Electrical Engineering

Which of these is the formula for Ohm’s law?

Amperage = Voltage/Impedance\*

Voltage = Impedance

Impedance = ½ voltage+ amperage

Anything that can go wrong will go wrong

How can we prevent EMI & RFI?

Use balanced cables with proper shielding\*

Wrap all our cables in electrical tape

Turn off anything that might generate it

You can’t prevent it

How does balancing a cable help prevent noise?

It uses a positive and negative cable to phase out noise introduced in the cable\*

The negative wire attracts interference preventing it from travelling over the positive

It increases total power in the cable, overpowering any noise introduced

It doesn’t

What does a transformer do?

It steps voltage of a signal up or down due to electromagnetism\*

It prevents signal from getting to loud

It equalizes a signal

Nothing

Microphones

What microphones always required +48v?

Condenser\*

Ribbon

Dynamic

Crystal

Which of these microphone types is the most sensitive?

Condenser\*

Ribbon

Dynamic

Crystal

Which of these is not a polar pattern type?

Cardioid

Omnidirectional

Unidirectional

Spheroidal\*

Which of these microphones are best used in high spl environments?

Condenser

Ribbon

Dynamic\*

Crystal

Can we use phantom power on ribbon microphones?

No

Absolutely not

Of course not

Wellllll...generally no...unless the mic expicitly requires it\*

Recording Mediums

What is the layer on magnetic tape that actually records signal called?

Oxide Layer\*

Recording Layer

Printing Layer

Chromic Layer

What does punching in mean?

To record a very hot signal

To begin recording while the tape is playing\*

To stop recording suddenly

To ride the faders while recording

What does bias current do on a tape machine?

Increases gain

Reduces noise by using noise reduction techniques

Increases recording fidelity \*

Powers the tape machine

What is tape compression?

Reducing the size of a tape reel

Reducing high amplitudes and adding harmonic saturation due to limitations of magnetic tape\*

Preventing high peaks of amplitude before they hit the magnetic tape

Slapping the tape machine to make it work

How do we store magnetic tape to prevent magnetic print through?

Tails Out

Tails In

Head Out

In a fridge