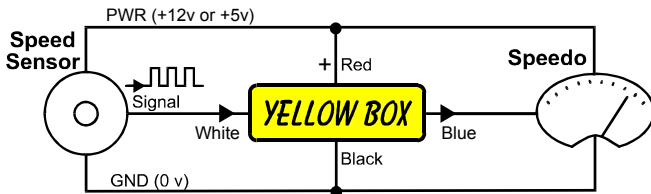# YELLOW BOX

Electronic Speedo Recalibrator

Corrects speed errors caused by gearing changes and tyre size changes.

Installs permanently in the vehicle and provides real-time correction of the vehicle speedometer and odometer.

Also suitable for tachometer correction.

Adjusts from 1:10 to 10:1 correction!

Plug-n-play wiring harness is available for some vehicles and motorcycles, see our web page.

10 YEAR Warranty!

YELLR
WWW.YELLR.COM

Since our very first product in 1999, every Yellow Box is covered by our 10 year replacement warranty.

10 YEAR Warranty!

If your Yellow Box fails for any reason within 10 years simply return it and we will replace it with a new Yellow Box.

SPECS

Power supply voltage; 5v to 14.5v (12v automotive)
Power supply current; < 10mA
Input signal; 2v to 20v squarewave, 2v to 30v sinewave
Output signal; square / sine (switch selectable)
Freq range; 1Hz to 6000Hz (all standard speedo types)

IMPORTANT! Don't lose your Jumper Plug

We provide a special Jumper Plug with every Yellow Box.

This plug can replace the Yellow Box if you need to return the Yellow Box for warranty reasons.
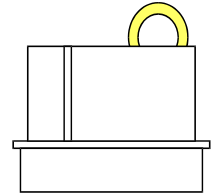
When the Jumper Plug is plugged in it returns the wiring to the original configuration, which may also be useful for test purposes.

Yellow Box Features

Green LED Light
The Green light shows the signal coming from the vehicle speed sensor. It will flash at low speeds and may flicker or appear blurry at high speeds.

Molded Body
Our proprietary molding system uses high strength plastic designed to protect the electronics and last for decades.

4 Pin Connector
Our standard connector is pin compatible with all Yellow Boxes.

1. Input (White wire)
2. Output (Blue wire)
3. Ground (Black wire)
4. +12v Power (Red wire)

LED Lights
When the Yellow Box is first powered up both lights will flicker during the self-test sequence.

Red LED Light
In normal operation the Red light slowly repeats a sequence of 10 flashes, to show the setting you selected on the 10 switches;
  FF FFFF FFFF
Long Flash = switch is ON
Short Flash = switch is OFF

In special modes the Red light is used to indicate other things. See the special modes for more info.
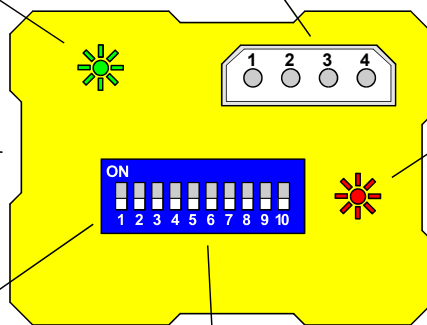
Switch 1   (selects signal type)
Selects the type of output signal;

ON (up) = suits square wave
3-wire hall-effect sensors
OFF (down) = suits AC sinewave
2-wire inductive sensors

Switches 2 - 10   (sets the correction ratio)
These 9 switches set the speedo calibration ratio.
Choose the desired switch settings from the ratio tables.
(0 = OFF switch down, 1 = ON switch up)

NOTE! These switches must be changed when the Yellow Box is powered down. The new ratio will take effect after you turn the ignition on and the Yellow Box powers up.

YELLOW BOX
Electronic Speedo Recalibrator

Thank you for purchasing a Yellow Box!
This new Yellow Box version YBX is our most technologically advanced product and is now automatically compatible with many different types of vehicle speed sensor.
In 1999 we created the world's first computerised speedo recalibrator, and we are proud to continue the tradition of being the market leader in reliability and speed correction technology.

Reliability.
Your Yellow Box was designed, assembled and tested by craftsmen here in Australia and has been subjected to rigorous testing at multiple stages during its construction.
If the Yellow Box does not work after installation, the most likely cause will be an incorrect switch setting or faulty installation wiring. Please check these carefully! We also have an installation and troubleshooting guide at our web page;
www.YELLR.com

Calculating the Correction Ratio.
First you need to find your total speed error by comparing your speedo indicated speed to the actual vehicle speed.
Use a GPS device or GPS speedo app on your smart phone to measure actual vehicle speed, and at the same time take note of the indicated speed on your speedo. It helps to drive on a straight level road at a steady speed for a couple of minutes to allow the GPS app to reach maximum accuracy.

Then do this simple calculation using a pocket calculator or the calculator app on your smart phone;

> **Ratio = Indicated Speed** divided by **Actual Speed**

Example 1; "Speedo reads too fast"
Speedo (indicated speed) 56
GPS (actual speed) 50
Ratio = 56 / 50 = 1.1200

Example 2; "Speedo reads too slow"
Speedo (indicated speed) 47
GPS (actual speed) 50
Ratio = 47 / 50 = 0.9400

Setting the Correction Ratio.
Look through the ratio tables provided in this instruction leaflet to find the ratio which is the best match. That will show you the switch setting for the 10 switches on the Yellow Box. Set the switches with the Yellow Box powered OFF, then when you turn it back on the correction ratio will be set.

NOTE 1. You can repeat the GPS test to make sure the ratio was correct. Sometimes you might need to choose the next ratio (above or below) to get the best accuracy.

NOTE 2. Don't forget that any time you change the ratio switches you need to turn the Yellow Box OFF then ON again.

NOTE 3. The first switch of the 10 (**switch 1**) does not affect the ratio, it sets the **type of output signal** to the speedo. It is marked as "x" in the ratio tables. (Also see Features Diagram.)

KPH to MPH conversion.
This feature can be useful on an imported vehicle to do a speedo conversion from kilometers to miles (or vice versa).

To show KPH on a MPH speedo, use ratio; 0.6214
To show MPH on a KPH speedo, use ratio; 1.6094

You may also want to correct for some small additional speedo error. If so, choose a ratio above or below the value shown here and compare with a GPS speedo reference like the calculator method shown above.

Special Test Modes.
To activate these modes, set the switches to the desired setting as shown for each mode then power up the Yellow Box. To end the special mode, turn the Yellow Box off and select your normal switch setting again.

All Switches ON.
11 1111 1111
This mode is used to test the 10 switches by displaying 10 long flashes on the red light. The speedo will not operate.

All Switches OFF.
00 0000 0000
In this mode the Yellow Box operates normally, but does not perform any recalibration of the speedo signal.
This mode can be used to see the speedo working with its original speed error (not corrected). It is also a switch test and will display 10 short flashes on the Red light.

Output Test Modes.
x0 1111 1000   25Hz
x0 1111 1001   50Hz
x0 1111 1010   100Hz
x0 1111 1011   200Hz *
x0 1111 1100   400Hz *
x0 1111 1101   800Hz *
These 6 modes send a calibrated speed signal to the speedo. This can be used to test that the speedo is working and also to choose which type of output signal works best with your speedo. Each test mode must be selected while the Yellow Box is powered down.
However **switch 1** (marked x) selects type of output signal, and this switch can be changed while the Yellow Box is running. In most cases, switch 1 should be ON (up).

* NOTE! On some speedos the higher frequencies (200, 400, 800) may cause the speedo to read max speed. Start with 25Hz then if the speedo reads low or zero, try each higher setting in turn.
Because all makes of speedos are different we cannot know what speed will be displayed, but the displayed speed should remain steady if the speedo is working properly. Try to choose a speed near the middle of your speedo range for best results.

Display Firmware Version.
x1 1111 1000
Display Hardware Version.
x1 1111 1001
The version will be displayed in binary as 8 flashes on the Red light. Example; Firmware v1.0 = 0001 0000

Speedo Sweep Test.
x1 1111 1010
The sweep test can be useful on older (dial type) speedos that use a moving pointer, especially if the pointer has become stuck at some position.
A signal will be sent to the speedo that increases speed over a few seconds until it reaches the speedo max speed then will hold there for a few seconds, and then sweep back to zero again. This may be able to fix a speedo that has a stuck pointer. The test performs once, after the Yellow Box powers up, so if you need to repeat the test turn the Yellow Box off then back on again.

> **Installation instructions available at;**
>
> # www.YELLR.com
>
> **Also Plug-n-Play Harness to suit motorcycles, some cars and 4WDs**

NORMAL CORRECTION RATIOS - Yellow Box Speedo Recalibrator - Version; YBX 2021

0 = Switch OFF (switch down),   1 = Switch ON (switch up),   x (sw1) = Set Output Signal Type (doesn't affect ratio)

RATIO	SWITCHES
1.0000	x0 0000 0000
1.0057	x0 0000 0001
1.0113	x0 0000 0010
1.0171	x0 0000 0011
1.0228	x0 0000 0100
1.0286	x0 0000 0101
1.0344	x0 0000 0110
1.0402	x0 0000 0111
1.0461	x0 0000 1000
1.0520	x0 0000 1001
1.0580	x0 0000 1010
1.0640	x0 0000 1011
1.0700	x0 0000 1100
1.0760	x0 0000 1101
1.0821	x0 0000 1110
1.0882	x0 0000 1111
1.0944	x0 0001 0000
1.1005	x0 0001 0001
1.1068	x0 0001 0010
1.1130	x0 0001 0011
1.1193	x0 0001 0100
1.1256	x0 0001 0101
1.1320	x0 0001 0110
1.1384	x0 0001 0111
1.1448	x0 0001 1000
1.1513	x0 0001 1001
1.1578	x0 0001 1010
1.1643	x0 0001 1011
1.1709	x0 0001 1100
1.1775	x0 0001 1101
1.1842	x0 0001 1110
1.1909	x0 0001 1111
1.1976	x0 0010 0000
1.2044	x0 0010 0001
1.2112	x0 0010 0010
1.2180	x0 0010 0011
1.2249	x0 0010 0100
1.2318	x0 0010 0101
1.2388	x0 0010 0110
1.2458	x0 0010 0111
1.2529	x0 0010 1000
1.2599	x0 0010 1001
1.2671	x0 0010 1010
1.2742	x0 0010 1011
1.2814	x0 0010 1100
1.2887	x0 0010 1101
1.2959	x0 0010 1110
1.3033	x0 0010 1111
1.3106	x0 0011 0000
1.3180	x0 0011 0001
1.3255	x0 0011 0010
1.3330	x0 0011 0011
1.3405	x0 0011 0100
1.3481	x0 0011 0101
1.3557	x0 0011 0110
1.3634	x0 0011 0111
1.3711	x0 0011 1000
1.3788	x0 0011 1001
1.3866	x0 0011 1010
1.3944	x0 0011 1011
1.4023	x0 0011 1100
1.4103	x0 0011 1101
1.4182	x0 0011 1110
1.4262	x0 0011 1111
1.4343	x0 0100 0000
1.4424	x0 0100 0001
1.4506	x0 0100 0010
1.4588	x0 0100 0011
1.4670	x0 0100 0100
1.4753	x0 0100 0101
1.4836	x0 0100 0110
1.4920	x0 0100 0111
1.5004	x0 0100 1000
1.5089	x0 0100 1001
1.5175	x0 0100 1010
1.5260	x0 0100 1011
1.5347	x0 0100 1100
1.5433	x0 0100 1101
1.5520	x0 0100 1110
1.5608	x0 0100 1111
1.5696	x0 0101 0000
1.5785	x0 0101 0001
1.5874	x0 0101 0010
1.5964	x0 0101 0011
1.6054	x0 0101 0100
1.6145	x0 0101 0101
1.6236	x0 0101 0110
1.6328	x0 0101 0111
1.6420	x0 0101 1000
1.6513	x0 0101 1001
1.6606	x0 0101 1010
1.6700	x0 0101 1011
1.6795	x0 0101 1100
1.6890	x0 0101 1101
1.6985	x0 0101 1110
1.7081	x0 0101 1111
1.7178	x0 0110 0000
1.7275	x0 0110 0001
1.7372	x0 0110 0010
1.7470	x0 0110 0011
1.7569	x0 0110 0100
1.7668	x0 0110 0101
1.7768	x0 0110 0110
1.7869	x0 0110 0111
1.7970	x0 0110 1000
1.8071	x0 0110 1001
1.8173	x0 0110 1010
1.8276	x0 0110 1011
1.8379	x0 0110 1100
1.8483	x0 0110 1101
1.8588	x0 0110 1110
1.8693	x0 0110 1111
1.8798	x0 0111 0000
1.8905	x0 0111 0001
1.9011	x0 0111 0010
1.9119	x0 0111 0011
1.9227	x0 0111 0100
1.9336	x0 0111 0101
1.9445	x0 0111 0110
1.9555	x0 0111 0111
1.9665	x0 0111 1000
1.9776	x0 0111 1001
1.9888	x0 0111 1010
2.0000	x0 0111 1011

RATIO	SWITCHES
0.9944	x0 0111 1100
0.9889	x0 0111 1101
0.9834	x0 0111 1110
0.9779	x0 0111 1111
0.9724	x0 1000 0000
0.9670	x0 1000 0001
0.9616	x0 1000 0010
0.9563	x0 1000 0011
0.9509	x0 1000 0100
0.9456	x0 1000 0101
0.9404	x0 1000 0110
0.9351	x0 1000 0111
0.9299	x0 1000 1000
0.9247	x0 1000 1001
0.9196	x0 1000 1010
0.9144	x0 1000 1011
0.9093	x0 1000 1100
0.9043	x0 1000 1101
0.8992	x0 1000 1110
0.8942	x0 1000 1111
0.8892	x0 1001 0000
0.8843	x0 1001 0001
0.8794	x0 1001 0010
0.8745	x0 1001 0011
0.8696	x0 1001 0100
0.8647	x0 1001 0101
0.8599	x0 1001 0110
0.8551	x0 1001 0111
0.8504	x0 1001 1000
0.8456	x0 1001 1001
0.8409	x0 1001 1010
0.8362	x0 1001 1011
0.8315	x0 1001 1100
0.8269	x0 1001 1101
0.8223	x0 1001 1110
0.8177	x0 1001 1111
0.8132	x0 1010 0000
0.8086	x0 1010 0001
0.8041	x0 1010 0010
0.7996	x0 1010 0011
0.7952	x0 1010 0100
0.7907	x0 1010 0101
0.7863	x0 1010 0110
0.7820	x0 1010 0111
0.7776	x0 1010 1000
0.7733	x0 1010 1001
0.7690	x0 1010 1010
0.7647	x0 1010 1011
0.7604	x0 1010 1100
0.7562	x0 1010 1101
0.7520	x0 1010 1110
0.7478	x0 1010 1111
0.7436	x0 1011 0000
0.7394	x0 1011 0001
0.7353	x0 1011 0010
0.7312	x0 1011 0011
0.7271	x0 1011 0100
0.7231	x0 1011 0101
0.7191	x0 1011 0110
0.7151	x0 1011 0111
0.7111	x0 1011 1000
0.7071	x0 1011 1001
0.7032	x0 1011 1010
0.6992	x0 1011 1011
0.6953	x0 1011 1100
0.6915	x0 1011 1101
0.6876	x0 1011 1110
0.6838	x0 1011 1111
0.6800	x0 1100 0000
0.6762	x0 1100 0001
0.6724	x0 1100 0010
0.6687	x0 1100 0011
0.6649	x0 1100 0100
0.6612	x0 1100 0101
0.6575	x0 1100 0110
0.6539	x0 1100 0111
0.6502	x0 1100 1000
0.6466	x0 1100 1001
0.6430	x0 1100 1010
0.6394	x0 1100 1011
0.6359	x0 1100 1100
0.6323	x0 1100 1101
0.6288	x0 1100 1110
0.6253	x0 1100 1111
0.6218	x0 1101 0000
0.6183	x0 1101 0001
0.6149	x0 1101 0010
0.6115	x0 1101 0011
0.6080	x0 1101 0100
0.6047	x0 1101 0101
0.6013	x0 1101 0110
0.5979	x0 1101 0111
0.5946	x0 1101 1000
0.5913	x0 1101 1001
0.5880	x0 1101 1010
0.5847	x0 1101 1011
0.5815	x0 1101 1100
0.5782	x0 1101 1101
0.5750	x0 1101 1110
0.5718	x0 1101 1111
0.5686	x0 1110 0000
0.5654	x0 1110 0001
0.5623	x0 1110 0010
0.5591	x0 1110 0011
0.5560	x0 1110 0100
0.5529	x0 1110 0101
0.5498	x0 1110 0110
0.5468	x0 1110 0111
0.5437	x0 1110 1000
0.5407	x0 1110 1001
0.5377	x0 1110 1010
0.5347	x0 1110 1011
0.5317	x0 1110 1100
0.5287	x0 1110 1101
0.5258	x0 1110 1110
0.5229	x0 1110 1111
0.5200	x0 1111 0000
0.5171	x0 1111 0001
0.5142	x0 1111 0010
0.5113	x0 1111 0011
0.5085	x0 1111 0100
0.5056	x0 1111 0101
0.5028	x0 1111 0110
0.5000	x0 1111 0111

WIDE CORRECTION RATIOS - Yellow Box Speedo Recalibrator - Version; YBX 2021

0 = Switch OFF (switch down),   1 = Switch ON (switch up),   x (sw1) = Set Output Signal Type (doesn't affect ratio)

RATIO	SWITCHES
2.0261	x1 0000 0000
2.0526	x1 0000 0001
2.0794	x1 0000 0010
2.1066	x1 0000 0011
2.1341	x1 0000 0100
2.1620	x1 0000 0101
2.1902	x1 0000 0110
2.2188	x1 0000 0111
2.2478	x1 0000 1000
2.2772	x1 0000 1001
2.3069	x1 0000 1010
2.3371	x1 0000 1011
2.3676	x1 0000 1100
2.3985	x1 0000 1101
2.4299	x1 0000 1110
2.4616	x1 0000 1111
2.4938	x1 0001 0000
2.5264	x1 0001 0001
2.5594	x1 0001 0010
2.5928	x1 0001 0011
2.6267	x1 0001 0100
2.6610	x1 0001 0101
2.6957	x1 0001 0110
2.7310	x1 0001 0111
2.7666	x1 0001 1000
2.8028	x1 0001 1001
2.8394	x1 0001 1010
2.8765	x1 0001 1011
2.9141	x1 0001 1100
2.9521	x1 0001 1101
2.9907	x1 0001 1110
3.0298	x1 0001 1111
3.0694	x1 0010 0000
3.1095	x1 0010 0001
3.1501	x1 0010 0010
3.1912	x1 0010 0011
3.2329	x1 0010 0100
3.2752	x1 0010 0101
3.3179	x1 0010 0110
3.3613	x1 0010 0111
3.4052	x1 0010 1000
3.4497	x1 0010 1001
3.4947	x1 0010 1010
3.5404	x1 0010 1011
3.5867	x1 0010 1100
3.6335	x1 0010 1101
3.6810	x1 0010 1110
3.7291	x1 0010 1111
3.7778	x1 0011 0000
3.8271	x1 0011 0001
3.8771	x1 0011 0010
3.9278	x1 0011 0011
3.9791	x1 0011 0100
4.0311	x1 0011 0101
4.0837	x1 0011 0110
4.1371	x1 0011 0111
4.1911	x1 0011 1000
4.2459	x1 0011 1001
4.3014	x1 0011 1010
4.3576	x1 0011 1011
4.4145	x1 0011 1100
4.4722	x1 0011 1101
4.5306	x1 0011 1110
4.5898	x1 0011 1111
4.6497	x1 0100 0000
4.7105	x1 0100 0001
4.7720	x1 0100 0010
4.8343	x1 0100 0011
4.8975	x1 0100 0100
4.9615	x1 0100 0101
5.0263	x1 0100 0110
5.0920	x1 0100 0111
5.1585	x1 0100 1000
5.2259	x1 0100 1001
5.2941	x1 0100 1010
5.3633	x1 0100 1011
5.4334	x1 0100 1100
5.5044	x1 0100 1101
5.5763	x1 0100 1110
5.6491	x1 0100 1111
5.7229	x1 0101 0000
5.7977	x1 0101 0001
5.8734	x1 0101 0010

RATIO	SWITCHES
5.9502	x1 0101 0011
6.0279	x1 0101 0100
6.1066	x1 0101 0101
6.1864	x1 0101 0110
6.2672	x1 0101 0111
6.3491	x1 0101 1000
6.4321	x1 0101 1001
6.5161	x1 0101 1010
6.6012	x1 0101 1011
6.6874	x1 0101 1100
6.7748	x1 0101 1101
6.8633	x1 0101 1110
6.9530	x1 0101 1111
7.0438	x1 0110 0000
7.1358	x1 0110 0001
7.2291	x1 0110 0010
7.3235	x1 0110 0011
7.4192	x1 0110 0100
7.5161	x1 0110 0101
7.6143	x1 0110 0110
7.7138	x1 0110 0111
7.8145	x1 0110 1000
7.9166	x1 0110 1001
8.0200	x1 0110 1010
8.1248	x1 0110 1011
8.2310	x1 0110 1100
8.3385	x1 0110 1101
8.4474	x1 0110 1110
8.5578	x1 0110 1111
8.6696	x1 0111 0000
8.7828	x1 0111 0001
8.8976	x1 0111 0010
9.0138	x1 0111 0011
9.1316	x1 0111 0100
9.2509	x1 0111 0101
9.3717	x1 0111 0110
9.4941	x1 0111 0111
9.6182	x1 0111 1000
9.7438	x1 0111 1001
9.8711	x1 0111 1010
10.0000	x1 0111 1011

RATIO	SWITCHES
0.4936	x1 0111 1100
0.4872	x1 0111 1101
0.4809	x1 0111 1110
0.4747	x1 0111 1111
0.4686	x1 1000 0000
0.4625	x1 1000 0001
0.4566	x1 1000 0010
0.4507	x1 1000 0011
0.4449	x1 1000 0100
0.4391	x1 1000 0101
0.4335	x1 1000 0110
0.4279	x1 1000 0111
0.4224	x1 1000 1000
0.4169	x1 1000 1001
0.4115	x1 1000 1010
0.4062	x1 1000 1011
0.4010	x1 1000 1100
0.3958	x1 1000 1101
0.3907	x1 1000 1110
0.3857	x1 1000 1111
0.3807	x1 1001 0000
0.3758	x1 1001 0001
0.3710	x1 1001 0010
0.3662	x1 1001 0011
0.3615	x1 1001 0100
0.3568	x1 1001 0101
0.3522	x1 1001 0110
0.3477	x1 1001 0111
0.3432	x1 1001 1000
0.3387	x1 1001 1001
0.3344	x1 1001 1010
0.3301	x1 1001 1011
0.3258	x1 1001 1100
0.3216	x1 1001 1101
0.3175	x1 1001 1110
0.3134	x1 1001 1111
0.3093	x1 1010 0000
0.3053	x1 1010 0001
0.3014	x1 1010 0010
0.2975	x1 1010 0011
0.2937	x1 1010 0100

RATIO	SWITCHES
0.2899	x1 1010 0101
0.2862	x1 1010 0110
0.2825	x1 1010 0111
0.2788	x1 1010 1000
0.2752	x1 1010 1001
0.2717	x1 1010 1010
0.2682	x1 1010 1011
0.2647	x1 1010 1100
0.2613	x1 1010 1101
0.2579	x1 1010 1110
0.2546	x1 1010 1111
0.2513	x1 1011 0000
0.2481	x1 1011 0001
0.2449	x1 1011 0010
0.2417	x1 1011 0011
0.2386	x1 1011 0100
0.2355	x1 1011 0101
0.2325	x1 1011 0110
0.2295	x1 1011 0111
0.2265	x1 1011 1000
0.2236	x1 1011 1001
0.2207	x1 1011 1010
0.2179	x1 1011 1011
0.2151	x1 1011 1100
0.2123	x1 1011 1101
0.2096	x1 1011 1110
0.2069	x1 1011 1111
0.2042	x1 1100 0000
0.2016	x1 1100 0001
0.1990	x1 1100 0010
0.1964	x1 1100 0011
0.1939	x1 1100 0100
0.1914	x1 1100 0101
0.1889	x1 1100 0110
0.1865	x1 1100 0111
0.1841	x1 1100 1000
0.1817	x1 1100 1001
0.1793	x1 1100 1010
0.1770	x1 1100 1011
0.1747	x1 1100 1100
0.1725	x1 1100 1101
0.1703	x1 1100 1110
0.1681	x1 1100 1111
0.1659	x1 1101 0000
0.1638	x1 1101 0001
0.1617	x1 1101 0010
0.1596	x1 1101 0011
0.1575	x1 1101 0100
0.1555	x1 1101 0101
0.1535	x1 1101 0110
0.1515	x1 1101 0111
0.1495	x1 1101 1000
0.1476	x1 1101 1001
0.1457	x1 1101 1010
0.1438	x1 1101 1011
0.1420	x1 1101 1100
0.1401	x1 1101 1101
0.1383	x1 1101 1110
0.1366	x1 1101 1111
0.1348	x1 1110 0000
0.1331	x1 1110 0001
0.1313	x1 1110 0010
0.1296	x1 1110 0011
0.1280	x1 1110 0100
0.1263	x1 1110 0101
0.1247	x1 1110 0110
0.1231	x1 1110 0111
0.1215	x1 1110 1000
0.1199	x1 1110 1001
0.1184	x1 1110 1010
0.1169	x1 1110 1011
0.1154	x1 1110 1100
0.1139	x1 1110 1101
0.1124	x1 1110 1110
0.1109	x1 1110 1111
0.1095	x1 1111 0000
0.1081	x1 1111 0001
0.1067	x1 1111 0010
0.1053	x1 1111 0011
0.1040	x1 1111 0100
0.1026	x1 1111 0101
0.1013	x1 1111 0110
0.1000	x1 1111 0111