Wheatstone Corporation
Technical Documentation

Blade Logic Function Names

A brief description of the logic function names used in the
Wheatstone WheatNet-IP system.

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Blade Logic Function Names

A large number of function names are defined in the WheatNet-IP system. The functions available at the time of this writing are shown in groups 1 through 7 below, along with descriptions of where and how they are used.

1. These functions are used with audio associated logic. The audio source they are associated with is expected to connect to a surface fader (example: *E6In01*), which will have a matching pre-programmed function.

Machine Start – logic output used to start a machine, such as a CD player, when a surface fader is turned on – by default the **Machine Start** function is a latched signal, but can be made to provide a pulse by selecting the *Machine Start Pulsed* VDip option for the associated audio signal in the control surface VDip settings (see the manual for the control surface type you are using)

Machine Stop – logic output used to stop a machine, such as a CD player, when a surface fader is turned off

Ready LED – logic input used to control the lighting of the OFF button on the fader to advise the operator of a condition such as a CD player being cued up and ready to play – the machine usually provides an alternating on and off signal so that the OFF button flashes on and off

On Tally – logic output used to provide a tally of the fader's ON button to a remote location

Off Tally – logic output used to provide a tally of the fader's OFF button to a remote location

Remote On – logic input used to turn the fader on from a remote location

Remote Off – logic input used to turn the fader off from a remote location

Cough – logic input used to unassign the fader from its output bus while a switch at a remote location is pressed, allowing talent at a microphone the chance to cough (or make some other sound) without it being heard on air

Talk Back – logic input used to assign the fader to the surface cue audio while a switch at a remote location is pressed, so talent at a microphone can talk directly to the board operator

2. These functions are programmed on logic-only destinations to control the timer on a surface. The logic-only destination must be routed to the surface source signal (example: *E6TIMER* on an E-6) that has the timer logic pre-programmed on it.

Start Timer – logic input to start a surface timer from a remote location

Stop Timer – logic input to stop a surface timer from a remote location

Reset Timer – logic input to reset (set to zero) a surface timer from a remote location

Hold Timer – logic input to hold a surface timer at its current setting from a remote location

3. These functions are programmed on logic-only destinations to interface with the Silence Detect functions. The logic-only destination must be routed to the logic signal that is automatically created when an output is enabled for Silence Detect. See the section on Silence Detect starting on page 4-52 of the *WheatNet-IP Audio Over IP Network Technical Manual* for more details.

SDet Failure – logic output to indicate when an output set for Silence Detect is in a failed state; that is, when the primary source fails to provide audio to that output

SDet Mux Pos – logic output to indicate when an output set for Silence Detect is using its backup audio source

SDet Force Pri – logic input to force an output with Silence Detect enabled to its primary source

SDet Force Sec – logic input to force an output with Silence Detect enabled to its backup source

4. These functions are currently undefined.

Take Preset *n* (where *n* = any integer between 1 and 10 inclusive)

5. These functions are programmed on logic-only destinations to indicate when certain sources on the surface have their fader on. The logic-only destination must be routed to the surface source signal (example: *E6TALLY* on an E-6) that has the tally logic pre-programmed on it. Sources that will trigger the surface tallies are set in the surface VDip settings (see the manual for the control surface type you are using).

Studio *n* In-Use (where *n* = any integer between 1 and 12 inclusive) – logic output – the numbers 1, 2, 3, and 4 correspond to tallies 1, 2, 3, and 4, respectively – use of the remaining values for *n* is currently undefined

6. These functions are programmed on logic-only destinations to use with programmable (spare) buttons on a surface. The logic-only destination must be routed to the surface source signal that has the logic for the desired spare button pre-programmed on it. On an E-6, for example, there are 14 such sources, named (by default) *Spare1*, *Spare2*, and so on, through *Spare14*.   Other surfaces may have fewer buttons, and thus fewer sources.

Switch *n* (where *n* = any integer between 1 and 14 inclusive) – logic output to read a spare button. No matter which spare button is used, the function must be **Switch 1**; use of the remaining values for *n* is currently undefined.

Switch LED *n* (where *n* = any integer between 1 and 14 inclusive) – logic input to light the LED in a spare button. No matter which spare button is being lit, the function must be **Switch LED 1**; use of the remaining values for *n* is currently undefined.

7. These functions are by design undefined, to be used in any manner desired. They may be associated with audio signals or programmed on logic-only signals as needed, and may be used with input or output logic as required. Keep in mind the master rules of system logic: (1) a logic input must connect to a logic output; and (2) a common function name must be used at both ends of a logic connection.

User *n* (where *n* = any integer between 1 and 500 inclusive)