
































Ralph S Bacon YouTube Videos – Most recent video listed first.

Number	Description	Date
#254	<a href="#">Web-enabled ESP32 Pond  Pump Controller - on my  phone</a>	25 Nov 22
#BB11	<a href="#">Create an Arduino Library  - A Real World Example (Easy)</a>	11 Nov 22
#253	<a href="#">Accurate Task Scheduler for the Arduino (and STM32, ESP32...)</a>	28 Oct 22
#252	<a href="#">SMD Soldering Walk-through - easier than you think</a>	14 Oct 22
#251	<a href="#">8-bit Shift Register for your Arduino's LEDs or 7-Segment Display</a>	30 Sep 22
#250	<a href="#">Intel Core-i5 12600K PC Upgrade, 32Gb, 3Tb SSDs   What did I buy?</a>	16 Sep 22
#249	<a href="#">7-Segment LED Digit Multiplexing with fewer GPIO pins</a>	09 Sep 22
#248	<a href="#">Resistor Component Storage - it's been a rocky road</a>	26 Aug 22
#247	<a href="#">What's gone wrong? How do we know?</a>	19 Aug 22
#246	<a href="#">e-Ink e-Paper project with ESP32 Deep  Sleep</a>	22 Jul 22
#BB10	<a href="#">Namespaces &amp; Macros for Arduino (and other) microcontrollers</a>	17 Jun 22
#245	<a href="#">Project Experiences - Better tools, connectors and more!   </a>	03 Jun 22
#BB9	<a href="#">Organising your code  for easier debugging and maintenance </a>	27 May 22
#244	<a href="#">Multiple tasks on an Arduino?  FreeRTOS can do it - so can you </a>	20 May 22
#BB8	<a href="#">C++ Range-based Loops  for Arduino (and other <math>\mu</math>controllers) - so easy!</a>	13 May 22
#BB7	<a href="#">Pass by Value or Reference - What's the difference?</a>	06 May 22
#243	<a href="#">USB-C PD (Power Delivery) for my Smart Phone Charger? Too many wires!</a>	22 Apr 22
#BB6	<a href="#">Arduino State  Machine - Part 2: Implementation  </a>	15 Apr 22
#242	<a href="#">Strange Component Failure  after 3 years - quick  fix required!</a>	08 Apr 22
#241	<a href="#">Yikes! Only ONE GPIO pin but TWO  LEDs - Now What? Easy fix!</a>	01 Apr 22
#BB5	<a href="#">Moving your Arduino to a multi-tasking State Machine - Easy Intro</a>	25 Mar 22
#240	<a href="#">USB-to-Serial Isolator  Protect your USB sockets </a>	18 Mar 22
#239	<a href="#">Using An ESP32 with  NeoPixels - What Went Wrong? Simple Fix!</a>	04 Mar 22
#238	<a href="#">The Wrong Connectors  forget DuPont, use JST or IDC for final use</a>	25 Feb 22
#237	<a href="#">Doorbell Range Extender using a Nano  how would YOU have done it?</a>	18 Feb 22
#236	<a href="#">Multimeter Comparison! My Meter  failed! I replaced it with what?</a>	04 Feb 22
#235	<a href="#">Bluetooth Audio  Transmitter (KCX BT EMITTER) - with AT commands</a>	21 Jan 22
#234	<a href="#">Arduino Quiz   New Year 2022! So you think you know the Arduino?</a>	07 Jan 22
#233	<a href="#">ESP32/Arduino IR  Fan Control - RESOLVED!  </a>	17 Dec 21
#232	<a href="#">FAIL!  My wall fan won't respond to IR signals! Help! </a>	10 Dec 21
#231	<a href="#">Easy Arduino project  for XMAS Tunes ! Annoy your entire family! </a>	03 Dec 21
#230	<a href="#">The  ULTIMATE  Switch Bounce Eliminator - simple and effective. </a>	19 Nov 21
#229	<a href="#">ESP32 Deep Sleep - PLUS a QIO, QOUT, DIO, DOUT problem bug fix</a>	05 Nov 21
#228	<a href="#">ESP32 Over the Air (OTA) Updates with ONE LINE are EASY!</a>	22 Oct 21
#227	<a href="#"> printf for Arduino  (and ESP32, ESP8266) easy, formatted output</a>	08 Oct 21
#226	<a href="#">ROTARY ENCODER with no switch bounce  - you MUST use this</a>	24 Sep 21
#225	<a href="#">How I designed my Heater controller - Warning!  Mains voltage!</a>	Not Available
#224	<a href="#"> STOP using Serial.print in your Arduino code! THIS is better.</a>	03 Sep 21
#223	<a href="#">ESP-NOW simple demo - easy IOT data transfer on ESP32 or ESP8266</a>	27 Aug 21
#222	<a href="#">"Smart" Workshop Heater Control - ESP32 Wireless Solution?</a>	13 Aug 21
#221	<a href="#">Arduino nRF24L01+ Simple Trigger Wireless  Project (Update) with E...</a>	30 Jul 21
#220	<a href="#">PICO and PIO: First Look - far easier than you might  think</a>	16 Jul 21

#219	<a href="#">Generating sounds 🎵 from the PICO! But is it music to my 🧠 ears?</a>	09 Jul 21
#218	<a href="#">Dual Switch Detection using Diodes and an Arduino 🧠</a>	02 Jul 21
#217	<a href="#">Auto Transformer ⚡ Variac for motor control - silent control 👍</a>	25 Jun 21
#216	<a href="#">BBC HTTP/1.1 Solved! 🐞 PLUS PICO 2040 &amp; Arduino IDE running C++ 🚀</a>	18 Jun 21
#215	<a href="#">Raspberry Pi PICO 2040 - getting started with Thonny IDE &amp; µPython</a>	11 Jun 21
#214	<a href="#">Battery-powered 📱 Arduino-controlled nRF24L01+ transceiver project ...</a>	04 Jun 21
#213	<a href="#">ESP32 Web Radio BBC URLs, Raspberry Pi 🍷 Pico RP2040 - and more!</a>	28 May 21
#212	<a href="#">Arduino Man Cave aka Workshop Tour 🖥</a>	21 May 21
#211	<a href="#">Like Arnie, I'm back! 😊 Arduino IDE 2.0 (Beta)</a>	14 May 21
#210	<a href="#">Year End 2020 Roundup - Arduino Timers, Web Radio, PCBs and more!</a>	25 Dec 20
#209	<a href="#">Arduino Timer Interrupts - Overflow &amp; Comparator. Easy Peasy.</a>	18 Dec 20
#208	<a href="#">Using an ESP32 Task for my Web Radio - using the Arduino IDE</a>	04 Dec 20
#207	<a href="#">ESP32 Revisited! ESP32 Rev 1 and ESP32-WROVER - problem solved? 🐞</a>	27 Nov 20
#206	<a href="#">ESP32 Circular Buffer for Internet Radio - and ESP32 WiFi Woes 😞</a>	20 Nov 20
#205	<a href="#">ESP32 Internet Radio with VS1053 MP3 decoder and ILI9341 TFT</a>	13 Nov 20
#204	<a href="#">TFT Touch Screen ILI9341 SPI for ESP32 (Internet Radio Research)</a>	06 Nov 20
#203	<a href="#">SPIFFS vs LITTLEFS for ESP32 ✅ &amp; ESP8266 ✅ (not Arduino UNO ❌)</a>	30 Oct 20
#202	<a href="#">Using Assembler 🧠 within an Arduino Sketch - easy to do! 😊</a>	23 Oct 20
#201	<a href="#">ePaper &amp; eInk Displays for Arduino (and Raspberry Pi)</a>	16 Oct 20
#200	<a href="#">Feel the Need for Speed? GCC Compiler Optimisation for the Arduino</a>	09 Oct 20
#199	<a href="#">Self Balancing 'Bot (almost) with Arduino Pro Micro</a>	21 Aug 20
#198	<a href="#">Wii Nunchuck (I2C Joystick) for your Arduino project - Easy!</a>	14 Aug 20
#ADS	<a href="#">Mid Roll Ads? Not on my watch! Gone from this channel.</a>	13 Aug 20
#197	<a href="#">Broken USB on my Arduino? Easy Fix! Plus Arduino Code Optimisation!</a>	07 Aug 20
#196	<a href="#">Two-Way Bluetooth Serial Comms for Arduino and other µControllers</a>	31 Jul 20
#195	<a href="#">Reverse Polarity Protection using a MOSFET - for Arduinos and more!</a>	17 Jul 20
#BB4	<a href="#">MOSFETs - From an Arduino Perspective</a>	12 Jul 20
#194	<a href="#">External Watchdog Panelised PCB and Testing (plus giveaways)</a>	10 Jul 20
#193	<a href="#">Smart Phone Charger (done) &amp; PICKit 2 &amp; 3 under Win10 - FIXED!</a>	26 Jun 20
#192	<a href="#">Wakey, wakey! Let the DS3231 RTC wake up your Arduino - easy!</a>	19 Jun 20
#BB3	<a href="#">Resistors - From an Arduino Perspective</a>	17 Jun 20
#191	<a href="#">No "ALT-key" or Numeric Keypad? An Arduino 32U4 workaround!</a>	12 Jun 20
#190	<a href="#">External Watchdog Timer - Prevent latch/hang ups in a µController</a>	05 Jun 20
#189	<a href="#">Zero Crossing Detection using an Arduino (TRIAC Dimmer Control)</a>	29 May 20
#BB2	<a href="#">Capacitors - from an Arduino Perspective</a>	27 May 20
#188	<a href="#">Nightmare Fan Speed Controller PLUS a Volts &amp; Amps Digital Display</a>	22 May 20
#BB1	<a href="#">Transistors - from an Arduino Perspective. Bacon Bytes Beginners' Series.</a>	17 May 20
#187	<a href="#">LED 3" Digits Clock SMD (TQFP, SOIC, LEDs) Practice - useful eye ca...</a>	08 May 20
#186	<a href="#">Measure Current with an Arduino - Digital or Analog? Easy!</a>	01 May 20
#185	<a href="#">Vacuum Tube Preamplifier and Headphone Amp. Plus Flashing LEDs!</a>	24 Apr 20
#184	<a href="#">Make an Arduino USB Volume Control - Ideal Beginner's Project</a>	17 Apr 20
#183	<a href="#">Motorised Infra-red Volume Control with dodgy component - FIXED!</a>	10 Apr 20
#182	<a href="#">Project updates &amp; woes - phone charger .apk, vacuum tubes &amp; more!</a>	27 Apr 20
#181	<a href="#">ATTiny13 (and ATTiny85) Development Board, amazingly useful</a>	20 Apr 20
#180	<a href="#">SAMD21 M0 boards + Arduino Zero with PRO IDE debugging?</a>	13 Mar 20

#179	<a href="#">Intelligent Phone  Charger with an Arduino </a>	06 Mar 20
#178	<a href="#">Arduino PRO IDE (alpha) - First Look PLUS Simple LCD Countdown</a>	31 Jan 20
#177	<a href="#">ATTiny13 Fridge Door Alarm Challenge? Pass or Fail?</a>	24 Jan 20
#176	<a href="#">Dual SMD &amp; THT PCB Arduino Shield (Easy! Yes You CAN)</a>	17 Jan 20
#175	<a href="#">Beyond Arduino Speak</a>	10 Jan 20
#174	<a href="#">ATTiny13 Brain Dead? A programming nightmare!</a>	03 Jan 20
#173	<a href="#">ATTiny85 Power On Off Shutdown</a>	20 Dec 19
#172	<a href="#">LTC2954 Push Button On-Off Emulator - cheap upgrade for your Arduino project</a>	13 Dec 19
#171	<a href="#">External Battery Monitor from your Arduino</a>	06 Dec 19
#170	<a href="#">ToneAC Library with 328P DIP Nano PCB Plug-in</a>	15 Nov 19
#169	<a href="#">Universal Timer  Update: Library, SMT Assembled, 3-volt Project</a>	08 Nov 19
#168	<a href="#">Upgrade to an Arduino Uno 'Plus' with MiniCore and an ATmega328PB</a>	01 Nov 19
#167	<a href="#">Light an LED  with low 1.8v Diode Pump <math>\mu</math>Controller output (easy)</a>	25 Oct 19
#166	<a href="#">Deep Sleep  ATmega328P Alarm - WDT &amp; Interrupt &amp; custom PCB</a>	18 Oct 19
#165	<a href="#">From Schematic to PCB - Part 2: Designing and Ordering the PCB </a>	11 Oct 19
#164	<a href="#">From Circuit Diagram to PCB - Part 1: Schematic, Parts, BOM </a>	04 Oct 19
#163	<a href="#">Flash your ATmega328P using THIS for the cost of a cup of coffee</a>	27 Sep 19
#162	<a href="#">Arduino Water  Level Detector (easy and cheap!)</a>	20 Sep 19
#161	<a href="#">#161 ATmega328PB 74HC165 Universal  Timer (or something else)</a>	06 Sep 19
#160	<a href="#">Arduino Battery (  VCC) Monitor - No external components required</a>	30 Aug 19
#159	<a href="#">PIR Deep Sleep ATmega328P Project (for Benny </a> )	23 Aug 19
#158	<a href="#">nRF24L01+ with STM32F103 (Blue Pill) - transfer more data! (Easy)</a>	16 Aug 19
#157	<a href="#">Top 5 Essential Arduino Workshop Tools  - Beginner &amp; Upgrader</a>	09 Aug 19
#156	<a href="#">LGT8F328P Replacement for ATMEGA328P (at 32MHz </a> )	02 Aug 19
#155	<a href="#">STM32F103 Programming Helper PCB (Blue Pill)</a>	26 Jul 19
#154	<a href="#">ESP8266 Wemos D1 Mini HOME  ALONE monitoring project</a>	19 Jul 19
#153	<a href="#">STM32 clones - good value or cheap copy? Asian Alternative Components</a>	12 Jul 19
#152	<a href="#">STM32 Blue Pill - Is this a modern NANO replacement (  )</a>	05 Jul 19
#151	<a href="#">ESP32 Passing Values  Between Tasks - Deep Dive (2 Easy Ways)</a>	28 Jun 19
#150	<a href="#">SMD KiCAD Arduino PCB Project (Spoiler:  =FAIL)</a>	21 Jun 19
#149	<a href="#">ESP32 Dual Core Programming + Speed  Test vs Arduino UNO (fast!)</a>	14 Jun 19
#148	<a href="#">TCA9548A I2C MULTIPLEXER (&amp; Voltage Shifter)</a>	07 Jun 19
#147	<a href="#">Fingerprint readers  for Arduino (R307 plus Adafruit version)`</a>	24 May 19
#146	<a href="#">How to Support My YouTube Channel (at no cost  to you!)</a>	17 May 19
#145	<a href="#">Making an SMD THT Hybrid PCB Arduino Clone (Using PCBWay &amp; KiCAD)</a>	10 May 19
#144	<a href="#">PCB for ATTiny85 Fuse Resetter (using JLCPCB &amp; EasyEDA)</a>	03 May 19
#143	<a href="#">Touch Switch  with optional TTP223 module (ESP8266 or Arduino)</a>	26 Apr 19
#142	<a href="#">Optical Door Lock  Monitor (using an Arduino)</a>	19 Apr 19
#141	<a href="#">ESP32 + SSD1306 OLED Single Module (Arduino Compatible)</a>	12 Apr 19
#140	<a href="#">Secure GMAIL emails from your ESP8266 (or Arduino)</a>	05 Apr 19
#139	<a href="#">No Real Time Clock (RTC) Required (Wemos ESP8266 Mini)</a>	29 Mar 19
#138	<a href="#">Internet of Things (IoT) with an ESP8266 (Thingspeak Live Demo)</a>	15 Mar 19
#137	<a href="#">K-Type Thermocouple Display</a>	24 Mar 19
#136	<a href="#">MOSFET vs BJT NPN (TO92 package) </a>	01 Mar 19
#135	<a href="#">Compact Switched Mode Power Supply 12v 1A (tested)</a>	22 Feb 19

#134	<a href="#">Triacs Mains AC DC SSRs ☹️ What's going on?</a>	15 Feb 19
#133	<a href="#">Workshop Heater Repair 📺 using an Arduino (Nano 168)</a>	08 Feb 19
#132	<a href="#">Using EasyEDA and KiCAD for Improved PCB (dog deterrent)</a>	01 Feb 19
#131	<a href="#">Mechanical relay overload and snubber (with sparks)</a>	25 Jan 19
#130	<a href="#">TEA5767 FM Radio 📻 Module for your Arduino (Cheap!)</a>	12 Jan 19
#129	<a href="#">Barking mad 🐕 dog bark detector /deterrent (Woof)</a>	27 Dec 18
#128	<a href="#">Making a PCB with PCBWay (I made ⚡ one)</a>	21 Dec 18
#127	<a href="#">Relay Comparison - Electromechanical SSR Latching</a>	07 Dec 18
#126	<a href="#">Simple Battery to USB power conversion (mini project)</a>	01 Dec 18
#125a	<a href="#">Where's Ralph?</a>	16 Nov 18
#125	<a href="#">TPL5110 Nano Power Timer (for Arduino)</a>	02 Nov 18
#124	<a href="#">Raspberry Pi UPS Fix - with an ATtiny85 control (EASY)</a>	26 Oct 18
#123	<a href="#">Arduino Auto Shutdown (and switch off)</a>	19 Oct 18
#122	<a href="#">Raspberry Pi 3B+ Auto Restart (using an Arduino)</a>	28 Sep 18
#121	<a href="#">Audio Amplifier 🎵 Class D 3W Module for Arduino (and more)</a>	21 Sep 18
#120	<a href="#">Wemos D1 Mini 👍 Intro (with shields)</a>	24 Aug 18
#119	<a href="#">Bootloader Shield 🛡️ and 8Mhz Arduino Barebones (made easy)</a>	27 Jul 18
#118	<a href="#">ESP8266 Deep Sleep 🛌 and Bare Bones ESP (easy)</a>	13 Jul 18
#117	<a href="#">Bare Bones 🧠 Arduino (make your own)</a>	06 Jul 18
#116	<a href="#">Deep Sleep 🛌 Bare-Bones Arduino (using wake up ⌚ TIMER)</a>	29 Jun 18
#115	<a href="#">Put your Arduino to Sleep 🛌 (using wake up ▶ INTERRUPT)</a>	25 Jun 18
#114	<a href="#">No contact mains detector for Arduino &amp; Pi 🧠(just 10 components)</a>	15 Jun 18
#113	<a href="#">ISD1820 Audio Recorder Module (Arduino or 🍷 RasPi)</a>	07 Jun 18
#112	<a href="#">Analog inputs for your Raspberry Pi 🍷 Model 3B+ (easy)</a>	01 Jun 18
#111	<a href="#">Mains Opto Isolator (SAFE ✅ Workshop Automation)</a>	25 May 18
#110	<a href="#">ESP8266 relay RANT and 4-ch Sonoff first look (Alexa controlled)</a>	04 May 18
#109	<a href="#">Workshop Build 🏠 and Automation (Sonoff included)</a>	21 Apr 18
#108	<a href="#">Breadboard gripes ☹️ plus Mega 2560 PRO (Eclipse version)</a>	24 Mar 18
#107	<a href="#">ESP8266 WiFi Relay (with an Arduino)</a>	16 Mar 18
#106	<a href="#">RS485 Serial Data Transmission - on wires (no radio waves)</a>	03 Mar 18
#105	<a href="#">Unsafe ⚡ Encapsulated TSP-05/HLK-PM01 PSU? AND other stuff (cheap!)</a>	16 Feb 18
#104	<a href="#">ADS1115 Analog-to-Digital Converter for Arduino Pi 🍷 &amp; All (2018)</a>	02 Feb 18
#103	<a href="#">HC-SR04 Ultrasonic Obstacle Avoidance and Range Finder (fun!)</a>	19 Jan 18
#102	<a href="#">L298N H-Bridge Motor Control - How does it work?</a>	05 Jan 18
#101	<a href="#">Fun 😊 SSD1306 OLED Screen for your Arduino project - I2C or SPI</a>	22 Dec 17
#100	<a href="#">Tesla Coil &amp; Useless Box - with added value!</a>	08 Dec 17
#099	<a href="#">Logic Analyzer for I2C SPI and many more protocols</a>	24 Nov 17
#098	<a href="#">Telephone Dialler 📞 and Hardware Debounce Solution (retro)</a>	10 Nov 17
#097	<a href="#">Simple function (signal waveform) generator</a>	29 Oct 17
#096	<a href="#">Rotary Encoder Update - Step-less &amp; Software Debounced</a>	15 Oct 17
#095	<a href="#">Speed Contest! ESP8266 ESP32 and the Uno 328P</a>	28 Sep 17
#094	<a href="#">TM1637 LED Controller (Part 2) using NTP Server</a>	04 Sep 17
#093	<a href="#">EEPROM Data Compression</a>	21 Aug 17
#092	<a href="#">JYE Oscilloscope Kit ⚡ (DSO150 Review &amp; Build)</a>	04 Aug 17
#091	<a href="#">Arduino-related Product Review</a>	25 Jul 17

#090	<a href="#">When GOOD 🐱 components go BAD 🐱</a>	03 Jul 17
#089	<a href="#">Nokia 5110 TFT Display - Cheap and Easy</a>	14 Jun 17
#088	<a href="#">Digital Potentiometer aka Volume Control - Easy (X9C103)</a>	01 Jun 17
#087	<a href="https://youtu.be/yAT_TdD6nLQ">https://youtu.be/yAT_TdD6nLQ</a>	26 May 17
#086	<a href="#">More eBay Goodies (for the price of a cup of coffee)</a>	19 May 17
#085	<a href="#">Arduino vs Orange &amp; Raspberry Pi Zero 🐱</a>	12 May 17
#084	<a href="#">Making the ATtiny85 easier to program</a>	05 May 17
#083	<a href="#">Colour Touch Screen TFT LCD for your Arduino - Cheap &amp; Easy</a>	28 Apr 17
#082	<a href="#">ATtiny85 + I2C + SPI and more!</a>	21 Apr 17
#081	<a href="#">eBay Goodies Update</a>	12 Apr 17
#080	<a href="#">Scrolling LED Matrix MAX7219 *Updated*</a>	07 Apr 17
#079	<a href="#">IR Rain 🌧 Sensor Soldering Irons (and more!)</a>	28 Mar 17
#078	<a href="#">See thru walls! Microwave Movement Sensor</a>	21 Mar 17
#077	<a href="#">Forget buttons - use Infra Red! VS1838B first look</a>	10 Mar 17
#076	<a href="#">MPU6050 3-Axis Accelerometer Gyro - First Look</a>	28 Feb 17
#075	<a href="#">Send EMAIL from your Arduino! Better HTML! Time Server! More!</a>	20 Feb 17
#074	<a href="#">Web Enable your Arduino (ENC28J60 or W5100 Ethernet Controller)</a>	13 Feb 17
#073	<a href="#">nRF24L01 Send (and receive) data with your Arduino!</a>	05 Feb 17
#072	<a href="#">Arduino controlled Dual PWM controller &amp; Timer thoughts</a>	30 Jan 17
#071	<a href="#">How to create an Arduino Library - easy!</a>	22 Jan 17
#070	<a href="#">GPS Ublox - First look! Possible RTC replacement?</a>	13 Jan 17
#069	<a href="#">Alternative Arduino IDE - Sublime Text Editor</a>	06 Jan 17
#068	<a href="#">NeoPixel TV Simulator - Security for your home - Easy!</a>	30 Dec 16
#067	<a href="#">Vibration and other switches for your Arduino</a>	23 Dec 16
#066	<a href="#">AT Tiny85 Digispark - Arduino UNO alternative? An introduction!</a>	16 Dec 16
#065	<a href="#">Arduino EEPROM Basics - easy to do and useful to implement</a>	09 Dec 16
#064	<a href="#">Lie Detector! Heartbeat Pulse Monitor KY039 - It's life Jim but not...</a>	02 Dec 16
#063	<a href="#">Cascade MAX7219 7-Segment LED displays - easy!</a>	25 Nov 16
#062	<a href="#">NeoPixel demo plus eBay Goodies</a>	18 Nov 16
#061	<a href="#">LED Party Strobe Part 2</a>	09 Nov 16
#060	<a href="#">LED Party Strobe - Part 1</a>	04 Nov 16
#059	<a href="#">Arduino LED Cube - Part 2 Creating Patterns</a>	28 Oct 16
#058	<a href="#">Strange Third Hand - and other tools for Arduino projects</a>	21 Oct 16
#057	<a href="#">Xmas Tree Project - Completed</a>	14 Oct 16
#056	<a href="#">How to build an LED Cube - Part 1</a>	07 Oct 16
#055	<a href="#">Using a Hall Effect Magnetic Sensor</a>	30 Sep 16
#054	<a href="#">Wireless 433Mhz Rain Receiver (Completed)</a>	23 Sep 16
#053	<a href="#">Protect your Arduino - use an Opto Isolator! And RGB sound-to-light demo</a>	16 Sep 16
#052	<a href="#">Arduino Compatible Microphone Preamplifier super LEDs and awful resistors</a>	09 Sep 16
#051	<a href="#">Easy Xmas Project Idea (&amp; Product Updates)</a>	02 Sep 16
#050	<a href="#">TP4056 UPS - protect from power outs and brown outs</a>	26 Aug 16
#049	<a href="#">MORE PINS PLEASE! PCF8574 Arduino Pin Extender (Easy)</a>	19 Aug 16
#048	<a href="#">Wireless 433Mhz Rain Receiver with MP3 player and LCD</a>	12 Aug 16
#047	<a href="#">Arduino related components - Part 2</a>	04 Aug 16
#046	<a href="#">Wireless 433MHz Rain Sensor (Transmitter)</a>	29 Jul 16



#045	<a href="#">Shopping for Arduino Components (and a lucky find)</a>	26 Jul 16
#044	<a href="#">Wireless Rain Sensor - Discussions &amp; Experiments</a>	22 Jul 16
#043	<a href="#">Seven segment LED Multiplexing - Easy Introduction</a>	14 Jul 16
#042	<a href="#">Fridge Alarm Door Open Reminder - Part 2 Putting it together</a>	05 Jul 16
#041	<a href="#">Arduino Fridge Door Open Reminder with Touch Control - Part 1</a>	29 Jun 16
#040	<a href="#">Let the music play! Arduino based MP3 Player for music (or announcement)</a>	22 Jun 16
#039	<a href="#">Stepper Motor 28BYJ-48 Temperature Gauge - Part 2 Completing the project</a>	15 Jun 16
#038	<a href="#">Stepper Motor 28BYJ-48 Temperature Gauge - Part 1</a>	09 Jun 16
#037	<a href="#">Controlling your Arduino from your phone - Part 2 (the App)</a>	03 Jun 16
#036	<a href="#">Control your Arduino from your phone - HC06 Bluetooth module</a>	27 May 16
#035	<a href="#">Power Supply (9v) Repair - woah! Mains Voltage!</a>	20 May 16
#034	<a href="#">RFID Reader/Writer (Mifare MFRC522) with a Logic Level Shifter</a>	13 May 16
#033	<a href="#">ESP8266 WiFi Web Server Arduino style -introduction</a>	06 May 16
#032	<a href="#">Load Cell Coffee Cup Coaster (Part 2) - the code</a>	01 May 16
#031	<a href="#">Load Cell project (part 1) Arduino Micro problems plus postman deliveries</a>	26 Apr 16
#030	<a href="#">Cap1188 Touch Sensor &amp; USB Keyboard Emulator using Arduino Leonardo</a>	20 Apr 16
#029	<a href="#">Essential Arduino Workbench tools</a>	15 Apr 16
#028	<a href="#">DS18B20 Temperature Sensor and CAP1188 Touch Board</a>	11 Apr 16
#027	<a href="#">Night-light 1W LED MOSFET PWM with Remote Control - Part 2</a>	07 Apr 16
#026	<a href="#">Night-light 1W LED MOSFET PWM with Remote Control - Part 1</a>	05 Apr 16
#025	<a href="#">Scrolling Characters on an LED Matrix using a MAX7219</a>	30 Mar 16
#024	<a href="#">Four ways to RESET your Arduino</a>	26 Mar 16
#023	<a href="#">LCD BIG DIGITS for your Arduino using I2C - Easy!</a>	21 Mar 16
#022	<a href="#">Using an SD card to log data - and how to improve the reliability!</a>	15 Mar 16
#021	<a href="#">Voltage Conversion: Linear Voltage Regulator vs Buck Converter</a>	11 Mar 16
#020	<a href="#">Postman #3! Does Size Matter? Reducing the footprint of your Arduino project</a>	09 Mar 16
#019	<a href="#">How to use a Rotary Encoder with an Interrupt routine on your Arduino</a>	06 Mar 16
#018	<a href="#">Add a Relay Module to your Arduino project - Hints Tips &amp; Traps</a>	28 Feb 16
#017	<a href="#">Ultrasonic HC-SR04 for your Arduino (Easy!)</a>	25 Feb 16
#016	<a href="#">COM Ports &amp; Device Drivers - Connect your Arduino to your PC (or Mac)</a>	15 Feb 16
#015	<a href="#">Arduino PWM (Pulse Width Modulation) Part 2</a>	12 Feb 16
#014	<a href="#">Arduino PWM (Pulse Width Modulation) Basics Part 1</a>	12 Feb 16
#013	<a href="#">Matrix Membrane Switch (12-key 4x3) an Arduino PLUS a LED MAX7219 display</a>	06 Feb 16
#012a	<a href="#">Welcome! This is my YouTube Channel Trailer...</a>	31 Jan 16
#012	<a href="#">Postman #2 Cork LEDs And Retro LED Watch ESPDuino WiFi Board</a>	27 Jan 16
#011	<a href="#">Arduino and LED 7-segment displays using a MAX7219 - Part 3</a>	25 Jan 16
#010	<a href="#">Arduino and LED 7-segment displays using a MAX7219 - Part 2</a>	25 Jan 16
#009	<a href="#">Arduino and LED 7-segment displays using a MAX7219 - Part 1</a>	24 Jan 16
#008	<a href="#">Simple Demo of Binary Coded Decimal (BCD) for Real Time Clocks (such as DS3231 &amp; DS1307)</a>	22 Jan 16
#007	<a href="#">USB Powerbank special - DIY kit with 18650 Li-ion batteries Part 2</a>	21 Jan 16
#006	<a href="#">USB Powerbank special - DIY kit with 18650 Li-Ion batteries Part 1</a>	20 Jan 16
#005	<a href="#">Arduino compatible Real Time Clock modules (RTC) - DS1307 &amp; DS3231</a>	19 Jan 16
#004	<a href="#">Beginners's Guide to Arduino Hardware Part 2</a>	16 Jan 16
#003	<a href="#">Beginner's Guide to Arduino Hardware Part 1</a>	14 Jan 16
#002	<a href="#">(Test) MAX7219 Scrolling Text and an Arduino Uno</a>	09 Jan 16

#001	<a href="#">(Test) Scrolling text with a MAX7219 LED Dot Matrix Module and an Arduino UNO – easy!</a>	27 Dec 15
------	-------------------------------------------------------------------------------------------------------	-----------