After installing URH, all essential settings are "ready to use", there is no need to know which bandwidth and sample rate (even gain) should be set. In addition, as a bonus, frequency is set to ISM 433.920M.

D	evice:	RTL-SDR	*
F	requency (Hz):	433,920M	\$
S	ample rate (Sps):	1,000M	-
в	andwidth (Hz):	1,000M	\$
G	ain:	49	÷
F	requency correction:	1	\$
D	irect sampling:	disabled	

Advantage of SD is that there device detection.

Disadvantage of SD is that you have to set all the values and in addition you have to put them in Hz

				Settin	ıgs			8		
Source	Anal	yzer parar	neters	Colors						
Load p	Load profile Default source					Load profil	e Save pro	file as		
Freq	uency			433800)128	Hz				
LNB freq	uency				0	Hz				
Sampl	e rate		1000000	sps Ave	erage	0	samples			
🗌 I/Q Bal	ance	✔ Remov	e DC							
• SDR de	evice									
Devi	ce rtls	dr (Generi	c RTL283	2U OEM :	: C 🔻	Antenna	RX	-		
Channel	# 0				4	Bandwidth	100000 Hz	\$		
O File so	urce									
File							Bro	owse		
Format	Autode	etect						000		
	🥔 OK 🛛 🗶 Cancel									

Feature request:

- Add default settings (after installation)
- Allow introduction of parameters with M(ega) notation like 2.1M sampling rate and frequency
 - or even use drop down menu for BW and SR with predefined values for SR
- Use generic settings for the market.. it means RTL-SDR via USB 2.0
 - \circ $~\sim 2M$ sample rate and BW
 - Set frequency like 433 ISM that can be used to decode RF remote controls (ASK)
- For multi antenna outputs, set default e.g. for LimeSDR by default there is selected NONE but you can preselect LNAW / LNAL

This will make better impression for the new users that are trying the software but are not familiar with GNU Radio style parameters "10e Hz".

Inspiration screenshots:

Select Rad	dio					×	
All	Local 🔡	% Server					
Name Airspy (Svr) Airspy Mini B205mini Generic RTL22 LimeSDR-mini LimeSDR-USB RTL2838UHIE < Bandwidth:	B32U OEM DIR 28 MHz	Model Airspy (Svr) Airspy Mini B205mini Generic RTL283 LimeSDR-mini LimeSDR-USI RTL2838UHI	Devic Gener Samp	Frequency 24 - 1800 MHz 24 - 1800 MHz 0 - 500 MHz 52 - 1770 MHz 2 - 2800 MHz C RTL28320 C RTL28320	Serial 235F38A3 061C67DC-235F38 3136366 00000001 200000000	Ad 19 3A3 se Re	R820T
Start	200 kHz 250 kHz 350 kHz 400 kHz 500 kHz 500 kHz 1 MHz 2 MHz 4 MHz 7 MHz 8 MHz 14 MHz 28 MHz 14 MHz 56 MHz		2.4 M 3.2 M 2.8 M 2.56 M 2.4 M 2.048 1.92 1.8 D 1.4 M 1.024 0.900 0.25 M	SPS SPS SPS MSPS SPS MSPS SPS SPS MSPS 001 MSPS 001 MSPS MSPS			•
			Frequ	ency correct	ion (ppm)	0	0 🗇

Decoding Flow

New user want to use SigDigger for fast signal identification and preferably decoding of the ASK,PSK,FSK and stream it somewhere else or replay it:

https://www.youtube.com/watch?v=uIVBVd6yi_A

I see SG as a "point on signal and it will help with identification of essential parameters like clock recovery, frame sync,

https://www.youtube.com/channel/UCqIWuCQfX00XHFiwTENI79A

Example with ASK Remote Control Decoding:

URH provides nice interface where you can see packets (pressed button):



you can use mouse scroll to zoom in on the signal:



In the interpretation window I can directly see attempt to decode Bits:

Interpretation	Analysis	Generato	or Simulator
1: Complex Signa	Ð	00	
13_231447-433_9	92MHz-1M	Sps-1MHz	
Noise:	0,0095	\$	
Center:	0,0000	\$	
Samples/Symbol:	100	\$	
Error Tolerance:	5	\$	
Modulation:	FSK	•	
Bits/Symbol:	1	-	
Autodetect	paramete	rs 💌	
			4
			▲ 0 selected 0.00 ns -∞ dBm
Signal View:	Analog	Ŧ	
✓ Show Signal as	Bits	*	

Where SigDigger should be useful is automated analysis of the Symbol Rate – This can be identified as you are doing it right now:

Parameter estima	ation	_
Ion-linear baud e	stimator	
615.911	Estimate	vlqqA

in URH you have to manually check this parameter:

Interpretation ,	Analysis	Generator	Simulator			
1: Complex Signal	lacksquare	0				
13_231447-433_9	2MHz-1MS	Sps-1MHz			ΛΛΛΛ	
Noise:	0,0095	\$		\mathbf{N}	$\Lambda \Lambda \Lambda \Lambda$	
Center:	0,0000	-				
Samples/Symbol:	100	÷ ••••				h
Error Tolerance:	5	•				
Modulation:	ASK	-				
Bits/Symbol:	1				VVVV	
Autodetect	parameter	rs 💌				
		•		r	r	
			38 selected	d 38,00 μs	-9,68 dBm	
		11 11 11 11	L00000011000 L00000011000 L00000011000	0001100000 0001100000 0001100000 0001100000	011111100110000 011111100110000 011111100110000 0111111	000:
Signal View:	Analog	- 11	L000000011000	0001100000	011111100110000	000
✓ Show Signal as	Bits	 ▼ 11 11 	L00000011000 L00000011000	0001100000	011111100110000	000:

URH will change the view as data are decoded: You can also mark part of waveform and have highlighted Bits/Symbols:



There is also interpretation window where you can see how bits are changing when you press different buttons (just simple example):

Protocols Part	E	Enter pai	tern	here							🆄 Se	arch	•	.	- / -	\$										-1	0,16	dBm			
🔻 🔽 🚞 New Gr				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28 29
✓ RTL-SDR-20200113_231447-433_92MHz-1			57 (B)	1	1	1	1	1																							
		5	58 (B)	1	1	1	1	1																							
		5	59 (B)	1	1	1	1	1																							
		e	60 (B)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	1	1	1	1		
		6	61 (B)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	1	1	1	1		
		6	62 (B)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	1	1	1	1		
		: 6	63 (B)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	1	1	1	1		
		e	64 (B)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	1	1	1	1		
'iew data as:	Bits	e	65 (B)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	1	1	1	1		
ecoding:	Non Return To Zero (NRZ) -	e	66 (B)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	1	1	1	1		
ecoding errors:	0 (0,00%)	e	67 (B)	1	1	1	1	1																							
Mark diffs in pro	tocol	6	68 (B)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	1	1	1	1	1	1 1
Show only diffs i	n protocol	6	69 (B)	1	1	1	1	1																							
Show only labels	Show only labels in protocol		4																												_
	Analyze Protocol	В	Bit: 1111	1111	1111	1111	1000	0011	111				He	x: fff	f073										Decin	nal:	6710	7871			

This view is perfect to know that you are decoding signal (correct filter bandwidth, distinguishing signal from noise floor etc)

Reset 60 fps		× SNR Reset N / A	WM making a set was descended and a set
Spectrum	Symbol stream		
Record	Clear Fit to Save Au	to window Width 1066 utoscroll Offset 0	Capture size: 20.963 ksym Data size: 20.963 kbits (2.559 KiB)

but users want to be able to see bits, make sense of them (preamble, body) and preferably replay them.

That why I seen this feature really promising:

2	Hexadecimal Tap	
Clear	Frame 13420 🗘 of 13421 🗌 Re	everse symbe Shift bits 0
Show last	Pack to bytes	B
	91 91 91 90 93 93 90 90 2 91 93 92 93 90 93 91 94 92 92 92 93 91 94 92 93 91 93 93 94 <td< th=""><th> Sequence Correlate to bit sequence Correlate to bit sequence Sequence Correlate to repetition of symbols Occurrences 1 symbols </th></td<>	 Sequence Correlate to bit sequence Correlate to bit sequence Sequence Correlate to repetition of symbols Occurrences 1 symbols

4	FAC Frame Sync		Hexadecimal Tap	
Frame length 1024	Shift 0	Enable	e 1 🛊 of 1 🗌 Reverse symbols Shift bits 🛛 🌲	
Blind frame guesser			ck to bytes 📝 LSB	
Buffer leng	th 65536	Start guessing	: 00 01 03 03 01 00 03 02 03 01 01 02 00 00 0301 : 00 03 03 03 03 01 01 01 01 01 01 01 01 01 01 22033 01 01 01 01 01 01 01 01 01 01 01 01 01 11111	
	0%		01 01 01 01 01 01 03 03 03 03 03 02 01 00 01 01 11111 01 02 03 01 01 02 02 00 01 02 01 02 01 00 01 01 23123 02 03 03 03 01 03 00 03 01 01 01 01 00 03 03 02233	11333321011 11220121011 31303111033
State	is: Candidate found!		0 63 66 63 62 62 66 66 63 63 61 62 61 66 63 36363 63 61 62 61 61 63 61 61 62 66 62 63 61 63 61312 6 62 63 61 61 62 66 62 63 63 61 63 66 62 62 62 623	22003312103 11311202313 12023313022
Candidate syr	nc: 2040 symbols	Apply	02 06 06 03 03 03 06 06 01 06 02 03 03 02 03 03 02 03 03 02<	23333001020 30000102112 32002123013
3333111111111		111133332 I		1968.22492122 1268.22492122 1268.22492363226 393.2312663 111111111111111 1111111111111111 113333116112 113333116112 1132320161311 12382716331 123830161201 1328271623 1328271623 1328271623 1328271623 1328271623 1328271623 1328271623 132826261 1328417272 1338417272 1338416261 132861722 14384172763 14384172763 14384172763 14384172763 14384172763 14384172763 14384172763 14384172763 14384172763 14384172763 14384172763 14384172763 14384172763 14384172763 14384172763 14384172763 14384172763 14384172763 1438417277777777777777777777777777777777777