

## Accessories and Options

PSL-20V	Extra podium Signal Light
PSL-20VF	Flush mount podium signal light for permanent installation
ASL4	Audience signal light with 4" lights
ASL4-ND3	Audience signal light with 4" digital display and green-yellow red lights.
ASL2-ND3	Audience signal light with 2" digital display and green-yellow red lights.
VC-2000	Video clock; software and dongle to display time on LCD monitor
CS-518	Carrying/storage case holds Limitmer system and ASL2-ND3
CS-827	Carrying/storage case for Limitmer system and ASL4-ND3.
KES-850	50-ft Cat 5 Cable / KES-825 (25-ft)
KES-882	Adaptor: Male XLR-to-Modular Cat 5 Jack
PRO-2000BT	Timer system with integrated Bluetooth transmitter and external powered Bluetooth receiver
IP-2000X	Adapter to connect timer and signal light(s) over a local area net or WAN
TP-2000X	Adapter to control Limitimer with touch panel systems

## Service and Support



DSan Corporation  
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[sales@dsan.com](mailto:sales@dsan.com)



Products and accessories available for purchase online:  
[www.dsan.com/shop](http://www.dsan.com/shop)



Limitimer user guides, bulletins, Q&As:  
[www.dsan.com/Limitimer](http://www.dsan.com/Limitimer)

### Warranty

Instruments made by DSAN Corp are warranted against defects in materials and workmanship one year from date of shipment. Any instrument which fails will be restored free of charge.



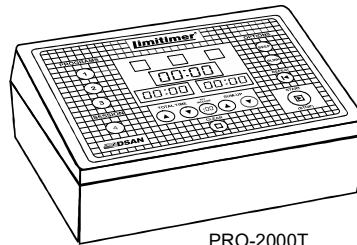
**DSAN**

Made in USA

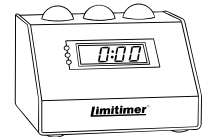
# Limitimer<sup>®</sup>

## Speaker Timer with Remote Signal Light

Model PRO-2000

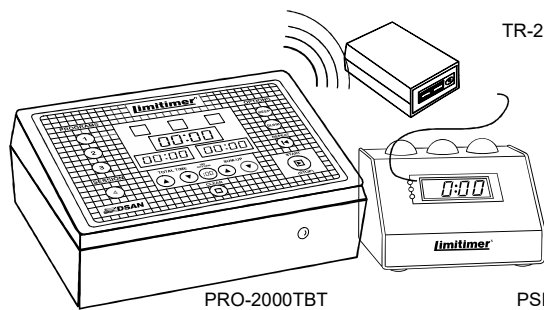


PRO-2000T



PSL-20V

Model PRO-2000BT



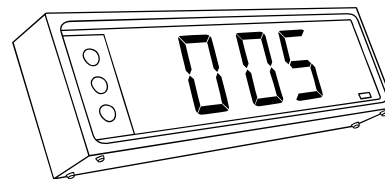
PRO-2000BT

TR-2000BT

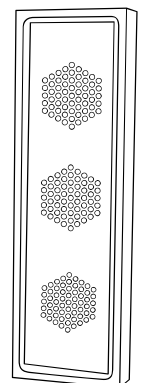
PSL-20V



ASL2-ND3



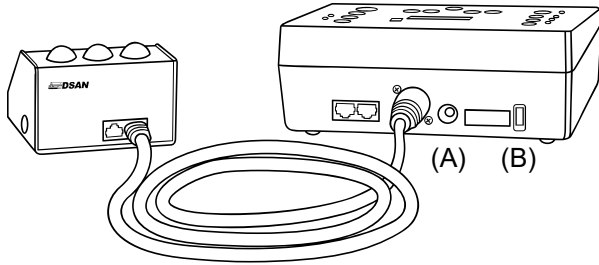
ASL4-ND3, ASL4-ND3BT



ASL-4

**DSAN**

## Quick Start - Set-up



Connect Signal Light to Limitimer with Cat-5 cable or use the Cat-5-XLR adapter KES882 (included).

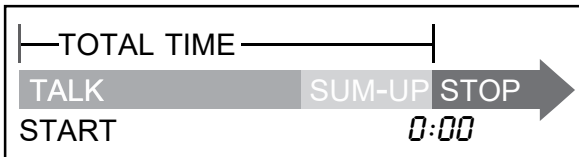
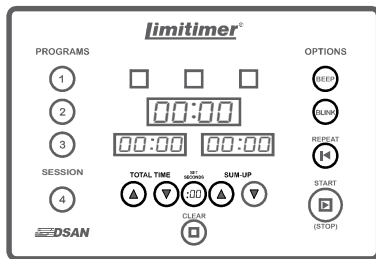
Plug in 12 V power supply (A).

Turn on power switch (B).

Set Total Time.

Set Sum-up Time.

Press Start.



## Options: Beep - Blink

Note: Blink and beep settings, like time settings, are set for each program individually.

**Blink:** Red light starts to blink after it comes on

**Beep:** Audible cue is sounded on yellow-to-red light and on red blink

**Blink + Beep:** Audible cue is sounded on yellow-to-red change, then, once every other second when Red light starts to blink.

Note: Hold Beep button to activate a single manual beep.

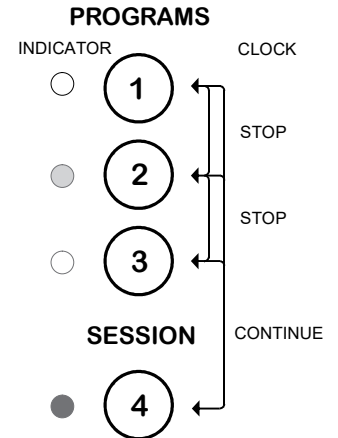
## Using the Programs

Programs are useful for debates or contests where pre-set timing formats can be selected quickly or where timekeeping is separate for each speaker.

To pre-set a program, select that program.

Set Total Time, Sum-up Time, Blink and Beep.

These settings are saved for the selected program.

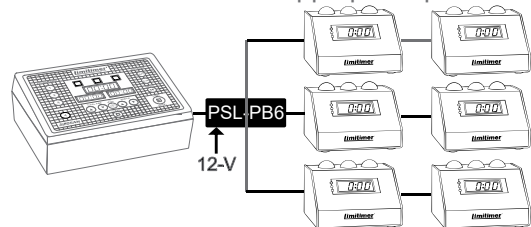


Programs 1, 2, and 3 cannot run simultaneously with each other. Toggling between these programs stops the clock. Session 4 is a program that can run in background to Program 1, 2 or 3.

A dimly-lit Program LED indicates that a program is running in background. A brightly lit LED indicates that the program is selected. A signal light set to display multiple programs displays the program selected on the timer.

## Multiple Signal Lights

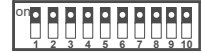
Up to 2 signal lights (PSL-20V or ASL2-ND3) can be powered from the base timer at a distance of about 200-feet. Longer distances will produce power attenuation due to resistance in the cable. To drive additional lights at greater distances, use DSAN model PSL-PB6 or PSL-PB18 power distribution hubs with an appropriate power supply.



# Global Settings

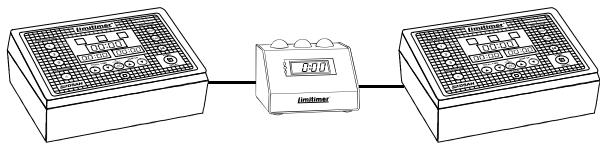
Global settings are common to all programs. They are made on the 12-position DIP switch on the rear of the timer console. The default settings (shown) are suitable for most uses.

Default settings



## 1. Master / Slave.

When two or more timers are connected to one or more signal lights, set one timer as master [ON] and the other(s) as slave [OFF]. When only one timer is used, it must be a master (default setting).



"Master" Switch 1 = ON

"Slave" Switch 1 = OFF

The Slave timer acts as a client that sends keystroke commands to control the Master and display the Time Remaining. All the time processing is done in the Master.

## 2. Counting Program 4 (Session)

Minutes:Seconds[ON]; Hours:Minutes [OFF]  
When using Program 4 to time a program over several hours, set to Hours:Minutes [OFF].

## 3. Counting Program 1, 2 or 3

Minutes:Seconds [ON] Hours:Minutes [OFF]

## 4. Count direction

Count-Down [ON] or Count-Up [OFF].  
If Count-Up, Time Remaining display shows elapsed time, else Time Remaining.

## 5. Count Behavior

Continue after zero [ON] else, stop display at zero.  
Note, in OFF mode, internal clock continues to run and red light stays on until user presses "STOP."

## 6. Sound Volume

High [ON] Low [OFF]

## 7.+ 8. Sound Selection

7. ON	8. ON	None*	*An empty sound. "BEEP" pressed on the timer outputs a cue to activate a sound at a signal light that is set for an audible sound.
7. OFF	8. ON	Buzz	
7. ON	8. OFF	Ring	
7. OFF	8. OFF	Chime	

## 9. Time Settings Permission

Allow time changes while clock is running [ON].

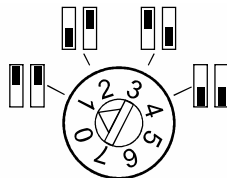
## 10. Block Transmitter [ON]

Model PRO-2000BT offers wireless transmission to the remote signal light. Set to "OFF" when using a wireless connection.

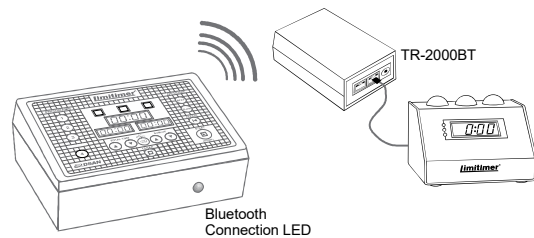
# Wireless Operation

## 11 + 12. Wireless Channels (PRO-2000BT)

PRO-2000BT is equipped with an integrated Bluetooth® transceiver. It can communicate with up to 6 Bluetooth signal light receivers (TR-2000BT) or other PRO-2000BT timers on four different channels. This allows multiple timer-signal light networks to operate in proximity. Match receiver channel (rotary switch) with timer channel (DIP switches 11 + 12) as shown. **Note:** Receiver channels 5,6,7 0 not used. The effective distance for

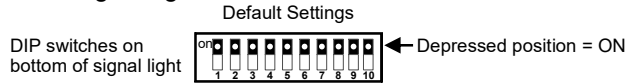


60-feet. Bluetooth devices need to "find" one



# Signal Light Settings

Use DIP switches on the bottom of the signal light to set which timer programs to display, whether sound cues accompany light changes, which phase lights are active and how the digital display behaves. All settings are local can be different for each signal light connected to the timer.



## 1-4. Select Timer Programs to be displayed

- 1. Display Program 1 [ON]
- 2. Display Program 2 [ON]
- 3. Display Program 3 [ON]
- 4. Display Program 4 [ON] (Session)

Since Program 4 can run in background, it might be useful to use a separate signal light that is enabled for Program 4 ONLY and another that is enabled for Programs 1, 2 and/or 3 ONLY. A signal light that is enabled for multiple programs displays the program that is selected on the timer.

**5. Continue counting after zero [ON]** else, stop display at zero. Note, in OFF mode, the internal clock continues to run and red light stays on until user presses "STOP." Beep / Blink continue, if set.

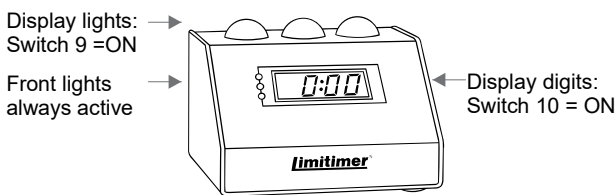
**6. Sound volume.** High [ON] Low [OFF]

## 7.+ 8. Sound Selection

- 7. ON 8. ON None\* \*An empty sound. "Beep" pressed on the timer
- 7. OFF 8. ON Buzz outputs a cue to activate a sound at a signal light that
- 7. ON 8. OFF Ring is set for an audible sound.
- 7. OFF 8. OFF Chime

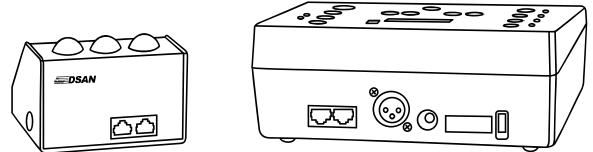
**9. Display top lights [ON]**

**10. Display digits [ON]**

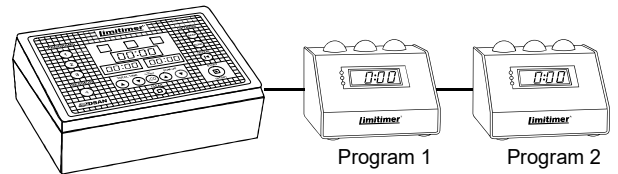


# Signal Light Connections

Connect the signal light to the Limitimer console with the 50-foot Cat-5 cable or the Cat-5-XLR adapter (both included). Maximum distance 200-feet. This can be increased by using power distribution hub PSL-PB6. See Page 1.



If Limitimer is used in debates or contests where separate times are maintained for participants, set the signal lights each to receive only a unique program. Signal lights may be interconnected to the timer console along a single cable run.



**Caution:** Cables carry 12V power.. Do not connect to audio devices or data ports. Contact DSAN for pinouts to make your own cables.

# Network Connections

Use IP-2000X "Network Extender" to make timer-signal light connections over a network. For more information, see [www.dsan.com/Network](http://www.dsan.com/Network).

