CLAIMS

1. A device comprising:
an encoder configured to:
receive two or more channels;
identify a target channel and a reference channel, the target channel and the reference channel identified from the two or more channels based on a mismatch value;
generate a modified target channel by temporally adjusting the target channel based on the mismatch value, the mismatch value indicative of an amount of temporal mismatch between the target channel and the reference channel;
determine a temporal correlation value indicative of a temporal correlation between a first signal associated with the reference channel and a second signal associated with the modified target channel;
compare the temporal correlation value to a threshold; and
generate, based on the comparison, missing target samples using at least one of a reference frame based on the reference channel or a target frame based on the modified target channel, wherein the first signal corresponds to a portion of the reference frame, and wherein the second signal corresponds to a portion of the target frame.

2. The device of claim **1**, wherein the reference frame comprises first reference samples associated with a first portion of the reference frame and second reference samples associated with a second portion of the reference frame, and wherein the target frame comprises first target samples associated with a first portion of the target frame.

3. The device of claim **1**, wherein the encoder is further configured to determine that the temporal correlation value satisfies the threshold, and wherein the missing target samples are generated based on the reference channel in response to the determination that the temporal correlation value satisfies the threshold.

4. The device of claim **1**, wherein the encoder is further configured to determine that the temporal correlation value fails to satisfy the threshold, and wherein the missing target samples are generated based on random noise filtered from a past set of samples of the modified target channel using a linear prediction filter in response to the determination that the temporal correlation value fails to satisfy the threshold.

5. The device of claim **1**, wherein the encoder is further configured to determine that the temporal correlation value fails to satisfy the threshold, and wherein the missing target samples are generated by scaling the modified target channel to zero in response to the determination that the temporal correlation value fails to satisfy the threshold.

6. The device of claim **1**, wherein the encoder is further configured to determine that the temporal correlation value fails to satisfy the threshold, and wherein the missing target samples are extrapolated from the modified target channel in response to the determination that the temporal correlation value fails to satisfy the threshold.

7. The device of claim 1, wherein the missing target samples are generated partially based on the reference channel and partially based on random noise filtered from a past set of samples of the modified target channel using a linear prediction filter.

8. The device of claim 1, wherein the missing target samples are generated partially based on the reference channel and partially based on scaling the modified target channel to zero.

9. The device of claim 1, wherein the missing target samples are generated partially based on the reference channel and partially based on extrapolations from the modified target channel.

10. The device of claim 1, wherein adjustment of the target channel is based on a non-causal shift.

11. The device of claim 1, wherein the missing target samples are further based on a coder type.

12. The device of claim 1, wherein the reference frame is based on an excitation of the reference channel, and wherein the target frame is based on an excitation of the modified target channel.

13. The device of claim 1, wherein the encoder is integrated into a mobile device.

14. The device of claim 1, wherein the encoder is integrated into a base station.

15. A method of encoding audio channels, the method comprising:

receiving two or more channels at an encoder;

identifying a target channel and a reference channel, the target channel and the reference channel identified from the two or more channels based on a mismatch value;

generating a modified target channel by temporally adjusting the target channel based on the mismatch value, the mismatch value indicative of an amount of temporal mismatch between the target channel and the reference channel;

determining a temporal correlation value indicative of a temporal correlation between a first signal associated with the reference channel and a second signal associated with the modified target channel;

comparing the temporal correlation value to a threshold; and

generating, based on the comparison, missing target samples using at least one of a reference frame based on the reference channel or a target frame based on the modified target channel, wherein the first signal corresponds to a portion of the reference frame, and wherein the second signal corresponds to a portion of the target frame.

16. The method of claim **15**, wherein the reference frame comprises first reference samples associated with a first portion of the reference frame and second reference samples associated with a second portion of the reference frame, and wherein the target frame comprises first target samples associated with a first portion of the target frame.

17. The method of claim **15**, further comprising determining that the temporal correlation value satisfies the threshold, wherein the missing target samples are generated based on the reference channel in response to the determination that the temporal correlation value satisfies the threshold.

18. The method of claim **15**, further comprising determining that the temporal correlation value fails to satisfy the threshold, wherein the missing target samples are generated based on random noise filtered from a past set of samples of the modified target channel using a linear prediction filter in response to the determination that the temporal correlation value fails to satisfy the threshold.

19. The method of claim **15**, further comprising determining that the temporal correlation value fails to satisfy the threshold, wherein the missing target samples are generated by scaling the modified target channel to zero in response to the determination that the temporal correlation value fails to satisfy the threshold.

20. The method of claim **15**, further comprising determining that the temporal correlation value fails to satisfy the threshold, wherein the missing target samples are extrapolated from the modified target channel in response to the determination that the temporal correlation value fails to satisfy the threshold.

21. The method of claim **15**, wherein the missing target samples are generated partially based on the reference channel and partially based on random noise filtered from a past set of samples of the modified target channel using a linear prediction filter.

22. The method of claim **15**, wherein generating the missing target samples is performed at a mobile device.

23. The method of claim **15**, wherein generating the missing target samples is performed at a base station.

24. A non-transitory computer-readable medium comprising instructions that, when executed by a processor within an encoder, cause the processor to perform operations comprising:

identifying a target channel and a reference channel, the target channel and the reference channel identified from two or more channels based on a mismatch value;

generating a modified target channel by temporally adjusting the target channel based on the mismatch value, the mismatch value indicative of an amount of temporal mismatch between the target channel and the reference channel;

determining a temporal correlation value indicative of a temporal correlation between a first signal associated with the reference channel and a second signal associated with the modified target channel;

comparing the temporal correlation value to a threshold; and

generating, based on the comparison, missing target samples using at least one of a reference frame based on the reference channel or a target frame based on the modified target channel, wherein the first signal corresponds to a portion of the reference frame, and wherein the second signal corresponds to a portion of the target frame.

25. The non-transitory computer-readable medium of claim **24**, wherein the reference frame comprises first reference samples associated with a first portion of the reference frame and second reference samples associated with a second portion of the reference frame, and wherein the target frame comprises first target samples associated with a first portion of the target frame.

26. The non-transitory computer-readable medium of claim **24**, wherein the operations further comprise determining that the temporal correlation value satisfies the threshold, and wherein the missing target samples are generated based on the reference channel in response to the determination that the temporal correlation value satisfies the threshold.

27. The non-transitory computer-readable medium of claim **24**, wherein the operations further comprise determining that the temporal correlation value fails to satisfy the threshold, and wherein the missing target samples are generated based on random noise filtered from a past set of samples of the modified target channel using a linear prediction filter in response to the determination that the temporal correlation value fails to satisfy the threshold.