>	_____	S2 or S3
S4	Coin Add Message <u>0</u>	_____	S2 or S3
S4	Alert Message <u>2</u>	_____	S2 or S3
S4	Restart Message <u>0</u>	_____	S2 or S3
S4	Good-Bye Message <u>4</u>	_____	S2 or S3

**STOP! Push S1 at this time to return to standby.**

S1           Timer resets to standby

Note: If you pushed S4 instead of S1 at this point, display will scroll "You are now editing Custom Message #1" then [END]. When [END] appears push S1 again. Timer will scroll "You are now editing Custom Message #2" then [END]. Push S1 two more times and timer will return to standby.

**Programming the operating set-up section, using the pushbuttons.**

**While programming in the operating set-up section if no buttons are pushed for 5 seconds a prompt will scroll across the bottom portion of the display telling you what to do next. Any time this prompt is on you can stop it by pushing any button. Program switch 2 makes the numbers larger, switch 3 makes them smaller. Holding either switch causes numbers to change rapidly.**

Push S4 to get into operating set-up section. Push S2 or S3 to set required value or desired choice for that particular function. Push S4 to advance to next function.

Pushing S1 at any place in this section will return timer to standby.



PUSH	DISPLAY SHOWS	YOUR CHOICE	SET WITH
S4	Time to Start <u>4:00</u>	_____	S2 or S3
S4	Time till bonus <u>0:00</u>	_____	S2 or S3
S4	Time per coin <u>0:30</u>	_____	S2 or S3
S4	Bonus coin time <u>0:00</u>	_____	S2 or S3
S4	Time per token <u>0:00</u>	_____	S2 or S3
S4	Bonus token time <u>0:00</u>	_____	S2 or S3
S4	Token Type <u>No Tokens</u>	_____	S2 or S3
S4	Alert Mode <u>10 beeps</u>	_____	S2 or S3
S4	On Coin In <u>beep horn</u>	_____	S2 or S3
S4	On Last Coin <u>Delay</u> timing	_____	S2 or S3
S4	Bonus Mode <u>Disabled</u>	_____	S2 or S3
S4	Courtesy Time <u>20</u> sec	_____	S2 or S3
S4	Courtesy <u>Clear</u>	_____	S2 or S3
S4	Password 1 <u>1111</u>	_____	S2 or S3
S4	Password 2 <u>2222</u>	_____	S2 or S3
S4	Password 3 <u>3333</u>	_____	S2 or S3
S4	Set Date <u>01/01</u>	_____	S2 or S3
S4	Set Year <u>1994</u>	_____	S2 or S3
S4	Daylight Savings <u>On</u>	_____	S2 or S3
S4	Set Clock <u>12:00 P.M.</u>	_____	S2 or S3
S1	Timer resets to standby		


## Using The Remote Control


**Note: Timer must be in standby to enable or disable remote control access.  
To Cancel Time Remaining Enter Password 3.**



### Programming The Message Section





**Note; While programming in the message section if no buttons are pushed for 5 seconds a prompt will appear across the bottom portion of the display telling you what to do next. Any time this prompt is scrolling you can stop it by pushing any button. To get into programming sections of timer using the remote control (enable remote control access) :**


















Press red power button . Display will show 0000. Using number keypad, enter 4 digit password that you have chosen for Password 1. Press . Timer will display "Remote access is now enabled" then display welcome message.

 will cause numbers to move up.

 will cause numbers to move down.





Holding either  or  will cause numbers to move rapidly.

Push the number 2 on the number keypad to get into message section. Push  or  to set desired message number. Push  to move on to next message. Push  to reset timer to standby at any time during programming.

PUSH	DISPLAY SHOWS	YOUR CHOICE SET WITH
2 (on keypad)	Welcome Message <u>5</u>	 /  
	Pre-Start Message <u>2</u>	 /  
	Coin-add Message <u>0</u>	 / 
	Alert Message <u>2</u>	 / 
	Restart Message <u>0</u>	 / 
	Good-bye Message <u>4</u>	 / 

**STOP! Push  at this time to return timer to standby.**

 Timer resets to standby

Note: If you pushed  instead of  at this point, display will scroll "You are now editing Custom Message #1", then [END]. When [END] appears push . Timer will scroll "You are now editing Custom Message #2" then [END]. Push  two more times to return timer to standby.



**Programming the Operating Set-up Section, using the remote control.**

While programming in the operating set-up section if no buttons are pushed for 5 seconds a prompt will appear across the bottom section of the display telling you what to do next. Any time this prompt is on you can stop it by pushing any button.

**VOL +** makes numbers larger, **VOL -** makes them smaller.

Holding either **VOL +** or **VOL -** causes numbers to change rapidly.

Press red power button **Ⓞ**. Display will show 0000. Using number keypad, enter 4 digit password that you have chosen for password 1. Press **ENTER**. Timer will display "Remote access is now enabled" then display welcome message.

Note: If you did not disable remote control access when finishing message programming above step can be omitted.

Push the number 4 on the number keypad to get into operating set-up section. Push **VOL +** or **VOL -** to set required value or make desired choice. Push **CH +** to move to next function. Push **CH -** to return timer to standby at any time.

PUSH	DISPLAY SHOWS	YOUR CHOICE	SET WITH
4 (on keypad)	Time to start <u>4:00</u>	_____	<b>VOL +</b> / <b>VOL -</b>
<b>CH +</b>	Time till bonus <u>0:00</u>	_____	<b>VOL +</b> / <b>VOL -</b>
<b>CH +</b>	Time per coin <u>0:30</u>	_____	<b>VOL +</b> / <b>VOL -</b>
<b>CH +</b>	Bonus coin time <u>0:00</u>	_____	<b>VOL +</b> / <b>VOL -</b>
<b>CH +</b>	Time per Token <u>0:00</u>	_____	<b>VOL +</b> / <b>VOL -</b>
<b>CH +</b>	Bonus token time <u>0:00</u>	_____	<b>VOL +</b> / <b>VOL -</b>
<b>CH +</b>	Token Type <u>No Tokens</u>	_____	<b>VOL +</b> / <b>VOL -</b>
<b>CH +</b>	Alert Mode <u>10 beeps</u>	_____	<b>VOL +</b> / <b>VOL -</b>
<b>CH +</b>	On Coin In <u>beep horn</u>	_____	<b>VOL +</b> / <b>VOL -</b>
<b>CH +</b>	On Last Coin <u>delay</u> timing	_____	<b>VOL +</b> / <b>VOL -</b>
<b>CH +</b>	Bonus Mode <u>disabled</u>	_____	<b>VOL +</b> / <b>VOL -</b>
<b>CH +</b>	Courtesy Time <u>20</u> sec	_____	<b>VOL +</b> / <b>VOL -</b>
<b>CH +</b>	Courtesy <u>clear</u>	_____	<b>VOL +</b> / <b>VOL -</b>
<b>CH +</b>	Password 1 <u>1111</u>	_____	<b>VOL +</b> / <b>VOL -</b>

CH +

Password 2 2222

\_\_\_\_\_

VOL + / VOL -

CH +

Password 3 3333

\_\_\_\_\_

VOL + / VOL -

CH +

Password 4 DVC#

\_\_\_\_\_

VOL + / VOL -

CH +

Set Date 01/01

\_\_\_\_\_

VOL + / VOL -

CH +

Set Year 1994

\_\_\_\_\_

VOL + / VOL -

CH +

Daylight Savings On

\_\_\_\_\_

VOL + / VOL -

CH +

Set Clock 12:00 P.M.

\_\_\_\_\_

VOL + / VOL -



CH -




Timer resets to standby





Remote access is now disabled



## Using the Remote Control to View Inventory Section Only


Press red power button . Display will show 0000. Using number keypad, enter 4 digit password that you have chosen for Password 2. Press . Timer will display "Remote Inventory Access is now Enabled" then display welcome message.

Press the number 3 on the number keypad to get into the inventory section. Push  to move to next item. After viewing inventory press  to reset to standby. Press red power button  to disable remote control access.

Inventories can be reset to zeros by holding down either  or  when display shows "Clear inv." **All inventories will reset to 0.** "Clear inv." is the last item to come up in the inventory section.

## Using the Remote Control for Remote Turn On of Timer Output

Press red power button . Display will show 0000. Using number keypad enter 4 digit password that you have chosen for Password 3. Press .

Timer output will turn on and display will show "manual" and start counting up in seconds. Press red power button  to turn off output, disable remote access, and reset timer to standby.

Note: Timer will automatically shut off after 15 minutes if you forget to turn it off.

## Special Notes When Using the Remote Control

Each password must be different.

When using the remote control, if no buttons are pushed for 1 min. 30 sec the remote control will automatically be disabled.

Timer may be reset to standby and remote access disabled at any time during programming by pushing the appropriate keys.

When programming using the remote control, should the timer suddenly show "DX2000 VER 2.5" then the standby message, it will be necessary to press power again and reenter password.

Note: To cancel time while timer is running, enter Password 3. Timer will show STOP and then return to welcome message. ( Time may also be canceled by opening timer and pushing any button.)

## CUSTOM MESSAGES

The DX2000 has two operator programmable messages. Each message can be a maximum of 64 characters or spaces.

Either custom message may be used as a welcome message, coin-add message, restart message, or good-bye message.

Following is a list of characters available for custom message programming. Characters are listed in order going up from [END].

[END] [T2S] [COIN] [TOKEN] [CLOCK] [BC] [BT] [C2S] blank ! " # \$ %  
& ' ( ) \* + , - . / 0 1 2 3 4 5 6 7 8 9 : ; > = < ? @ A B C D E F G H  
I J K L M N O P Q R S T U V W X Y Z [ ] ^ \_ ` a b c d e f g h i j k  
l m n o p q r s t u v w x y z { } block

Following is a list of the "smart messages", what they represent, and what the display will show when they are used as part of the message.

[END] - Used to signify the end of a message.

[T2S] - Time to start. Display will show the amount of time required to start wash.

[COIN] - Time per coin. Display will show the amount of time per coin.

[TOKEN] - Time per token. Display will show the amount of time per token.

[CLOCK] - Real time. Display will show the time of day.



[BC] - Bonus coin time. Display will show the amount of time given to bonus coins.

[BT] - Bonus token time. Display will show the amount of time given bonus tokens.


[C2S] - Coins to start. Display will show the number of coins to start.



With "smart messages" any time you change your program in the timer, your message will automatically be changed. For example, if you change your price from \$1.25 to \$1.50 and are using [C2S] as part of your custom message, that part of the message will automatically change from "5" to "6" .







## Programming your own Custom Message

Note: The following instructions are for programming the message using the pushbuttons located inside the timer with the corresponding remote control button shown in ( ). If you are using the remote control, you must first enable remote control access by pressing red power button  and entering password 1 and pressing .


Programming your message is done one space at a time. The space you are programming will always be on the left side of the display.



Press S2(2) to get into message section. Press S4 () until display reads "You are now editing Custom Message #1" then "[END]".

Press S2 () or S3 () until the required letter, number, character, or "smart message" appears on the left side of the display.


Press S4 () to move to next space. Press S2 () or S3 () to enter the character required in that space. Continue using S4 () to advance from space to space and S2 () or S3 () to enter required character until message is complete. Use [END] to signify the end of the message  
Custom Message #2 is programmed in the same manner.

Hints for message programming:



Use S4 () to move from space to space in the message.

Use S2 () or S3 () to set whatever is required in that space.  
A blank must be used before and after "smart messages".

S2 () will move forward through the letters and other characters.

S3 () will move you backward through the letters and other characters.

Always use [END] to signify the end of the message.

When message is complete, press S1 () to move to Custom Message #2, then S1 () two more times to return timer to standby.

**Example:** To program Custom Message #1 to read: "12:00 PM Deposit 6 Coins". Press S2 (2). Display will show "Welcome Message 5".

Press S4 (**CH +**) until display shows "You are now editing Custom Message #1" then [END].

Press S2 (**VOL +**) or S3 (**VOL -**) until [CLOCK] appears on left side of display.

Press S4 (**CH +**). Press S2 (**VOL +**) or S3 (**VOL -**) until blank appears on left.

Press S4 (**CH +**). Press S2 (**VOL +**) or S3 (**VOL -**) until "D" appears on left.

Press S4 (**CH +**). Press S2 (**VOL +**) or S3 (**VOL -**) until "e" appears on left.

Press S4 (**CH +**). Press S2 (**VOL +**) or S3 (**VOL -**) until "p" appears on left.

Press S4 (**CH +**). Press S2 (**VOL +**) or S3 (**VOL -**) until "o" appears on left.

Press S4 (**CH +**). Press S2 (**VOL +**) or S3 (**VOL -**) until "s" appears on left.

Press S4 (**CH +**). Press S2 (**VOL +**) or S3 (**VOL -**) until "i" appears on left.

Press S4 (**CH +**). Press S2 (**VOL +**) or S3 (**VOL -**) until "t" appears on left.

Press S4 (**CH +**). Press S2 (**VOL +**) or S3 (**VOL -**) until blank appears on left.

Press S4 (**CH +**). Press S2 (**VOL +**) or S3 (**VOL -**) until [C2S] appears on left.

Press S4 (**CH +**). Press S2 (**VOL +**) or S3 (**VOL -**) until blank appears on left.

Press S4 (**CH +**). Press S2 (**VOL +**) or S3 (**VOL -**) until "C" appears on left.

Press S4 (**CH +**). Press S2 (**VOL +**) or S3 (**VOL -**) until "o" appears on left.

Press S4 (**CH +**). Press S2 (**VOL +**) or S3 (**VOL -**) until "i" appears on left.

Press S4 (**CH +**). Press S2 (**VOL +**) or S3 (**VOL -**) until "n" appears on left.

Press S4 (**CH +**). Press S2 (**VOL +**) or S3 (**VOL -**) until "s" appears on left.

Press S4 (**CH +**). Press S2 (**VOL +**) or S3 (**VOL -**) until [END] appears on left.

Press S1 (**CH -**). Display will show "You are now editing Custom Message #2" then [END].

Press S1 (**CH -**) two more times and timer will return to standby.

**NOTE; If you are completely confused and want to start all over again from the beginning , you can reset timer to all "Default settings ". Open door and push S1 and display will read " INFO-KEY NOT RESPONDING" then "Reset and clear timer?" Now push S4 and display will read**

**"RESET." Push S1 to return to "standby". CAUTION This procedure will completely reset all messages, times, passwords, & everything you have programmed to the DEFAULT settings. You will have to reprogram everything.**

## **INFO-KEY PROGRAMMING (OPTIONAL)**

With the optional Info-Key it will not be necessary to manually program each one of your timers. Simply program one timer, then transfer the program to the Info-Key. The Info-Key can then be used to program the remaining timers.

To use the Info-Key to program the DX2000, you must first program one timer using either the pushbuttons or the remote control. Once programming is complete, follow the instructions below to transfer your program to your remaining timers.

### **To Transfer Program from Programmed Timer to Info-Key:**

Insert Info-Key into receptacle on lower right side of timer circuit board.

Press S1 and S4 simultaneously. Timer will display "Setup from unit #X", then "Write Setup to Infokey".

Note: should timer display "Infokey not responding", then "Write Setup to Infokey", press S1, remove key and reinsert and try again.

Press S4. Timer will display "WAIT", then "DONE", then "Write setup to Infokey".

Press S1 and timer should return to standby.

All timer messages and settings are now contained in the Info-Key.

### **To Transfer Program from Info-Key to Timer:**

Insert Info-Key into receptacle on timer circuit board.

Press S1. Timer will display "Setup from Unit #X", then "Read Setup from Infokey".

Note: As before, should timer display "Infokey Not Responding", then "Read Setup from Infokey", press S1, remove key, reinsert, and try again.

Press S4. Timer will display "WAIT", then "DONE", then "Read Setup from Infokey".

Press S1 and timer should return to standby.

Program has now been transferred to timer.

## INVENTORY ITEMS

To view inventory using the pushbuttons: Press S3 to get into inventory section. Press S4 to move to next item in the inventory. Press S1 to return to standby.

To view the inventory using the remote control see the instruction on using the remote control.

COINS: Shows number of coins deposited getting regular time per coin.

TOKENS: Shows the number of tokens deposited.

CYCLES: Shows the number of times the timer has started and stopped.

BONUSES: Shows the number of coins deposited that got bonus time.

RESTARTS: Shows the number of times timer has been restarted during courtesy time.

IDLE: Shows the amount of time ( hrs:min:sec) that timer has been in standby.

ACTIVATING: Shows the amount of time (hrs:min:sec) that the customers have spent depositing coins.

WASHING: Shows the amount of time (hrs:min:sec) that the timer output has been turned on.

MANUAL ON: Shows the amount of time (hrs:min:sec) that the timer has run using remote control turn on.

COINS PER DAY: Shows the averaged number of coins per day.

TOKENS PER DAY: Shows the averaged number of tokens per day.

CYCLES PER DAY: Shows the averaged number of cycles per day.

BONUS PER DAY: Shows the averaged number of coins getting bonus time per day.

RESTARTS PER DAY: Shows the averaged number of coins deposited during courtesy time.

IDLE PER DAY: Shows the averaged amount of time per day that the timer has been in standby.

ACTIVE/DAY: Shows the averaged amount of time per day that customers have spent depositing coins.

WASHING/DAY: Shows the averaged amount of time per day that the timer output has been turned on.

ACTIVE/CYC: Shows the averaged amount of time per cycle that customers have taken depositing coins.

WASHING/CYC: Shows the amount of time per cycle that the output of the timer has been turned on.

CLEAR INV.: Hold S2 or S3 ( **VOL +** or **VOL -** if using remote control) while this item is showing to clear all inventories.










## INVENTORY MANAGER

With Inventory Manager it is not necessary to show all the items in the inventory when viewing the inventory. You can choose only the items that you want to be shown.

Using Inventory Manager with the pushbuttons:

Press S1 and S3 at the same time. Display will show "Coins Shown". Press S2 or S3 to change to "not shown" if you do not want to show the number of coins deposited. Press S4 to advance to the next item in the inventory, "Tokens Shown". Press S2 or S3 to change to "not shown" if you do not want to show the number of tokens. Continue pressing S4 to advance to the next item in the inventory and S2 or S3 to select "shown" or "not shown" for that item until you have advanced through all the items in the inventory. Press S1 to return to standby.

Using Inventory Manager with the remote control:

Press red power button . Enter 4-digit code for Password 1 then press . Display will show "Remote access is now enabled". Press the number 5 on the keypad. Display will show "Coins" and either shown or not shown. Press  to move from item to item in the inventory and  /  to choose "shown" or "not shown" for that item. When entire inventory has been set press  to return to standby then red power button  to disable remote control.

## SECONDARY OUTPUT

The DX2000 contains a secondary output that you can use to turn an external device (bay lights, outside lights, bill changer, etc.) on or off using the daily time clock or the sun switch. When using the sun switch the DX2000 automatically tracks the changing times of dawn and dusk throughout the year.

Explanation of items to be programmed for the secondary output.

**On Time:** What time the output turns on. When using the daily time clock this number will be the time. When using the sun switch this number will be the number of hours and/or minutes before or after dawn or before or after dusk.

**On Basis:** Is the number set in `On Time` AM (AM Clock), PM (PM Clock), or the number of hours and/or minutes before or after dawn or dusk.

**Off Time:** What time the output turns off. When using the daily time clock this number will be the time. When using the sun switch this number will be the number of hours and/or minutes before or after dawn or before or after dusk.

**Off Basis:** Is the number set in 'Off Time' AM(AMClock), PM(PM Clock), or the number of hours and/or minutes before dawn, after dawn, before dusk, after dusk.

**Latitude:** Set this item to the number of degrees of latitude for your location.

**Longitude:** Set this item to the number of degrees of longitude for your location.

**Time Zone:** Set this item to the time zone for your location, Eastern, Central, Mountain, Pacific.



**Note:** In order for the Sun Switch to operate correctly the latitude, longitude, and time zone must be set to the correct values for your area.





**Pushbutton Programming:**

Push S1 and S2 at the same time to get into secondary output section.

Push S4 to advance to next item. Push S2 or S3 to set required value or choice for that item. Push S1 to return to standby.

**Remote Control Programming:**

Press red power button . Enter 4-digit code for Password 1. Press . Display will show "Remote access is now enabled". Press the number '7' to get into secondary output section

Press  to advance to next item. Press  /  to set required value or choice for that item. Push  to return to standby.

## SECONDARY OUTPUT SETUP EXAMPLES

You want the output to switch ON at 6:45 AM every day and OFF at 11:30 PM every day. The settings would be as follows:

On Time: 6:45

On Basis: AM Clock

Off Time: 11:30

Off Basis: PM Clock

You want the output to switch ON 45 min. before dusk and OFF 30 min. after dawn.

On Time: 00:45

On Basis: Before Dusk

Off Time: 00:30

Off Basis: After Dawn

You want the output to switch ON at 12:00 midnight and off at 12:00 Noon.

On Time: 00:00

On Basis: AM Clock

Off Time: 00:00

Off Basis: PM Clock

You want the output to switch ON at 4:00 PM and OFF 1 hour and 30 minutes after dawn

On Time: 4:00

On Basis: PM Clock

Off Time: 1:30

Off Basis: After Dawn

Remember, when using the sun switch the DX2000 will automatically adjust the on and off times with the changing times of dawn and dusk.

## **INSTALLATION AND WIRING**

Your DX2000 can be mounted anywhere in the bay that you desire. We recommend a minimum of 7 feet above the floor to help deter vandalism. Keep in mind that you must run an electrical conduit between your coin meter box and the DX2000.

The DX2000 has four mounting holes located in the rear section of the enclosure. These mounting holes are 5/16" diameter. **DO NOT HOLD TIMER IN PLACE AND DRILL HOLES THROUGH THE CASE.** Mark the holes then remove timer before drilling to prevent damage to timer.

### **Electrical Requirements**

The timer operates on 24 VAC. You need a minimum of 40 watts to operate the timer alone. We highly recommend a minimum 75 watt transformer per bay in warm climates with no coin box heaters and a minimum 100 watt transformer per bay in cold climates. Use a minimum of 18 gauge wire for all timer connections.

Timed output is 24VAC with a maximum load of 3 amps.

Secondary output is variable depending on voltage put in . Maximum load 3 amps.

### **Wiring**

The wiring connector is on the upper left side of circuit board. It is a 12 pin, 2 part, snap together plug. Use care when separating this plug.

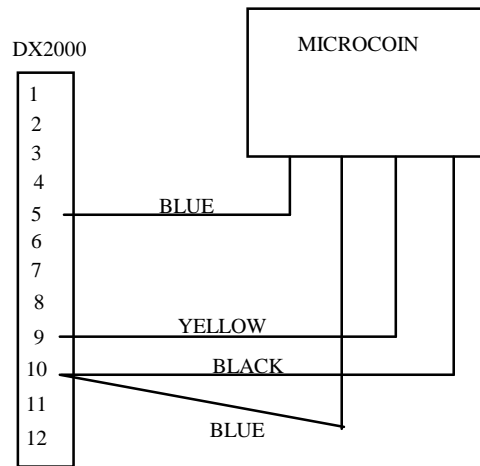
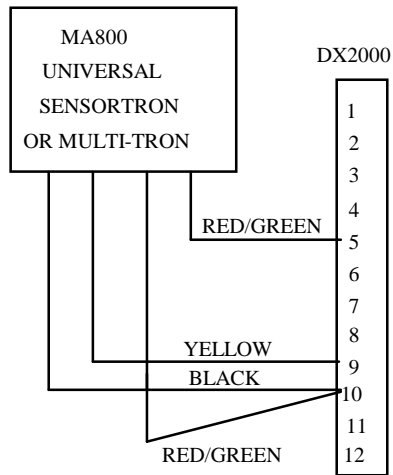
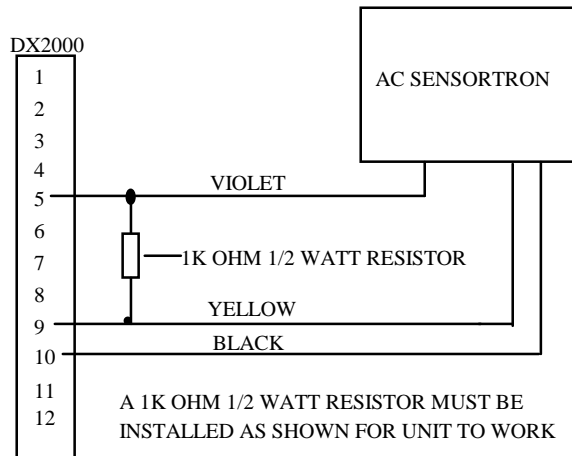
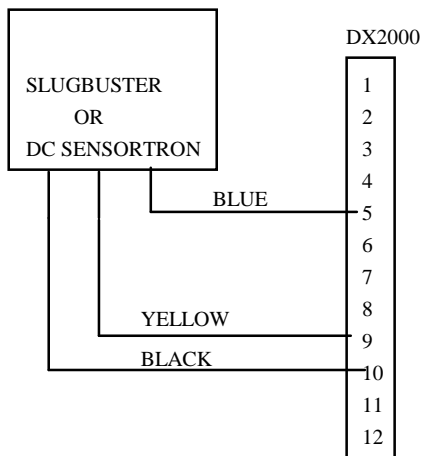
**ALWAYS DISCONNECT POWER BEFORE WIRING**

#### Wiring Connections

Pin 1 is at the top of the plug, Pin 12 is at the bottom.

PIN	USE
1	Secondary Output power out (hot)
2	Secondary Output power in (hot)
3	Timed Output 24VAC
4	Not Used (Special Application Only)
5	Coin Signal
6	Not Used (Special Application Only)
7	+ 12 volt DC Horn Output
8	- 12 volt DC Horn Output
9	24 VAC Power In (hot)
10	24 VAC Power In (common)
11	Modem
12	Modem

## Coin Acceptor Wiring



## ALTERNATE SCHEDULE PROGRAMMING

The DIXMOR DX2000 has the capability of automatically changing the complete program; IE; time per coin ,coins to start, messages and all other programmable functions at a predetermined time and day of the week. Example , on Wednesday and Thursday you want to run a special of 8 minutes for \$2.00 and have the display read something like " MIDWEEK SPECIAL NOW IN EFFECT ! 8 minutes for \$2.00 -9 am till 4 pm" The DX2000 will automatically do this for you.

You must have our software package which is Microsoft WINDOWS 3.1 based . If you buy the DX1600 modem the software is included, or you can get just the software package consisting of the following, a 3.5" floppy disk, 1 Info-Key, 1 6 foot extension cord for the info key and the coded adapter which connects to your computer. The floppy disk and the adapter are coded as a set and must be used together to operate properly. The DX2000 has a built in clock which can display the time of day to your customers if you so desire and this clock is what controls the automatic switching between programs, therefore it is imperative that you set the correct time and etc. during the initial programming of your DX2000 for it to operate properly.

The way it works is you simply load the disk onto your computer and then go into the DX2000 file. From there on you can completely program your DX2000 for all normal operations and then program the Alternate Schedule to operate at any time of the day, any day of the week. There would then be 2 complete programs which will automatically switch on and off according to how you program it. You can change programs for any day of the week and any time of the day. Once you get all the programming done to your specifications you simply insert the INFO-KEY into the adapter and click on "transfer", then take the INFO-KEY to your car wash and download it into each of the bays. This is explained on page 13 of your instruction manual.

If you are one of the people who really like to use computers you can even get our DX1600 modem to install in your equipment room and then call up your car wash and get an up to the minute report of inventory items and even change the programming over the phone.

## TROUBLESHOOTING GUIDE

<u>PROBLEM</u>	<u>SOLUTION</u>
NO DISPLAY	Verify that 24 volts is present on pins 9 & 10 of the timer. If yes, disconnect power for 5 minutes then reconnect. If still no display return board for service.
NO OUTPUT	Jumper between pins 9 & 3 on timer. If equipment runs return board for service. If equipment still does not run, problem is elsewhere in the system.
NO HORN	On new installations verify that horn polarity is correct. Pin 7 is horn positive. Pin 8 is horn negative. Substitute known good horn to verify that problem is in the timer. Check program to verify that horn output has not been turned off.
COINS DO NOT ADD TIME	Jumper between pin 10 & pin 5 of timer. This should add 1 coins worth of time every time you touch them. Check program to verify that bonus time settings are <u>NOT</u> set to "Bonus Coin Time 0:00" "Time till Bonus 0:00" and "Bonus Mode Enabled" On new installations verify that polarity on coin acceptor is correct.
OUTPUT DOES NOT SHUT OFF	Disconnect power to timer for 5 minutes then reconnect. If timer now seems to function normally timer was probably locked up by a voltage spike or power surge.
DISPLAY READS "ERROR"	Program has been lost. Press any button on timer (or Power on remote control) to reset timer. Timer will then need to be reprogrammed.
DISPLAY READS "CLOSED"	This indicates a constant coin pulse. Disconnect the wire from #5 of the timer. If "CLOSED" goes away coin acceptor is defective.

REMEMBER, IF ALL ELSE FAILS, CALL US.  
WE WILL BE GLAD TO ASSIST YOU.

DIXMOR ENTERPRISES  
5755 S. GALLUP ST LITTLETON CO 80120 303-794-0597 OR 303-794-1387