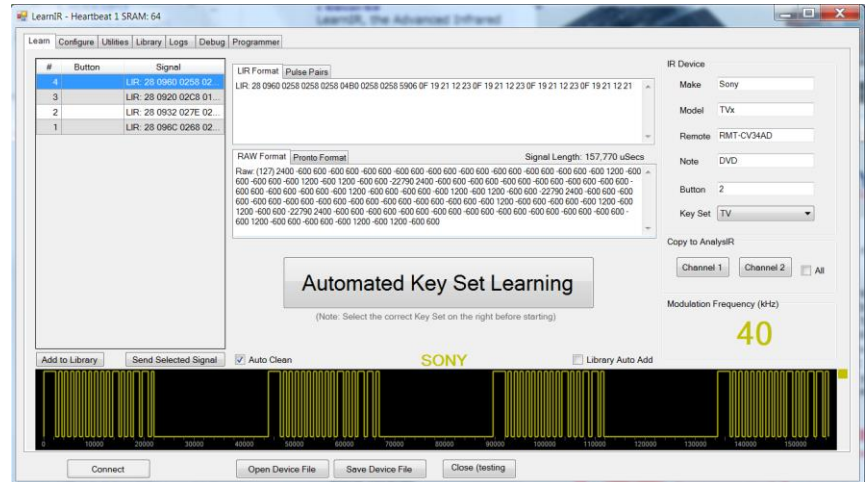


LearnIR Advanced Infrared Learner

Features

LEARNIR, the Advanced Infrared learning device includes:

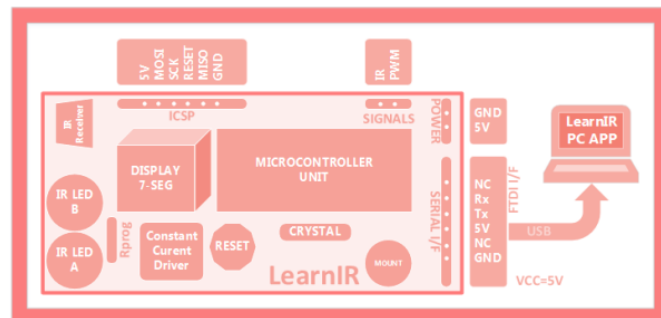
- Modulation frequency display
- Unique signal Auto-clean
- Constant current transmission with dual IR emitters/leds.
- Additional noise suppression circuitry for Receiver.
- Customisable Range for dual Emitters via TH resistor.
- TTL serial interface (5V)
- On-board 7-Segment display
- High quality IR receiver & dual Infrared emitters
- Range: 2-20m(rx), 10m+(tx)
- Single IR receiver design.
- Dedicated Windows app for updates, configuration, Learning, IR sending.
- Graphical signal display.
- Unique LIR encoding scheme with advanced signal compression.
- Automated Key-Set learning support.
- Learn, Build and manage your own signal libraries.
- Firmware updates via Windows application
- Bonus Features:
 - IR Jammer
 - Time Lapse IR sending
 - Serial over IR (Tx)
 - Signal generator & more
- Manual & software reset.
- Comprehensive User Guide and setup instructions
- PCB Size: 50x25x11mm(LxWxH)
- Tight integration with ANALYSIR



LEARNIR Overview

LEARNIR is an advanced tool for 'learning' infrared remote control signals. The most hi-tech & feature rich solution available.

LEARNIR allows makers, hobbyists and professionals to record individual or sets of IR signals and store them in libraries for later use. In addition, captured signals can be replayed immediately to confirm the validity of the learned signal. It is what we believe to be the most feature rich IR learner available today. The 'Auto-Clean' feature means you can achieve perfect timings, automatically, for a list of supported protocols, which can be easily extended for all of your signals & protocols. Every captured signal is immediately displayed in graphical format for real-time debugging, thus ensuring perfect signals are captured every time.



What is LEARNIR

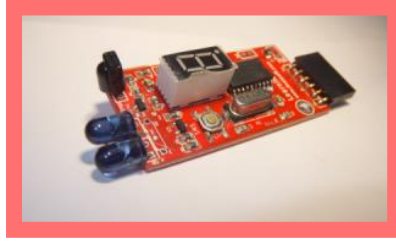
LEARNIR is made up of 3 components:

- The LEARNIR Windows PC application.
- The LEARNIR board module.
- A serial to USB adapter or Arduino is required to connect to the LEARNIR application over USB. (Optionally available as bundle.)

LEARNIR is an excellent companion device for ANALYSIR and other 3rd party Infrared solutions

What's Included

A copy of LEARNIR software, via download. No registration is required as the application will only work with official LEARNIR devices. You need to provide your own serial to USB adapter (5V), which are readily available online or purchase the bundle with one included. Alternatively, you can use your existing Arduino or other MCU to communicate with LEARNIR. There is no need for additional IR receivers or emitters as they are already included on-board. As well as integration with its own Windows application, LEARNIR can be driven by 3rd party applications and systems. Details of the serial interface syntax/protocol are available on request. IR range can be increased further by installing a programming resistor on the PCB. This is a feature of all of our constant current IR emitter designs in the MAKEIR kit series.



Interfacing

LEARNIR provides tight integration with ANALYSIR and also provides a number of PCB interfaces for Serial, ICSP, Power and both modulated and demodulated IR signals.

Licensing Model & Purchase

LEARNIR, the associated firmware and Windows application are supplied under a single licence which covers both non-commercial and commercial use. You can purchase your own LEARNIR device via: <http://www.ANALYSIR.com/> and other outlets. LEARNIR firmware and hardware is also available for integration into 3rd party systems (e.g. SoC). Custom designs are possible for bulk orders.

Service and Support

Support is provided for LEARNIR via email or our on-line IRforum. Contact details for support are contained in the user guide. Support is available only using your registered email address.

Major and minor version upgrades (Firmware & Windows application) are made available at no additional charge as part of the initial purchase price, for a minimum of 2 years.

A MAKEIR Kit

LEARNIR is part of the MAKEIR series which comprises a range of innovative infrared remote control kits for makers, hobbyists and professionals.

AnalysIR is an advanced analyser & decoder designed by ANALYSIR which offers tight integration with LearnIR for advanced users.



Additional Information

For more information visit <http://www.ANALYSIR.com/> or contact us directly using the contact information below.

Minimum Requirements

- Windows PC with latest updates and .Net
- Serial interface module such as FTDI to USB, Arduino or other MCU (5V)
- Bundled LEARNIR windows application for configuration and software updates.
- Infrared Remote Control for learning.
- Optimised for 1366x768 display resolution or greater.

Infrared Innovations

LEARNIR features a number of new Innovations:

- 'LIR' encoding mechanism, which stores the longest IR signals in limited SRAM. Long signals are supported with over 2000 pulses.
- An advanced compression algorithm makes storage and rapid communication of signals.

Modulation Frequencies

LEARNIR supports all of the common following send & receive modulation frequencies: 20-60kHz including 30kHz, 33kHz, 36kHz, 38kHz, 40kHz, 56kHz with Tx support for the rare 455kHz frequency.

IR formats

LIR, Pronto, RAW plus a comprehensive range of industry formats via ANALYSIR.

Integrated Display

The integrated display shows the modulation frequency of every received IR signal, provides visual feedback for various functions and can be independently controlled via serial.

About ANALYSIR

ANALYSIR is committed to providing leading edge Infrared solutions & technology to our Maker, Hobbyist, EDU and Professional users globally.