# REFERENCE MANUAL OF WORKER SWITCH (WSW) 

## - Separate series correspondence table of WSW

Model: MFC-9460CDN/9465CDN/9560CDW/9970CDW, DCP-9055CDN/9270CDN

| WSW01 |  | WSW10 |  | WSW19 |  | WSW27 |  | WSW36 |  | WSW46 |  | WSW54 |  | WSW64 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2 | $\checkmark$ | 1 | $\checkmark$ | 1-3 | $\checkmark$ | 1 | - | 1 | $\checkmark$ | 1, 2 | - | 1, 2 | - | 1-6 | $\checkmark$ |
| 3, 4 | $\checkmark$ | 2 | $\checkmark$ | 4-6 | $\checkmark$ | 2 | $\checkmark$ | 2 | $\checkmark$ | 3 | - | 3 | $\checkmark$ | 7, 8 | $\checkmark$ |
| 5,6 | $\checkmark$ | 3 | $\checkmark$ | 7 | $\checkmark$ | 3 | - | 3 | $\checkmark$ | 4 | $\checkmark$ | 4 | - | WSW | 165 |
| 7 | $\checkmark$ | 4 | $\checkmark$ | 8 $\checkmark$ <br> WSW20  |  | 4 | $\checkmark$ | 4 | - | 5-8 | - | 5,6 | - | 1, 2 | $\checkmark$ |
|  | 8 $\checkmark$ <br> WSWO2  | 5,6 | $\checkmark$ | WSW20 |  | 5 | - | 5 | $\checkmark$ | WSW47 |  | 7 | - | 3 | $\checkmark$ |
| WSW02 |  | 7 | $\checkmark$ | 1 | $\checkmark$ | 6 | - | 6-8 | $\checkmark$ | 1 | - | 8 | - | 4 | $\checkmark$ |
| 1,2 | $\checkmark$ | 8 | $\checkmark$ | 2 | $\checkmark$ | 7 | - | WSW37 |  | 2 | - | WSW55 |  | 5 | $\checkmark$ |
| 3, 4 | $\checkmark$ | WSW11 |  | 3 | $\checkmark$ | 8 | - | 1 | $\checkmark$ | 3, 4 | $\checkmark$ | 1-8 | $\checkmark$ | 6 | $\checkmark$ |
| 5-8 | $5-8$ $\checkmark$ <br> WSW03  | 1, 2 | $\checkmark$ | 4,5 | $\checkmark$ | WSW28 |  | 2 | $\checkmark$ | 5 | $\checkmark$ | WSW56 |  | 7, 8 | - |
| WSW03 |  | $3-8$ <br> WSW12 |  | 6,7 | $\checkmark$ | 1-3 | $\checkmark$ | $3-8$ - <br> WSW38  |  | 6 | - | 1 | - | WSW66 |  |
| 1 | $\checkmark$ | WSW12 |  | 8 $\checkmark$ <br> $W W W 21$  |  | 4-6 | $\checkmark$ | WSW38 |  | 7 | $\checkmark$ | 2 | - | 1-8 | x |
| 2-4 | - | 1, 2 | $\checkmark$ | WSW21 |  | $\begin{array}{\|c\|r} \hline 7,8 & - \\ \hline \text { WSW29 } \end{array}$ |  | 1, 2 | $\checkmark$ | 8 | $\checkmark$ | 3 | - | WSW67 |  |
| 5 | $\checkmark$ | 3, 4 | $\checkmark$ | 1-5 | - | WSW29 |  | 3 | $\checkmark$ | WSW48 |  | 4 | - | 1-8 | x |
| 6, 7 | - | 5, 6 | $\checkmark$ | 6, 7 | - | 1-3 | - | 4 | $\checkmark$ | 1,2 | - | 5 | - | WSW68 |  |
| 8 | - | 7 | - | 8 | $\checkmark$ | 4-6 | - | 5,6 | $\checkmark$ | 3-5 | $\checkmark$ | 6 | $\checkmark$ | 1-8 | x |
| WSW04 |  | 8 | - | WSW22 |  | 7 | $\checkmark$ | 7 | $\checkmark$ | 6-8 | - | 7 | - | WSW69 |  |
| 1 | - | WSW13 |  | 1 | $\checkmark$ | 8 | - | 8 | $\checkmark$ | WSW49 |  | 8 | $\checkmark$ | 1-8 | x |
| 2, 3 | - | 1, 2 | $\checkmark$ | 2 | $\checkmark$ | WSW30 |  | WSW39 |  | 1,2 | X | WSW57 |  | WSW70 |  |
| 4 | - | 3, 4 | $\checkmark$ | 3 | - | 1-3 | - | 1-4 | $\checkmark$ | 3 | $\checkmark$ | 1-3 | - | 1-8 | x |
| 5 | $\checkmark$ | 5-8 | $\checkmark$ | 4 | - | 4-6 | - | 5-8 | $\checkmark$ | 4,5 | $\checkmark$ | 4-6 | - | WSW71 |  |
| 6-8 | $\checkmark$ | WSW14 |  | 5-8 | - | 7 | - | WSW40 |  | 6,7 | - | 7 | - | 1-8 | x |
| WSW05 |  | 1, 2 | $\checkmark$ | WSW23 |  | 8 | - | 1, 2 | - | 8 | - | 8 | - | WSW72 |  |
| 1-3 | $\checkmark$ | 3, 4 | $\checkmark$ | 1 | $\checkmark$ | WSW31 |  | 3-8 | $\checkmark$ | WSW50 |  | WSW58 |  | 1-8 | x |
| 4 | $\checkmark$ | 5-8 | $\checkmark$ | 2, 3 | $\checkmark$ | 1 | - | WSW41 |  | 1,2 | - | 1-3 | - | WSW73 |  |
| 5, 6 | $\checkmark$ | WSW15 |  | 4,5 | $\checkmark$ | 2 | $\checkmark$ | 1-3 | - | 3 | - | 4,5 | - | 1-8 | X |
| 7 | $\checkmark$ | 1, 2 | $\checkmark$ | 6,7 | - | 3 | - | 4 | - | 4 | - | 6 | - | WSW74 |  |
| 8 | - | 3-6 | $\checkmark$ | 8 | $\checkmark$ | 4 | - | 5-8 | $\checkmark$ | 5,6 | - | 7, 8 | - | 1-8 | - |
| WSW06 |  | 7 | - | WSW24 |  | 5 | $\checkmark$ | WSW42 |  | 7, 8 | - | WSW59 |  | WSW75 |  |
| 1-3 | $\checkmark$ | 8 | $\checkmark$ | 1,2 | - | 6, 7 | - | 1 | - | WSW51 |  | 1 | $\checkmark$ | 1 | - |
| 4-6 | $\checkmark$ | WSW16 |  | 3, 4 | $\checkmark$ | 8 | $\checkmark$ | 2 | - | 1 | $\checkmark$ | 2 | $\checkmark$ | 2-8 | - |
| 7 | $\checkmark$ | 1 | - | 5-8 | - | WSW32 |  | 3 | - | 2 | - | 3-7 | - | WSW76 |  |
| 8 | $\checkmark$ | 2 | $\checkmark$ | WSW25 |  | 1-4 | - | 4 | $\checkmark$ | 3, 4 | - | 8 | $\checkmark$ | 1-8 | - |
| WSW07 |  | 3-6 | - | 1, 2 | $\checkmark$ | 5,6 | $\checkmark$ | 5 | - | 5-7 | - | WSW60 |  | WSW77 |  |
| 1,2 | $\checkmark$ | 7 | $\checkmark$ | 3, 4 | - | 7, 8 | $\checkmark$ | 6-8 | - | 8 | - | 1-3 | - | 1-8 | - |
| 3 | - | 8 | $\checkmark$ | 5-7 | $\checkmark$ | WSW33 |  | WSW43 |  | WSW52 |  | 4,5 | $\checkmark$ | WSW78 |  |
| 4-6 | $\checkmark$ | WSW17 |  | 8 | - | 1-3 | - | 1 | - | 1-3 | - | 6 | $\checkmark$ | 1 | - |
| 7 | $\checkmark$ | 1,2 | $\checkmark$ | WSW26 |  | 4,5 | - | 2, 3 | $\checkmark$ | 4-6 | $\checkmark$ | 7, 8 | - | 2 | - |
| 8 | - | 3, 4 | - | 1, 2 | - | 6 | $\checkmark$ | 4, 5 | $\checkmark$ | 7 | - | WSW61 |  | 3, 4 | $\checkmark$ |
| WSW08 |  | 5 | $\checkmark$ | 3 | $\checkmark$ | 7, 8 | - | 6 | - | 8 | - | 1-4 | - | 5-8 | $\checkmark$ |
| 1-3 | $\checkmark$ | 6 | - | 4, 5 | $\checkmark$ | WSW34 |  | 7 | $\checkmark$ | WSW53 |  | 5-8 | $\checkmark$ | WSW79 |  |
| 4,5 | $\checkmark$ | 7 | $\checkmark$ | 6,7 | $\checkmark$ | 1-3 | - | 8 | $\checkmark$ | 1,2 | - | WSW62 |  | 1 | $\checkmark$ |
| 6-8 | $\checkmark$ | 8 | - | 8 | - | 4,5 | - | WSW44 |  | 3, 4 | $\checkmark$ | 1-4 | - | 2 | $\checkmark$ |
| WSW09 |  | WSW18 |  |  |  | 6, 7 | $\checkmark$ | 1-5 | x | 5,6 | $\checkmark$ | 5,6 | - | 3 | - |
| 1 | $\checkmark$ | 1 | $\checkmark$ |  |  | 8 | - | 6-8 | - | 7 | $\checkmark$ | 7, 8 | - | 4 | $\checkmark$ |
| 2 | $\checkmark$ | 2, 3 | $\checkmark$ |  |  | WSW | V35 | WSW | 45 | 8 | - | WSV |  | 5-8 | - |
| 3, 4 | $\checkmark$ | 4, 5 | - |  |  | 1-4 | - | 1-3 | - |  |  | 1, 2 | $\checkmark$ |  |  |
| 5 | $\checkmark$ | 6 | $\checkmark$ |  |  | 5-8 | - | 4-6 | - |  |  | 3 | $\checkmark$ |  |  |
| 6 | $\checkmark$ | 7, 8 | $\checkmark$ |  |  |  |  | 7 | $\checkmark$ |  |  | 4-7 | - |  |  |
| 7, 8 | $\checkmark$ |  |  |  |  |  |  | 8 | - |  |  | 8 | $\checkmark$ |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Model: HL-4140CN/4150CDN/4570CDW/4570CDWT


Model: MFC-J6310W/J6510DW/J6710DW/J6910DW

| WSW01 |  | WSW10 |  | WSW18 |  | WSW27 |  | WSW36 |  | WSW46 |  | WSW54 |  | WSW64 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2 | $\checkmark$ | 1 | $\checkmark$ | 1 | $\checkmark$ | 1 | - | 1 | - | 1,2 | - | 1,2 | $\checkmark$ | 1-6 | - |
| 3, 4 | $\checkmark$ | 2 | $\checkmark$ | 2, 3 | $\checkmark$ | 2 | $\checkmark$ | 2 | - | 3 | - | 3 | $\checkmark$ | 7, 8 | - |
| 5,6 | $\checkmark$ | 3 | $\checkmark$ | 4, 5 | - | 3 | - | 3 | - | 4 | $\checkmark$ | 4 | $\checkmark$ | WSW |  |
| 7 | $\checkmark$ | 4 | $\checkmark$ | 6 | $\checkmark$ | 4 | $\checkmark$ | 4 | - | 5-8 | $\checkmark$ | 5, 6 | $\checkmark$ | 1, 2 | - |
| 8 | $\checkmark$ | 5, 6 | $\checkmark$ | 7, 8 | $\checkmark$ | 5 | - | 5 | $\checkmark$ | WS |  | 7 | $\checkmark$ | 3 | - |
| WSW02 |  | 7 | $\checkmark$ | WSW19 |  | 6 | $\checkmark$ | 6-8 | $\checkmark$ | 1 | $\checkmark$ | 8 | - | 4 | - |
| 1,2 | $\checkmark$ | 8 | $\checkmark$ | 1-3 | $\checkmark$ | 7 | $\checkmark$ | WSW37 |  | 2 | $\checkmark$ | WSW55 |  | 5 | - |
| 3, 4 | $\checkmark$ | WSW11 |  | 4-6 | $\checkmark$ | 8 | $\checkmark$ | 1 | $\checkmark$ | 3, 4 | $\checkmark$ | 1-8 | - | 6 | - |
| 5-8 | $\checkmark$ | 1, 2 | $\checkmark$ | 7 | $\checkmark$ | WSW28 |  | 2 | $\checkmark$ | 5 | $\checkmark$ | WSW56 |  | 7, 8 | - |
| WSW03 |  | 3-8 | $\checkmark$ | 8 | $\checkmark$ | 1-3 | $\checkmark$ | 3-8 | - | 6 | - | 1 | - | WSW66 |  |
| 1 | $\checkmark$ | WSW12 |  | WSW20 |  | 4-6 | $\checkmark$ | WSW38 |  | 7 | $\checkmark$ | 2 | - | 1-8 | - |
| 2-4 | $\checkmark$ | 1, 2 | $\checkmark$ | 1 | $\checkmark$ | 7, 8 | $\checkmark$ | 1,2 | $\checkmark$ | 8 | $\checkmark$ | 3 | - | WSW67 |  |
| 5 | $\checkmark$ | 3, 4 | $\checkmark$ | 2 | $\checkmark$ | WSW29 |  | 3 | $\checkmark$ | WSW48 |  | 4 | $\checkmark$ | 1-8 | - |
| 6,7 | $\checkmark$ | 5, 6 | $\checkmark$ | 3 | $\checkmark$ | 1-3 | $\checkmark$ | 4 | $\checkmark$ | 1,2 | $\checkmark$ | 5 | $\checkmark$ | WSW68 |  |
| 8 | - | 7 | $\checkmark$ | 4, 5 | $\checkmark$ | 4-6 | $\checkmark$ | 5,6 | $\checkmark$ | 3-5 | $\checkmark$ | 6 | $\checkmark$ | 1-8 | - |
| WSW04 |  | 8 | $\checkmark$ | 6, 7 | $\checkmark$ | 7 | $\checkmark$ | 7 | $\checkmark$ | 6-8 | - | 7 | - | WSW69 |  |
| 1 | - | WSW13 |  | 8 | $\checkmark$ | 8 | $\checkmark$ | 8 | $\checkmark$ | WSW49 |  | 8 | - | 1-8 | - |
| 2, 3 | - | 1,2 | $\checkmark$ | WSW21 |  | WSW30 |  | WSW39 |  | 1,2 | - | WSW57 |  | WSW70 |  |
| 4 | - | 3, 4 | $\checkmark$ | 1-5 | $\checkmark$ | 1-3 | $\checkmark$ | 1-4 | $\checkmark$ | 3 | - | 1-3 | $\checkmark$ | 1-8 | - |
| 5 | $\checkmark$ | 5-8 | $\checkmark$ | 6,7 | $\checkmark$ | 4-6 | - | 5-8 | $\checkmark$ | 4, 5 | $\checkmark$ | 4-6 | $\checkmark$ | WSW71 |  |
| 6-8 | $\checkmark$ | WSW14 |  | 8 | $\checkmark$ | 7 | $\checkmark$ | WSW40 |  | 6,7 | - | 7 | $\checkmark$ | 1-8 | - |
| WSW05 |  | 1,2 | $\checkmark$ | WSW22 |  | 8 | $\checkmark$ | 1 | $\checkmark$ | 8 | $\checkmark$ | 8 | $\checkmark$ | WSW72 |  |
| 1-3 | $\checkmark$ | 3, 4 | $\checkmark$ | 1 | $\checkmark$ | WSW31 |  | 2 | - | WSW50 |  | WSW58 |  | 1-8 | - |
| 4 | $\checkmark$ | 5-8 | $\checkmark$ | 2 | $\checkmark$ | 1 | - | 3-8 | $\checkmark$ | 1,2 | $\checkmark$ | 1-3 | $\checkmark$ | WSW73 |  |
| 5,6 | $\checkmark$ | WSW15 |  | 3 | $\checkmark$ | 2 | $\checkmark$ | WSW41 |  | 3 | $\checkmark$ | 4 | $\checkmark$ | 1-8 | - |
| 7 | $\checkmark$ | 1,2 | $\checkmark$ | 4 | - | 3 | - | 1-3 | - | 4 | $\checkmark$ | 5 | $\checkmark$ | WSW74 |  |
| 8 | - | 3-6 | $\checkmark$ | 5-8 | - | 4 | - | 4 | - | 5,6 | $\checkmark$ | 6 | $\checkmark$ | 1-8 | - |
| WSW06 |  | 7 | $\checkmark$ | WSW23 |  | 5 | $\checkmark$ | 5-8 | $\checkmark$ | 7, 8 | $\checkmark$ | 7, 8 | - | WSW75 |  |
| 1-3 | $\checkmark$ | 8 | $\checkmark$ | 1 | $\checkmark$ | 6,7 | $\checkmark$ | WSW42 |  | WSW51 |  | WSW59 |  | 1 | - |
| 4-6 | $\checkmark$ | WSW16 |  | 2, 3 | $\checkmark$ | 8 | - | 1 | $\checkmark$ | 1 | $\checkmark$ | 1 | $\checkmark$ | 2-8 | - |
| 7 | $\checkmark$ | 1 | - | 4,5 | $\checkmark$ | WSW32 |  | 2 | $\checkmark$ | 2 | $\checkmark$ | 2 | $\checkmark$ | WSW76 |  |
| 8 | $\checkmark$ | 2 | $\checkmark$ | 6,7 | - | 1-4 | $\checkmark$ | 3 | - | 3, 4 | $\checkmark$ | 3-7 | $\checkmark$ | 1-8 | - |
| WSW07 |  | 3 | $\checkmark$ | 8 | $\checkmark$ | 5,6 | $\checkmark$ | 4 | $\checkmark$ | 5-7 | $\checkmark$ | 8 | $\checkmark$ | WSW77 |  |
| 1,2 | $\checkmark$ | 4 | - | WSW24 |  | 7, 8 | $\checkmark$ | 5 | - | 8 | $\checkmark$ | WSW60 |  | 1-8 | - |
| 3 | $\checkmark$ | 5 | $\checkmark$ | 1, 2 | $\checkmark$ | WSW33 |  | 6-8 | - | WSW52 |  | 1-3 | $\checkmark$ |  |  |
| 4-6 | $\checkmark$ | 6 | - | 3, 4 | $\checkmark$ | 1-3 | $\checkmark$ | WSW43 |  | 1-3 | $\checkmark$ | 4, 5 | $\checkmark$ |  |  |
| 7 | $\checkmark$ | 7 | $\checkmark$ | 5-8 | $\checkmark$ | 4,5 | - | 1 | - | 4-6 | $\checkmark$ | 6 | $\checkmark$ |  |  |
| 8 | - | 8 | $\checkmark$ | WSW25 |  | 6 | $\checkmark$ | 2, 3 | $\checkmark$ | 7 | - | 7, 8 | $\checkmark$ |  |  |
| WSW08 |  | WSW17 |  | 1, 2 | $\checkmark$ | 7, 8 | $\checkmark$ | 4, 5 | $\checkmark$ | 8 | $\checkmark$ | WSW61 |  |  |  |
| 1-3 | $\checkmark$ | 1, 2 | $\checkmark$ | 3, 4 | - | WSW34 |  | 6 | - | WSW53 |  | 1-4 | - |  |  |
| 4, 5 | $\checkmark$ | 3, 4 | - | 5-7 | $\checkmark$ | 1-3 | $\checkmark$ | 7 | $\checkmark$ | 1,2 | $\checkmark$ | 5-8 | - |  |  |
| 6-8 | $\checkmark$ | 5 | $\checkmark$ | 8 | - | 4,5 | $\checkmark$ | 8 | $\checkmark$ | 3, 4 | $\checkmark$ | WSW62 |  |  |  |
| WSW09 |  | 6 | - | WSW26 |  | 6,7 | $\checkmark$ | WSW44 |  | 5,6 | $\checkmark$ | 1-4 | - |  |  |
| 1 | $\checkmark$ | 7 | $\checkmark$ | 1, 2 | - | 8 | $\checkmark$ | 1-5 | $\checkmark$ | 7 | $\checkmark$ | 5,6 | - |  |  |
| 2 | $\checkmark$ | 8 | - | 3 | $\checkmark$ | WSW35 |  | 6-8 | - | 8 | - | 7, 8 | - |  |  |
| 3, 4 | $\checkmark$ |  |  | 4, 5 | $\checkmark$ | 1-4 | $\checkmark$ | WSW45 |  |  |  | WSW63 |  |  |  |
| 5 | $\checkmark$ |  |  | 6,7 | $\checkmark$ | 5-8 | - | 1-3 | - |  |  | 1,2 | - |  |  |
| 6 | $\checkmark$ |  |  | 8 | - |  |  | 4-6 | - |  |  | 3 | $\checkmark$ |  |  |
| 7, 8 | $\checkmark$ |  |  |  |  |  |  | 7 | - |  |  | 4-7 | $\checkmark$ |  |  |
|  |  |  |  |  |  |  |  | 8 | $\checkmark$ |  |  | 8 | - |  |  |


| WSW01 |  | WSW10 |  | WSW18 |  | WSW27 |  | WSW36 |  | WSW45 |  | WSW54 |  | WSW64 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2 | $\checkmark$ | 1 | - | 1 | $\checkmark$ | 1 | - | 1 | $\checkmark$ | 1-3 | $\checkmark$ | 1,2 | $\checkmark$ | 1-6 | - |
| 3, 4 | $\checkmark$ | 2 | $\checkmark$ | 2, 3 | $\checkmark$ | 2 | $\checkmark$ | 2 | $\checkmark$ | 4-6 | $\checkmark$ | 3 | $\checkmark$ | 7, 8 | - |
| 5,6 | $\checkmark$ | 3 | $\checkmark$ | 4, 5 | - | 3 | - | 3 | $\checkmark$ | 7 | $\checkmark$ | 4 | - | WSW65 |  |
| 7 | $\checkmark$ | 4 | $\checkmark$ | 6 | $\checkmark$ | 4 | $\checkmark$ | 4 | - | 8 | - | 5, 6 | $\checkmark$ | 1,2 | - |
| 8 | 8 - | 5, 6 | $\checkmark$ | 7, 8 | $\checkmark$ | 5 | - | 5 | $\checkmark$ | WSW46 |  | 7 | $\checkmark$ | 3 | - |
| WSW02 |  | 7 | $\checkmark$ | WSW19 |  | 6 | - | 6-8 | $\checkmark$ | 1, 2 | $\checkmark$ | 8 | - | 4 | - |
| 1,2 | $\checkmark$ | 8 <br> WSW11 |  | 1-3 |  | 7 | - | WSW37 |  | 3 | $\checkmark$ | WSW55 |  | 5 | - |
| 3, 4 | $\checkmark$ | WSW11 |  | 4-6 | $\checkmark$ | 8 | - | $\checkmark$ |  | 4 | $\checkmark$ | $1-8$ - |  | 6 | - |
| 5-8 | $\checkmark$ | 1,2 | $\checkmark$ | 7 | $\checkmark$ | WSW28 |  | 2 | $\checkmark$ | 5-8 |  | WSW56 |  | 7, 8 | - |
| WSW03 |  | 3, 4 | $\checkmark$ | 8 | $\checkmark$ | 1-3 | $\checkmark$ | 3-8 | - | WSW47 |  | 1 | - | WSW66 |  |
| 1 | $\checkmark$ | 5,6 | $\checkmark$ | WSW20 |  | 4-6 | $\checkmark$ | WSW38 |  | 1 | $\checkmark$ | 2 | - | 1-8 | - |
| 2-4 | $\checkmark$ | 7, 8 | - | 1 | $\checkmark$ | 7, 8 | - | 1,2 | $\checkmark$ | 2 | - | 3 | - | WSW67 |  |
| 5 | $\checkmark$ | WSW12 |  | 2 | $\checkmark$ | WSW29 |  | 3 | $\checkmark$ | 3, 4 | - | 4 | $\checkmark$ | 1-8 | - |
| 6,7 | - | 1,2 | $\checkmark$ | 3 | $\checkmark$ | 1-3 | - | 4 | $\checkmark$ | 5 | - | 5 | - | WSW68 |  |
| 8 | - | 3, 4 | $\checkmark$ | 4, 5 | $\checkmark$ | 4-6 | - | 5,6 | $\checkmark$ | 6 | - | 6 | - | 1-8 | - |
| WSW04 |  | 5, 6 | $\checkmark$ | 6, 7 | $\checkmark$ | 7 | - | 7 | $\checkmark$ | 7 | - | 7 | - | WSW69 |  |
| 1 | - | 7 | - | 8 | $\checkmark$ | 8 | - | 8 | $\checkmark$ | 8 | $\checkmark$ | 8 | - | 1-8 | - |
| 2, 3 | - | 8 | - | WSW21 |  | WSW30 |  | WSW39 |  | WSW48 |  | WSW57 |  | WSW70 |  |
| 4 | - | WSW13 |  | 1-5 | - | 1-3 | - | 1-4 | $\checkmark$ | 1,2 | - | 1,2 | $\checkmark$ | 1-8 | - |
| 5 | $\checkmark$ | 1,2 | $\checkmark$ | 6, 7 | - | 4-6 | - | 5-8 | $\checkmark$ | 3-5 | $\checkmark$ | 3-6 | - | WSW71 |  |
| 6-8 | - | 3, 4 | $\checkmark$ | 8 | $\checkmark$ | 7 | - | WSW40 |  | 6-8 | - | 7 | $\checkmark$ | 1-8 | - |
| WSW05 |  | 5-8 | $\checkmark$ | WSW22 |  | 8 | - | 1 | - | WSW49 |  | 8 | - | WSW72 |  |
| 1-3 | $\checkmark$ | WSW14 |  | 1 | $\checkmark$ | WSW31 |  | 2 | - | 1, 2 | - | WSW58 |  | 1-8 | - |
| 4 | $\checkmark$ | 1,2 | $\checkmark$ | 2 | $\checkmark$ | 1 | - | 3-6 | $\checkmark$ | 3 | - | 1-3 | - | WSW73 |  |
| 5,6 | $\checkmark$ | 3, 4 | $\checkmark$ | 3 | $\checkmark$ | 2 | $\checkmark$ | 7 | - | 4, 5 | $\checkmark$ | 4 | - | 1-8 | - |
| 7 | $\checkmark$ | 5-8 | $\checkmark$ | 4 | - | 3 | - | $\begin{array}{l\|c} \hline 8 & \checkmark \\ \hline \text { WSW41 } \end{array}$ |  | 6,7 | - | 5 - |  | WSW74 |  |
| 8 | - | WSW15 |  | 5-8 | - | 4 | $\checkmark$ | WSW41 |  | 8 | $\checkmark$ | 6 | $\checkmark$ | 1-8 | - |
| WSW06 |  | 1,2 | $\checkmark$ | WSW23 |  | 5 | $\checkmark$ | 1-3 | $\checkmark$ | WSW50 |  | 7, 8 | - | WSW75 |  |
| 1-3 | $\checkmark$ | 3-6 | $\checkmark$ | 1 | $\checkmark$ | 6,7 | - | 4 | - | 1,2 | $\checkmark$ | WS |  | 1 | - |
| 4-6 | $\checkmark$ | 7 | - | 2, 3 | $\checkmark$ | 8 | - | 5-8 | $\checkmark$ | 3 | $\checkmark$ | 1 | $\checkmark$ | 2-8 | - |
| 7 | $\checkmark$ | 8 | $\checkmark$ | 4,5 | $\checkmark$ | WSW | 32 | WS | 42 | 4 | $\checkmark$ | 2 | $\checkmark$ | WS |  |
| 8 | $\checkmark$ | WSW |  | 6,7 | - | 1-4 | - | 1 | $\checkmark$ | 5,6 | $\checkmark$ | 3-7 | $\checkmark$ | 1-8 | - |
| WS |  | 1 | - | 8 | $\checkmark$ | 5,6 | $\checkmark$ | 2 | - | 7, 8 | $\checkmark$ | 8 | $\checkmark$ | WSW |  |
| 1,2 | $\checkmark$ | 2 | $\checkmark$ | WS |  | 7, 8 | $\checkmark$ | 3 | - | WS | 51 | WS |  | 1-8 | - |
| 3 | - | 3 | $\checkmark$ | 1,2 | - | WSW | V3 | 4 | - | 1 | $\checkmark$ | 1-3 | - |  |  |
| 4-6 | $\checkmark$ | 4 | - | 3, 4 | $\checkmark$ | 1-3 | - | 5 | - | 2 | $\checkmark$ | 4,5 | - |  |  |
| 7 | $\checkmark$ | 5 | - | 5-8 | - | 4, 5 | - | 6-8 | - | 3, 4 | - | 6 | $\checkmark$ |  |  |
| 8 | - | 6 | - | WS | 25 | 6 | $\checkmark$ | WS | V43 | 5-7 | - | 7, 8 | $\checkmark$ |  |  |
| WS |  | 7 | $\checkmark$ | 1,2 | $\checkmark$ | 7, 8 | - | 1 | - | 8 | - | WSW |  |  |  |
| 1-3 | $\checkmark$ | 8 | $\checkmark$ | 3, 4 | - | WS | V3 | 2, 3 | $\checkmark$ | WSW | 52 | 1-4 | - |  |  |
| 4, 5 | $\checkmark$ | WSW |  | 5-7 | $\checkmark$ | 1-3 | - | 4,5 | $\checkmark$ | 1-3 | - | 5-8 | - |  |  |
| 6-8 | $\checkmark$ | 1,2 | $\checkmark$ | 8 | - | 4,5 | - | 6 | - | 4-6 | - | WS |  |  |  |
| WS |  | 3, 4 | - | WS | V26 | 6,7 | $\checkmark$ | 7 | $\checkmark$ | 7 | $\checkmark$ | 1-4 | - |  |  |
| 1 | $\checkmark$ | 5 | $\checkmark$ | 1,2 | - | 8 | - | 8 | $\checkmark$ | 8 | $\checkmark$ | 5,6 | - |  |  |
| 2 | $\checkmark$ | 6 | - | 3 | $\checkmark$ | WS | 35 | WS | V44 | WS | 53 | 7, 8 | - |  |  |
| 3, 4 | $\checkmark$ | 7 | - | 4,5 | $\checkmark$ | 1-4 | - | 1-5 | - | 1,2 | $\checkmark$ | WSW | V63 |  |  |
| 5 | $\checkmark$ | 8 | - | 6,7 | $\checkmark$ | 5-8 | - | 6-8 | $\checkmark$ | 3, 4 | - | 1,2 | - |  |  |
| 6 | $\checkmark$ |  |  | 8 | - |  |  |  |  | 5,6 | - | 3, 4 | $\checkmark$ |  |  |
| 7, 8 | $\checkmark$ |  |  |  |  |  |  |  |  | 7 | $\checkmark$ | 5-7 | - |  |  |
|  |  |  |  |  |  |  |  |  |  | 8 | - | 8 | $\checkmark$ |  |  |

Model: MFC-J5910


Model: MFC-7360N/7460DW/7470D/7860DW, DCP-7055/7060D/7065DN/7070DW, HL-2280DW

| WSW01 |  | WSW10 |  | WSW19 |  | WSW27 |  | WSW36 |  | WSW46 |  | WSW54 |  | WSW64 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2 | $\checkmark$ | 1 | - | 1-3 | $\checkmark$ | 1 | - | 1 | - | 1, 2 | - | 1,2 | - | 1-6 | $\checkmark$ |
| 3, 4 | $\checkmark$ | 2 | $\checkmark$ | 4-6 | $\checkmark$ | 2 | $\checkmark$ | 2 | - | 3 | - | 3 | $\checkmark$ | 7, 8 | $\checkmark$ |
| 5,6 | $\checkmark$ | 3 | $\checkmark$ | 7 | - | 3 | - | 3 | - | 4 | $\checkmark$ | 4 | - | WS |  |
| 7 | $\checkmark$ | 4 | $\checkmark$ | 8 | $\checkmark$ | 4 | $\checkmark$ | 4 | - | 5-8 | - | 5, 6 | - | 1,2 | $\checkmark$ |
| 8 | $\checkmark$ | 5, 6 | $\checkmark$ | WS |  | 5 | - | 5 | $\checkmark$ | WS |  | 7 | - | 3 | $\checkmark$ |
| WSW02 |  | 7 | $\checkmark$ | 1 | $\checkmark$ | 6 | - | 6-8 | $\checkmark$ | 1 | - | 8 | - | 4 | $\checkmark$ |
| 1,2 | $\checkmark$ | 8 | $\checkmark$ | 2 | $\checkmark$ | 7 | - | WS |  | 2 | - | WSW |  | 5 | $\checkmark$ |
| 3, 4 | $\checkmark$ | WSW11 |  | 3 | $\checkmark$ | 8 | - | 1 | $\checkmark$ | 3, 4 | - | 1-8 | $\checkmark$ | 6 | $\checkmark$ |
| 5-8 | $\checkmark$ | 1,2 | $\checkmark$ | 4,5 | $\checkmark$ | WSW28 |  | 2 | $\checkmark$ | 5 | - | WSV |  | 7, 8 | - |
| WSW03 |  | 3-8 | $\checkmark$ | 6,7 | - | 1-3 | $\checkmark$ | 3-8 | - | 6 | - | 1 | - | WS |  |
| 1 | $\checkmark$ | WSW12 |  | 8 | $\checkmark$ | 4-6 | $\checkmark$ | WS |  | 7 | - | 2 | - | 1-8 | x |
| 2-4 | $\checkmark$ | 1,2 | $\checkmark$ | WSW21 |  | 7, 8 | - | 1,2 | - | 8 | $\checkmark$ | 3 | - | WSW67 |  |
| 5 | $\checkmark$ | 3, 4 | $\checkmark$ | 1-5 | - | WSW29 |  | 3 | - | WSW48 |  | 4 | - | 1-8 | x |
| 6,7 | $\checkmark$ | 5, 6 | $\checkmark$ | 6,7 | - | 1-3 | - | 4 | - | 1,2 | - | 5 | - | WSW |  |
| 8 | - | 7 | - | 8 | $\checkmark$ | 4-6 | - | 5,6 | - | 3-5 | - | 6 | $\checkmark$ | 1-8 | X |
| WSW04 |  | 8 | - | WSW22 |  | 7 | $\checkmark$ | 7 | - | 6-8 | - | 7 | - | WSW69 |  |
| 1 | - | WSW13 |  | 1 | $\checkmark$ | 8 | - | 8 | - | WSW49 |  | 8 | $\checkmark$ | 1-8 | X |
| 2, 3 | - | 1,2 | $\checkmark$ | 2 | $\checkmark$ | WSW30 |  | WSW39 |  | 1, 2 | - | WSW57 |  | WSW70 |  |
| 4 | - | 3, 4 | $\checkmark$ | 3 | $\checkmark$ | 1-3 | - | 1-4 | - | 3 | $\checkmark$ | 1-3 | - | 1-8 | x |
| 5 | $\checkmark$ | 5-8 | $\checkmark$ | 4 | - | 4-6 | - | 5-8 | - | 4,5 | - | 4-6 | - | WSW71 |  |
| 6-8 | $\checkmark$ | WSW14 |  | 5-8 | - | 7 | - | WSW40 |  | 6,7 | - | 7 | - | 1-8 | x |
| WSW05 |  | 1,2 | $\checkmark$ | WSW23 |  | 8 | - | 1,2 | - | 8 | - | 8 | - | WSW72 |  |
| 1-3 | $\checkmark$ | 3, 4 | $\checkmark$ | 1 | $\checkmark$ | WSW31 |  | 3-8 | - | WSW50 |  | WSW58 |  | 1-8 | x |
| 4 | $\checkmark$ | 5-8 | $\checkmark$ | 2, 3 | $\checkmark$ | 1 | - | WSW41 |  | 1, 2 | - | 1-3 | - | WSW73 |  |
| 5,6 | $\checkmark$ | WSW15 |  | 4, 5 | $\checkmark$ | 2 | $\checkmark$ | 1-3 | $\checkmark$ | 3 | - | 4, 5 | - | 1-8 | X |
| 7 | $\checkmark$ | 1,2 | $\checkmark$ | 6, 7 | - | 3 | - | 4 | $\checkmark$ | 4 | - | 6 | - | WS |  |
| 8 | - | 3-6 | $\checkmark$ | 8 | $\checkmark$ | 4 | - | 5-8 | - | 5,6 | - | 7, 8 | - | 1-8 | $\checkmark$ |
| WSW06 |  | 7 | - | WSW24 |  | 5 | $\checkmark$ | WSW42 |  | 7, 8 | - | WSW59 |  | WSW75 |  |
| 1-3 | $\checkmark$ | 8 | $\checkmark$ | 1,2 | - | 6,7 | - | 1 | - | WS |  | 1 | $\checkmark$ | 1 | $\checkmark$ |
| 4-6 | $\checkmark$ | WSW16 |  | 3, 4 | $\checkmark$ | 8 | $\checkmark$ | 2 | $\checkmark$ | 1 | $\checkmark$ | 2 | - | 2-8 | $\checkmark$ |
| 7 | $\checkmark$ | 1 | - | 5-8 | - | WSW32 |  | 3 | - | 2 | - | 3-7 | - | WSW76 |  |
| 8 | $\checkmark$ | 2 | $\checkmark$ | WSW25 |  | 1-4 | - | 4 | $\checkmark$ | 3, 4 | - | 8 | $\checkmark$ | 1-8 | $\checkmark$ |
| WSW07 |  | 3-6 | - | 1,2 | - | 5,6 | $\checkmark$ | 5 | - | 5-7 | - | WSW60 |  | WSW77 |  |
| 1,2 | $\checkmark$ | 7 | $\checkmark$ | 3, 4 | - | 7, 8 | $\checkmark$ | 6-8 | - | 8 | - | 1-3 | - | 1-8 | $\checkmark$ |
| 3 | - | 8 | $\checkmark$ | 5-7 | $\checkmark$ | WSW33 |  | WSW43 |  | WSW52 |  | 4, 5 | - | WSW78 |  |
| 4-6 | $\checkmark$ | WSW17 |  | 8 | - | 1-3 | - | 1 | $\checkmark$ | 1-3 | - | 6 | $\checkmark$ | 1 | - |
| 7 | $\checkmark$ | 1,2 | $\checkmark$ | WSW26 |  | 4,5 | - | 2, 3 | $\checkmark$ | 4-6 | - | 7, 8 | - | 2 | - |
| 8 | - | 3, 4 | - | 1 | - | 6 | $\checkmark$ | 4, 5 | - | 7 | - | WSW |  | 3, 4 | - |
| WSW08 |  | 5 | $\checkmark$ | 2 | $\checkmark$ | 7, 8 | - | 6 | - | 8 | - | 1-4 | $\checkmark$ | 5-8 | - |
| 1-3 | $\checkmark$ | 6 | - | 3 | $\checkmark$ | WSW34 |  | 7 | $\checkmark$ | WSW53 |  | 5-8 | $\checkmark$ |  |  |
| 4, 5 | $\checkmark$ | 7 | $\checkmark$ | 4,5 | $\checkmark$ | 1-3 | - | 8 | $\checkmark$ | 1,2 | - | WSW62 |  |  |  |
| 6-8 | $\checkmark$ | 8 | - | 6, 7 | - | 4,5 | $\checkmark$ | WSW44 |  | 3, 4 | - | 1-4 | $\checkmark$ |  |  |
| WSW09 |  | WSW18 |  | 8 | - | 6,7 | $\checkmark$ | 1-5 | - | 5,6 | - | 5,6 | $\checkmark$ |  |  |
| 1 | $\checkmark$ | 1 | $\checkmark$ |  |  | 8 | - | 6-8 | - | 7 | $\checkmark$ | 7, 8 | $\checkmark$ |  |  |
| 2 | $\checkmark$ | 2, 3 | $\checkmark$ |  |  | WSW35 |  | WSW45 |  | 8 | - | WSW63 |  |  |  |
| 3, 4 | $\checkmark$ | 4, 5 | - |  |  | 1-4 | - | 1-3 | - |  |  | 1, 2 | - |  |  |
| 5 | $\checkmark$ | 6 | $\checkmark$ |  |  | 5-8 | - | 4-6 | $\checkmark$ |  |  | 3 | $\checkmark$ |  |  |
| 6 | $\checkmark$ | 7, 8 | $\checkmark$ |  |  |  |  | 7 | $\checkmark$ |  |  | 4-7 | $\checkmark$ |  |  |
| 7, 8 | $\checkmark$ |  |  |  |  |  |  | 8 | - |  |  | 8 | $\checkmark$ |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## FIRMWARE SWITCHES (WSW)

This appendix describes the functions of the Worker switches, which can be divided into two groups: one is for customizing preferences designed for the shipping destination and the other is for modifying preferences that match the machine to the environmental conditions. Use the latter group if the machine malfunctions due to mismatching.
Each switch has eight selectors. However, some of them cannot be set by an end user. Only selectors in the worker switch setting tables of this Appendix that are shaded can be set by an end user.

The worker switch setting procedure is described in Service Manual.
Worker Switch

| WSW No. | Function | Refer to: |
| :---: | :---: | :---: |
| WSW01 | Dial pulse setting | 4 |
| WSW02 | Tone signal setting | 6 |
| WSW03 | PABX mode setting | 7 |
| WSW04 | Transfer facility setting | 9 |
| WSW05 | 1st dial tone and busy tone detection | 10 |
| WSW06 | [Redial/Pause] button setting and 2nd dial tone detection | 11 |
| WSW07 | Dial tone setting 1 | 13 |
| WSW08 | Dial tone setting 2 | 14 |
| WSW09 | Protocol definition 1 | 15 |
| WSW10 | Protocol definition 2 | 16 |
| WSW11 | Busy tone setting | 17 |
| WSW12 | Signal detection condition setting | 18 |
| WSW13 | Modem setting | 19 |
| WSW14 | AUTO ANS facility setting | 20 |
| WSW15 | Redial facility setting | 21 |
| WSW16 | Function setting 1 | 22 |
| WSW17 | Function setting 2 | 23 |
| WSW18 | Function setting 3 | 24 |
| WSW19 | Transmission speed setting | 25 |
| WSW20 | Overseas communications mode setting | 26 |
| WSW21 | TAD setting 1 | 27 |
| WSW22 | ECM and call waiting caller ID | 28 |
| WSW23 | Communications setting | 29 |
| WSW24 | TAD setting 2 | 30 |
| WSW25 | TAD setting 3 | 31 |
| WSW26 | Function setting 4 | 32 |
| WSW27 | Function setting 5 | 34 |
| WSW28 | Function setting 6 | 35 |
| WSW29 | Function setting 7 | 36 |
| WSW30 | Function setting 8 | 37 |


| WSW No. | Function | Refer to: |
| :---: | :---: | :---: |
| WSW31 | Function setting 9 | 38 |
| WSW32 | Function setting 10 | 39 |
| WSW33 | Function setting 11 | 40 |
| WSW34 | Function setting 12 | 41 |
| WSW35 | Function setting 13 | 42 |
| WSW36 | Function setting 14 | 43 |
| WSW37 | Function setting 15 | 44 |
| WSW38 | V. 34 transmission settings | 45 |
| WSW39 | V. 34 transmission speed | 46 |
| WSW40 | V. 34 modem settings | 47 |
| WSW41 | ON-duration of the scanning light source | 49 |
| WSW42 | Internet mail settings | 50 |
| WSW43 | Function setting 16 | 51 |
| WSW44 | Speeding up scanning-1 | 52 |
| WSW45 | Speeding up scanning-2 | 53 |
| WSW46 | Monitor of power ON/OFF state and parallel port kept at high | 55 |
| WSW47 | Switching between high- and full-speed USB | 56 |
| WSW48 | USB setup latency | 57 |
| WSW49 | End-of-copying beep and print in black | 58 |
| WSW50 | SDAA settings | 59 |
| WSW51 | Function setting 17 | 60 |
| WSW52 | Function setting 18 | 61 |
| WSW53 | Function setting 19 | 62 |
| WSW54 | Function setting 20 | 63 |
| WSW55 | Interval of time required for the developing bias voltage correction | 64 |
| WSW56 | Function setting 21 | 65 |
| WSW57 | Function setting 22 | 66 |
| WSW58 | Function setting 23 | 67 |
| WSW59 | Function setting 24 | 68 |
| WSW60 | Function setting 25 | 69 |
| WSW61 | Scanning light intensity to judge to be stable 1 | 70 |
| WSW62 | Scanning light intensity to judge to be stable 2 | 71 |
| WSW63 | Function setting 26 | 72 |
| WSW64 | Setting the language / Default paper size | 74 |
| WSW65 | Setting the paper support | 75 |
| WSW66 | Reserved (Change of the setting is prohibited) | 76 |
| WSW67 | Reserved (Change of the setting is prohibited) | 76 |
| WSW68 | Reserved (Change of the setting is prohibited) | 76 |
| WSW69 | Reserved (Change of the setting is prohibited) | 76 |


| WSW No. | Function | Refer to: |
| :---: | :--- | :---: |
| WSW70 | Reserved (Change of the setting is prohibited) | 76 |
| WSW71 | Reserved (Change of the setting is prohibited) | 76 |
| WSW72 | Reserved (Change of the setting is prohibited) | 77 |
| WSW73 | Reserved (Change of the setting is prohibited) | 77 |
| WSW74 | ADF stop control | 77 |
| WSW75 | Paper ejecting distance of the switch back | 78 |
| wSW76 | The limited number of the documents in reverse for paper <br> ejection of the simplex scanning from ADF | 79 |
| WSW77 | The limited number of the documents in reverse for paper <br> ejection of the duplex scanning from ADF | 79 |
| WSW78 | Recording stop function when the drum reaches the end <br> of life | 80 |
| WSW79 | Function setting 27 | 81 |

The functions and settings for each worker switch (WSW) are described below;
<WSW01> (Dial pulse setting)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | Dial pulse generation mode | $\begin{array}{rl} \hline \text { No. } 1 & 2 \\ 0 & 0: N \\ 0 & 1: N+1 \\ 1 & 0: 10-N \\ 1 & 1: N \end{array}$ |
| $\begin{aligned} & 3 \\ & 4 \end{aligned}$ | Break time length in pulse dialing |  |
| $5$ | Inter-digit pause | ```No.5 6 0 0:800 ms 0 1:850 ms 1 0:950 ms (for 16 PPS) 1 1:600 ms (at 106-ms intervals)``` |
| 7 | Switching between pulse and tone dialing, by the function switch | 0: Yes 1: No |
| 8 | Default dialing mode, pulse (DP) or tone (PB) dialing | 0: PB 1: DP |

## - Selectors 1 and 2: Dial pulse generation mode

These selectors set the number of pulses to be generated in pulse dialing.
N : Dialing " N " generates " N " pulses. (Dialing " 0 " generates 10 pulses.)
$N+1$ : Dialing " N " generates " $\mathrm{N}+1$ " pulses.
10 - N: Dialing "N" generates " $10-\mathrm{N}$ " pulses.

## - Selectors 3 and 4: Break time length in pulse dialing

These selectors set the break time length in pulse dialing.
(Example: If "1," "2," and "3" are dialed when N is set by selectors 1 and 2.)


- Selectors 5 and 6: Inter-digit pause

These selectors set the inter-digit pause in pulse dialing.
(Example: If "1," "2," and " 3 " are dialed when N is set by selectors 1 and 2.)


- Selector 7: Switching between pulse and tone dialing, by the function switch

This selector determines whether or not the dialing mode can be switched between the pulse (DP) and tone (PB) dialing by using the function switch.

- Selector 8: Default dialing mode, pulse (DP) or tone (PB) dialing

This selector sets the default dialing mode (pulse dialing or tone dialing) which can be changed by the function switch. If the user switches it with the function switch when selector 7 is set to " 0 ," the setting specified by this selector will also be switched automatically.
<WSW02> (Tone signal setting)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | Tone signal transmission time length | $\begin{array}{rl} \hline \text { No. } 1 & 2 \\ 0 & 0: 70 \mathrm{~ms} \\ 0 & 1: 80 \mathrm{~ms} \\ 1 & 0: 90 \mathrm{~ms} \\ 1 & 1: 100 \mathrm{~ms} \end{array}$ |
| $\begin{aligned} & 3 \\ & 4 \end{aligned}$ | Min. pause in tone dialing | $\begin{array}{rl} \hline \text { No. } 3 & 4 \\ 0 & 0: 70 \mathrm{~ms} \\ 0 & 1: 80 \mathrm{~ms} \\ 1 & 0: 90 \mathrm{~ms} \\ 1 & 1: 140 \mathrm{~ms} \end{array}$ |
| $\begin{aligned} & 5 \\ & 1 \\ & 8 \end{aligned}$ | Attenuator for pseudo ring backtone to the line (selectable in the range of 0-15 dB, in 1 dB increments) | $0: 0 \mathrm{~dB}$ $1: 8 \mathrm{~dB}$ <br> $0: 0 \mathrm{~dB}$ $1: 4 \mathrm{~dB}$ <br> $0: 0 \mathrm{~dB}$ $1: 2 \mathrm{~dB}$ <br> $0: 0 \mathrm{~dB}$ $1: 1 \mathrm{~dB}$ |

- Selectors 1 through 4:Tone signal transmission time length and Min. pause in tone dialing

These selectors set the tone signal transmission time length and minimum pause in tone dialing.
(Example: If "1," "2," "3," "4," and "5" are dialed.)


- Selectors 5 through 8: Attenuator for pseudo ring backtone to the line

These selectors are used to adjust the sound volume of a ring backtone in the F/T mode, an on-hold sound, or a beep generated as a signal during remote control operation or at the start of ICM recording.
The larger the value specified by these selectors, the greater the attenuation.
<WSW03> (PABX mode setting)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| 1 | CNG detection when sharing a modular wall socket with a telephone | $0: \mathrm{A}$ 1: B |
| $2$ | Detection time length of PABX* dial tone, required for starting dialing | No. 2 3 4 <br> 0 0 $0: 50 \mathrm{~ms}$ <br> 0 0 $1: 210 \mathrm{~ms}$ <br> 0 1 $0: 500 \mathrm{~ms}$ <br> 0 1 $1: 800 \mathrm{~ms}$ <br> 1 0 $0: 900 \mathrm{~ms}$ <br> 1 0 $1: 1.5 \mathrm{sec}$. <br> 1 1 $0: 2.0 \mathrm{sec}$. <br> 1 1 $1: 2.5 \mathrm{sec}$ |
| 5 | CNG detection when sharing a modular wall socket with a telephone | 0: A 1: B |
| 6 7 | Dial tone detection in PABX* | No. 67 <br> 0 : No detection ( 3.5 sec . wait) <br> 0 1: No detection ( 5 sec . wait) <br> 10 : No detection (7 sec. wait) <br> 1 1: Detection (Frequency only) |
| 8 | "R" key function | 0 : Detection 1: No detection |

* PABX: Private automatic branch exchange


## Note:

- Selectors 2 through 4, 6 and 7 are not applicable where no PABX is installed.
- Selectors 1 and 5: CNG detection when sharing a modular wall socket with a telephone

These selectors determine whether or not the machine detects a CNG signal when a line is connected to a telephone sharing a modular wall socket with the machine. Upon detection of CNG signals by the number of cycles specified by these selectors, the machine interprets CNG as an effective signal and then starts FAX reception.

| Selector |  | Cycle |
| :---: | :---: | :---: |
| No. 1 | No. 5 |  |
| $0(A)$ | $0(A)$ | 0.5 cycle |
| $0(A)$ | $1(B)$ | 1.0 cycle |
| $1(A)$ | $0(A)$ | 1.5 cycle |
| $1(B)$ | $1(B)$ | 2.0 cycle |

## - Selectors 2 through 4: Detection time length of PABX dial tone, required for starting

 dialingUpon detection of the PABX dial tone for the time length set by these selectors, the machine starts dialing. These selectors are effective only when both selectors 6 and 7 are set to "1" (Detection).

- Selectors 6 and 7: Dial tone detection in PABX*

These selectors activate or deactivate the dial tone detection function which detects a dial tone when a line is connected to the PABX.
Setting both of these selectors to "1" activates the dial tone detection function so that the machine starts dialing upon detection of a dial tone when a line is connected.
Other setting combinations deactivate the dial tone detection function so that the machine starts dialing after the specified WAIT ( $3.5,5.0$, or 7.0 sec .) without detection of a dial tone when a line is connected.

## - Selector 8: "R" key function

This selector determines whether or not the 1st dial tone detection function (specified by selectors 1 through 3 of WSW05) is added to the R key.
If this selector is set to " 0 ", pressing the R key automatically activates the 1st dial tone detection function when the PABX and the automatic calling are selected by using the function switch. If you press the R key and a dial number in succession, the machine will automatically carry out the 1st dial tone detection function following the original transfer function as shown below.

<WSW04> (Transfer facility setting)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| 1 | Earth function in transfer facility | 0 : Provided 1: Not provided |
| $\begin{aligned} & 2 \\ & 3 \end{aligned}$ | Dual tone detection frequency in ICM recording | No. 2 3 <br> 0 $0: 350$ and 440 Hz (A) <br> 0 $1: 440$ and 480 Hz (B) <br> 1 $0: 480$ and 620 Hz <br> 1 (C) <br> 1 $1: 480$ and 620 Hz |
| 4 | Dual tone detection sensitivity in ICM recording | 0: Normal 1: High |
| 5 | Length of time added to time designated by selectors 3 and 4 on the WSW 24 (time between CML ON and pseudo ring backtone return). | 0 : Not added 1: +4 seconds added |
| $\begin{aligned} & 6 \\ & 1 \\ & 8 \end{aligned}$ | Break time length for flash function | No. 6 7 8 <br> 0 0 $0: 80 \mathrm{~ms}$ <br> 0 0 $1: 100 \mathrm{~ms}$ <br> 0 1 $0: 110 \mathrm{~ms}$ <br> 0 1 $1: 120 \mathrm{~ms}$ <br> 1 0 $0: 200 \mathrm{~ms}$ <br> 1 0 $1: 250 \mathrm{~ms}$ <br> 1 1 $0: 500 \mathrm{~ms}$ <br> 1 1 $1: 700 \mathrm{~ms}$ |

## Note:

- Selectors 1 and 5 through 8 are not applicable in those countries where no transfer facility is supported.
- Selectors 2 through 4 are applicable to models equipped with built-in TADs.


## - Selector 1: Earth function in transfer facility

This selector determines whether or not the earth function is added to the transfer setting menu to be accessed by the function switch.

## - Selectors 2 and 3: Dual tone detection frequency in ICM recording

If the machine detects either of the frequencies set by these selectors in ICM recording, it disconnects the line. For example, if these selectors are set to " 0,0 " the machine disconnects the line upon detection of 350 Hz or 440 Hz .

- Selector 4: Dual tone detection sensitivity in ICM recording

Setting this selector to "1" increases the tone detection sensitivity in ICM recording.

- Selector 5: Length of time added to time designated by selectors 3 and 4 on the WSW 24 (time between CML ON and pseudo ring backtone return).
This selector add the time between CML ON and pseudo ring backtone return.


## - Selectors 6 and 8: Break time length for flash function

These selectors set the break time length. This setting is effective only when the flash function is selected for the [Search/Speed Dial] button by using the function switch.
<WSW05> (1st dial tone and busy tone detection)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & 1 \\ & 3 \end{aligned}$ | 1st dial tone detection | No. 1 2 3 <br> 0 0 $0: 3.5 \mathrm{sec}$. wait <br> 0 0 $1: 7.0 \mathrm{sec}$. wait <br> 0 1 $0: 10.5 \mathrm{sec}$. wait <br> 0 1 $1: 14.0 \mathrm{sec}$. wait <br> 1 0 $0: 17.5 \mathrm{sec}$. wait <br> 1 0 $1: 21.0 \mathrm{sec}$. wait <br> 1 1 $0: 24.5 \mathrm{sec}$. wait <br> 1 1 $1:$ Detection (Without wait) |
| 4 | Max. pause time allowable for remote ID code detection | 0: $2 \mathrm{sec} . \quad 1: 1 \mathrm{sec}$. |
| $\begin{aligned} & 5 \\ & 6 \end{aligned}$ | Busy tone detection in auto-matic sending mode | No. 56 <br> 0 0: No detection <br> 0 1: Detection only after dialing <br> 1 0: No detection <br> 1 1: Detection before and after dialing |
| 7 | Busy tone detection in auto-matic receiving mode | 0: Yes 1: No |
| 8 | DTMF detection time | 0 : more than 40 ms <br> 1: more than 100 ms |

## Note:

- Selectors 5 through 7 are not applicable in those countries where no busy tone detection is supported.


## - Selectors 1 through 3: 1st dial tone detection

These selectors activate or deactivate the 1st dial tone detection function which detects the 1st dial tone issued from the PSTN when a line is connected to the PSTN.

Setting all of these selectors to "1" activates the dial tone detection function so that the machine starts dialing upon detection of a dial tone when a line is connected. (However, in those countries which support no dial tone detection function, e.g., in the U.S.A., setting these selectors to "1" makes the machine start dialing after a WAIT of 3.5 seconds.) For the detecting conditions of the 1st dial tone, refer to WSW07 and WSW08.
Other setting combinations deactivate the dial tone detection function so that the machine starts dialing after the specified WAIT (3.5, 7.0, 10.5, 14.0, 17.5, 21.0 , or 24.5 seconds) without detection of a dial tone when a line is connected to the PSTN.

## - Selector 4: Max. pause time allowable for remote ID code detection

This selector sets the maximum pause time allowable for detecting the second digit of a remote ID code after detection of the first digit in remote reception.

If selector 4 is set to " 0 " ( 2 seconds), for instance, only a remote ID code whose second digit is detected within 2 seconds after detection of the first digit will become effective so as to activate the remote function.

- Selectors 5 and 6: Busy tone detection in automatic sending mode

These selectors determine whether or not the machine automatically disconnects a line upon detection of a busy tone in automatic sending mode.

Setting selector 6 to "0" ignores a busy tone so that the machine does not disconnect the line. Setting selectors 5 and 6 to " 0 " and "1," respectively, makes the machine detect a busy tone only after dialing and disconnect the line.

Setting both of selectors 5 and 6 to "1" makes the machine detect a busy tone before and after dialing and then disconnect the line.

## - Selector 7: Busy tone detection in automatic receiving mode

This selector determines whether or not the machine automatically disconnects the line upon detection of a busy tone in automatic receiving mode.

## - Selector 8:

<WSW06> ([Redial/Pause] button setting and 2nd dial tone detection)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $3$ | [Redial/Pause] button setting and 2nd dial tone detection | No. 123 <br> 0 0: No pause <br> 00 1: 3.5 sec . wait <br> 01 0: 7 sec. wait <br> 01 1: 10.5 sec . wait <br> $10 \quad 0: 2.8$ sec. wait <br> 10 1: 2nd dial tone detection both in DP and push-button (PB) dialing system <br> $1 \quad 1 \quad 0$ : 2nd dial tone detection only in pulse dialing (DP) system <br> 11 1: 2nd dial tone detection both in DP and push-button (PB) dialing system |
| $\begin{aligned} & 4 \\ & \text { } \\ & 6 \end{aligned}$ | Detection of 2nd dial tone | No. 4 5 6 <br> 0 0 $0: 50 \mathrm{~ms}$ <br> 0 0 $1: 250 \mathrm{~ms}$ <br> 0 1 $0: 500 \mathrm{~ms}$ <br> 0 1 $1: 620 \mathrm{~ms}$ <br> 1 0 $0: 800 \mathrm{~ms}$ <br> 1 0 $1: 1.5 \mathrm{sec}$. <br> 1 1 $0: 2.0 \mathrm{sec}$. <br> 1 1 $1: 2.5 \mathrm{sec}$. |
| 7 | No. of 2nd dial tone detection cycles | 0: 1 cycle $1: 2$ cycles |
| 8 | Allowable instantaneous interrupt during reception of 2nd dial tone | $0: 30 \mathrm{~ms} \quad 1: 50 \mathrm{~ms}$ |

## Note:

- Selectors 4 through 8 are not applicable in those countries where no dial tone detection is supported, e.g., U.S.A.
- Selectors 1 through 3: [Redial/Pause] button setting and 2nd dial tone detection

Selectors

| 1 | 2 | 3 |  |
| :--- | :--- | :--- | :--- |
| 0 | 0 | 0 | No wait is inserted even if the [Redial/Pause] button is pressed. |
| 0 | 0 | 1 | If you press the [Redial/Pause] button during dialing, the machine will |
| 0 | 1 | 0 | insert wait as defined in the above table. |
| 0 | 1 | 1 | If the [Redial/Pause] button is pressed repeatedly, the machine inserts |
| 1 | 0 | 0 | also in hook-up dialing. |

$10 \begin{array}{lll} & 1 & \text { When these selectors are set to "1, } 0,1 \text { ": }\end{array}$
110 Each time you press the [Redial/Pause] button in dialing, the machine
1 1-1 will wait for the 2nd dial tone to be sent via the communications line regardless of pulse dialing or tone dialing.
When these selectors are set to "1, 1, 0":
If you press the [Redial/Pause] button in pulse dialing, the machine will first wait for the 2nd dial tone to be sent via the communications line. After that, pressing the [Redial/Pause] button will cause the machine to insert a WAIT of 3.5 seconds. In tone dialing, the machine will insert a WAIT of 3.5 seconds.
When these selectors are set to "1, 1, 1":
If you press the [Redial/Pause] button, the machine will first wait for the 2nd dial tone to be sent via the communications line regardless of pulse dialing or tone dialing. After that, pressing the [Redial/Pause] button will cause the machine to insert a wait of 3.5 seconds.
((In those countries where no dial tone detection function is supported, setting these selectors to "1, $0,1, "$ " $1,1,0, "$ or "1, 1, 1" inserts a wait of 3.5 seconds.)

## - Selectors 4 through 6: Detection of 2nd dial tone

Upon detection of the 2nd dial tone for the time length specified by these selectors, the machine starts dialing.
This setting is effective only when the 2nd dial tone detection function is activated by selectors 1 through 3 (Setting 101, 110, or 111).
This function does not apply in those countries where no dial tone detection function is supported.

## - Selector 7: No. of 2nd dial tone detection cycles

This selector sets the number of dial tone detection cycles required for starting dialing.

## - Selector 8: Allowable instantaneous interrupt during reception of 2nd dial tone

This selector sets the allowable instantaneous interrupt period that should be ignored during reception of the 2nd dial tone.
<WSW07> (Dial tone setting 1)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | Dial tone frequency band control | No. 1 2 <br> 0 $0:$ Narrows by 10 Hz <br> 0 $1:$ Initial value <br> 1 $0:$ Widens by 10 Hz <br> 1 1 : Widens by 10 Hz |
| 3 | Line current detection | 0: No 1:Yes |
| $\begin{aligned} & 4 \\ & 1 \\ & 6 \end{aligned}$ | 2nd dial tone detection level $(Z=600 \Omega)$ | No. 4 5 6 <br> 0 0 $0:-21 \mathrm{dBm}$ <br> 0 0 $1:-24 \mathrm{dBm}$ <br> 0 1 $0:-27 \mathrm{dBm}$ <br> 0 1 $1:-30 \mathrm{dBm}$ <br> 1 0 $0:-33 \mathrm{dBm}$ <br> 1 0 $1:-36 \mathrm{dBm}$ <br> 1 1 $0:-39 \mathrm{dBm}$ <br> 1 1 $1:-42 \mathrm{dBm}$ |
| 7 | Allowable instantaneous interrupt during reception of 1 st dial tone | $0: 30 \mathrm{~ms} \quad 1: 50 \mathrm{~ms}$ |
| 8 | Not used. |  |

## Note:

- Selectors 1, 2, 4 through 7 are not applicable in those countries where no dial tone or line current detection is supported, e.g., U.S.A.
- Selector 3 is not applicable to those models having no loop current detection function.


## - Selectors 1 and 2: Dial tone frequency band control

These selectors set the frequency band for the 1st dial tone and busy tone (before dialing) to be detected. This setting is effective only when selectors 1 through 3 on WSW05 are set to "1,1,1."

## - Selector 3: Line current detection

This selector determines whether or not to detect a line current before starting dialing.

- Selectors 4 through 6: 2nd dial tone detection level

These selectors set the detection level of the 2nd dial tone.

- Selector 7: Allowable instantaneous interrupt during reception of 1 st dial tone

This selector sets the allowable instantaneous interrupt period that should be ignored during reception of the 1 st dial tone.
<WSW08> (Dial tone setting 2)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & 1 \\ & 3 \end{aligned}$ | 1st dial tone detection time length | No. 1 2 3 <br> 0 0 $0: 50 \mathrm{~ms}$ <br> 0 0 $1: 250 \mathrm{~ms}$ <br> 0 1 $0: 500 \mathrm{~ms}$ <br> 0 1 $1: 620 \mathrm{~ms}$ <br> 1 0 $0: 800 \mathrm{~ms}$ <br> 1 0 $1: 1.5 \mathrm{sec}$. <br> 1 1 $0: 2.0 \mathrm{sec}$. <br> 1 1 $1: 2.5 \mathrm{sec}$. |
| $4$ | Time-out length for 1st and 2nd dial tone detection | $\begin{array}{\|rl\|} \hline \text { No. } 4 & 5 \\ 0 & 0: 10 \mathrm{sec} . \\ 0 & 1: 20 \mathrm{sec} . \\ 1 & 0: 15 \mathrm{sec} . \\ 1 & 1: 30 \mathrm{sec} . \end{array}$ |
| $\begin{aligned} & 6 \\ & \text { । } \\ & 8 \end{aligned}$ | Detection level of 1st dial tone and busy tone before dialing | No. 6 7 8 <br> 0 0 $0:-21 \mathrm{dBm}$ <br> 0 0 $1:-24 \mathrm{dBm}$ <br> 0 1 $0:-27 \mathrm{dBm}$ <br> 0 1 $1:-30 \mathrm{dBm}$ <br> 1 0 $0:-33 \mathrm{dBm}$ <br> 1 0 $1:-36 \mathrm{dBm}$ <br> 1 1 $0:-39 \mathrm{dBm}$ <br> 1 1 $1:-42 \mathrm{dBm}$ |

## Note:

- The WSW08 is not applicable in those countries where no dial tone detection is supported, e.g., U.S.A.


## - Selectors 1 through 3: 1st dial tone detection time length

Upon detection of the 1st dial tone for the time length set by these selectors, the machine starts dialing. This setting is effective only when selectors 1 through 3 on WSW05 are set to "1,1,1."

## - Selectors 4 and 5: Time-out length for 1st and 2nd dial tone detection

These selectors set the time-out length for the 1st and 2nd dial tone detection so that the machine waits dial tone input for the specified time length and disconnects itself from the line when no dial tone is inputted.

## - Selectors 6 through 8:

<WSW09> (Protocol definition 1)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| 1 | Frame length selection | 0: 256 octets 1: 64 octets |
| 2 | Use of non-standard commands | 0: Allowed 1: Prohibited |
| $\begin{aligned} & 3 \\ & 4 \end{aligned}$ | No. of retries | No. 3 4 <br> 0 $0: 4$ times <br> 0 $1: 3$ times <br> 1 $0: 2$ times <br> 1 $1: 1$ times |
| 5 | T5 timer | 0: 300 sec . 1: 60 sec . |
| 6 | T1 timer | 0: 35 sec . 1: 40 sec . |
| 7 8 | Timeout for response from the called station in automatic sending mode | ```No. }7 0 0:55 sec. (in U.S.A., Canadian, Chile, Brazil and South Africa models) 60 sec. (in other models) 0 1:140 sec. 1 0: }90\mathrm{ sec. 1 1:35 sec.``` |

## Note:

- Selectors 1 through 5 are not applicable in those models which do not support ECM.


## - Selector 1: Frame length selection

Usually a single frame consists of 256 octets ( 1 octet $=8$ bits). For communications lines with higher bit error rate, however, set selector 1 to "1" so that the machine can divide a message into 64-octet frames.
Remarks: The error correction mode (ECM) is a facsimile transmission manner in which the machine divides a message into frames for transmission so that if any data error occurs on the transmission line, the machine retransmits only those frames containing the error data.

- Selector 2: Use of non-standard commands

If this selector is set to "0," the machine can use non-standard commands (the machine's native-mode commands, e.g., NSF, NSC, and NSS) for communications. If it is set to "1," the machine will use standard commands only.

## - Selectors 3 and 4: No. of retries

These selectors set the number of retries in each specified modem transmission speed.

- Selector 5: T5 timer

This selector sets the time length for the T5 timer.

## - Selector 6: T1 timer

This selector sets the time length for the T1 timer.

- Selectors 7 and 8: Timeout for response from the called station in automatic sending mode

If the machine (calling station) receives no response (no G3 command) from the called terminal in automatic sending mode for the period specified by these selectors, it disconnects the line.
<WSW10> (Protocol definition 2)

| Selector No. | Function |  | Setting and Specifications |  |
| :---: | :---: | :---: | :---: | :---: |
| 1 | DPS switching interfacing with CML |  | $0:$ No | 1: Yes |
| 2 | Time length from transmission of the last dial digit to CML ON |  | 0: 100 ms | 1:50 ms |
| 3 | Time length from CML ON to CNG transmission |  | 0: 2 sec. | 1: 4 sec. |
| 4 | Time length from CML ON to CED transmission (except for facsimile-to-telephone switching) |  | 0: $0.5 \mathrm{sec} . \quad 1: 2 \mathrm{sec}$. |  |
| $5$ | No. of training retries |  | $\begin{array}{\|rl} \text { No. } 5 & 6 \\ 0 & 0: 1 \text { time } \\ 0 & 1: 2 \text { times } \\ 1 & 0: 3 \text { times } \\ 1 & 1: 4 \text { times } \end{array}$ |  |
| 7 | Encoding system (Compression) | MR | 0: Allowed | 1: Not allowed |
| 8 |  | MMR | 0 : Allowed | 1: Not allowed |

- Selector 1: Switching of DPS, following the CML ON/OFF

Setting this selector to "1" automatically switches DPS following the CML ON/OFF operation.

- Selector 2: Time length from transmission of the last dial digit to CML ON

This selector sets the time length from when the machine transmits the last dial digit until the CML relay comes on.

## - Selector 3: Time length from CML ON to CNG transmission

This selector sets the time length until the machine transmits a CNG after it turns on the CML relay.

- Selector 4: Time length from CML ON to CED transmission

This selector sets the time length until the machine transmits a CED after it turns on the CML relay. This setting does not apply to switching between facsimile and telephone.

## - Selectors 5 and 6: No. of training retries

These selectors set the number of training retries to be repeated before automatic fallback.

## - Selectors 7 and 8: Encoding system (Compression)

This selector determines whether or not to allow the use of the MR/MMR coding system.
<WSW11> (Busy tone setting)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | Busy tone frequency band control | No. 1 2 <br> 0 $0:$ Narrows by 10 Hz <br> 0 $1:$ Initial value <br> 1 $0:$ Widens by 10 Hz <br> 1 $1:$ Widens by 10 Hz |
| 3 | ON/OFF time length ranges for busy tone (More than one setting allowed) | 1: 250-750/250-750 ms |
| 4 |  | 1: 400-600/400-600 ms |
| 5 |  | 1: $175-440 / 175-440 \mathrm{~ms}$ |
| 6 |  | 1: 100-1000/17-660 ms |
| 7 |  | 1: 110-410/320-550 ms |
| 8 |  | 1: $100-660 / 100-660 \mathrm{~ms}$ |

## Note:

- WSW11 is not applicable in those countries where no busy tone detection is supported.
- The setting of WSW11 is effective only when selectors 5 and 6 on WSW05 are set to " 0 , 1 " or "1, 1" (Busy tone detection).


## - Selectors 1 and 2: Busy tone frequency band control

These selectors set the frequency band for busy tone to be detected.

- Selectors 3 through 8: ON/OFF time length ranges for busy tone

These selectors set the ON and OFF time length ranges for busy tone to be detected. If more than one selector is set to "1," the ranges become wider. For example, if selectors 4 and 5 are set to " 1, " the ON and OFF time length ranges are from 175 to 600 ms .
<WSW12> (Signal detection condition setting)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | Min. detection period required for interpreting incoming calling signal (CI) as OFF | No. 1 2 <br> 0 $0: 1500 \mathrm{~ms}$ <br> 0 $1: 500 \mathrm{~ms}$ <br> 1 $0: 700 \mathrm{~ms}$ <br> 1 $1: 900 \mathrm{~ms}$ |
| $3$ | Max. detection period for incoming calling signal (CI) being OFF | $\begin{array}{rl} \hline \text { No. } 3 & 4 \\ 0 & 0: 6 \mathrm{sec} . \\ 0 & 1: 7 \mathrm{sec} . \\ 1 & 0: 9 \mathrm{sec} . \\ 1 & 1: 11 \mathrm{sec} . \end{array}$ |
| $5$ | Min. detection period required for acknowledging incoming calling signal (CI) as ON |  |
| 7 | Line connection timing | $\begin{array}{cc}\text { 0: Ringer-OFF } & \text { 1: Ringer-ON } \\ \text { period } & \text { period }\end{array}$ |
| 8 |  |  |

* 1000 ms in Chinese models.


## - Selectors 1 through 4: Min. detection period required for interpreting incoming calling signal ( Cl ) as OFF Max. detection period for incoming calling signal (CI) being OFF

If the machine detects the OFF state of a Cl signal for the period greater than the value set by selectors 1 and 2 and less than the value set by selectors 3 and 4, it interprets the Cl signal as OFF.

## - Selectors 5 and 6: Min. detection period required for acknowledging incoming

 calling signal ( Cl ) as ONThese selectors set the period required to make the machine acknowledge itself to be called. That is, if the machine continuously detects a Cl signal with the frequency set by selectors 1 through 4 on WSW14 during the period set by these selectors 5 and 6, then it acknowledges the call.

- Selector 7: Line connection timing

If a line is connected in a ringer-ON period, FAX models equipped with SDAA circuits may malfunction due to the ringer voltage. To make the line connection stable, this selector should be set to " 0 " so that a line is connected in a ringer-OFF period.

## - Selector 8:

<WSW13> (Modem setting)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | Cable equalizer | No. 1 2 <br> 0 $0: 0 \mathrm{~km}$ <br> 0 $1: 1.8 \mathrm{~km}$ <br> 1 $0: 3.6 \mathrm{~km}$ <br> 1 $1: 5.6 \mathrm{~km}$ |
| $3$ | Reception level | $\begin{array}{\|rl} \hline \text { No. } 3 & 4 \\ 0 & 0:-43 \mathrm{dBm} \\ 0 & 1:-47 \mathrm{dBm} \\ 1 & 0:-49 \mathrm{dBm} \\ 1 & 1:-51 \mathrm{dBm} \end{array}$ |
| $\begin{aligned} & 5 \\ & 1 \\ & 8 \end{aligned}$ | Modem attenuator | No. 5 6 7 8 <br> 0 0 0 $0: 0 \mathrm{~dB}$ <br> 0 0 0 $1: 1 \mathrm{~dB}$ <br> 0 0 1 $0: 2 \mathrm{~dB}$ <br> 0 0 1 $1: 3 \mathrm{~dB}$ <br> 0 1 0 $0: 4 \mathrm{~dB}$ <br>    $\vdots$ <br> 1 1 1 $1: 15 \mathrm{~dB}$ |

## Note:

- The modem should be adjusted according to the user's line conditions.


## - Selectors 1 and 2: Cable equalizer

These selectors are used to improve the pass-band characteristics of analogue signals on a line. Attenuation in the high-band frequency is greater than in the low-band frequency. Set these selectors according to the distance from the telephone switchboard to the machine.

## - Selectors 3 and 4: Reception level

These selectors set the optimum receive signal level.

## - Selectors 5 through 8: Modem attenuator

These selectors are used to adjust the transmitting level attenuation of the modem when the reception level at the remote station is improper due to line loss. This function applies for G3 protocol signals.
Setting two or more selectors to "1" produces addition of attenuation assigned to each selector.
If selector 8 on WSW23 is set to " 0 ," this setting is so limited that 10 dB ( 1 dB in France) or higher setting only is effective.
Note that in Japan and China, 9 dB or higher and 2 dB or higher settings only are effective, respectively, regardless of whether selector 8 on WSW23 is set to " 0 ."
<WSW14> (AUTO ANS facility setting)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | Frequency band selection (lower limit) for incoming calling signal (CI) | $\begin{array}{\|rl\|} \hline \hline \text { No. } 1 & 2 \\ 0 & 0: 13 \mathrm{~Hz} \\ 0 & 1: 15 \mathrm{~Hz} \\ 1 & 0: 23 \mathrm{~Hz} \\ 1 & 1: 20 \mathrm{~Hz} \end{array}$ |
| 3 4 | Frequency band selection (upper limit) for incoming calling signal (CI) | $\begin{array}{\|rl\|} \hline \text { No. } 3 & 4 \\ 0 & 0: 30 \mathrm{~Hz} \\ 0 & 1: 55 \mathrm{~Hz} \\ 1 & 0: 70 \mathrm{~Hz} \\ 1 & 1: 200 \mathrm{~Hz}(\text { CHINA: } 80 \mathrm{~Hz}) \end{array}$ |
| $\begin{aligned} & 5 \\ & 1 \\ & 8 \end{aligned}$ | No. of rings in AUTO ANS mode | No. 5 6 7 8 <br> 0 0 0 $0:$ Fixed to once <br> 0 0 0 $1: 1$ to 6 times <br> 0 0 1 $0: 1$ to 8 times <br> 0 0 1 $1: 2$ to 8 times <br> 0 1 0 $0: 1$ to 2 times <br> 0 1 0 $1: 1$ to 3 times <br> 0 1 1 $0: 1$ to 4 times <br> 0 1 1 $1: 1$ to 5 times <br> 1 0 0 $0: 2$ to 3 times <br> 1 0 0 $1: 2$ to 4 times <br> 1 0 1 $0: 2$ to 5 times <br> 1 0 1 $1: 2$ to 6 times <br> 1 1 0 $0: 1$ to 10 times <br> 1 1 0 $1: 2$ to 10 times <br> 1 1 1 $0: 3$ to 5 times <br> 1 1 1 $1: 4$ to 10 times |

## - Selectors 1 through 4: Frequency band selection for incoming calling signal (CI)

These selectors are used to select the frequency band of Cl for activating the AUTO ANS facility.
In the French models, if the user sets the PBX to OFF from the control panel, the setting made by selectors 1 and 2 will take no effect and the frequency's lower limit will be fixed to 32 Hz . (Even if the setting made by these selectors does not apply, it will be printed on the configuration list.)

- Selectors 5 through 8: No. of rings in AUTO ANS mode

These selectors set the number of rings to initiate the AUTO ANS facility.
<WSW15> (Redial facility setting)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | Redial interval | No. 1 2 <br> 0 $0: 5 \mathrm{~min}$. <br> 0 $1: 1 \mathrm{~min}$. <br> 1 $0: 2 \mathrm{~min}$. <br> 1 $1: 3 \mathrm{~min}$. |
| $\begin{gathered} 3 \\ 1 \\ 6 \end{gathered}$ | No. of redialings | No. 3 4 5 6 <br> 0 0 0 $0: 16$ times <br> 0 0 0 $1: 1$ times <br> 0 0 1 $0: 2$ times <br> 0 0 1 $1: 3$ times <br>    1 <br> 1 1 1 $1: 15$ times |
| 7 | Not used. |  |
| 8 | CRP option | 0: Disable 1: Enable |

## - Selectors 1 through 6: Redial interval and No. of redialings

The machine redials by the number of times set by selectors 3 through 6 at intervals set by selectors 1 and 2 .

## - Selector 8: CRP option

If a command error occurs in the machine (calling station), the machine usually waits for three seconds and then makes a retry three times. This CRP option is a request command that can be sent from the called station for requesting the calling station to retry the failed command immediately.
<WSW16> (Function setting 1)

| Selector No. | Function | Setting and Specifications |  |
| :---: | :--- | :--- | :--- |
| 1 | Automatic cutter | $0:$ ON | 1: OFF |
| 2 | ITU-T (CCITT) superfine <br> recommendation | 0: Only from the <br> connected <br> external <br> telephone | 1: From all <br> telephones <br> connected |
| 3 | Remote reception | ON |  |
| 4 | Not used. | 0: OFF |  |
| 5 | No print page setting (reception) | 1: ON |  |
| 6 | Exclusive line mode | $0: 400 \mathrm{~cm}$ | 1:90 cm |
| 7 | Max. document length limitation | $0:$ Not functional 1: Functional |  |
| 8 | [Stop/Exit] button pressed <br> during reception |  |  |

## Note:

- Selector 7 is applicable to models equipped with ADF units.


## - Selector 1: Automatic cutter

The selector activates or deactivates the automatic cutter.

## - Selector 2: ITU-T (CCITT) superfine recommendation

If this selector is set to "1," the machine communicates in ITU-T (CCITT) recommended superfine mode ( 15.4 lines $/ \mathrm{mm}$ ). If it is set to " 0 ," it communicates in native superfine mode.

## - Selectors 3: Remote reception

Setting this selector to "0" allows the facsimile equipment to receive data from the directly connected external telephone only. Setting it to "1" allows the equipment, as well as from the directly connected external telephone.

If any of the following problems occurs frequently, set this selector to "0".

- Dialing from any of the telephones sharing a modular wall socket starts the facsimile equipment.
- Picking up the handset for any telephones sharing a modular wall socket while the equipment is in receiving operation disrupts the received image due to the superimposed noise.


## - Selectors 6: Exclusive line mode

Setting this selector to "1" connects the equipment to the exclusive line, which enables transmission merely by pressing the [Start] key without dialing operation at both the calling and called terminals.

- Selector 7: Max. document length limitation

This selector is used to select the maximum length of a document to be sent.

- Selector 8: [Stop/Exit] button pressed during reception

If this selector is set to "1," pressing the [Stop/Exit] button can stop the current receiving operation. The received data will be lost.
<WSW17> (Function setting 2)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | Off-hook alarm | No. 12 <br> 0 0: No alarm <br> 0 1: Always valid <br> 1 0: Valid except when' call reservation' is selected. <br> 1 1: Valid except when' call reservation' is selected. |
| 3 | Power failure report output | $0:$ ON 1: OFF |
| 4 | Calendar clock/prompt alternate display | 0: NO 1:YES |
| 5 | Calendar clock type | 0: U.S.A. type 1: European type |
| 6 | Error indication in activity report | 0: NO 1: YES |
| 7 | Non-ring reception | 0: OFF 1: ON |
| 8 | Black end sensor operation switching | 0: Disabled 1: Enabled |

- Selectors 1 and 2: Off-hook alarm

These selectors activate or deactivate the alarm function which sounds an alarm when the communication is completed with the handset being off the hook.

## - Selectors 3: Power failure report output

This selector determines whether or not to output a power failure report when the power comes back on.

## - Selectors 4: Calendar clock/prompt alternate display

If this selector is set to "1," the calendar clock and the prompt "INSERT DOCUMENT" appear alternately on the LCD while the machine is on standby; if it is set to " 0, " only the calendar clock appears.

## - Selector 5: Calendar clock type

If this selector is set to "0" (USA), the MM/DD/YY hh:mm format applies; if it is set to "1" (Europe), the DD/MM/YY hh:mm format applies: DD is the day, MM is the month, YY is the last two digits of the year, hh is the hour, and mm is the minute.

## - Selector 6: Error indication in activity report

This selector determines whether or not to print a communications error code in the activity report.

## - Selector 7: Non-ring reception

Setting this selector to "1" makes the machine receive calls without ringer sound if the number of calling is set to 0 .

- Selector 8: Black end sensor operation switching

This selector activates only the thermal roll paper models.
<WSW18> (Function setting 3)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| 1 | Addition of registration of station ID for PC-FAX | 0: Add 1: Not add |
| $\begin{aligned} & 2 \\ & 3 \end{aligned}$ | Detection enabled time for CNG and no tone |  |
| 4 | ACS* check sheet output function on/off key | 0: Operative 1: Inoperative |
| 5 | ACS* check sheet output function | 0: ON 1: OFF |
| 6 | Registration of station ID | 0: Permitted 1: Prohibited |
| $\begin{aligned} & 7 \\ & 8 \end{aligned}$ | Tone sound monitoring | No. 78 <br> 0 0: No monitoring <br> 0 1: No monitoring <br> 10 : Up to phase B at the calling station only <br> 1 1: All transmission phases both at the calling and called stations |

* ACS: Anti-curl system


## - Selector 1: Addition of registration of station ID for PC-FAX

The sending state is as follows whether add the station ID in the PC side or not.
The data do not add the station ID in the PC side.
$\Rightarrow$ Follow the Selector 1 in WSW 18, add the station ID or not.
The data add the station ID in the PC side.
$\Rightarrow$ Let it lie in the main body side.

- Selectors 2 and 3: Detection enabled time for CNG and no tone

After the line is connected via the external telephone or by picking up the handset of the machine, the machine can detect a CNG signal or no tone for the time length specified by these selectors. The setting specified by these selectors becomes effective only when selector 8 on WSW20 is set to "1."

## - Selectors 4: ACS check sheet output function on/off key

If this selector is set to "0" (Operative), the user can toggle the ACS check sheet output function on and off by pressing one-touch keys 01 and 05 simultaneously. If it is set to "1" (Inoperative), the user cannot toggle the ACS check sheet output function from the control panel so that the setting specified by selector 5 takes effect.

## - Selectors 5: ACS check sheet output function

When selector 4 is set to " 0 ," the setting specified by this selector becomes the default state of the ACS check sheet output function. When selector 4 is set to "1," the setting specified by this selector permanently takes effect.

## - Selector 6: Registration of station ID

Setting this selector to "0" permits the registration of station ID for Austrian and Czech models.

## - Selectors 7 and 8: Tone sound monitoring

These selectors set monitoring specifications of the tone sound inputted from the line.
<WSW19> (Transmission speed setting)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| 1 | First transmission speed choice for fallback | No. 1 2 3 <br> No. 4 5 6 <br> 0 0 $0: 2,400 \mathrm{bps}$ <br> 0 0 $1: 4,800 \mathrm{bps}$ <br> 0 1 $0: 7,200 \mathrm{bps}$ <br> 0 1 $1: 9,600 \mathrm{bps}$ <br> 1 0 $0: 12,000 \mathrm{bps}$ <br> 1 0 $1: 14,400 \mathrm{bps}$ <br> 1 1 $0: 14,400 \mathrm{bps}$ <br> 1 1 $1: 14,400 \mathrm{bps}$ |
| I |  |  |
|  |  |  |
| 3 |  |  |
|  | Last transmission speed choice for fallback |  |
| 4 |  |  |
| I |  |  |
|  |  |  |
| 6 |  |  |
|  |  |  |
| 7 | V .34 mode | 0: Permitted 1: Prohibited |
| 8 | V .17 mode | 0: Permitted 1: Prohibited |

## Note:

- Selector 7 takes effect only in models supporting V. 34 mode.


## - Selectors 1 through 6: First and last choices of transmission speed for fallback

These selectors are used to set the MODEM speed range. With the first transmission speed choice specified by selectors 1 through 3, the machine attempts to establish the transmission link via the MODEM. If the establishment fails, the machine automatically steps down to the next lowest speed and attempts to establish the transmission link again. The machine repeats this sequence while stepping down the transmission speed to the last choice specified by selectors 4 through 6.
If the MODEM always falls back to a low transmission speed (e.g., 4,800 bps), set the first transmission speed choice to the lower one (e.g., modify it from $12,000 \mathrm{bps}$ to $7,200 \mathrm{bps}$ ) in order to deactivate the high-speed MODEM function and reduce the training time for shorter transmission time.

Generally, to save the transmission time, set the last transmission speed choice to a higher one.

## - Selector 7: V. 34 mode

If this selector is set to " 0, " selectors 5 through 8 on the WSW38 through WSW40 and on WSW41, will become effective. The models without the V. 34 mode become "Not used".

## - Selector 8: V. 17 mode

This selector inhibits the V .17 mode if the machine malfunctions in the short training of the image signal. The models without the V. 17 mode become "Not used".
<WSW20> (Overseas communications mode setting)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| 1 | EP* tone prefix | 0: OFF 1: ON |
| 2 | Overseas communications mode (Reception) | 0: 2100 Hz 1: 1100 Hz |
| 3 | Overseas communications mode (Transmission) | 0: OFF 1: Ignores DIS once. |
| $\begin{aligned} & 4 \\ & 5 \end{aligned}$ | Min. time length from reception of CFR to start of transmission of video signals | No. 4 5 <br> 0 $0: 100 \mathrm{~ms}$ <br> 0 $1: 200 \mathrm{~ms}$ <br> 1 $0: 300 \mathrm{~ms}$ <br> 1 $1: 400 \mathrm{~ms}$ |
| $\begin{aligned} & 6 \\ & 7 \end{aligned}$ | At CNG detection, elimination of chattering noise |  |
| 8 | Limitation on CNG detection | 0: OFF 1: ON |

* EP: Echo protection


## Note:

- Selectors 6 and 7 are applicable to models equipped with SDAA circuits.


## - Selector 1: EP tone prefix

Setting this selector to "1" makes the machine transmit a 1700 Hz echo protection (EP) tone immediately preceding training in V. 29 modulation system to prevent omission of training signals.

Prefixing an EP tone is useful when the machine fails to transmit at the V .29 modem speed and always has to fall back to 4800 bps transmission.
The setting made by this selector takes effect only when the Overseas Mode is set to ON.

## - Selectors 2 and 3: Overseas communications mode

These selectors should be used if the machine malfunctions in overseas communications. According to the communications error state, select the signal specifications.

Setting selector 2 to "1" allows the machine to use 1100 Hz CED signal instead of 2100 Hz in receiving operation. This prevents malfunctions resulting from echoes, since the 1100 Hz signal does not disable the echo suppressor (ES) while the 2100 Hz signal does.
Setting selector 3 to "1" allows the machine to ignore a DIS signal sent from the called station once in sending operation. This operation suppresses echoes since the first DIS signal immediately follows a 2100 Hz CED (which disables the ES) so that it is likely to be affected by echoes in the disabled ES state. However, such a disabled ES state will be removed soon so that the second and the following DIS signals are not susceptible to data distortion due to echoes. Note that some models when called may cause error by receiving a self-outputted DIS.
The setting made by selector 3 takes effect only when the Overseas Communications Mode is set to ON. (The setting made by selector 2 is always effective.)

- Selectors 4 and 5:

These selectors can be done the receiving of the image signal by changing time from CFR to sending the image signal if fails the receiving of the image signal and the machine malfunctions in communication.

## - Selectors 6 and 7:

## - Selectors 8: Limitation on CNG detection

If this selector is set to "1," the machine detects a CNG signal according to the condition preset by selectors 2 and 3 on WSW18 after a line is connected. If it is set to " $0, "$ the machine detects a CNG signal as long as the line is connected.
<WSW21> (TAD setting 1)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & \text { I } \\ & 5 \end{aligned}$ | Max. waiting time for voice signal | No. 1 2 3 4 5 <br> 0 0 0 0 $0:$ No detection <br> 0 0 0 0 $1: 1$ sec. <br> 0 0 0 1 $0: 2$ sec. <br> 0 0 0 1 $1: 3 \mathrm{sec}$. <br>    $\mid$  <br> 0 0 1 1 $0: 6$ sec. (Default) <br>    $\mid$  <br> 1 1 1 1 $1: 31$ sec. |
| $\begin{aligned} & 6 \\ & 7 \end{aligned}$ | Taping the call | No. 67 <br> 0 0: Enable (signaling for U.S.A.) <br> 0 1: Enable (signaling for countries except U.S.A.) <br> 1 0: Enable (without signaling) (C) <br> 1 1: Disable |
| 8 | Erasure of message stored in the memory after the message transfer | 0: Yes 1: No |

## Note:

- Selectors 1 through 5 are applicable to models equipped with ICM recorders.
- Selectors 6 through 8 are applicable to models equipped with TADs.


## - Selectors 1 through 5: Max. waiting time for voice signal

In the TAD mode, the machine waits for voice signal for the time length specified by these selectors before it automatically shifts to the facsimile message receive mode or disconnects the line.

## - Selectors 6 and 7: Taping the call

These selectors select whether or not to tape the call. Setting them to "1, 0" enables taping the call without signaling to the calling station that the call is being taped.

- Selector 8: Erasure of message stored in the memory after the message transfer

Setting this selector to "0" will erase the message recorded in the memory after the document retrieval feature transfers the message.
<WSW22> (ECM and call waiting caller ID)

| Selector No. | Function | Setting and Specifications |  |
| :---: | :---: | :---: | :---: |
| 1 | ECM* in sending | 0: Valid | 1: Invalid |
| 2 | ECM* in receiving | 0: Valid | 1: Invalid |
| 3 | Call Waiting Caller ID | 0: Displa | 1: Not displayed |
| 4 | Intermediate resolution for multicopy | 0: FINE | 1: S.FINE |
| $\begin{aligned} & 5 \\ & 1 \\ & 8 \end{aligned}$ | Acceptable TCF bit error rate (\%) (Only at 4800 bps) | $\begin{aligned} & 0: 0 \% \\ & 0: 0 \% \\ & \text { 0: } 0 \% \\ & 0: 0 \% \end{aligned}$ | $\begin{aligned} & 1: 8 \% \\ & 1: 4 \% \\ & 1: 2 \% \\ & 1: 1 \% \end{aligned}$ |

* ECM: Error correction mode


## Note:

- Selector 3 is applicable to the American models only.
- Selectors 5 through 8 are applicable to the Chinese, Taiwanese and Asian models only.


## - Selector 3: Call Waiting Caller ID

Setting this selector to "0" allows the user to decide whether or not to interrupt the current call when a new call comes in. If Call Waiting Caller ID service is available in the area and the user subscribes to it, he/she can see information about his/her incoming call on the LCD.

## - Selector 4: Intermediate resolution for multi-copy

This selector determines whether the resolution for multi-copy should be Fine or Superfine.

## - Selectors 5 through 8: Acceptable TCF bit error rate (\%)

Setting two or more selectors to "1" produces addition of percent assigned to each selector. If you set selectors 7 and 8 to " $1, "$ the acceptable TCF bit error rate will be $3 \%$.
<WSW23> (Communications setting)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| 1 | Starting point of training check (TCF) | 0: 0 From the head of a series of zeros <br> 1: From any arbitrary point |
| $\begin{aligned} & 2 \\ & 3 \end{aligned}$ | Allowable training error rate | $\begin{array}{rl} \text { No. } 2 & 3 \\ 0 & 0: 0 \% \\ 0 & 1: 0.5 \% \\ 1 & 0: 1 \% \\ 1 & 1: 2 \% \end{array}$ |
| $\begin{aligned} & 4 \\ & 5 \end{aligned}$ | Decoding error rate for transmission of RTN | $\begin{array}{rl} \text { No. } 4 & 5 \\ 0 & 0: 16 \% \\ 0 & 1: 14 \% \\ 1 & 0: 10 \% \\ 1 & 1: 8 \% \end{array}$ |
| 6 | Issue of RTN at the occurrence of a pagination error | 0: Yes 1: No |
| 7 | Limitation of received resolution at the return from sleep | 0: Yes 1: No |
| 8 | Limitation of attenuation level | 0: Yes 1: No |

## Note:

- Selector 8 is not applicable to the French/Japan/China models.


## - Selector 1: Starting point of training check (TCF)

At the training phase of receiving operation, the called station detects for 1.0 second a training check (TCF) command, a series of zeros which is sent from the calling station for 1.5 seconds to verify training and give the first indication of the acceptability of the line.

This selector sets the starting point from which the called station should start counting those zeros. If this selector is set to " 0, " the called station starts counting zeros 100 ms after the head of a series of zeros is detected.
If it is set to " 1 ," the called station starts counting zeros upon detection of $10-\mathrm{ms}$ successive zeros 50 ms after the head of a series of zeros is detected. In this case, if the detection of $10-\mathrm{ms}$ successive zeros is too late, the data counting period will become less than 1.0 second, making the called station judge the line condition unacceptable.

## - Selectors 2 and 3: Allowable training error rate

The called station checks a series of zeros gathered in training (as described in Selector 1) according to the allowable training error rate set by these selectors. If the called station judges the line condition to be accepted, it responds with CFR; if not, it responds with FTT.

## - Selectors 4 and 5: Decoding error rate for transmission of RTN

The machine checks the actual decoding errors and then transmits an RTN according to the decoding error rate (Number of lines containing an error per page $\div$ Total number of lines per page) set by these selectors.

## - Selectors 6: Issue of RTN at the occurrence of a pagination error

If this selector is set to " 0, " the machine transmits an RTN when a pagination error occurs due to recording lag relative to receiving.

- Selectors 7: Limitation of received resolution at the return from sleep

If this selector is set to "Yes," the resolution is set down 1 dpi .

- Selector 8: Limitation of attenuation level

Setting this selector to "0" limits the transmitting level of the modem to -10 dB . This setting has priority over the settings selected by WSW02 (selectors 5 through 8) and WSW13 (selectors 5 through 8).
<WSW24> (TAD setting 2)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | Maximum OGM recording time | No. 1 2 <br> 0 $0: 15 \mathrm{sec}$. <br> 0 $1: 20 \mathrm{sec}$. <br> 1 $0: 30 \mathrm{sec}$. <br> 1 $1: 50 \mathrm{sec}$. |
| 3 4 | Time length from CML ON to start of pseudo ring backtone transmission | No. 3 4 <br> 0 $0: 4 \mathrm{sec}$. <br> 0 $1: 3 \mathrm{sec}$. <br> 1 $0: 2 \mathrm{sec}$. <br> 1 $1: 1 \mathrm{sec}$. |
| $5$ | Attenuator for playback of ICM/ OGM to the line | $0: 0 \mathrm{~dB}$ $1: 8 \mathrm{~dB}$ <br> $0: 0 \mathrm{~dB}$ $1: 4 \mathrm{~dB}$ <br> $0: 0 \mathrm{~dB}$ $1: 2 \mathrm{~dB}$ <br> $0: 0 \mathrm{~dB}$ $1: 1 \mathrm{~dB}$ |

## - Selectors 1 and 2: Maximum OGM recording time

These selectors set the allowable maximum recording time for an OGM.

- Selectors 3 and 4: Time length from CML ON to start of pseudo ring backtone transmission

These selectors set the length of time from CML-ON up to the start of pseudo ring backtone transmission.

In models with OGM facilities, the settings made by these selectors also apply to the length of time from CML-ON up to the start of OGM transmission.

## - Selectors 5 through 8: Attenuator for playback of ICM/OGM to the line

Setting two or more selectors to "1" produces addition of attenuation assigned to each selector.

This setting is not limited by selector 8 on WSW23.
<WSW25> (TAD setting 3)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | External TAD no-tone detection start delay time | No. 1 2 <br> 0 $0: 0 \mathrm{sec}$. <br> 0 $1: 8 \mathrm{sec}$. <br> 1 $0: 16 \mathrm{sec}$. <br> 1 $1: 24 \mathrm{sec}$. |
| $\begin{aligned} & 3 \\ & 4 \end{aligned}$ | External TAD no-tone detection level | $\begin{array}{rll} \text { No. } 3 & 4 & \\ 0 & 0:-43 \mathrm{~dB} & \text { (A) } \\ 0 & 1:-46 \mathrm{~dB} & \text { (B) } \\ 1 & 0:-49 \mathrm{~dB} & \text { (C) } \\ 1 & 1:-51 \mathrm{~dB} & \text { (D) } \end{array}$ |
| $\begin{aligned} & 5 \\ & \text { I } \\ & 7 \end{aligned}$ | Pause between paging number and PIN | $\begin{array}{rll} \text { No. } 5 & 6 & 7 \\ 0 & 0 & 0: 2 \mathrm{sec} . \\ 0 & 0 & 1: 4 \mathrm{sec} . \\ 0 & 1 & 0: 6 \mathrm{sec} . \\ 0 & 1 & 1: 8 \mathrm{sec} . \\ 1 & 0 & 0: 10 \mathrm{sec} . \\ 1 & 0 & 1: 12 \mathrm{sec} . \\ 1 & 1 & 0: 14 \mathrm{sec} . \\ 1 & 1 & 1: 16 \mathrm{sec} . \end{array}$ |
| 8 | Automatic shift to facsimile message receive mode in ICM recording mode | 0: Yes 1: No |

## Note:

- Selectors 1 through 4 are not applicable in cases of models designed for the US market, models not equipped with a function of detection for no tone with external TAD, nor for models equipped with the Rockwell modem V24.
- Selectors 5 through 7 are applicable to the U.S.A. models only.
- Selectors 1 and 2: External TAD no-tone detection start delay time

Valid only for the external TAD mode. This machine will delay the start of detection for no tone by the length of time set by selectors 1 and 2 .

The sum of the detection delay time setting and the waiting time for no-tone detection setting by selectors 1 through 5 of WSW21 must be within 40 seconds or less.

- Selectors 3 and 4: External TAD no-tone detection level

These selectors set the no-tone detection level in the external TAD mode.

- Selectors 5 through 7: Pause between paging number and PIN

These selectors set the pause time between a telephone number being paged and PIN (personal identification number) for the paging feature.

- Selector 8: Automatic shift to facsimile message receive mode in ICM recording mode (For those models equipped with a built-in TAD)

If this selector is set to "0," the equipment automatically shifts to the facsimile message receive mode after recording an ICM. If it is set to "1," the equipment automatically disconnects the line after the waiting time has passed.
<WSW26> (Function setting 4)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| 1 | Application of DC wetting pulse | 0: OFF 1: ON |
| 2 | Overvoltage limiter at the applying time of a wetting pulse | $0:$ ON 1: OFF |
| 3 | Dialing during document reading into the temporary memory in inmemory message transmission | 0: Disable 1: Enable |
|  | No. of CNG cycles to be detected (when the line is connected via the external telephone except in the external TAD mode or via the built-in telephone) | In the case of Selector 3=0 in WSW54. No. 45 $\begin{array}{lll} 0 & 0: 0.5 & (\mathrm{~A}) \\ 0 & 1: 1 & (\mathrm{~B}) \\ 1 & 0: 1.5 & (\mathrm{C}) \\ 1 & 1: 2 & \text { (D) } \end{array}$ <br> In the case of Selector 3=1 in WSW54. $\begin{array}{\|rll} \text { No. } 4 & 5 & \\ 0 & 0: 2.5 & \text { (A) } \\ 0 & 1: 3 & \text { (B) } \\ 1 & 0: 3.5 & \text { (C) } \\ 1 & 1: 4 & \text { (D) } \end{array}$ |
|  | No. of CNG cycles to be detected (when the line is connected via the external telephone in the external TAD mode, via the builtin telephone in the TAD mode, or via the machine in the automatic reception of the F/T mode) | In the case of Selector 6=0 in WSW58. No. 67 $\begin{array}{lll} 0 & 0: 0.5 & (A) \\ 0 & 1: 1 & (B) \\ 1 & 0: 1.5 & \text { (C) } \\ 1 & 1: 2 & \text { (D) } \tag{D} \end{array}$ <br> In the case of Selector 6=1 in WSW58. $\begin{array}{\|rll} \text { No. } 6 & 7 & \\ 0 & 0: 2.5 & \text { (A) } \\ 0 & 1: 3 & \text { (B) } \\ 1 & 0: 3.5 & \text { (C) } \\ 1 & 1: 4 & \text { (D) } \end{array}$ |
| 8 | FAX reception after the time-out of pseudo ring backtones in F/T mode | 0: YES 1:NO |

## - Selectors 1 and 2: Application of DC wetting pulse and overvoltage limiter

These selectors take effect only when the UK version of the facsimile equipment is set up for the British Telecom's caller ID service or its equivalent.
Selector 2 takes effect only when selector 1 is set to "1."

## - Selector 3: Dialing during document reading into the temporary memory in inmemory message transmission

If this selector is set to " 0 ," the machine waits for document reading into the memory to complete and then starts dialing. This enables the machine to list the total number of pages in the header of the facsimile message.

- Selectors 4 and 5: No. of CNG cycles to be detected (when the line is connected via the external telephone except in the external TAD mode or via the built-in telephone)

The machine interprets a CNG as an effective signal if it detects the CNG by the number of cycles specified by these selectors when the line is connected via the external telephone except in the external TAD mode or via the built-in telephone.

- Selectors 6 and 7: No. of CNG cycles to be detected (when the line is connected via the external telephone in the external TAD mode, via the built-in telephone in the TAD mode, or via the machine in the automatic reception of the F/T mode)

The machine interprets a CNG as an effective signal if it detects the CNG by the number of cycles specified by these selectors when the line is connected via the external telephone in the external TAD mode, via the built-in telephone in the TAD mode, or via the machine in the automatic reception of the F/T mode.

- Selector 8: FAX reception after the time-out of pseudo ring backtones in F/T mode

If this selector is set to "0," the equipment enters the facsimile receive mode after issuing pseudo ring backtones. If it is set to "1," the equipment disconnects the line after issuing pseudo ring backtones.
<WSW27> (Function setting 5)

| Selector No. | Function | Setting and Specifications |  |
| :---: | :--- | :--- | :--- |
| 1 | Definition of programmable key | $0:$ TEL key | 1: TEL/POLLING key |
| 2 | Ringer OFF setting | $0:$ Yes | 1: No |
| 3 | Automatic playback of OGM <br> when switched to the TAD mode | 0: No | 1: Yes |
| 4 | Detection of distinctive ringing <br> pattern | 0: Yes | 1: No |
| 5 | Automatic erasure of voice <br> alarm | $0:$ Yes | 1: No |
| 6 | Recording quality | 0: Normal | 1: High |
| 7 | Recording time for high <br> recording quality | $0:$ Short (9.6 kbps) 1: Long (8.8 kbps) |  |
| 8 | Suppression of FAX data <br> reception when the recording <br> head is overheated | $0:$ No | 1: Yes |

## Note:

- Selectors 4 and 5 are applicable to the U.S.A. models only.


## - Selector 1: Definition of programmable key

This selector defines a programmable key as a TEL key or TEL/POLLING key.
Setting this selector to "1" allows the programmable key to function as either a TEL or POLLING key if pressed when the handset is off or on the hook, respectively.

This setting is effective only for those models having a programmable key.

## - Selector 2: Ringer OFF setting

This selector determines whether or not the ringer can be set to OFF.

## - Selector 3: Automatic playback of OGM when switched to the TAD mode

This selector determines whether or not to automatically play back an OGM the moment the machine switches to the TAD mode.

## - Selector 4: Detection of distinctive ringing pattern

If this selector is set to "1," the machine detects only the number of rings; if it is set to " 0, " the machine detects the number of rings and the ringing time length to compare the detected ringing pattern with the registered distinctive one.

## - Selector 5: Automatic erasure of voice alarm

This selector determines whether or not the voice alarm should be erased from the memory after it is issued.

## - Selector 6: Recording quality

This selector determines the recording quality for the OGM and ICM. Selecting "1" (High) increases the quality, sacrificing the recording time.

- Selector 7: Recording time for high recording quality

This setting takes effect when selector 6 is set to "1" (High). Setting this selector to "0" (Short) further increases the recording quality, sacrificing the recording time. The recording quality and time to be applied when this selector is set to "1" (Long) are higher and shorter than the ones to be applied when selector 6 is set to "0" (Normal).
The recording quality and time determined by this selector being set to "1" (Long) are higher and shorter than the ones determined by selector 6 being set to " 0 " (Normal).

## - Selector 8:

<WSW28> (Function setting 6)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & \text { I } \\ & 3 \end{aligned}$ | Transmission level of DTMF high-band frequency signal | No. 1 2 3 <br> 0 0 $0: 0 \mathrm{~dB}$ <br> 0 0 $1:+1 \mathrm{~dB}$ <br> 0 1 $0:+2 \mathrm{~dB}$ <br> 0 1 $1:+3 \mathrm{~dB}$ <br> 1 0 $0: 0 \mathrm{~dB}$ <br> 1 0 $1:-1 \mathrm{~dB}$ <br> 1 1 $0:-2 \mathrm{~dB}$ <br> 1 1 $1:-3 \mathrm{~dB}$ |
| $\begin{aligned} & 4 \\ & \text { I } \\ & 6 \end{aligned}$ | Transmission level of DTMF lowband frequency signal | $\begin{array}{\|rll} \hline \text { No. } 4 & 5 & 6 \\ 0 & 0 & 0: 0 \mathrm{~dB} \\ 0 & 0 & 1:+1 \mathrm{~dB} \\ 0 & 1 & 0:+2 \mathrm{~dB} \\ 0 & 1 & 1:+3 \mathrm{~dB} \\ 1 & 0 & 0: 0 \mathrm{~dB} \\ 1 & 0 & 1:-1 \mathrm{~dB} \\ 1 & 1 & 0:-2 \mathrm{~dB} \\ 1 & 1 & 1:-3 \mathrm{~dB} \end{array}$ |
| $\begin{aligned} & \hline 7 \\ & 8 \end{aligned}$ | Not used. |  |

- Selectors 1 through 6: Transmission level of DTMF high-/low-band frequency signal

These selectors are intended for the manufacturer who tests the machine for the Standard. Never access them.
<WSW29> (Function setting 7)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & 1 \\ & 3 \end{aligned}$ | Compression threshold level for voice signals inputted via the telephone line in the built-in TAD operation | No. 1 2 3  <br> 0 0 $0:-47.0 \mathrm{dBm}$ (A) <br> 0 0 $1:-48.5 \mathrm{dBm}$ (B) <br> 0 1 $0:-50.0 \mathrm{dBm}$ (C) <br> 0 1 $1:-51.5 \mathrm{dBm}$ (D) <br> 1 0 $0:-53.0 \mathrm{dBm}$ (E) <br> 1 0 $1:-54.5 \mathrm{dBm}$ (F) <br> 1 1 $0:-56.0 \mathrm{dBm}$ (G) <br> 1 1 $1: 0 F F$ (H) |
| $\begin{aligned} & 4 \\ & 1 \\ & 6 \end{aligned}$ | Compression threshold level for voice signals inputted via the handset in the built-in TAD operation | $\begin{array}{rlll} \hline \text { No. } 4 & 5 & 6 & \\ 0 & 0 & 0:-44.0 \mathrm{dBm} & \text { (A) } \\ 0 & 0 & 1:-45.5 \mathrm{dBm} & \text { (B) } \\ 0 & 1 & 0:-47.0 \mathrm{dBm} & \text { (C) } \\ 0 & 1 & 1:-48.5 \mathrm{dBm} & \text { (D) } \\ 1 & 0 & 0:-50.0 \mathrm{dBm} & \text { (E) } \\ 1 & 0 & 1:-51.5 \mathrm{dBm} & \text { (F) } \\ 1 & 1 & 0:-53.0 \mathrm{dBm} & \text { (G) } \\ 1 & 1 & 1: 0 F F & \text { (H) } \end{array}$ |
| 7 | Impedance switching control in pulse dialing | $0:$ OFF 1:ON |
| 8 | Prompt beep when the memory area for the activity report becomes full | 0: No 1:Yes |

## Note:

- Selectors 1 through 6 are applicable to models equipped with built-in TADs.
- Selectors 7 and 8 are applicable only to the European versions.


## - Selectors 1 through 6:Compression threshold level for voice signals inputted via the telephone line and handset in the built-in TAD operation

If voice signals inputted via the telephone line are below the level specified by these selectors, the TAD interprets those received voice signals as no signal, compressing the recording time.

- Selector 8: Prompt beep for activity report

This selector determines whether or not to beep if the memory area for the activity report becomes full, for prompting you to print out the report. (Printing it out will clear the memory area.)
<WSW30> (Function setting 8)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & 1 \\ & 3 \end{aligned}$ | Dial tone/busy tone detection level during recording of ICM | No. 1 2 3  <br> 0 0 $0:-38.0 \mathrm{dBm}$ (A) <br> 0 0 $1:-39.5 \mathrm{dBm}$ (B) <br> 0 1 $0:-41.0 \mathrm{dBm}$ (C) <br> 0 1 $1:-42.5 \mathrm{dBm}$ (D) <br> 1 0 $0:-44.0 \mathrm{dBm}$ (E) <br> 1 0 $1:-45.5 \mathrm{dBm}$ (F) <br> 1 1 $0:-47.0 \mathrm{dBm}$ (G) <br> 1 1 $1:-48.5 \mathrm{dBm}$ (H) |
| 4 | Not used. |  |
| 5 | Drum cleaning alarm | 0: ON 1: OFF |
| 6 | Modem sleep function | 0: OFF 1: ON |
| 7 | Scanning magnification adjusting function | 0: Enable 1: Disable |
| 8 | Test mode copy contrast adjusting | 0: Normal 1: Dark |

## Note:

- Selectors 1 through 3 are applicable to models equipped with internal TADs.
- Selectors 1 through 3:Dial tone/busy tone detection level during recording of ICM

If the machine (called station) detects dial tone ( 400 Hz continuously) or busy tone ( 400 Hz intermittently) exceeding the detection level specified by these selectors for the period specified by selectors 1 through 4 on WSW35, then it interprets the calling station as being disconnected. The machine stops TAD recording and disconnects the line.
<WSW31> (Function setting 9)

| Selector No. | Function | Setting and Specifications |  |
| :---: | :--- | :--- | :--- |
| 1 | Not used. |  |  |
| 2 | Default reduction rate for failure <br> of automatic reduction during <br> recording | $0: 100 \% \quad 1: 75 \%$ |  |
| 3 | Not used. |  |  |
| 4 | (Do not disturb this selector.) |  |  |
| 5 | Minimum ON and OFF duration <br> of ringer signals effective in <br> distinctive ringing | $0: 130 \mathrm{~ms}$ | $1: 90 \mathrm{~ms}$ |
| 6 | Not used. | $0:$ No | $1:$ Yes |
| 8 | Drum life indication |  |  |

## Note:

- Selector 5 is applicable only to the U.S.A. models.


## - Selector 2: Default reduction rate for failure of automatic reduction during recording

This selector sets the default reduction rate to be applied if the automatic reduction function fails to record one-page data sent from the calling station in a single page of the current recording paper.

If it is set to " 0 ," the machine records one-page data at full size (100\%) without reduction; if it is set to "1," the machine records it at $70 \%$ size.

## - Selector 5: Minimum ON and OFF duration of ringer signals effective in distinctive ringing

The ringer pattern consists of short and long rings, e.g., short-short-long rings. This selector sets the minimum ON and OFF duration of ringer signals that are required for the machine to interpret ringer signals as being ON or OFF. This is to prevent components of a ringer pattern from being misinterpreted due to chattering in distinctive ringing.

The machine monitors ringer signals at $10-\mathrm{ms}$ intervals. If the signal is ON , the machine counts +1 ; if it is OFF, it counts -1 . If the counter increments up to +5 or +13 when this selector is set to "1" $(90 \mathrm{~ms})$ or " 0 " ( 130 ms ), respectively, the machine interprets the current signal as being ON.
If the counter returns to zero, the machine interprets the signal as being OFF. If the Distinctive Ring is set to OFF, this selector is not effective.

## - Selector 8: Drum life indication

This selector selects whether display the LCD message at the "Drum life end soon," or not.
<WSW32> (Function setting 10)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| 1 | Not used. |  |
| I |  |  |
| 4 |  |  |
| 56 | Default resolution when FAX scanning | No. 56 |
|  |  | 0 0: Standard |
|  |  | 0 1: Fine |
|  |  | 1 0: Super fine |
|  |  | 1 1: Photo |
| $\begin{aligned} & 7 \\ & 8 \end{aligned}$ | Default contrast when FAX scanning | No. 78 |
|  |  | 0 0: Automatic |
|  |  | 0 1: Automatic |
|  |  | 1 0: Super light |
|  |  | 1 1: Super dark |

## - Selectors 5 and 6: Default resolution

These selectors set the default resolution which applies when the machine is turned on or completes a transaction.

## - Selectors 7 and 8: Default contrast

These selectors set the default contrast which applies when the machine is turned on or completes a transaction.
<WSW33> (Function setting 11)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & 1 \\ & 3 \end{aligned}$ | Detection threshold level of "no tone" during recording of ICM | No. 1 2 3  <br> 0 0 $0:-48 \mathrm{dBm}$ (A) <br> 0 0 $1:-50 \mathrm{dBm}$ (B) <br> 0 1 $0:-52 \mathrm{dBm}$ (C) <br> 0 1 $1:-54 \mathrm{dBm}$ (D) <br> 1 0 $0:-56 \mathrm{dBm}$ (E) <br> 1 0 $1:-58 \mathrm{dBm}$ (F) <br> 1 1 $0:-60 \mathrm{dBm}$ (G) (Default) <br> 1 1 $1:-62 \mathrm{dBm}$ (H) |
| 4 5 | FAX receiving speed to be kept within the transmission speed limit to the PC | No. 4 5 <br> 0 $0: 14,400 \mathrm{bps}$ <br> 0 $1: 12,000 \mathrm{bps}$ <br> 1 $0: 9,600 \mathrm{bps}$ <br> 1 $1: 7,200 \mathrm{bps}$ |
| 6 | Report output of polled transmission requests | 0: Yes 1: No |
| $\begin{aligned} & 7 \\ & 8 \end{aligned}$ | Comfortable noise level | No. 7 8  <br> 0 $0:$ OFF  <br> 0 $1:$ Low (A) <br> 1 $0:$ Medium (B) <br> 1 $1:$ High (C) |

## Note:

- Selectors 1 through are applicable to models equipped with built-in TADs.
- Selectors 4 and 5 are applicable to those models equipped with a PC interface.
- Selector 6 is not applicable to the U.S.A. models.


## - Selectors 1 through 3: Detection threshold level of "no tone" during recording of ICM

If the tone level during recording of ICM is less than the threshold setting made by these selectors, the tone is interpreted as "no tone". When the "no tone" state is kept for the period specified by selectors 1 through 5 on WSW21, the machine disconnects the line.

## - Selectors 4 and 5: FAX receiving speed to be kept within the transmission speed limit to the PC

To transmit FAX data being received from other machine to the connected PC, you may need to keep the FAX receiving speed within the transmission speed limit specified for the PC. In an initial negotiation sequence for transmission, the machine responds to the calling station with the allowable FAX receiving speed specified by these selectors.

## - Selectors 7 and 8: Comfortable noise level

These selectors set the level of noise to be added during playing-back of voice signals recorded with no-signal compression. If they are set to " 0,0, , no noise will be added.
<WSW34> (Function setting 12)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & 1 \\ & 3 \end{aligned}$ | Erasing time length of ICM tone recorded preceding the tone detection starting point in the case of automatic line disconnection due to no voice signal received | No. 1 2 3 <br> 0 0 $0: 0$ sec. <br> 0 0 $1: 1 \mathrm{sec}$. <br> 0 1 $0: 2 \mathrm{sec}$. <br> 0 1 $1: 3 \mathrm{sec}$. <br> 1 0 $0: 4 \mathrm{sec}$. <br> 1 0 $1: 5 \mathrm{sec}$. <br> 1 1 $0: 6 \mathrm{sec}$. <br> 1 1 $1: 7 \mathrm{sec}$. |
| $\begin{aligned} & 4 \\ & 5 \end{aligned}$ | No. of CNG cycles to be detected (when the line is connected via the external telephone in the external TAD mode or via the machine in F/T mode) | In the case of Selector 6=0 in WSW58. No. 45 <br> In the case of Selector 6=1 in WSW58. No. 45 <br> 0 0: 2.5 (A) <br> 0 1:3 (B) <br> 1 0: 3.5 (C) <br> 1 1:4 <br> (D) |
| 6 7 | Number of DTMF tone signals for inhibiting the detection of CNG during external TAD operation | $\begin{array}{rl} \hline \text { No. } 6 & 7 \\ 0 & 0: 3 \\ 0 & 1: 2 \\ 1 & 0: 1 \\ 1 & 1: \text { OFF } \end{array}$ |
| 8 | CNG detection when the line is connected via the external telephone | 0: CALLED SIDE only <br> 1: ALL CASES |

## Note:

- Selectors 1 through 5 are applicable to models equipped with built-in TADs.
- Selectors 1 through 3: Erasing time length of ICM tone recorded preceding the tone detection starting point in the case of automatic line disconnection due to no voice signal received
If the machine has disconnected the line after detection of disconnection tone in ICM recording, it erases tone recorded preceding the tone detection starting point for the time length set by these selectors.
- Selectors 4 and 5: No. of CNG cycles to be detected (when the line is connected via the external telephone in the external TAD mode or via the machine in F/T mode)
The machine interprets a CNG as an effective signal if it detects a CNG signal by the number of cycles specified by these selectors when the line is connected via the external telephone in the external TAD mode or via the machine in F/T mode.


## - Selectors 6 and 7:Number of DTMF tone signals for inhibiting the detection of CNG during external TAD operation

If the machine receives this specified number of DTMF tone signals during external TAD operation, it will not detect CNG afterwards.
If these selectors are set to "1, 1," the CNG detection will not be inhibited.

- Selectors 8:
<WSW35> (Function setting 13)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & \text { I } \\ & 4 \end{aligned}$ | Max. detection period of dial tone/busy tone during recording of ICM | No. 1 2 3 4 <br> 0 0 0 $0:$ No detection <br> 0 0 0 $1: 1 \mathrm{sec}$. <br> 0 0 1 $0: 2 \mathrm{sec}$. <br> 0 1 0 $0: 4 \mathrm{sec}$. <br>    $\mid$ <br> 1 1 1 $1: 15 \mathrm{sec}$. |
| $\begin{aligned} & 5 \\ & 1 \\ & 8 \end{aligned}$ | Not used. |  |

## Note:

- Selectors 1 through 4 are applicable to models equipped with internal TADs.
- Selectors 1 through 4: Max. detection period of dial tone/busy tone during recording of ICM

If the machine (called station) detects dial tone or busy tone exceeding the detection level specified by selectors 1 through 3 on WSW30 for the period specified by these selectors, then it disconnects the line.
<WSW36> (Function setting 14)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| 1 | ECP mode* | 0: ON 1: OFF |
| 2 | Recovery from Inactive PC Interface | 0: Disable 1: Enable |
| 3 | PC Power-off Recognition Time | 0: Normal 1: Long |
| 4 | Not used. |  |
| 5 | Escape from phase C | 0: Yes 1: No |
| $\begin{aligned} & 6 \\ & 1 \\ & 8 \end{aligned}$ | Extension of incoming calling signal (Cl) frequency band specified by selectors 1 through 4 on WSW14 | No. 6 7 8  <br> 0 0 $0: 0$ $($ lgnored $)$ <br> 0 0 $1: 4$ $(448 \mathrm{~Hz})$ <br> 0 1 $0: 8$ $(244 \mathrm{~Hz})$ <br> 0 1 $1: 12$ $(162 \mathrm{~Hz})$ <br> 1 0 $0: 16$ $(122 \mathrm{~Hz})$ <br> 1 0 $1: 20$ $(97 \mathrm{~Hz})$ <br> 1 1 $0: 24$ $(81 \mathrm{~Hz})$ <br> 1 1 $1: 28$ $(69 \mathrm{~Hz})$ |

*ECP (Enhanced Capabilities Port)

## Note:

- Selectors 2 and 3 will become operative if selectors 1 and 2 of WSW46 are set to "monitor" the PC power ON/OFF state.


## - Selector 1: ECP mode

The ECP mode enhances the normal bidirectional communications between the machine and the connected PC for higher transmission speed throgh the parallel interface.

## - Selector 2: Recovery from Inactive PC Interface

If the machine recognizes via the STB signal line that the connected PC is powered off throgh the parallel interface, it will turn the PC interface outputs Low to protect the PC from hazards that could be caused by weak electric current accidentally flown from the machine. This selector determines whether or not the machine should recover from the inactive PC interface to normal interfacing state upon receipt of data from the PC.

## - Selector 3: PC Power-off Recognition Time

This selector sets the time length from when the machine detects the PC powered off until it recognizes the detected state as power-off.
If selector 2 is set to " 0, , it is recommended that selector 3 be set to " 1 "; otherwise, the machine may mistakenly detect PC powered off.

- Selector 5: Escape from phase C

This selector determines whether or not the machine will escape from phase C when it detects an RTC (Return to Control) in non-ECM mode or an RCP (Return to Control Partial page) in ECM mode.

## - Selectors 6 through 8: Extension of incoming calling signal (CI) frequency band specified by selectors 1 through 4 on WSW14

At the start of reception, if the machine detects the frequency of a Cl signal specified by selectors 1 through 4 on WSW14, it starts the ringer sounding. However, the machine may fail to detect the Cl signal normally due to noise superimposed at the time of reception. To prevent it, use selectors 6 through 8 on WSW36.
If the machine detects higher frequencies than the setting made here, it regards them as noise and interprets the detecting state as being normal, allowing the ringer to keep sounding according to the preset number of ringers (until it starts automatic reception of FAX data in the FAX mode or enters the TAD mode in the TEL mode).

## <WSW37> (Function setting 15)

| Selector No. | Function | Setting and Specifications |
| :---: | :--- | :--- |
| 1 | Printout of the stored image <br> data of an unsent document <br> onto an error report | $0:$ No $1:$ Yes |
| 2 | Erasure of the stored image <br> data of an unsent document at <br> the time of the subsequent in- <br> memory message transmission | 0: No |
| 3 | Not used. Yes |  |
| 1 |  |  |

## - Selector 1: Printout of the stored image data of an unsent document onto an error report

This selector determines whether or not to print out the 1st-page image data of a document onto the error report if the document image data stored in the temporary memory cannot be transmitted normally.

## - Selector 2: Erasure of the stored image data of an unsent document at the time of the subsequent in-memory message transmission

If in-memory message transmission fails repeatedly when selector 1 is set to "1," the temporary memory will be occupied with image data. Setting selector 2 to " 1 " will automatically erase the stored 1st-page image data of an unsent document at the time of the subsequent in-memory message transmission only when recording paper or toner runs out.
<WSW38> (V. 34 transmission settings)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | Setting of the equalizer | No. 12 <br> 0 0: Automatic <br> 0 1: Automatic <br> 1 0: Fixed to 4 points <br> 1 1: Fixed to 16 points |
| 3 | Sending level of guard tone at phase 2 | 0: Normal - 7 db 1: Normal |
| 4 | Stepping down the transmission speed at fallback each | 0: $2,400 \mathrm{bps} \quad 1: 4,800 \mathrm{bps}$ |
| 5 6 | Automatic control of modem's EQM gain for proper transmission speed choice | No. 56 <br> 0 0: For higher transmission speed than the current setting <br> 0 1: No change from the current setting <br> 10 : For lower transmission speed than the current setting <br> 1 1: For further lower transmission than the setting made by 1,0 |
| 7 | Redialing when a communications error occurs | $0:$ ON 1: OFF |
| 8 | Detection of CED for stopping CNG | 0: ON 1: OFF |

## Note:

- WSW38 takes effect only when the V. 34 mode is permitted (WSW19, selector 7) in models supporting V. 34 mode.


## - Selectors 1 and 2: Setting of the equalizer

These selectors set the equalizer's training level to be applied if the machine fails to send training due to weak line connection. If these selectors are set to " $0, \mathrm{X}$, , the modem will automatically set the appropriate training level.

## - Selector 3: Sending level of guard tone at phase 2

This selector sets the sending level of guard tone for 1800 Hz to be sent at Phase 2 in the V. 34 mode.

- Selector 4: Stepping down the transmission speed at fallback each

This selector determines how much the modem steps down the transmission speed at fallback when called by the remote station. If this selector is set to "1," the modem may step down the transmission speed from 33600 bps to 28800 bps by one-time fallback.

- Selectors 5 and 6: Automatic control of modem's EQM gain for proper transmission speed choice These selectors determine how the modem controls the EQM (Eye Quality Monitor) gain for proper choice of the transmission speed, which applies if the modem selects higher transmission speed than the possible speed so that it always repeats falling back.


## - Selector 8: Detection of CED for stopping CNG

If this selector is set to " 0 ," the detection time of CED specified by WSW43, selectors 4 and 5 will apply.
<WSW39> (V. 34 transmission speed)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & 1 \\ & 4 \end{aligned}$ | First transmission speed choice for fallback |  |
| $\begin{aligned} & 5 \\ & 1 \\ & 8 \end{aligned}$ | Last transmission speed choice for fallback |  |

## Note:

- WSW39 takes effect only when the V. 34 mode is permitted (WSW19, selector 7) in models supporting V. 34 mode. For the transmission speed setting in other modes, refer to WSW19.
- Selectors 1 through 8: First and last choices of transmission speed for fallback

These selectors are used to set the modem speed range. With the first transmission speed choice specified by selectors 1 through 4, the machine attempts to establish the transmission link via the modem. If the establishment fails, the machine automatically steps down to the next highest speed and attempts to establish the transmission link again. The machine repeats this sequence while stepping down the transmission speed to the last choice specified by selectors 5 through 8 .

If the modem always falls back to a low transmission speed (e.g., 24,000 bps), set the first transmission speed choice to the lower one (e.g., modify it from $31,200 \mathrm{bps}$ to $26,400 \mathrm{bps}$ ) in order to deactivate the high-speed modem function and reduce the training time for shorter transmission time.
WSW39 will be limited by selectors 3 through 8 on WSW40.
<WSW40> (V. 34 modem settings)

| Selector No. | Function | Setting and Specifications |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Busy / Ring Feature | 0: OFF |  | 1: ON |  |
| 2 | Not used. |  |  |  |  |
| $\begin{aligned} & 3 \\ & 1 \\ & 8 \end{aligned}$ | Masking of symbol rate(s) | Not <br> No. 3 <br> No. <br> No. 5 <br> No. 6 <br> No. 7 <br> No. 8 | $\begin{gathered} \text { king } \\ 0 \\ 0 \\ 0 \\ 0 \\ - \\ 0 \end{gathered}$ | as 1 1 1 1 | 3429 symbols/sec <br> 3200 symbols/sec <br> 3000 symbols/sec <br> 2800 symbols/sec <br> Not used. <br> 2400 symbols/sec |

## Note:

- WSW40 takes effect only when the V. 34 mode is permitted (WSW19, selector 7) in models supporting V. 34 mode.
- Selectors 3 through 8: Masking of symbol rate(s)

These selectors allow you to limit the transmission speed range in V. 34 mode by masking the desired symbol rate(s). Transmission speeds assigned to the symbol rates are listed on the next page. The setting made by these selectors will limit the setting made by selectors 1 through 4 on WSW39.
If selector 3 is set to "1" to mask the 3429 symbols/second when the first transmission speed choice is 33600 bps (specified by selectors 1 through 4 of WSW39), for example, then the allowable maximum transmission speed will be limited to 31200 bps. If selector 8 is set to "1" to mask the 2400 symbols/second when the first transmission speed choice is 33600 bps, then the allowable maximum transmission speed remains 33600 bps.

If selector 8 is set to "1" to mask the 2400 symbols/second when the first transmission speed choice is 21600 bps (specified by selectors 1 through 4 on WSW39), then the allowable maximum transmission speed remains 21600 bps but the minimum transmission speed will be limited to 4800 bps.

| Symbol rate | Transmission speed (bps) | Symbol rate | Transmission speed (bps) | Symbol rate | Transmission speed (bps) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2400 | 2,400 | 3000 | 4,800 | 3429 | 4,800 |
|  | 4,800 |  | 7,200 |  | 7,200 |
|  | 7,200 |  | 9,600 |  | 9,600 |
|  | 9,600 |  | 12,000 |  | 12,000 |
|  | 12,000 |  | 14,400 |  | 14,400 |
|  | 14,400 |  | 16,800 |  | 16,800 |
|  | 16,800 |  | 19,200 |  | 19,200 |
|  | 19,200 |  | 21,600 |  | 21,600 |
|  | 21,600 |  | 24,000 |  | 24,000 |
|  |  |  | 26,400 |  | 28,800 |
|  |  |  | 28,800 |  | 31,200 |
| 2800 | 4,800 | 3200 | 4,800 |  | 33,600 |
|  | 7,200 |  | 7,200 |  |  |
|  | 9,600 |  | 9,600 |  |  |
|  | 12,000 |  | 12,000 |  |  |
|  | 14,400 |  | 14,400 |  |  |
|  | 16,800 |  | 16,800 |  |  |
|  | 19,200 |  | 19,200 |  |  |
|  | 21,600 |  | 21,600 |  |  |
|  | 24,000 |  | 24,000 |  |  |
|  | 24,600 |  | 26,400 |  |  |
|  |  |  | 28,800 |  |  |
|  |  |  | 31,200 |  |  |

<WSW41> (ON-duration of the scanning light source)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & \text { I } \\ & 3 \end{aligned}$ | ON-duration of the scanning light source at room temperature | No. 1 2 3 <br> 0 0 $0: 16$ hours <br> 0 0 $1: 24$ hours <br> 0 1 $0: 12$ hours <br> 0 1 $1: 8$ hours <br> 1 0 $0: 4$ hours <br> 1 0 $1: 2$ hours <br> 1 1 $0: 1 / 6$ hours <br> 1 1 $1: 0$ hours |
| 4 | I-FAX relay report | $0:$ ON 1: OFF |
| $\begin{aligned} & 5 \\ & 1 \\ & 8 \end{aligned}$ | Modem attenuator | $\begin{array}{rlll} \text { No. } 5 & 6 & 7 & 8 \\ 0 & 0 & 0 & 0:-10 \mathrm{dBm} \\ 0 & 0 & 0 & 1:-11 \mathrm{dBm} \\ 0 & 0 & 1 & 0:-12 \mathrm{dBm} \\ 0 & 0 & 1 & 1:-13 \mathrm{dBm} \\ 0 & 1 & 0 & 0:-14 \mathrm{dBm} \\ & & & 1 \\ 1 & 1 & 1 & 1:-25 \mathrm{dBm} \end{array}$ |

- Selectors 1 through 3: ON-duration of the scanning light source at room temperature If the scanning operation is started when the scanning light source is off, then it will come on for scanning. These selectors determine how long the light source is ON after scanning. If these selectors are set to "1, 1, 1," the Scanner unit goes off for protection of the Scanner unit for 10 minutes after the scanning sequence.


## - Selectors 5 through 8: Modem attenuator

These selectors are used to adjust the transmitting level of the modem when the reception level at the remote station is improper due to line loss. This function applies to super G3 protocol signals.
<WSW42> (Internet mail settings)

| Selector No. | Function | Setting and Specifications |  |
| :---: | :--- | :--- | :--- |
| 1 | Access to the incoming mail <br> (POP3) server (Periodical or <br> on-demand) | $0:$ OFF | 1: ON |
| 2 | Access to the outgoing mail <br> (SMTP) server | $0:$ OFF | $1:$ ON |
| 3 | I-FAX relay | 0: OFF | $1:$ ON |
| 4 | JBIG encoding system | $0:$ Not allowed | $1:$ Allowed |
| 5 | Drum discharge detection | $0:$ ON | $1:$ OFF |
| 6 | Not used. |  |  |
| 1 |  |  |  |

- Selector 4: JBIG encoding system

This selector eliminates the malfunction by setting to "0" (the sending the DIS of the FIF set to 6 bytes from 7 bytes) if the machine malfunctions in the sending the DIS of the FIF.

- Selector 5: Drum discharge detection

Laser model only
<WSW43> (Function setting 16)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| 1 | Header for sent mail (Station ID) | $0:$ Yes 1: No |
| $\begin{aligned} & 2 \\ & 3 \end{aligned}$ | Wait time for PC-Fax reception (Class 2) and FPTS command transmission | No. 2 3 <br> 0 $0: 50 \mathrm{~ms}$ <br> 0 $1: 100 \mathrm{~ms}$ <br> 1 $0: 150 \mathrm{~ms}$ <br> 1 $1: 0 \mathrm{~ms}$ |
| $\begin{aligned} & 4 \\ & 5 \end{aligned}$ | Detection time of 2100 Hz CED or ANSam | No. 4 5 <br> 0 $0: 200 \mathrm{~ms}$ <br> 0 $1: 300 \mathrm{~ms}$ <br> 1 $0: 400 \mathrm{~ms}$ <br> 1 $1: 500 \mathrm{~ms}$ |
| 6 | Not used. |  |
| 7 | Automatic start of remote maintenance | 0: No 1:Yes |
| 8 | JPEG coding | 0: Disable 1: Enable |

## - Selector 1: Header for sent mail (Station ID)

This selector set whether add the header (Station ID) to the image data of the reading sent mail. (only with LAN model)

## - Selectors 4 and 5: Detection time of 2100 Hz CED or ANSam

These selectors are effective only V. 34 model.

- Selector 8: JPEG coding

Setting this selector to "0" disables the machine from sending/receiving JPEG color images and from receiving JPEG monochrome images.
<WSW44> (Speeding up scanning-1)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & \text { I } \\ & 5 \end{aligned}$ | Copying speed control | $\begin{array}{rrrll} \hline \hline \text { No. } 1 & 2 & 3 & 4 & 5 \\ 0 & 0 & 0 & 0 & 0: \text { Max. } \\ 0 & 0 & 0 & 0 & 1: 1 \mathrm{ppm} \\ & & & \mid & \\ 1 & 1 & 1 & 1 & 1: 31 \mathrm{ppm} \end{array}$ |
| $6$ | Effective time length of the white level compensation data obtained beforehand | ```No.6 }7 0 0: Obtained compensation data ineffective 0 0 1:1 min. 0 1 0: 3 min. 0 1 1:5 min. 10 0: 10 min. 1 0 1: 15 min. 1 1 0: 20 min. 1 1 1:30 min.``` |

## Note:

- Selectors 6 through 8 are applicable to flat head-type models only.
- Selectors 6 through 8: Effective time length of the white level compensation data obtained beforehand

These selectors determine how long compensation data obtained beforehand will keep effective.
<WSW45> (Speeding up scanning-2)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $1$ | Delay time from when documents are set until the ADF starts drawing them in | No. 1 2 3 <br> 0 0 $0:$ No automatic drawing-in <br> 0 0 $1: 1 \mathrm{sec}$. <br> 0 1 $0: 2 \mathrm{sec}$. <br> 0 1 $1: 3 \mathrm{sec}$. <br> 1 0 $0: 4 \mathrm{sec}$. <br> 1 0 $1: 5 \mathrm{sec}$. <br> 1 1 $0: 6 \mathrm{sec}$. <br> 1 1 $1: 7 \mathrm{sec}$. |
| 4 1 6 | Periodical correction intervals of the reference voltage to be applied to white level compensation for document scanning, during standby | No. 456 <br> $0 \quad 0 \quad 0$ : No correction of reference voltage during standby <br> 00 1: 10 sec . <br> 010 0: 30 sec . <br> 01 1:1 min. <br> 10 0: 3 min . <br> $10 \mathrm{1:5min}$. <br> $110: 10 \mathrm{~min}$. <br> 11 1:30 min. |
| 7 | Standby position of the scanner unit | 0 : Unit lock position <br> 1: Location of the white-level reference film |
| 8 | Line polarity reverse detection function | 0: No 1:Yes |

## Note:

- WSW45 is applicable only to flat head-type models.
- Selectors 1 through 3: Delay time from when documents are set until the ADF starts
drawing them in drawing them in
These selectors determine how long the ADF will delay automatic drawing-in of documents (to the scanning standby position) after you set them in the ADF, as well as determining whether or not the ADF automatically draws in documents.
- Selectors 4 through 6: Periodical correction intervals of the reference voltage applied to white level compensation for document scanning, during standby

These selectors set the correction intervals (in seconds) of the reference voltage to be applied to white level compensation for document scanning during standby, as well as determining whether or not the controller makes the reference voltage correction during standby. (Conventionally, the correction has been made immediately before the start of actual scanning)

This function takes effect in copying. Making the correction during standby may shorten the preparation time for copying.

## Note:

- Do not access these selectors.
- Selector 7: Standby position of the scanner unit

This selector determines whether the standby position of the scanner unit should be the unit lock position or the location of the white-level reference film (attached to the inside of the scanner top cover). If the location of the reference film is selected, the scanner unit will not return to the home position so as to shorten the travel time, decreasing the preparation time for copying.

## - Selector 8: Line polarity reverse detection function

Line polarity will be reversed if the phone is hung up at the other end of the line. If this selector is set to "1," the machine will detect the reverse polarity during an answering machine operation and thereby determine that the phone has been hung up.
<WSW46> (Monitor of power ON/OFF state and parallel port kept at high)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | Monitoring the PC ON/OFF state | No. 12 <br> 0 0: Disable <br> 0 1: Monitor SELECT IN <br> 1 0: Monitor STROBE <br> 1 1: Monitor both SELECT IN and STROBE |
| 3 | Parallel port output pins kept at high level | 0: Enable 1: Disable |
| 4 | Previous filtering parameters for white level compensation | 0: Enable 1: Disable |
| 5 | Not used. |  |
| $6$ | Waiting time for scanning for a single copy | No. 6 7 8 <br> 0 0 $0:$ Without WALT <br> 0 0 $1: 1 \mathrm{sec}$. <br> 0 1 $0: 2 \mathrm{sec}$. <br> 0 1 $1: 3 \mathrm{sec}$. <br> 1 0 $0: 4 \mathrm{sec}$. <br> 1 0 $1: 5 \mathrm{sec}$. <br> 1 1 $0: 6 \mathrm{sec}$. <br> 1 1 $1: 7 \mathrm{sec}$. |

## Note:

- Selector 4 is not applicable to models equipped with flat-bed scanners.
- Selectors 1 and 2: Monitoring the PC ON/OFF state

For the related functions, refer to WSW36, selectors 2 and 3.

- Selector 3: Previous filtering parameters for white level compensation

Setting this selector to "0" will keep all parallel output pins of the machine at high level. Use this setting if Resource Manager (bundled with MFC models) installed to WindowsNT running on the connected PC fails to monitor the power ON/OFF state of the machine.

## - Selector 4: Previous filtering parameters for white level compensation

At the start of scanning operation, the machine usually initializes white and black level data stored in the EEPROM by scanning the while-level reference film attached to the inside of the scanner top cover. After long use of the machine, however, the film may be contaminated with dust or dirt.
Accordingly, incorrect white level data will be set up so that white vertical streaks will be brought on the scanning result.
Setting this selector to "0" (Enabled) will apply previously saved white level data instead of new incorrect compensation.
<WSW47> (Switching between high- and full-speed USB)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| 1 | Handling paper at the occurrence of a paper feed timing error | 0: Eject paper w/o print <br> 1: Print on the current paper |
| 2 | Reducing to B4 from A4 and sending at the real time sending | 0: No 1: Yes |
| 3 4 | Delay of FAX line disconnection when switching to the pseudoringing external telephone | No. 3 4 <br> 0 $0: 200 \mathrm{~ms}$ <br> 0 $1: 400 \mathrm{~ms}$ <br> 1 $0: 700 \mathrm{~ms}$ <br> 1 $1: 1000 \mathrm{~ms}$ |
| 5 | Disable the ringer of external telephone at non-ring reception | 0: No 1:Yes |
| 6 | Not used. |  |
| 7 | Disable the ringer of external telephone with CAR signal when caller ID service is available | 0: No 1:Yes |
| 8 | Switching between high-speed USB and full-speed USB | 0 : Auto switching between high-speed USB (ver. 2.0) and full-speed USB (ver. 1.1) <br> 1: Fixed to full-speed USB (ver. 1.1) |

## Note:

- Selector 1 is applicable only to models equipped with flat-bed scanners.
- Selectors 3 and 4 are applicable only to models supporting pseudo-ringing of a connected external telephone.


## - Selector 1: Handling paper at the occurrence of a paper feed timing error

When feeding paper to the print start position, the machine might cause a feed timing error so that the registration sensor goes ON signaling the presence of paper. This selector determines whether the machine prints on the current paper or ejects the current paper without printing and prints on the next paper.

## - Selector 2: Reducing to B4 from A4 and sending at the real time sending

Setting this selector to "1" reduces the document size from B4 to A4 in real-time transmission.

- Selectors 3 and 4: Delay of FAX line disconnection when switching to the pseudoringing external telephone
When the machine receives a phone call, it can make the connected external telephone ring (so called pseudo-ringing). During pseudo-ringing, if you pick up the handset of the external telephone, the line might be disconnected due to cut-off of the line current. To hold the line, the machine may supply line current by making use of the pulse generator circuit that forms a parallel loop. This way the FAX line disconnection may be delayed. These selectors determine the delay period.
<WSW48> (USB setup latency)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & \hline 1 \\ & 2 \end{aligned}$ | Not used. |  |
| $3$ | Number of network TWAIN PCs registered for each application | No. 3 4 5 <br> 0 0 $0: 25 \mathrm{PCs}$ <br> 0 0 $1: 50 \mathrm{PCs}$ <br> 0 1 $0: 75 \mathrm{PCs}$ <br> 0 1 $1: 100 \mathrm{PCs}$ <br> 1 0 $0: 125 \mathrm{PCs}$ <br> 1 0 $1: 150 \mathrm{PCs}$ <br> 1 1 $0: 175 \mathrm{PCs}$ <br> 1 1 $1: 200 \mathrm{PCs}$ |
| $6$ | USB setup latency | No. 678 <br> 00 0: Default period (default period without change) <br> 0 0 1: Shorten 1 <br> 010 : Lengthen 1 <br> 01 1: Lengthen 2 <br> 10 0: Lengthen 3 <br> 10 1: Lengthen 4 <br> 1 1 0: Shorten 2 <br> 1 1 1 : Shorten 3 |

## - Selectors 6 through 8: USB setup latency

These selectors should not be disturbed.
<WSW49> (End-of-copying beep and print in black)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | RAM disc size in PCL/ PS | No. 1 2 <br> 0 $0:$ None <br> 0 $1: 1 \mathrm{MB}$ <br> 1 $0: 2 \mathrm{MB}$ <br> 1 $1: 4 \mathrm{MB}$ |
| 3 | End-of-copying beep | 0: Yes 1: No |
| $\begin{aligned} & 4 \\ & 5 \end{aligned}$ | Command flag detection time | No. 4 5 <br> 0 $0: 150 \mathrm{~ms}$ <br> 0 $1: 350 \mathrm{~ms}$ <br> 1 $0: 550 \mathrm{~ms}$ <br> 1 $1: 750 \mathrm{~ms}$ |
| $\begin{aligned} & 6 \\ & 7 \end{aligned}$ | Scanner unit warm-up time adjustment | No. 6 7 <br> 0 $0:$ Not adjusted <br> 0 $1: 80 \%$ <br> 1 $0: 120 \%$ <br> 1 $1: 150 \%$ |
| 8 | Print in black | 0: No (Default) 1: Yes |

## - Selectors 4 and 5: Command flag detection time

After receiving a command flag, the machine will wait for the command that should follow for the time length specified by these selectors.

## - Selectors 8: Print in black

If any of the color inks have been deleted ("out of ink"), no printing can occur by default. If this selector is set to "1," in cases of "out of ink" data will be printed only in black ink. However, in such circumstances, no color data will be printed.
<WSW50> (SDAA settings)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | Percentage voltage for interpreting the external telephone as being hooked up (based on the network's standard voltage) | $\begin{array}{rl} \hline \text { No. } 1 & 2 \\ 0 & 0: 50 \% \\ 0 & 1: 80 \% \\ 1 & 0: 30 \% \\ 1 & 1: \text { No detection } \end{array}$ |
| 3 | DC mask curve table to be applied when the line is connected | 0 : Apply the initial value specified by loca regulations <br> 1: Apply table DC5 prepared specially |
| 4 | AC impedance to be applied when the line is connected | 0: $600 \Omega$ termination 1: ZR termination |
| $\begin{aligned} & 5 \\ & 6 \end{aligned}$ | Current control to be applied immediately after connection of the line | No. 56 <br> 0 0: Standard <br> 0 1: Increase start-up current for termination <br> 10 : Fine current control for termination <br> 1 1: Not used. (equal to " 0,0 ") |
| $\begin{aligned} & 7 \\ & 8 \end{aligned}$ | AC voltage threshold for detection of ring | $\begin{array}{rl} \hline \text { No. } 7 & 8 \\ 0 & 0: 19 \mathrm{~V} \\ 0 & 1: 11 \mathrm{~V} \\ 1 & 0: 25 \mathrm{~V} \\ 1 & 1: 31 \mathrm{~V} \end{array}$ |

## Note:

- WSW50 is applicable to models equipped with SDAA circuits.
- Selectors 5 and 6: Current control to be applied immediately after connection of the line FAX models equipped with an SDAA circuit (on which an NTU chip is mounted) might not be connected to a broad band line such as an ADSL (Asynchronous Digital Subscriber Line) in a stable condition. If those models fail to connect to such a line, try to change the current control to be applied immediately after connection of the line by using selectors 5 and 6.
If selectors 5 and 6 are set to " 0 " and " 1, " respectively, the SDAA draws more current, decreasing the period required to terminate the current control. If they are set to "1" and " 0 ," the SDAA finely controls precision of the termination current against the voltage to approach nearer to the specified DC curve that specifies the current vs. voltage characteristics of the network termination. Selecting either control may solve an unstable connection problem.
<WSW51> (Function setting 17)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| 1 | Output of communications error report when transmission verification report is disabled | 0 : Enable 1: Disable |
| 2 | CR motor torque variation reduction control | $0:$ Yes 1: No |
| $3$ | Cordless handset microphone volume | ```No. }3 0 0: Middle (Default) 0 1:Low 1 0: High 1 1:Very high``` |
| $5$ | Main unit microphone level and echo cancellation ON/OFF function | No. 567 <br> 0 0 0 : Microphone level 0 with echo cancellation OFF <br> 00 1: Microphone level 1 with echo cancellation ON <br> 0 1 0: Microphone level 2 with echo cancellation ON <br> 0 1 1: Microphone level 3 with echo cancellation ON |
| 8 | Support between nearly empty $\rightarrow$ empty when main unit cover opened after nearly empty detected | 0: Empty state detected when main unit cover opened <br> 1: Nearly empty state maintained when main unit cover opened |

## Note:

- Selectors 3 and 4 are applicable only to models equipped with cordless handsets.


## - Selector 2: CR motor torque variation reduction control

Printing quality may be lowered due to changes in the head/carriage travel speed resulting from variations in the torque of the CR motor during operation. If selector 2 is set to " 0 ," the CR motor drive current will be controlled so as to inhibit variations in torque, resulting in a smooth CR motor rotation.

## - Selectors 5 through 7: Microphone level and echo cancellation ON/OFF

Microphone level 0 is the highest microphone volume setting. The higher the microphone level, the lower the microphone volume setting. The microphone level can also be adjusted by means of a user function. In other words, the microphone level depends on the setting of the user function as well as on the setting by these selectors.Using the echo cancellation function, it is possible to reduce echoes both during speaking and hearing.

## - Selector 8: Support between nearly empty $\rightarrow$ empty with main unit cover open after nearly empty detection

If this selector is set to " 0 ," the nearly empty ink state, if detected, will be replaced by the empty ink state when the main unit cover is opened, thus prompting the user to replace the ink cartridge immediately.
<WSW52> (Function setting 18)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & 1 \\ & 3 \end{aligned}$ | Cordless handset microphone level and echo cancellation ON/ OFF | No. 123 <br> 0 O O: Microphone level 0 with echo cancellation OFF <br> 0 O 1: Microphone level 1 with echo cancellation ON <br> 01 0: Microphone level 2 with echo cancellation ON <br> 0 1 1: Microphone level 3 with echo cancellation ON |
| $\begin{aligned} & 4 \\ & 1 \\ & 6 \end{aligned}$ | External telephone pseudo ringing signal frequency setting | No. 4 5 6 <br> 0 0 $0: 16 \mathrm{~Hz}$ <br> 0 0 $1: 20 \mathrm{~Hz}$ <br> 0 1 $0: 24 \mathrm{~Hz}$ <br> 0 1 $1: 28 \mathrm{~Hz}$ <br> 1 0 $0: 32 \mathrm{~Hz}$ <br> 1 0 $1: 16 \mathrm{~Hz}$ <br> 1 1 $0: 16 \mathrm{~Hz}$ <br> 1 1 $1: 16 \mathrm{~Hz}$ |
| 7 | Caller ID (number display) display after the machine has returned to TEL mode from FAX mode | 0: Yes 1: No |
| 8 | Dial display during transmission | 0: Yes 1: No |

## - Selectors 1 through 3: Cordless handset microphone level and echo cancellation ON/OFF

These selectors switch the echo cancellation level.

- Selectors 4 through 6: External telephone pseudo ringing signal frequency setting

External telephone ringing sound can be changed.

- Selector 7: Caller ID (number display) display continued after the machine has returned to TEL mode from FAX mode

If this function is selected, the caller ID number (number display) will continue to be displayed even after the TEL $\rightarrow$ FAX $\rightarrow$ TEL mode changes.

- Selector 8: Dial display during transmission

If this selector is set to " 0, " the dial number of the fax transmission destination will be displayed until such time as the fax transmission has been completed.
<WSW53> (Function setting 19)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | Not used. |  |
| $\begin{aligned} & 3 \\ & 4 \end{aligned}$ | Caller ID (number display) FSK receiving timing delay setting | No. 3 4 <br> 0 $0: 0 \mathrm{~ms}$ <br> 0 $1: 100 \mathrm{~ms}$ <br> 1 $0: 150 \mathrm{~ms}$ <br> 1 $1: 200 \mathrm{~ms}$ |
| $5$ | Caller ID (number display) instantaneous interrupt detection time setting | No. 5 6 <br> 0 $0: 20 \mathrm{~ms}$ <br> 0 $1: 10 \mathrm{~ms}$ <br> 1 $0: 30 \mathrm{~ms}$ <br> 1 $1: 0 \mathrm{~ms}$ |
| 7 | CNG detection retry after invalid CNG detected | 0: Yes 1: No |
| 8 | Decompression of JPEG compressed file | 0: ASIC (Default) |

## Note:

- Selector 8 is applicable only to models equipped with photo media capture.
- Selectors 3 through 6:Caller ID (number display) FSK receiving timing delay setting and instantaneous interrupt detection time setting
If a call error occurs during use of caller ID (number display), it may be possible for the error to be corrected by adjustment these selectors. If the error cannot be thus corrected, try adjusting selectors 5 and 6 .


## - Selector 8: Decompression of JPEG compressed file

Decompress JPEG compressed files stored on the inserted memory card. (ASIC: application specified integrated circuit)., JPEG compressed files can be decompressed with an ASIC. If an image fails to be replayed correctly due to a decompression error, set this selector to "1" and use other proven decompression software instead.
<WSW54> (Function setting 20)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | PictBridge command delay time | No. 1 2 <br> 0 $0: 100 \mathrm{~ms}$ (default) <br> 0 $1: 0 \mathrm{~ms}$ <br> 1 $0: 50 \mathrm{~ms}$ <br> 1 $1: 200 \mathrm{~ms}$ |
| 3 | More CNG detection cycles in user-friendly reception | 0: No 1:2 more cycles |
| 4 | Cordless handset ID recovery future | 0: Valid 1: Invalid |
| $\begin{aligned} & 5 \\ & 6 \end{aligned}$ | Caller ID tone alert detection time length | No. 5 6 <br> 0 $0: 10 \mathrm{~ms}$ (default) <br> 0 $1: 20 \mathrm{~ms}$ <br> 1 $0: 30 \mathrm{~ms}$ <br> 1 $1: 40 \mathrm{~ms}$ |
| 7 | Caller ID wet pulse transmission | 0: Yes (default) |
| 8 | Switching between DTMF and FSK for caller ID reception | 0: DTMF (default) 1: FSK |

## Note:

- Selectors 1 and 2 are applicable only to models equipped with PictBridge.
- Selector 4 is applicable only to models equipped with cordless handset(s).
- Selectors 5 through 7 are applicable only to models designed for the UK market.
- Selector 8 is applicable only to models designed for the Chinese market.


## - Selector 1 and 2: PictBridge command delay time

These selectors specify the PictBridge command delay time that applies when the machine responds to the digital camera connected via PictBridge during negotiation. If the machine fails to receive data from the digital camera, change the delay time.

## - Selector 3: More CNG detection cycles in user-friendly reception

If CNG detection fails even after adjustment of selectors 4 and 5 on WSW26, try adding 2 more cycles to the permitted number of CNG detection cycles.

## - Selector 4: Cordless handset ID recovery

When this function becomes operative, if the cordless handset ID number registered on the main board does not match that registered on the cordless board, the cordless handset ID number registered on the main board will be automatically written onto the cordless board.

## - Selectors 5 and 6: Caller ID tone alert detection time length

In the event of a false detection of a caller ID tone alert, adjust the detection time length.

## - Selector 7: Caller ID mild pulse transmission

If a caller ID (number display) cannot be displayed due to mild pulses transmitted after detection of tone alert, use this selector so as to make it impossible to transmit mild pulses.

## - Selector 8: Switching between DTMF and FSK for caller ID reception

If a caller ID (number display) cannot be received, switch from DTMF to FSK. This operation can also be performed by means of the menu, by switching between DTMF and FSK.
<WSW55> (Interval of time required for the developing bias voltage correction)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| 1 | 0: The developing bias voltage <br> correction is performed on each <br> print job. |  |
| 1 | Interval of time required for <br> the developing bias voltage <br> correction (hour) | 1-72: The developing bias voltage <br> correction is performed when a <br> print job occurs at specified <br> time or later. |
| 8 |  | 73-254: Not allowed to set. <br> 255 (0xFF): The developing bias voltage <br> correction is not performed. |

The setting example of the selector number is as follows;
No. 12345678
00000000 : The developing bias voltage correction is performed on each print job.
00011000 : The developing bias voltage correction is performed when a print job occurs after 24 hours (default value) or later.
00010010 : The developing bias voltage correction is performed when a print job occurs after 72 hours or later.
$\begin{array}{llllllll}1 & 1 & 1 & 1 & 1 & 1 & 1 & 1\end{array}$ : The developing bias voltage correction is not performed.

- Selector 1 to 8: Interval of time required for the developing bias voltage correction

To keep the density of four colors evenly, the developing bias voltage correction is performed when a print job occurs at specified time or later.
<WSW56> (Function setting 21)

| Selector No. | Function | Setting and Specifications |  |
| :---: | :---: | :---: | :---: |
| 1 | PS emulation function setting | 0: Invalid | 1: Valid |
| 2 | Switching of the PPT setting | 0: Invalid | 1: Valid |
| 3 | "Last Job Reprint" function setting | 0: Invalid | 1: Valid |
| 4 | Wireless LAN function | 0: Enable(default) <br> 1: Disable |  |
| 5 | Switching of the echo suppression improvement during calling | 0: Enable | 1: Disable |
| 6 | Switching of the display for the coverage of toner cartridge | 0 : The coverage only for the current toner cartridge <br> 1: The coverage for all toner cartridges which had been consumed |  |
| 7 | PCL emulation function setting | 0: Invalid | 1: Valid |
| 8 | Switching of the CPU sleep mode | 0: Invalid | 1: Valid |

## - Selector 3: "Last Job Reprint" function setting

Setting this selector to "0" makes the machine not to reprint the "Last Job Print" data such as confidential document in order to prevent the misuse.

- Selector 4: Wireless LAN function

To disable the wireless LAN (WLAN) functions, set this selector to "1" and turn the machine power off and then on.

## - Selector 5: Switching of the echo suppression improvement during calling

To suppress the echo during calling, set this selector to " 0 ". The default value is " 0 :Enable".

## - Selector 6: Switching of the display for the coverage of toner cartridge

This selector specifies the display for the coverage of toner cartridge. Setting this selector to " 0 ", the machine displays the coverage only for the current toner cartridge. If this selector sets to "1", the machine displays the coverage for all toner cartridge which had been consumed.

- Selector 7: PCL emulation function setting

This selector is applicable to models equipped without PCL emulation.

## - Selector 8: Switching of the CPU sleep mode

This selector specifies the CPU sleep mode ON or OFF.
<WSW57> (Function setting 22)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| 3 | Caller ID judgment voltage (to be distinguished from rings) | No. 1 2 3 <br> 0 0 $0: 0 \mathrm{~V}$ <br> 0 0 $1: 5 \mathrm{~V}$ (Default) <br> 0 1 $0: 10 \mathrm{~V}$ <br> 0 1 $1: 15 \mathrm{~V}$ <br> 1 0 $0: 20 \mathrm{~V}$ <br> 1 0 $1: 25 \mathrm{~V}$ <br> 1 1 $0: 30 \mathrm{~V}$ <br> 1 1 $1:$ Max. |
| $6$ | Caller ID judgment voltage (to be distinguished from reverse polarity voltages) | $\begin{array}{rll} \hline \text { No. } 4 & 5 & 6 \\ 0 & 0 & 0: 0 \mathrm{~V} \\ 0 & 0 & 1: 5 \mathrm{~V} \text { (Default) } \\ 0 & 1 & 0: 10 \mathrm{~V} \\ 0 & 1 & 1: 15 \mathrm{~V} \\ 1 & 0 & 0: 20 \mathrm{~V} \\ 1 & 0 & 1: 25 \mathrm{~V} \\ 1 & 1 & 0: 30 \mathrm{~V} \\ 1 & 1 & 1: \text { Max. } \end{array}$ |
| 7 | Not used. |  |
| 8 | Base unit [Start] button after cordless handset dialing | 0: Invalid (Default) 1: Valid |

## Note:

- Selectors 1 through 6 are applicable only to models designed for the European market.
- Selectors 1 through 3: Caller ID judgment voltage (to be distinguished from rings)

If caller IDs cannot be displayed because of confusion with rings due to variations in the voltage, increase the judgment voltage.
However, do make sure that the voltage value set by selectors 1 through 3 of this switch is equal to, or greater than, the value set by selectors 4 through 6 of the same switch.

- Selectors 4 through 6: Caller ID judgment voltage (to be distinguished from reverse polarity voltages)
If caller IDs cannot be displayed because reverse polarities cannot be detected due to a large difference between line voltages in a reverse polarity condition and in a steady condition, increase the judgment voltage.
However, do make sure that the voltage value set by selectors 1 through 3 of this switch is equal to, or greater than, the value set by selectors 4 through 6 of the same switch.


## - Selector 8: Base unit [Start] button after cordless handset dialing

Even if the base unit [Start] button is pressed to start a FAX transmission during calling when this selector is in its default state, no FAX transmission will occur. By using this selector, it is possible to make the base unit [Start] button operative after cordless handset dialing.
<WSW58> (Function setting 23)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & 1 \\ & 3 \end{aligned}$ | Prevention of line interrupt during ICM recording (ratio of guard tone response time to call end tone ON time) | No. 1 2 3 <br> 0 0 $0:$ Invalid <br> 0 0 $1: 10 \%$ <br> 0 1 $0: 20 \%$ <br> 0 1 $1: 30 \%$ (Default) <br> 1 0 $0: 40 \%$ <br> 1 0 $1: 50 \%$ <br> 1 1 $0: 60 \%$ <br> 1 1 $1: 70 \%$ |
| 4 | Operation of cordless handset R key with PBX setting OFF | 0: Flush 1: Not flush |
| 5 | Call transfer to cordless handset from telephone connected in parallel | 0: Yes 1: No |
| 6 | Extension of the "No. of CNG cycles to be detected" (which allows two cycles to be added to the cycles specified by selectors 6 and 7 on WSW26 and selectors 4 and 5 on WSW34) | $\begin{aligned} & 0: \text { No } \\ & 1:+2 \text { cycles } \end{aligned}$ |
| 7 8 | No. of busy tone detection cycles | ```No.7 8 0 0:-1 cycle 0 1:+0 cycles (default) 1 0: +1 cycle 1: +2 cycles``` |

## Note:

- Selectors 1 through 3 are applicable only to models equipped with built-in TADs.
- Selectors 1 through 3:Prevention of line interrupt during ICM recording (ratio of guard tone response time to call end tone ON time)
If an ICM tone is detected as a call end tone by error, this machine will release the line even during ICM recording. To avoid this problem, change the setting for the ratio of guard tone response time to the call end tone ON detection time.
If the actual percentage of guard tone response time is greater than the percentage set by selectors 1 through 3 , this machine will judge that the call end tone has not yet been detected and will continue ICM recording.


## - Selector 4: Operation of cordless handset R key with PBX setting OFF

This selector can be set the PBX setting, and this selector is applicable only to models equipped with cordless handset.
<WSW59> (Function setting 24)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| 1 | USB serial number (SN) transmission enabled/disabled | 0: USB serial number transmitted <br> 1: USB serial number not transmitted |
| 2 | Extension of the waiting time between ANSam and DIS | $\begin{aligned} & \text { 0: Enable } \quad \text { : Disable } \\ & \text { (default) } \end{aligned}$ |
| $\begin{aligned} & 3 \\ & 1 \\ & 7 \end{aligned}$ | Checking of the specified character code set when displaying or printing the folder/ file names stored in memory cards or USB flash memory drives | No. 34567 <br> 00000 : ASC11 <br> (default for U.S.A/ <br> European models) <br> 00001 : Latin1 (CP1252) <br> 00010 : Latin2 (CP1250) <br> 00011 : Cyrillic (CP1251) <br> 00100 : SJIS (CP932) <br> (default for Japanese models) <br> 00101 : Thai (CP874) <br> 00110 : Korean (CP949) <br> 00111 : Traditional Chinese (CP950) <br> 01000 : Simplified Chinese (CP936) (default for Chinese and Asia \& Pacific models) <br> 01001: Arabic (CP1256) <br> 01010 <br> \| Reserved. <br> 11111 |
| 8 | Improvement of DTMF detection function (to minimize the effects of momentary power failure or noise) | 0: Disable 1: Enable (default) |

## - Selector 1: Frame length selection

This is intended to prevent the problem of a continued increase in USB ports when serial numbers are transmitted from the MFC to a Windows Vista-based PC.

It is intended only to prevent a problem specific to Windows Vista; its default setting is "0: USB SN enabled."

- Selector 2: Extension of the waiting time between ANSam and DIS

Setting this selector to "0" extends the waiting time between the ANSam and DIS in order to secure the time required for switching the calling machine's echo suppressor in transmission from a G3 to G4 FAX machine.

- Selector 3 through 7: Checking of the specified character code set when displaying or printing the folder/file names stored in memory cards or USB flash memory drives

Setting these selectors to " $0,0,0,0,0$ " does not check any character code set. When folder/ file names stored in memory cards or USB flash memory drives contain Chinese characters, for example, those characters may get garbled in displaying on the color LCD or printing indexes. If it happens, select the character code set of the language in use with these selectors.

- Selector 8: Improvement of DTMF detection function (to minimize the effects of momentary power failure or noise)
Be effective only MFC8480DN/8880DN/8890DW.
<WSW60> (Function setting 25)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & 1 \\ & 3 \end{aligned}$ | Not used. |  |
| $4$ | Caller ID primary closed circuit timing adjustment | No. 4 5 <br> 0 $0:$ OFF <br> 0 $1:$ Fast <br> 1 $0:$ Normal <br> 1 1 : Slow |
| 6 | Output of CNG detection result to the activity report | 0: Disable (default) <br> 1: Enable |
| $\begin{aligned} & 7 \\ & 8 \end{aligned}$ | Delay time which allows a polarity inversion interrupt from polarity inversion judgment | No. 7 8 <br> 0 $0: 500 \mathrm{~ms}$ <br> 0 $1: 750 \mathrm{~ms}$ <br> 1 $0: 1,000 \mathrm{~ms}$ <br> 1 $1: 1,500 \mathrm{~ms}$ |

- Selector 6: Output of CNG detection result to the activity report

Setting this selector to "1" (Enable) changes the items to be listed in the activity report as follows.

| FAX No./NAME | CNG DETECTION STATE <br> (Tone detection status, calling/called status) |
| :--- | :--- |
| DURATION | RCV MODE <br> (FAX receive mode setting) |
| PAGE (S) | EASY RCV <br> (Easy receive setting) |
| RESOULT | TRIGGER <br> (FAX receive trigger) |

<WSW61> (Scanning light intensity to judge to be stable 1)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & \text { I } \\ & 4 \end{aligned}$ | Change rate of the Scanner scanning light intensity to judge to be stable in the long time mode |  |
| $5$ | Change rate of the Scanner scanning light intensity to judge to be stable in the short time mode |  |

## - Selectors 1 through 8: Change rate of the CCD scanning light intensity to judge to be stable.

The light intensity of the Scanner unit is changed widely immediately after the light source is on, that influences scanning density. Therefore, the first scanning after the light source is off and on is started after the change rate of the Scanner light intensity is stabilized in the definite range. These selectors set the change rate to start the scanning operation above. If you want to start scanning immediately even if the image quality is not good, set the rate to high.
Long / short time mode:
The selectors are divided between the long and short time modes depending on the scanning resolution and black and white or color mode. The long time mode is selected in color scanning at 600dpi or more, or in black and white scanning at 1200dpi. The short time mode is selected in other scanning conditions than the above.
<WSW62> (Scanning light intensity to judge to be stable 2)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $1$ | Change rate of the Scanner light intensity for scanning pages compensation |     Change rate <br> for simple Change rate <br> for regular <br> compensation <br>  2 3 4   <br> 0 0 0 $0:$ $3 \%$ $10 \%$ * <br> 0 0 0 $1:$ $3 \%$ $7 \%$ <br> 0 0 1 $0:$ $3 \%$ $15 \%$ <br> 0 0 1 $1:$ $3 \%$ $20 \%$ <br> 0 1 0 $0:$ $3 \%$ $25 \%$ <br> 0 1 0 $1:$ $5 \%$ $10 \%$ <br> 0 1 1 $0:$ $5 \%$ $15 \%$ <br> 0 1 1 $1:$ $5 \%$ $20 \%$ <br> 1 0 0 $0:$ $5 \%$ $25 \%$ <br> 1 0 0 $1:$ $7 \%$ $15 \%$ <br> 1 0 1 $0:$ $7 \%$ $20 \%$ <br> 1 0 1 $1:$ $7 \%$ $25 \%$ <br> 1 1 0 $0:$ $10 \%$ $15 \%$ <br> 1 1 0 $1:$ $10 \%$ $20 \%$ <br> 1 1 1 $0:$ $10 \%$ $25 \%$ <br> 1 1 1 $1:$ $15 \%$ $30 \%$ <br>       <br>       <br> Nompation      |
| $5$ | Selection of judging function for simple scanning pages compensation | No. 56 <br> 0 0: Judges according to the change rate <br> 0 1: Not judges <br> 1 0: Judges every page |
| 7 8 | Selection of judging function for regular scanning pages compensation | No. 78 <br> 0 0: Judges according to the change rate <br> 0 1: Not judges <br> 1 0: Judges every page |

## - Selectors 1 through 4:Change rate of the Scanner light intensity for scanning pages compensation

The light intensity of the Scanner unit may be changed (decreased, especially), and difference of density may appear among the scanning pages if continuous copying or scanning is implemented from the ADF for a long time. To prevent the above, in simplex copying or scanning from the ADF, the machine checks the change rate of the light intensity in every page. Then, it takes the compensation data again if the rate is over the set value. These selectors set the change rate of the light intensity to control such operations.

Change rate for simple compensation:
Change rate when compensating the pages using the standard data in the machine memory without moving the Scanner unit to the designated position for scanning of the compensation data.
Change rate for regular compensation:
Change rate when compensating the pages with moving the Scanner unit to the designated position for scanning of the compensation data and obtaining the data actually.
For duplex scanning, this setting is not used since the machine takes the compensation data of every page again.

- Selectors 5 and 6 / 7 and 8:Selection of judging function for scanning pages compensation

These selectors set the condition to control scanning pages compensation. Some operation losses occur in the control of the compensation. If you want to start scanning immediately even if the image quality is not good, set to "01: Not discriminates". If you want to give priority to the image quality even though losses are increased, select one of others ("00: Discriminates depending on the rate of change" or "10: Discriminates every page").

## <WSW63> (Function setting 26) (For Laser model)

| Selector No. | Function | Setting and Specifications |
| :---: | :--- | :--- |
| 1 | $000:$ Speed1 |  |
|  |  | $01:$ Speed2 |
|  |  | $10:$ Speed3 |
|  | $11:$ Speed4 |  |
| 3 | Clock type | $0:$ Follow to WSW17 |
|  |  | $1:$ Japanese Type (YMD) |
|  |  | $0000:$ Other |
| 4 |  | $0001:$ English |
| 1 | Demo print type | $0010:$ USA |
| 7 | (Demo language) | $0011:$ CANADA |
|  |  | $0100:$ JAPANESE |
|  |  | $0101:$ EU1 |
|  |  | $0110:$ EU2 |
|  |  | $0111:$ EU3 |
| 8 | Font support for Israel | $1000:$ EU4 |

## - Selector 1 through 2: Switching of the print speed

These selectors set the print speed for the machine.

- Selector 3: Clock type

Setting this selector to "1"displays Japanese clock type (YMD). If this selector sets to "0", select USA type (MDY) or European type (DMY) by WSW17 selector 5.

## - Selector 4 through 7: Demo print type (Demo language)

This selector specifies the language for Demo print.

- Selector 8: Font support for Israel

To enable the font support for Israel, set this selector to "1".
<WSW63> (Function setting 26) (For Ink model)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | Switching of the print speed | 00 : Speed1 <br> 01 : Speed2 <br> 10 : Speed3 <br> 11 : Speed4 |
| $\begin{aligned} & 3 \\ & 4 \end{aligned}$ | Switching between DTMF and FSK for caller ID reception | $\begin{aligned} & 00 \text { : DTMF } \\ & 01 \text { : FSK } \\ & 10 \text { : AUTO } \\ & 11 \text { : N/A } \end{aligned}$ |
| 5 | Setting "UK BT no polarity reversion ALT" to "caller ID receive trigger" | $0:$ OFF 1:ON |
| 6 | Converting Dial Prefix assigned to $R$ key while line is connected | 0 : OFF 1:ON |
| $\begin{aligned} & 7 \\ & 8 \end{aligned}$ | Limit for FAX (receiving) document size for evaluation | 0 : Up to A3 <br> 1: Up to B4 <br> 2 : Up to A4 <br> 3 : Not used |

## - Selector 1 through 2: Switching of the print speed

These selectors set the value to change the print speed.

- Selector 3 through 4: Switching between DTMF and FSK for caller ID reception If a caller ID (number display) cannot be received, switch from DTMF to FSK. This operation can also be performed by means of the menu, by switching between DTMF and FSK.
- Selector 5: Setting "UK BT no polarity reversion ALT" to "caller ID receive trigger" UK BT caller ID generally sends polarity reversion, ALT (alert tone), and FSK signal in this order.
However, caller ID from some telephone carriers sends ALT without issuing polarity reversion. When this selector is set to "1: ON", the machine detects ALT during standby, and proceeds to FSK reception when it has received ALT.


## - Selector 6: Converting Dial Prefix assigned to $\mathbf{R}$ key while line is connected

When Dial Prefix is set to "1: ON" for European models, Dial Prefix assigned to R key is handled as below.

- Automatic calling (dialing while line is disconnected) = The machine transmits the flash by reassigning Dial Prefix to the registered dial.
- Manual calling (dialing while line is connected) = The machine transmits the flash.

When this selector is set to "1: ON", the machine transmits the flash by reassigning Dial Prefix to the registered dial even in manual calling.

- Selector 7 through 8: Limit for FAX (receiving) document size for evaluation

These selectors set the limit for the document size when receiving a FAX. These selectors are valid only for A3 models. " 0 : Up to $A 3$ " is the default setting.
<WSW64> (Setting the language / Default paper size)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $6$ | Setting the language |  |
| $\begin{aligned} & 7 \\ & 8 \end{aligned}$ | Default paper size | $\begin{array}{\|rl} \hline \text { No. } 1 & 2 \\ 0 & 0: \text { Letter } \\ 0 & \text { 1: A4 } \\ 1 & \text { 0: Reserve } \\ 1 & \text { 1: Reserve } \end{array}$ |

- Selectors 1 through 6: Setting the language

Set the language displayed in the LCD.
<WSW65> (Setting the paper support)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | Default media type | No. 1 2 <br> 0 $0:$ Plain Paper <br> 0 1: Thin Paper <br> 1 $0:$ Reserve <br> 1 $1:$ Reserve |
| 3 | Supporting of BOND paper | 0: Disable 1: Enable |
| 4 | Supporting of HAGAKI paper | 0: Disable 1: Enable |
| 5 | Supporting of OHP | 0: Disable 1: Enable |
| 6 | Supporting of LABEL paper | 0: Disable 1: Enable |
| $\begin{aligned} & 7 \\ & 8 \end{aligned}$ | Not used |  |

<WSW66> (Reserved (Change of the setting is prohibited))

| Selector No. | Function | Setting and Specifications |
| :---: | :--- | :--- |
| 1 | <Reserved> <br> * Prohibit a change of the <br> setting |  |
| 8 |  |  |

<WSW67> (Reserved (Change of the setting is prohibited))

| Selector No. | Function | Setting and Specifications |
| :---: | :--- | :---: |
| 1 | <Reserved $>$ <br> * Prohibit a change of the <br> setting |  |
| 8 |  |  |

<WSW68> (Reserved (Change of the setting is prohibited))

| Selector No. | Function | Setting and Specifications |
| :---: | :--- | :--- |
| 1 | <Reserved> |  |
| 1 | * Prohibit a change of the |  |
| 8 | setting |  |

<WSW69> (Reserved (Change of the setting is prohibited))

| Selector No. | Function | Setting and Specifications |
| :---: | :--- | :--- |
| 1 | <Reserved> |  |
| 1 | * Prohibit a change of the |  |
| setting |  |  |
| 8 |  |  |

<WSW70> (Reserved (Change of the setting is prohibited))

| Selector No. | Function | Setting and Specifications |
| :---: | :--- | :--- |
| 1 | $<$ Reserved $>$ |  |
| 1 | *Prohibit a change of the |  |
| 8 | setting |  |

<WSW71> (Reserved (Change of the setting is prohibited))

| Selector No. | Function | Setting and Specifications |
| :---: | :--- | :--- |
| 1 | <Reserved> |  |
| 1 | * Prohibit a change of the |  |
| setting |  |  |
| 8 |  |  |

<WSW72> (Reserved (Change of the setting is prohibited))

| Selector No. | Function | Setting and Specifications |
| :---: | :--- | :--- |
| 1 | <Reserved> |  |
| 1 | * Prohibit a change of the |  |
| setting |  |  |
| 8 |  |  |

<WSW73> (Reserved (Change of the setting is prohibited))

| Selector No. | Function | Setting and Specifications |
| :---: | :--- | :--- |
| 1 | <Reserved> <br> * Prohibit a change of the <br> setting |  |
| 8 |  |  |

## <WSW74> (ADF stop control)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| 1 1 8 | The limited number of the documents in order for paper ejection of the simplex scanning from ADF | $\begin{array}{rllllllll} \hline \hline \text { No. } 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0: & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1: & 1 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0: & 2 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 1: & 3 \\ 0 & 0 & 0 & 0 & 0 & 1 & 0 & 0: & 4 \\ & & & & \mid & & & & \\ 0 & 1 & 1 & 0 & 0 & 0 & 1 & 1: & 99 \\ 0 & 1 & 1 & 0 & 0 & 1 & 0 & 0 & \text { or later: Invalidity } \end{array}$ |

- Selectors 1 through 8:The limited number of the documents in order for paper ejection of the simplex scanning from ADF
These selectors are used to set the limited number of the paper ejection under the following condition.
- The machine takes action simplex scanning from the ADF.
- The documents which are stacked on the ADF are ejected in order of the documents which has been scanned.
There is a possibility that loading problem or dog-ear problem occurs if the limited number is over a maximum number which machine can paper feeding.
<WSW75> (Paper ejecting distance of the switch back)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| 1 | Adjustment for the paper feeding distance for turning the document counter when the machine takes action duplex scanning | $\begin{aligned} & 0:+ \\ & 1:- \end{aligned}$ |
| $2$ | Paper feeding parameter for turning the document counter when the machine takes action duplex scanning | $\begin{array}{rlllllll} \hline \text { No. } 2 & 3 & 4 & 5 & 6 & 7 & 8 & \\ 0 & 0 & 0 & 0 & 0 & 0 & 0: & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1: & 1 \\ 0 & 0 & 0 & 0 & 0 & 1 & 0: & 2 \\ & & & 1 & & & & \\ 1 & 1 & 1 & 1 & 1 & 1 & 1: & 127 \end{array}$ |

## - Selector 1: Adjustment for the paper feeding distance for turning the document counter when the machine takes action duplex scanning

This selector is used to adjust the timing that the switch back roller is turned counter (the paper feeding distance for the document which has already passed through the switch back sensor) after scanning the first page when the machine takes action duplex scanning from ADF by using selectors from 2 to 8.
It is available to choose the direction " + " or "-" from the standard position of the paper feeding distance for the document which you have selected by using selectors from 2 to 8 .

## - Selectors 2 through 8: Paper feeding parameter for turning the document counter when the machine takes action duplex scanning

These selectors are used to adjust the paper feeding distance from the standard position that the timing of the switch back roller is turned counter after scanning the first page when the machine takes action duplex scanning from ADF. The value is parameter, so it is not actual.
<WSW76> (The limited number of the documents in reverse for paper ejection of the simplex scanning from ADF)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & 1 \\ & 8 \end{aligned}$ | The limited number of the documents in reverse for paper ejection of the simplex scanning from ADF | $\begin{array}{rllllllll} \hline \hline \text { No. } 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0: & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1: & 1 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0: & 2 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 1: & 3 \\ 0 & 0 & 0 & 0 & 0 & 1 & 0 & 0: & 4 \\ & & & & 1 & & & & \\ 0 & 1 & 1 & 0 & 0 & 0 & 1 & 1: \\ 0 & 1 & 1 & 0 & 0 & 1 & 0 & 0 & 0 \\ \text { or later: Invalidity } \end{array}$ |

- Selectors 1 through 8:The limited number of the documents in reverse for paper ejection of the simplex scanning from ADF

These selectors are used to set the limited number of the paper ejection under the following condition.

- The machine takes action simplex scanning from the ADF.
- The documents which are stacked on the ADF are ejected in reverse of the documents which has been scanned.

There is a possibility that loading problem or dog-ear problem occurs if the limited number is over a maximum number which machine can paper feeding.
<WSW77> (The limited number of the documents in reverse for paper ejection of the duplex scanning from ADF)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| 1 1 8 | The limited number of the documents in reverse for paper ejection of the duplex scanning from ADF | $\begin{array}{rllllllll} \hline \hline \text { No. } 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0: & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1: & 1 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0: & 2 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 1: & 3 \\ 0 & 0 & 0 & 0 & 0 & 1 & 0 & 0: & 4 \\ & & & & \mid & & & & \\ 0 & 1 & 1 & 0 & 0 & 0 & 1 & 1: & 99 \\ 0 & 1 & 1 & 0 & 0 & 1 & 0 & 0 & \text { or later: Invalidity } \end{array}$ |

- Selectors 1 through 8:The limited number of the documents for paper ejection of the duplex scanning from ADF
These selectors are used to set the limited number of the paper ejection when the machine takes action duplex scanning from the ADF.

There is a possibility that loading problem or dog-ear problem occurs if the limited number is over a maximum number which machine can paper feeding.
<WSW78> (Recording stop function when the drum reaches the end of life)

| Selector No. | Function | Setting and Specifications |
| :---: | :---: | :---: |
| 1 | Not used |  |
| 2 | Not used |  |
| $\begin{aligned} & 3 \\ & 4 \end{aligned}$ | Default value by country of glass scan size | No. 3 4 <br> 0 $0:$ Letter <br> 0 $1:$ A4 <br> 1 $0:$ Reserve <br> 1 $1:$ Reserve |
| $5$ | Copying speed control (in units of 0.1 ppm ) | No. 5 6 7 8 <br> 0 0 0 $0: 0.0 \mathrm{ppm}$ <br> 0 0 0 $1: 0.1 \mathrm{ppm}$ <br> 0 0 1 $0: 0.2 \mathrm{ppm}$ <br>     <br> 1 0 0 $1: 0.9 \mathrm{ppm}$ <br>  * $($ Settable from 0 to 0.9 ppm$)$   |

- Selectors 3 and 4: Default value by country of glass scan size

Set the default value of reading in the scanner glass.

## - Selectors 5 through 8: Copying speed control

Add the single digit after decimal point to the set copying speed ( 1 to 31 ppm , or max value in the machine) in the selectors 1 to 4 of WSW44.
<WSW79> (Function setting 27)

| Selector No. | Function | Setting and Specifications |
| :---: | :--- | :--- |
| 1 | Paper edge sensor | $0:$ Model with paper edge sensor <br> $1:$ Model without paper edge sensor |
| 2 | Reverse point with duplex <br> printing | 0: Legal 1: A4 |
| 3 | Dummy panel function | $0:$ Not functional <br> $1:$ Functional |
| 4 | Reboot suppression function in <br> the state of that no information <br> command between the touch <br> panel and machine | 0: Yes $\quad$ 1: No |
| 5 | Not used |  |
| 6 |  |  |

## - Selector 1: Paper edge sensor

This selector determines whether or not the paper edge sensor is mounted in the machine.

## - Selector 2: Reverse point with duplex printing

This selector set the reverse timing (for feeding a paper into the machine) of the paper feeding with duplex printing.

## - Selector 3: Dummy panel function

If set the "1" of this selector, the panel operation is controllable from the outside via the serial terminal.

## - Selector 4: Reboot suppression function in the state of that no information command between the touch panel and machine

If the command to exchange between the touch panel and machine within the specified time is not transmitted, judge that the touch panel is not operating normally.
If set this selector to the " 0 ", reboot when it is judged that the information from the panel side is not received within the specified time and leave an error. If set this selector to the "1", leave an error code without rebooting.

