TABLE I
RLS-CMA ALGORITHM

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|---|---|
| Initialization | $\mathbf{w}(0)=[1,\mathbf{0}_{1\times(L-1)}]^T$,<br>$\mathbf{C}(0)=\delta^{-1}\mathbf{I}_{L\times L}$, $\delta$ = small positive constant |
| Approximation and RLS update (For each iteration $n=1,2,\ldots$) | $\mathbf{z}(n)=\mathbf{x}(n)\mathbf{x}^H(n)\mathbf{w}(n-1)\left\|\mathbf{x}^H(n)\mathbf{w}(n-1)\right\|^{p-2}$<br>$\mathbf{h}(n)=\mathbf{z}^H(n)\mathbf{C}(n-1)$<br>$\mathbf{g}(n)=\mathbf{C}(n-1)\mathbf{z}(n)/(\lambda+\mathbf{h}(n)\mathbf{z}(n))$<br>$\mathbf{C}(n)=(\mathbf{C}(n-1)-\mathbf{g}(n)\mathbf{h}(n))/\lambda$<br>$e(n)=\mathbf{w}^H(n-1)\mathbf{z}(n)-1$<br>$\mathbf{w}(n)=\mathbf{w}(n-1)+\mathbf{g}(n)e^*(n)$ |