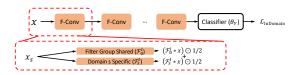
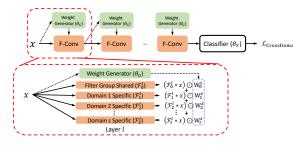
A. Generalized Model Form

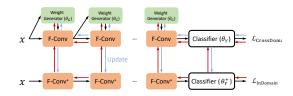
DSFG can be generalized with as many layers of F-Conv as desired. Figure 6 illustrates the general model.



(a) Illustration of in-domain training process for general model.



(b) Illustration of cross-domain training process for general model.



(c) Illustration of weight generator update process for general model.

Figure 6: Visualization of the training process for general case. Figure 6(a) illustrates in-domain training process, where each layer of F-conv follows the same weighting. Figure 6(b) illustrates crossdomain training process. Each sample in the training set will be used as a target in the cross-domain update as with a single layer of F-conv. The solid arrows give the gradient flow. Figure 6(c) illustrates the weight generator updates. The blue solid arrow indicates the gradient flow of the one-step gradient descent update in Eq.(8) and Eq.(9). The blue dotted arrow indicates the one-step gradient descent update does not update weight generator parameter θ_G . And the red arrow gives the gradient flow when updating the weight generator. The superscript + indicates the one step gradient descent variable for meta-update.