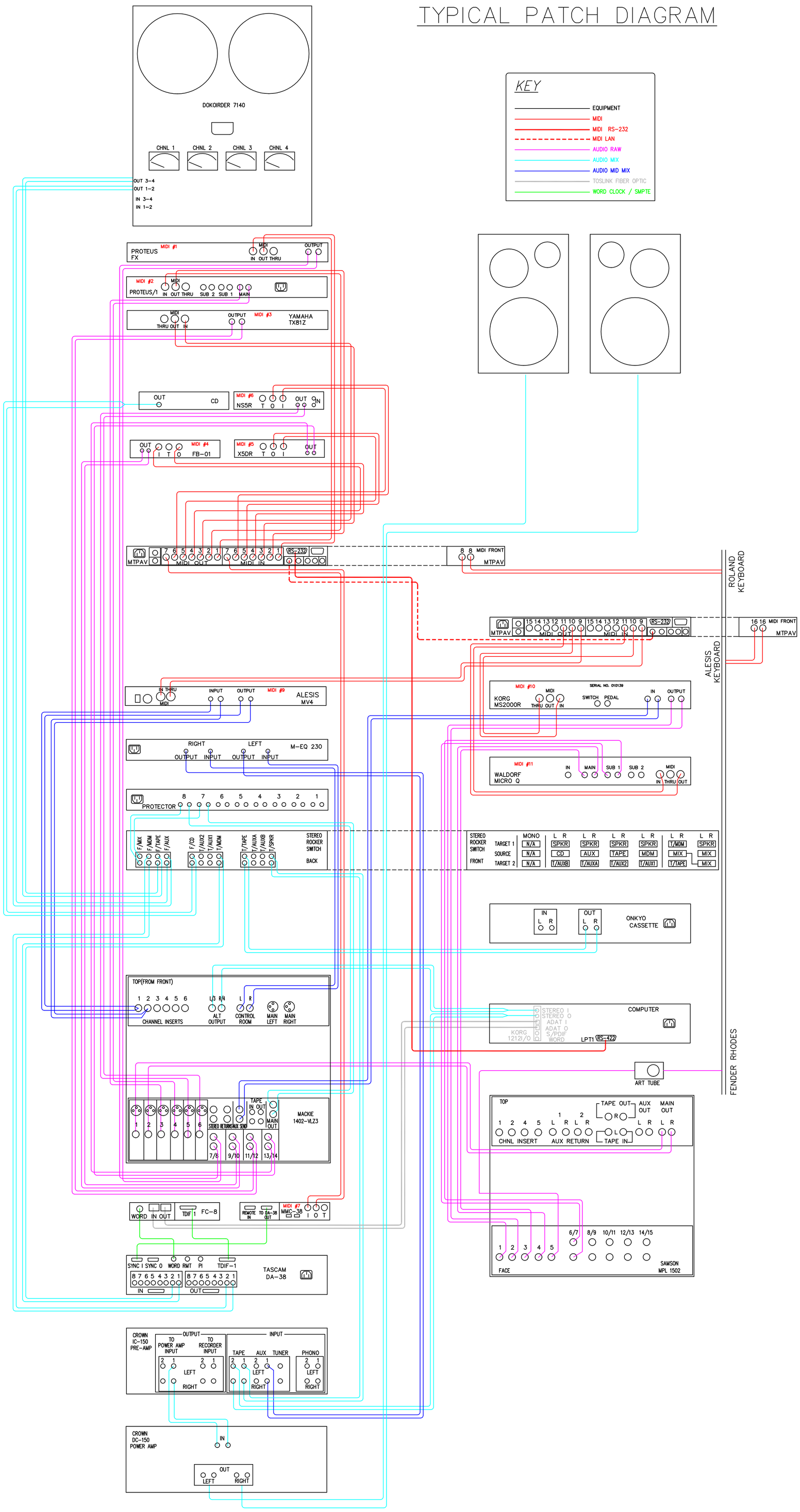TYPICAL PATCH DIAGRAM