Zoom R20 Review

by 64Guitars September 12, 2022



I've had my Zoom R20 for just over a month now and I have mixed feelings about it. Overall, it's a pretty good multitrack recorder, but there are several design issues that are quite disappointing.

What's Included

The recorder comes in an oversize black fabric bag. It's not very useful for storage of the recorder because it's too thin to protect it, but it makes a good dustcover. I just lay the bag over top of the R20 when I'm not using it to keep the dust off. If you need a sturdy case for transporting the R20, the Zoom <u>CBR-16</u> is available.

The Zoom ZAD-1220 AC adapter is included. Its output is 12 volts DC at 2.0 amps. It has a screw-lock connector to prevent the cable from disconnecting.

Also included is a printed 16-page <u>Quick Tour</u> booklet and an access code to download <u>Cubase LE</u> from the Steinberg website. However, there's an <u>announcement on the Zoom website</u> that says they're no longer bundling Steinberg software with Zoom products as of June 1, 2022. It doesn't say if they'll substitute some other DAW software instead.

What's Not Included

There's no USB cable and no SD card included with the R20. I bought a 128GB <u>Kingston CANVAS Go! Plus</u> SDXC card which works well (so far) and has lots of room for songs. I haven't recorded enough yet to determine how big the average song is but my conservative estimate is that a 128GB card will easily hold more than 100 songs; possibly a *lot* more. And the R20 can handle SDXC cards up to 1TB. Currently, 1TB cards are too expensive and might be hard to find, but the price will eventually come down and availability will improve. Meanwhile, smaller capacity cards are quite affordable, so if you manage to fill up a card, you can easily replace it with a new empty card.

Other than the Quick Tour booklet, there's no printed manual included. You have to download the Operation Manual and other documentation from the Zoom R20 support page as pdf files.

Build Quality

The build quality is pretty good. The case is plastic but quite sturdy. The faders, knobs, and switches are all reasonably good and operate smoothly. One thing that impressed me about the R20 when I first took it out of the box and set it on my desk is the rubber feet. They really grip the desk surface firmly so it doesn't slide around. I like that.

The display is quite nice. It's clear, bright, and colourful, with each track displayed in a different colour which matches the colour on the corresponding input fader and input gain control. You can adjust the brightness of the display in the system settings. The touch aspect of the display is adequate but not great. It's okay for simple selection of icons and regions, for example, but can be frustrating when scrolling or dragging. Some R20 users on the web have reported that using a stylus can be easier and more accurate than using your finger. I haven't tried that yet as I don't have a stylus, but I might get one sometime to see if it makes the touchscreen more usable.

Inputs

I was quite disappointed to discover that there's no input assignment on the R20. Each input is permanently assigned to the track immediately below it in the currently-selected track bank. When bank 1 (tracks 1-8) is selected and you plug a guitar or bass into input 1, you can only record it to track 1. If you switch to bank 2 (tracks 9-16), you can only record input 1 to track 9. It is impossible to record input 1 on any other track. This is a major design flaw since input 1 is the only input with a 1/4" jack and a HiZ switch. What's the point of a 16-track recorder that only lets you record on 2 tracks!

There is a workaround to this problem. After recording a guitar part to track 1, you can use the touchscreen to drag track 1 to any empty track, thereby freeing up track 1 to record another guitar part. But this isn't easy to do with the touchscreen. It only shows 5 tracks at a time, and if you've already recorded something on tracks 2 through 5, you can't easily move track 1 to an empty track because there are none visible and the screen doesn't scroll while you're dragging. If you drop track 1 onto one of the previously-recorded tracks, it will swap that track with track 1, which doesn't solve the problem since track 1 will still be occupied and unavailable for a new recording. There are some workarounds but they're not very easy.

Instead of dragging the track, you can drag only the recorded region of the track and drop it onto any other track. However, if you accidentally drop it on an existing region, that region will be replaced by the region you're dragging. On a crowded screen, this is easily done and can be disastrous! There is an Undo button on the screen but it's only one level deep, so you have to press it immediately after your mistake or the replaced region will be permanently lost. To get around this problem, you can pinch inward on the touchscreen to zoom out until your entire song occupies only the left side of the screen. This leaves the right side of the screen empty, providing a clear path in which to move regions. If you accidentally drop a region on the wrong track, it will be placed in this empty region of the track, well past the end of your song so no harm is done. You can simply grab the region again and drag it to whichever track you had intended. Once it's on the right track, you can then drag it to the left to position it at the start of that track. The snap feature will ensure that it lines up precisely with the start of the first bar of the song.

A safer and easier way to move regions is with the copy and paste feature. Just double-tap on the region in track 1 and select Copy from the Option Menu. Now scroll down to any empty track and select it by tapping the track number. Move the playback header to the start of the track and tap in the empty area of the track. Select Paste from the Option Menu. The region will be copied into the destination track at the current playback header position. You can then go back to track 1 and delete it so that it will be empty and available for another recording from input 1.

Another way to move track 1 is to export it as a WAV file, then import that WAV file into any empty track. To do that, tap the track number at the left of track 1, then tap it again to bring up the Track Menu. Tap Export and give the file a suitable name so you can find it later. Now scroll down to any empty track, tap it once to select it, then tap it again to bring up the Options Menu. Select Add Audio File from the Options Menu and select the WAV file you saved from track 1. It will be imported into the selected track at the current playback header position. You can then go back to track 1 and delete it so you can record something else from input 1 on track 1.

I was surprised to find that my electric guitar sounds just fine with the HiZ switch turned off. The input level is lower, which might affect how some of the effects sound, but I think it's quite usable. So I should be able to plug my guitar or bass into any of the R20's eight inputs and record it to the corresponding track. Of course, I'd need a ¼" to XLR adapter because inputs 3 to 8 only have XLR jacks. Since I don't currently have such an adapter, I haven't been able to make any recordings with inputs 3 to 8 yet.

The sound from any input cannot be heard until you arm the corresponding track for record. When I first plugged my guitar into input 1 and didn't hear anything, I thought I had a bad guitar cable. I tried another cable but there was still no sound. Then I pressed the arm button for track 1 and suddenly I had sound. This was never an issue with my Boss BR-864 because a track was always selected and the input would automatically be assigned to the selected track. So when I plug my guitar into the BR-864, I hear it right away.

Outputs

There are two 1/4" output jacks on the back for connecting to powered monitors, etc. And there's a headphone jack with its own level control. The headphone output has plenty of power. It seems much louder than my BOSS BR-864's headphone output.

You can also use the R20's audio interface mode to send the input signals to your computer over USB, either individually or as a stereo mix. However, this only sends the dry input signal. There is no way to include the R20's effects or pre-recorded tracks in the audio data sent over USB.

Recording

There are no recording level controls on the R20. There's only an input gain control on each input at the start of the signal path, before the effects. If you select one or more effects, the signal level can increase, causing clipping in the recording. To compensate, you have to edit the effects patch and reduce the Patch Level setting. The R20's faders do not control the recording level. They only control the level of the monitor signal to your headphones or speakers.

There are no v-tracks on the R20. However, there are workarounds which would allow you to record multiple takes of a track. For instance, you can export the track as a WAV file on the SD card. Then you can delete the track and record a new one in its place. For example, you could record some lead guitar and export it as "Lead Guitar - Take 1.wav". Then you could delete track 1 and record another take of the lead guitar in its place. You could export that as "Lead Guitar - Take 2.wav". And so on. This way, you can record an unlimited number of takes.

Another way to simulate v-tracks is to move the existing track region (take 1) past the end of the song on the same track so you won't accidentally record over it. Then you can move the playhead to zero and record another region on that track. This will be take 2. You can then move take 2 past the end of the song and past take 1 on the same track. And so on. This way, you end up with a single track containing several takes, one after the other. To use any of the takes in the song, just move it back to zero so it will be in sync with the other tracks. When you export the project, all of the regions (or takes) will be saved as separate files, so you'll have all of your takes in the project backup. The problem is in file identification. You have to listen to each WAV file in Audacity or something to figure out which part it is (guitar, bass, vocals, etc.) and which take. The benefit of the first method above, where you export each track then delete it from the Zoom so you can record another track in its place, is that it lets you specify the filename. So there's no problem identifying your takes if you've given them descriptive filenames ("Bass - Take 1", for example).

When you export a track, you can only export to the SD card. There is no option to export to a USB stick. This is a big disappointment to me. One of the main reasons I bought the R20 was because I wanted to be able to record some tracks, export them to a USB stick, then take the USB stick to my computer and import the exported tracks into a DAW. But the R20 can't do this. Instead, you have to remove the SD card from the R20, which means first turning the R20's power off. Using a USB stick would be a lot more convenient. I can only hope that Zoom will add an Export to USB feature in a future firmware update.

From the Projects screen, you can export an entire project to a USB stick. However, any exported tracks are stored in the /AUDIO folder of the SD card which is not included in the project backup. Of course, the project's tracks are already in WAV format within the project folder, so you can copy your tracks into your DAW from the project backup on a USB stick. However, the names of the WAV files are such that it's practically impossible to determine which track is which without listening to each WAV file. The format of the track WAV filenames is RECxx_yy.WAV, where "xx" is the 2-digit number of the track on which the file was recorded and "yy" is the take number. When you move a track, the filename doesn't change. So, for example, if I record some guitar on track 1 of a new project, the WAV file will be named REC01_01.WAV. If I move this recording to track 5 so I can record some bass on track 1, the bass track will be named REC01_02.WAV and the guitar track now on track 5 will still be named REC01_01.WAV. At this point, it might be easy enough to remember which track is the guitar and which is the bass by the take numbers ("_01" and "_02"). But after you've recorded several tracks and they all start with "REC01_", it's almost impossible to tell which file is which track without listening to them. That's why an Export Track to USB feature is badly needed. Then you could easily give each of your exported tracks a meaningful name so it will be obvious which track is which.

The R20 also lacks any file management features. If it had the ability to copy files, you could export a track to the SD card, copy it from the /AUDIO folder into your project folder, and export your project to a USB stick. Then the project folder on the USB stick would contain properly named copies of all of your exported tracks. Again, I can only hope that Zoom will add a file copy feature in a future firmware update. Although, it probably wouldn't be needed if the R20 had an Export Track to USB feature.

Each project is limited to a length of 1,350 bars. For a single song, that's more than enough. But if you want to record for a long period of time without stopping (a band rehearsal, for example), then you could easily reach the 1350 bar limit, at which point the recording will stop. The maximum recording time depends on the tempo and time signature as shown in the following table.

	Maximum Recording Time (min:sec)		
Time Signature	40 BPM	120 BPM	250 BPM
3/4	101:15	33:45	16:12
4/4	135:00	45:00	21:36
6/8	101:15	33:45	16:12

The longest recording time possible would be at 40 BPM (the lowest tempo available) in 4/4 time which would last for 135 minutes (2¼ hours) before reaching the 1350 bar limit. And the shortest recording time would be at 250 BPM (the highest tempo available) in 3/4 time which would reach the 1350 bar limit in 16 minutes, 12 seconds. So, if you never record for more than 16 minutes at a time, you'll never reach the 1350 bar limit, regardless of the tempo and time signature settings. But if you want to record something longer, like a band rehearsal, then you should set the tempo to 40 BPM and the time signature to 4/4 so that you'll have the maximum recording time available (2¼ hours).

There is also a limit to the number of regions you can have in a project. The total number of regions in all of your audio tracks and your drum track cannot exceed 50. A synth track can have up to 80 regions. Each loop in the drum track is a region. For example, if your drum track has three verses, four choruses, a bridge, and intro, and an outro, then that's 10 regions used just for the drum track, leaving only 40 regions available for *all* of your audio tracks. If you only record one region per track, then that's not a problem. But if you record several regions per track or split regions when editing, you could reach the 50-region limit.

When you create a new project, it remembers the tempo, time signature, and bit depth you used in the last project you created. So you have to remember to change these to the appropriate values every time you create a new project. Once a project is created, its bit depth can't be changed.

Drum Track

You can have only one drum track per project. However, you can load drum loops into any stereo audio tracks and you can have as many of those as you like. As far as I can tell, there's no difference between a drum track and a stereo audio track containing drum loops except for the following trivial points:

- Drum tracks are marked with an image of a drum kit, so it's easy to tell which track has your drums on it.
- The included drum loops are stored in the R20's internal memory (ROM or Flash). So, when you create a drum track, all of the included drum loops are immediately available for your use. But if you use an audio track for your drums, you have to first copy the drum loops that you want to use to the AUDIO folder of the SD card or a USB stick. You can then import any of those drum loops into your audio track. To save time, you could create a permanent library of drum loops on a USB stick by exporting each of the included loops to a WAV file. Once that's done, you could easily import any of the included drum loops into any audio track of any project from the USB stick. You could also add additional drum loops to your drum loop library from loops found on the web, purchased drum libraries, or drum loops you've created yourself. This is a big advantage of using an audio track for your drums instead of a drum track because the drum track can only use the internal drum loops. There's no way to import external drum loops to a drum track. It makes me wonder why the drum track feature even exists. I can find no advantage to using it compared to using a stereo-linked audio track for your drum loops.

There are 150 internal drum loops in the R20 consisting of 30 genres, each having a loop for Intro, Verse, Chorus, Bridge, and Outro.

Synth

The built-in FM synth has 19 preset sounds which can't be changed and there's no way to create your own sounds. The available sounds are:

01: E.Piano	06: Organ2	11: Slap Bass	16: Brass2
02: Bright E.P	07: Pipe Organ	12: AcousticBass	17: Brass3
03: Mellow E.P	08: Finger Bass1	13: Synth Bass1	18: Synth Lead
04: Bell	09: Finger Bass2	14: Synth Bass2	19: Drum Kit
05: Organ1	10: Pick Bass	15: Brass1	

Only one synth track is allowed per project. But you can convert a synth track to audio, then record another synth track. Of course, that means you'll no longer be able to edit the MIDI notes of the first synth track because the track is no longer MIDI.

You can connect a MIDI keyboard controller to the R20's USB-C port to play any of the 19 synth sounds and record your performance to a synth track as MIDI data which can then be edited in the piano roll editor. Another way to create note data for a synth track is to enter it directly into the piano roll editor. Or you can import a standard MIDI file (SMF) to a synth track and the notes will be played through the R20's FM synth.

Synth tracks are mono. That's a shame because the drum kit patch (19) would be another way to make a drum track, but what use is a mono drum track! You could use the piano roll editor to create any patterns you like as individual regions which could then be easily extended for as many bars as you want. You can have up to 80 regions in a synth track, so you could build a pretty interesting drum track. But, alas, your finished drum track would not be in stereo, so it's really not practical for most recordings.

System Settings

To access the system settings, you have to go to the Projects screen, which means you have to exit the current project. On the Projects screen, click the gear icon in the top-right of the screen to access the system settings (Date/Time, LCD Brightness, Auto Power Off, Audio Interface, Guitar Lab, Bluetooth, USB MIDI Keyboard, SD Card, Firmware Version, and Factory Reset). When you exit the system screen, you're returned to the Projects screen. From there, you can re-open your project. Any time you go to the Projects screen, all of the settings in your current project are saved automatically. So there's no worry of losing what you were working on in your project. But I would have preferred to have a dedicated button or icon to get to the System screen without having to exit the current project.

Effects

The R20 comes with 77 effects built in. You can add new effects using the free Guitar Lab software. There are currently 242 effects for the R20 in Guitar Lab. This includes the 77 effects already in the R20, so you can add up to 165 *new* effects depending on available memory. The Guitar Lab software shows the percentage of device memory that is currently used at the bottom of the screen. When I first connected with just the 77 factory-installed effects, Guitar Lab showed that 67% of the memory was used. I added 18 new effects and it rose to only 69%. So there's lots of room left to add more effects. And you can delete unused effects to free up more memory.

I've created a separate document describing each of the 77 included effects in detail. It's available in this message on Songcrafters.org. The descriptions of the effects and their parameters are from Guitar Lab. For effects that simulate or model a known hardware effect, amp, or cabinet, I've included a picture of the device which I found on the web. For all other effects, I've included a picture of the effect's controls from the Guitar Lab software which shows the parameters available for the effect.

Any of the built-in effects can be replaced or deleted, or their settings altered by the user. All changes are saved automatically and immediately. Deleted or changed effects can be restored with their original settings using Guitar Lab.

A stereo effect must be recorded to 2 tracks to hear it in stereo. However, I can find nothing in the R20 nor in the Guitar Lab software that says whether an effect is stereo or mono. The only way I can find to check it is to first arm a single track with the effect and listen, then arm a pair of tracks and listen again. If it sounds the same, then it's a mono effect. A stereo effect should sound noticeably different when going to a pair of tracks versus a single track.

The R20 doesn't distinguish between loop effects and insert effects like the Boss recorders do. With the R20, *any* effect can be used as either an insert effect or a loop effect. However, you can't use insert effects and loop effects simultaneously; you have to choose one or the other. But that's okay because loop effects are usually only used when mixing your tracks, and insert effects are usually only used when recording your individual tracks. Loop effects can only be recorded during mixdown. Otherwise, they can be monitored (through headphones or speakers) while recording but only the dry signal will be recorded to the tracks. Insert effects will always be recorded wet.

You can only use a maximum of three effects at a time in the R20. For vocals, and perhaps a lot of other things, that might be okay. But for electric guitar, three effects doesn't go very far because you'll usually want one of those three effects to be an amp sim, and another to be a cabinet sim. That means there's only one slot left for another effect such as a phase shifter or delay. For example, if you needed to use a phase shifter and a delay together, you'd have to be willing to give up the amp sim and/or cabinet sim.

Guitar Lab is meant for Windows or Mac but the Windows version also works with Linux under <u>Wine</u>. However, Guitar Lab's News page isn't working for me in Ubuntu 22.04 using Wine 6.0.3. It might be a setting in Wine that needs changing, or it might be something that will get fixed in a future Wine update. But everything apart from the News page works in Linux, so I can reorder and backup my patches, install new effects and patches on my R20, try out new patches in Guitar Lab without necessarily installing them, etc. And I'm hopeful that the News page will someday start working too.

Patches

The R20 has a single patch bank that can store 50 patches. By default, the first 40 patches contain settings supplied by Zoom and patches 41-50 are empty. See the Zoom document E R20 PatchMemoryList.

For comparison, the Boss BR series multitrack recorders have 3 patch banks. The Preset bank is permanently stored in the BR's internal memory and can't be changed. A separate Song bank for each song is stored on the BR's memory card with the song data. The User bank is stored in the BR's internal flash memory and is accessible from any song. The Zoom R20's patch bank is comparable to the BR's User bank. That is, the patches are stored in flash memory which can be changed by the user, and they're accessible from any song. The downside of this is that there are no permanent patches in the R20. If you delete or modify any of the factory-installed patches, they will no longer be available. However, you can always re-install them using the Guitar Lab software, or do a Factory Reset to restore *all* of the R20's settings to their factory defaults, including the patches.

The lack of a Song bank means there's no record of which effects were used in a song project. And the fact that any of the R20's patches can be changed at any time means that the patches used in a given song may no longer exist when you edit or remix that song in the future. So it's important to manually keep a record of the patches used in a song. Perhaps the best way is to use the Guitar Lab software to backup all of the patches when you complete a song. If you need to return to a song in the future, you can restore the needed patches from the backup using Guitar Lab. You can also use Guitar Lab to restore any missing effects needed by the song's patches.

There are no mastering effects patches. However, there are lots of effects that would be suitable for mastering (compressor, EQ, etc), so you can create your own mastering effects patches and save them in the R20's patch memory to use in future song projects.

Audio Interface

The R20 works well enough as an audio interface. However, I was disappointed to find that you can't use any of the R20's effects while it's in audio interface mode. It just sends the clean pre-effects signal to the computer. That's a shame. I guess if you want to use the R20's effects while recording in a DAW, you'd have to use a separate USB audio interface and plug the output of the R20 into the audio interface's line input.

There are two modes within audio interface mode: Multi Track and Stereo Mix. Multi Track mode sends each of the 8 inputs separately to the computer. According to the block diagram on page 174 of the manual, the input signal is tapped just before the insert effects in the signal path, which explains why the effects aren't included. Stereo Mix mode sends the stereo mix of all 8 inputs to the computer. According to the block diagram in the manual, the signal is tapped in the output bus at the same point as the master level meters. This is well after the effects, so you'd think they'd be included. However, you enter audio interface mode from the System menu which is accessed from the Projects screen. That means you have to exit your current project whenever you want to use the R20 as an audio interface. Since you're not in a project while the R20 is in audio interface mode, any effects you selected in your project are no longer active. That's why they're not included in the signal sent to the computer. And you can't access any effects settings from audio interface mode, so there's no way to add an effect.

Control Surface

The R20 can act as a control surface for your DAW when the R20's in audio interface mode. I tried this with Bitwig, Ardour, and REAPER with varying results, especially for the REW/FF buttons.

Bitwig Studio 8-Track v4.3.4

- STOP/PLAY/REC buttons, track arm switches/LEDs, track faders and Master fader all work the way you'd expect.
- The REW/FF buttons work except that the REW button goes forward instead of backward. So both buttons do the same thing.
- Track arm switches/LEDs can also control Mute and Solo states for each track if you select the desired function in the audio interface settings.
- Track bank selector on R20 doesn't work in Bitwig Studio 8-Track, presumably because it only has 8 tracks.

Ardour v6.9

- STOP/PLAY/REC buttons, track arm switches/LEDs, track faders and Master fader all work the way you'd expect.
- The REW/FF buttons result in small movements backwards or forward while playing the audio. Successive presses of the REW/FF buttons decreases or increases the playback speed. Playback speed is restored by pressing PLAY or STOP.
- Track arm switches/LEDs can also control Mute and Solo states for each track if you select the desired function in the audio interface settings.
- Track bank selector on the R20 allows you to control either tracks 1-8 or tracks 9-16 in Ardour. I'm not sure if it can also control tracks 17-24, 25-32, etc. I didn't get a chance to try that yet.

REAPER v6.66

- STOP/PLAY buttons, track arm switches/LEDs, and Master fader all work the way you'd expect.
- The REC button works but it also starts the transport. On other DAWs, the REC button only arms the transport for record. To actually start recording, you have to then press PLAY.
- Track arm switches/LEDs can also control Mute and Solo states for each track if you select the desired function in the audio interface settings. However, the LEDs don't light when you Solo tracks (they do on other DAWs).
- Track faders work but not in a usable way. The problem is that moving a fader is meant to select the corresponding track in Reaper, but it often and intermittently selects two or more tracks simultaneously so that moving one fader changes the levels of all of the selected tracks.
- REAPER crashed a lot when adding new tracks to the project but this probably has nothing to do with the R20.
- Track bank selector on R20 works. However, I don't know if it can select banks past track 16 because it crashed every time I tried to add enough tracks to test more than two banks.

Audacity v3.1.3

• You can't use the R20 as a control surface for Audacity because Audacity doesn't support MIDI controllers.

I don't think that any of the problems I encountered when using the R20 as a control surface are the fault of the R20. The DAW obviously recognizes the button presses and fader movements but it doesn't always respond to them in the way you'd expect. It could be a bug in the DAW, or it could be a setting that needs to be changed (which I haven't discovered yet).

Summary

What's Good about the R20:

- The colourful display gives you more feedback about your recording than you'd get from a conventional multitrack recorder's small screen.
- You can record multiple regions within a single track and each region can be looped, edited, and time-stretched. The screen lets you see at a glance where each region is within the track and you can move regions around with your finger on the touchscreen.
- You can set markers along the timeline to visibly flag sections of your song such as "Verse 1", "Chorus", "Verse 2", "Bridge", etc. You can enter any name you like up to 10 characters long for each marker. You can quickly jump to the next or previous marker by pressing STOP + FF or STOP + REW. Or you can simply tap a marker on the touchscreen to move the playhead directly to that marker.
- Lots of good effects (77 included), and over 160 additional effects available through the free Guitar Lab software. See the full list of included effects here: https://songcrafters.org/forum/index.php?msg=391105
- The built-in FM synth can be handy for quickly recording melody ideas, bass lines, pads, etc. However, the lack of access to any of the synth's parameters is a big disappointment.
- The USB-C port is great for connecting a MIDI controller, backing up projects, importing WAV and MIDI files, etc. However, it's a shame that it can't be used to export WAV files from your song projects to a USB stick.
- Has a built-in clock/calendar which means that any files saved on the R20 will show the date and time saved when they're viewed on your computer. This is helpful when viewing past projects as you can tell when the tracks were recorded. However, when you export a project to a USB stick, the R20 sets the date/time of each file in the project to the time of the export, so all of the files have exactly the same date and time. This is wrong in my opinion. The exported *folder* should have the date/time of the export, but each of the files within that folder should retain the date/time when they were recorded on the R20 so you can easily distinguish older tracks from newer tracks. Tracks that are exported to the SD card also have their date/time changed to the export date/time rather than retaining the date/time that the tracks were actually recorded.

What's Disappointing about the R20:

- No input assignment. Can't record high-impedance guitar or bass to tracks 2-8 and 10-16.
- No track export to USB stick.
- No recording level control.
- Effects cannot be used from audio interface mode.
- Synth settings cannot be adjusted. Can't create new synth patches.
- Synth is mono. If it had been stereo, the drum kit patch (19) would be useful for creating stereo drum tracks using the piano roll editor.

Bottom Line

In its present state, I don't recommend the Zoom R20 for most musicians. You'd be better off with a TASCAM DP-24SD or a Boss BR-800. It's unfortunate because the R20 could have been a great recorder if Zoom had provided an input assignment feature for Input 1 and a Track Export to USB feature. If they add these essential features in a future firmware update, then I might be able to recommend the R20. However, I'd also like to see the addition of Record Level controls for each track, the ability to edit synth parameters and save user synth patches, and the ability to use insert effects in audio interface mode. It would also be nice if exported files retained the date/time that they were recorded instead of always being set to the date/time of export.

And I found at least one bug that needs to be fixed. The manual states repeatedly that pressing the STOP button when the R20 is already stopped will move the playhead to the start of the timeline (0:00:00). However, if you've set any markers, pressing the STOP button when the R20 is already stopped will move the playhead to the previous marker rather than to the beginning of the song. If you have many markers set, this is very annoying because you have to press STOP many times to get back to the start of the song. This is clearly a bug since there are already controls for moving between markers (STOP + REW and STOP + FF). The STOP button should *always* move the playhead directly to the start of the song, regardless of whether any markers have been created in the project.