

TS200

Programmable Universal Tire-Pressure Sensor

TS200 Universal Tire-Pressure Sensor User Manual (Metal Valve / Clamp in Style)

Disclaimer

Please read this manual carefully before installing TS200 universal tire sensor (hereinafter referred to as TS200). For safety reasons, all the installation and maintenance operations should be carried out by trained professionals, with the guidance of vehicle manufacturer. Tire valves are vehicle safety related component and incorrect installations may cause malfunctions for tire valves or TPMS sensors. Shenzhen Xtootech Intelligent Co., Ltd. (hereinafter referred to as "Xtootech") does not assume any liability in case of incorrect installation of the product. Pictures illustrated here are for reference only and this user manual is subject to change without prior notice.

Warranty

TS101 sensor is guaranteed to be free from material or manufacturing defects for a period of 24 months or 40,000km (25,000 miles), whichever comes first. In case of defects caused by material or workmanship, Xtootech will repair or replace (according to the situations) the product or parts for free by inspecting the proof of purchase.

Xtootech are not responsible for defects caused in the following circumstances:
- Incorrect installation;
- Damage caused by collision or tire damage;
- Exceeding specific using limits of the product.

Specification

Sensor Weight	approx. 13 g
Use-Case Scenarios	46.1 x 25 x 16.2mm (1.81" x 0.98" x 0.64")
Max. Pressure	900 kPa (6.0 bar or 130.5 psi)
Max. Speed	240 km/h (150mph)

⚠ Warning!

Before installation, please use the "XTool TPMS" Mobile app and program the sensor(s).
Make sure the vehicle is equipped with TPMS/Tire Pressure Monitoring System before installation. You can check all vehicle models that are supported by TS200 sensor via "XTool TPMS" app.
Do not install a programmed TS101 sensor inside a broken wheel.
To ensure the best performance, do not install valve stems from other manufacturers, or install other parts which is not included inside TS101 sensor.
After finished installation, please test the TPMS system according to the guidance inside user manual from the original vehicle manufacturer. In order to confirm that the sensor is installed correctly.
When the tire is removed, it is highly recommended to replace or service the sensor. If the tire is using rubber valve, the valve stem must be replaced.
When driving vehicles with TS101 installed, the speed should be under 240km/h (150mph) and the tire pressure should be no higher than 900 kPa (6.0 bar or 130.5 psi).

Contact Us

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Before USE - Programming Sensors

⚠ To make sure the sensors are working properly, please read this guide before unpacking and program the sensor according to the programming instructions.

1. Get XTool TPMS App

Please take a smartphone (Android 5.1/64 bit) or iOS 9.0+ required, and find "XTool TPMS" app in the app store. You can also get the app by scanning the QR Code on the package.
This app can be used as TS200 sensor programming & detection, and can also be used to search for TPMS referring method and OEM sensor information.

⚠ Make sure your smartphone (or other smart devices) supports NFC function before installing the app.

2. Select Vehicle (or sensor P/N)

In the "XTool TPMS" app (hereinafter called "App"), you can select the vehicle brand, find the model and model year and get into the programming page for the vehicle.
Or you can also search for the OE sensor P/N (Parts Number), and get to the programming page for the sensor.

3. Programming Page

Here is a brief introduction on the programming page.
1. Programming mode: You can select the mode here, from auto to manual.
Auto: The sensor ID will be randomly generated and be written to the sensor. The sensor needs to be released after installation.
Manual: You can enter a sensor ID manually and the app will write the ID to the sensor. If you can get the original ID and write it to the sensor, the sensor does not need to be released.
2. ID enter fields: If you select "Manual", then the ID fields will appear.
DIC fields only accept decimal IDs. HEX fields only accept hexadecimal IDs.
3. OK button: Click this button to start programming.

4. Start Programming

Click "OK" to start programming. Put the back of the sensor (the square part, transparent side up) close to the NFC sensing area of your smartphone (or other devices). If the phone detects the sensor, the app will start programming automatically. DO NOT move the sensor or the smartphone until the programming succeeded, or the programming will fail and you will have to try again.

⚠ The NFC sensing area differs between smartphones.
Normally, smartphones with Android / HarmonyOS usually place the sensing area on the upper side on the back of the phone. And iPhones normally place the sensing area on top of the phone.
Please check the location of the sensing area on your phone before programming.

Other APP functions

① Check sensors: You can check all sensor informations (ID, SN, battery voltage, etc.) by NFC using the app.
② History records: Vehicles / Sensor menus that has been programmed before will be shown here. This can be used as a shortcut to get into the menu.
③ Settings & Updates: You can update the database, or send feedbacks here.

Before USE - Install Sensors

⚠ Before repairing, uninstall tire, or installing sensor, please use the original valve, rubber gasket, screw, etc. from XTool to ensure airtightness. Sensors have to be changed if the tires are damaged.
The torque of the valve nut should be under 4Nm.

1. Uninstall tires

Remove the valve cap and valve core, and deflate the tire. After deflation, use a pneumatic shovel to peel the rubber tire off the rim.
Fix the tire, adjust the valve to the 1 o'clock position relative to the tire separation head, insert the tire tool and lift the tire bead onto the installation head to remove the bead.

⚠ When removing the tire and rim, please face the valve at 180° towards the air pressure shovel.
During the tire removal process, the starting position must be maintained.

2. Uninstall sensor

Remove the valve cap and nut from the valve stem, and then remove the original tire pressure sensor assembly from the rim.

3. Install sensor

① Remove the valve cap from the valve.
② Pass the valve core and the sensor body through the rim valve hole so that the sensor is placed inside the rim.
③ Install the nut back on the valve stem and tighten the nut with a torque of 4Nm.
④ According to the installation of the sensor on the rim, adjust the angle between the sensor body and the valve, and tighten the fastening screws on the sensor.
⑤ Place the tire on the rim, make sure the valve faces the separation head at an angle of 180°, and install the tire. After installation, inflate the tire according to the tire pressure reference value on the vehicle nameplate.

Compliance Information

FCC Compliance
FCC ID: 25W3TPM54
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
1) This device may not cause harmful interference.
2) This device must accept any interference received, including interference that may cause undesired operation.
Warning
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
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 does generate, use and 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 the receiver.
• Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
RF Exposure Warning Statement
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment shall be installed and operated with minimum distance 20cm between the radiator & body.
Responsible Party
Shenzhen Xtootech Intelligent Co., Ltd.
Address: 302, Anhuo Road, Shuangzhen, Shenzhen, Guangdong, China
E-mail: xtootech@xtootech.com

ISED Statement
IC: 25W3TPM54
This device complies with the Canadian Interference-causing (Interference) that comply with Innovation, Science and Economic Development Canada's radio-frequency (RF) exposure limits. Operation is subject to the following two conditions:
(1) The device must not cause interference.
(2) The device must accept any interference, including interference that may cause undesired operation of the device.
CONCISSE (EN) RÉSUMÉ
Ce matériel est conforme aux normes d'émission d'interférences radiofréquences (RF) qui sont conformes aux RDSI (radio-détection de signaux de radiofréquences) de l'Innovation, Science et Développement économique Canada. L'exploitation est soumise aux deux conditions suivantes:
(1) Ce matériel ne doit pas provoquer d'interférences.
(2) Ce matériel doit accepter toute interférence, y compris les interférences susceptibles de compromettre un fonctionnement indésirable de l'appareil.
Cet équipement respecte les exigences des limites d'exposition radiofréquence dans la section 6.6 de l'ISIRI 330 et est conforme aux RDSI 330 RF. L'exposition, selon les données de l'information sur l'RF, est acceptée et complétée.
Cet équipement est conforme aux limites d'exposition radiofréquence de l'Innovation, Science et Développement économique Canada pour un environnement non contrôlé. Ce matériel est conforme aux limites d'exposition radiofréquence de l'Innovation, Science et Développement économique Canada pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec une distance minimale de 20cm entre le radiateur et le corps.

Declaration of Conformity
Shenzhen Xtootech Intelligent Co., Ltd. declares that the TS200 Sensor is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. In accordance with Article 10(2) and Article 10(10), this product allowed to be used in all EU member states.

UKCA
Shenzhen Xtootech Intelligent Co., Ltd. declares that the TS200 Sensor conforms with the technical regulations applicable to the product within the scope of UK Radio Equipment Regulations (SI 2017/1250), UK Electrical Equipment (Safety) Regulations (SI 2018/1101), and UK Electromagnetic Compatibility Regulations (SI 2019/1091) and declare that the same application has not been lodged with any other UK Approved Body.

Shenzhen Xtootech Intelligent Co., Ltd.
Add: 173,174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.