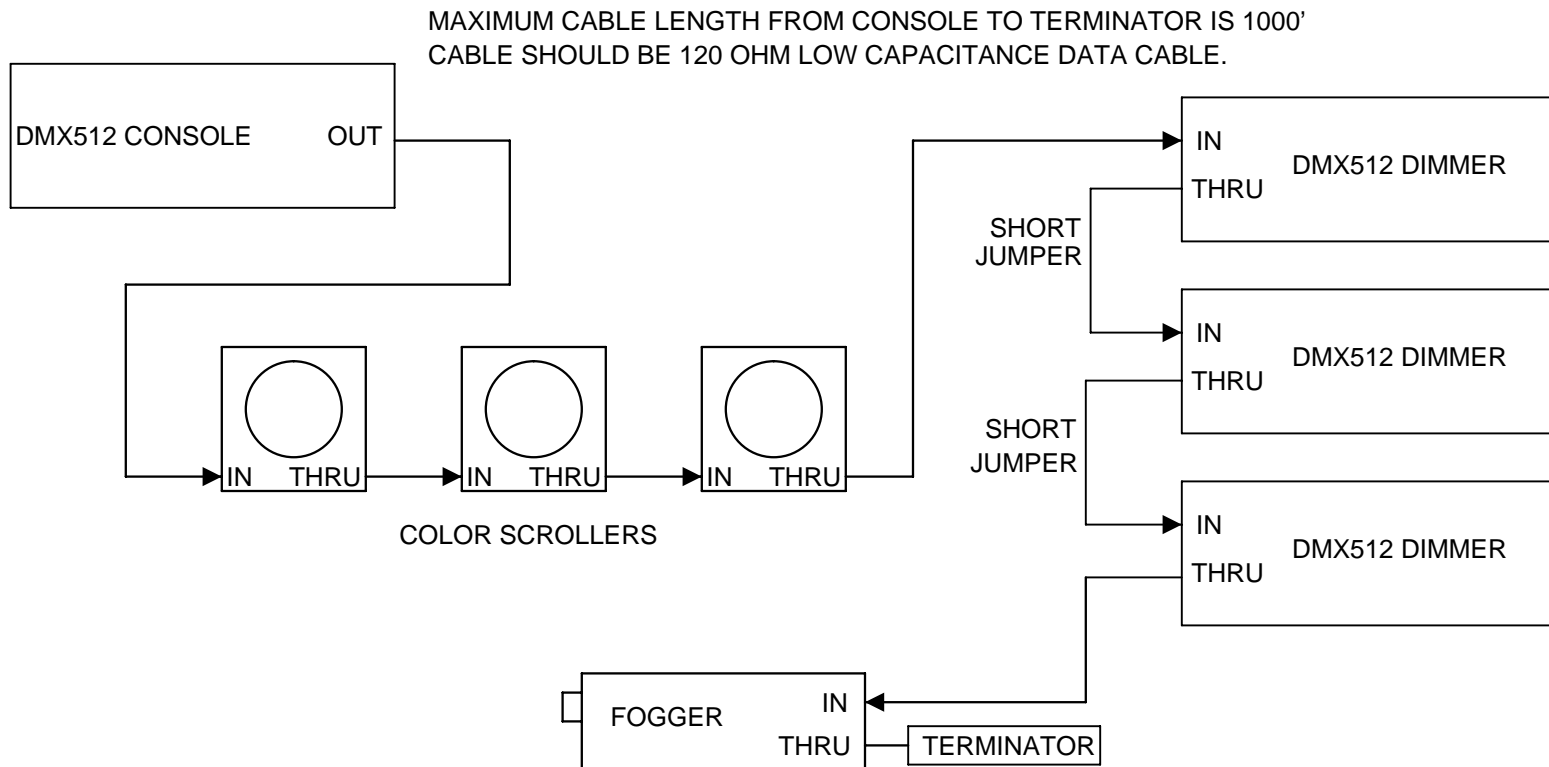


A SIMPLE DMX512 CONTROLLED DIMMER SYSTEM

(WHAT DMX512 WAS DESIGNED TO DO)

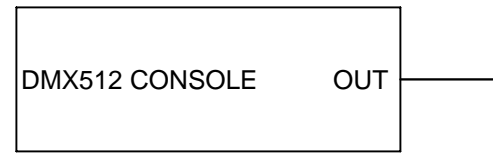


ALL DEVICES ON A DMX512 LINK ARE CONNECTED IN A DAISY CHAIN.
THE OUTPUT OF ONE FEEDS THE INPUT OF THE NEXT.

A CABLE FAILURE ANYWHERE ON THE LINK CAN BRING THE ENTIRE
SYSTEM DOWN. AN A.C. FAULT IN ONE OF THE DIMMERS CAN BLOW
UP EVERY PIECE OF EQUIPMENT ON THE DMX512 LINK: CONSOLE,
SCROLLERS, FOGGER, ETC.

DEPENDING ON THE PRODUCT DESIGN, AS FEW AS 5 DEVICES MAY
OVERLOAD THE CONSOLE'S ABILITY TO DRIVE THE SYSTEM.

SOME LIMITATIONS OF THE ORIGINAL DMX512 SPECIFICATION

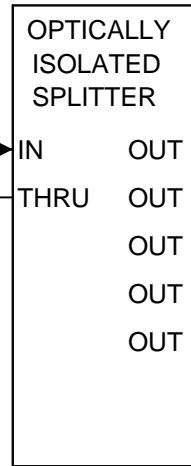


THE CONSOLE CAN DRIVE UP TO 1000' OF 120 OHM DATA CABLE



TERMINATOR

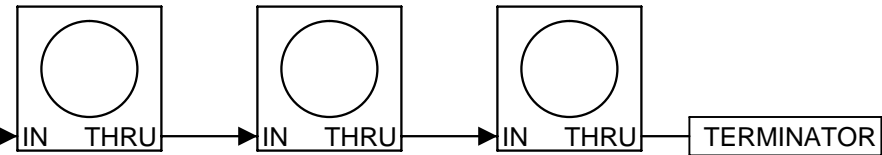
SOME SPLITTERS HAVE "THRU" CONNECTORS. THESE SHOULD BE USED ONLY TO CONNECT TO ANOTHER SPLITTER WITH A SHORT JUMPER CABLE. IF NOT USED, THEY MUST BE TERMINATED.



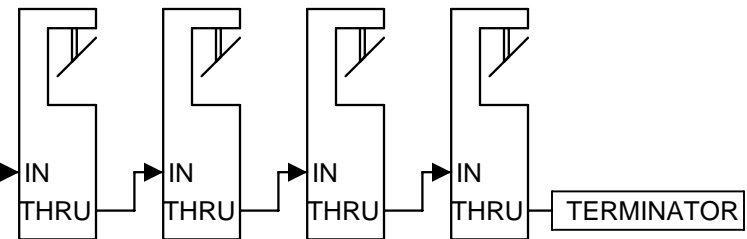
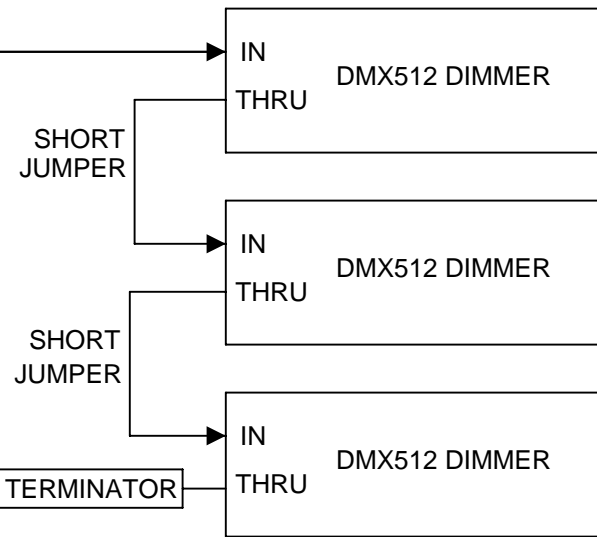
EACH OUTPUT OF THE SPLITTER CAN DRIVE 1000' OF 120 OHM DATA CABLE

EACH OUTPUT OF THE SPLITTER CAN DRIVE MANY DEVICES

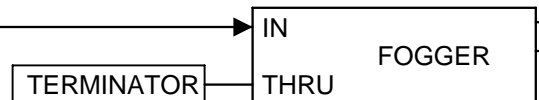
UNUSED OUTPUTS DO NOT NEED TO BE TERMINATED



COLOR SCROLLERS

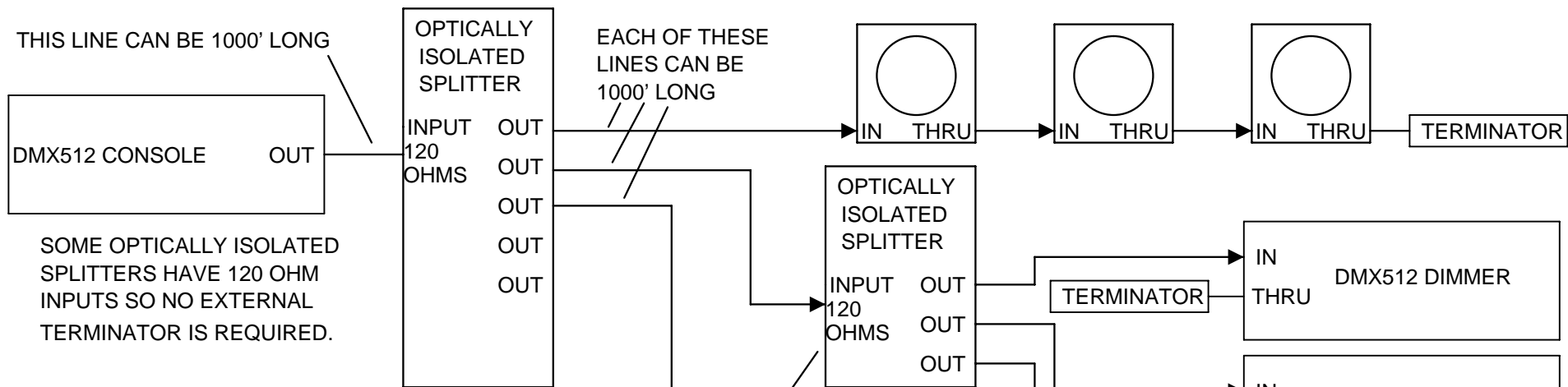


AUTOMATED LIGHT FIXTURES

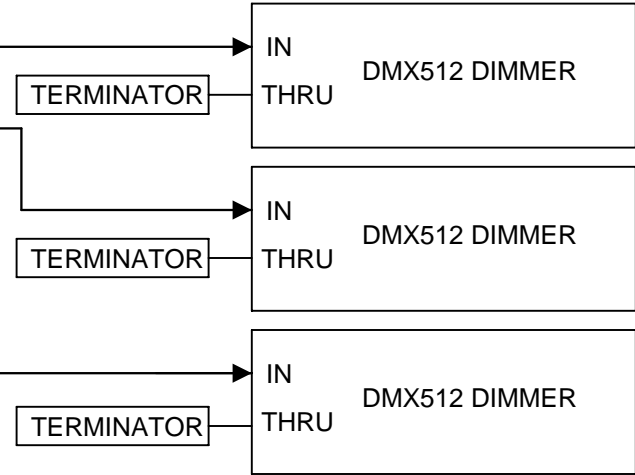


TERMINATOR

OPTICALLY ISOLATED SPLITTERS SOLVE SOME DMX512 PROBLEMS

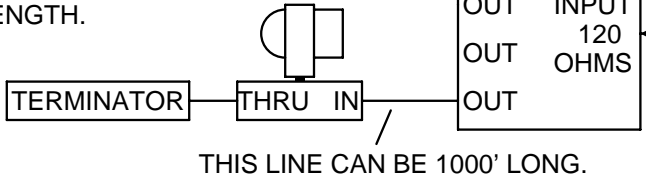


HERE A SPLITTER IS BEING USED AT THE DIMMERS TO PREVENT A.C. FAILURE IN ONE DIMMER FROM BLOWING UP THE OTHER DIMMERS.

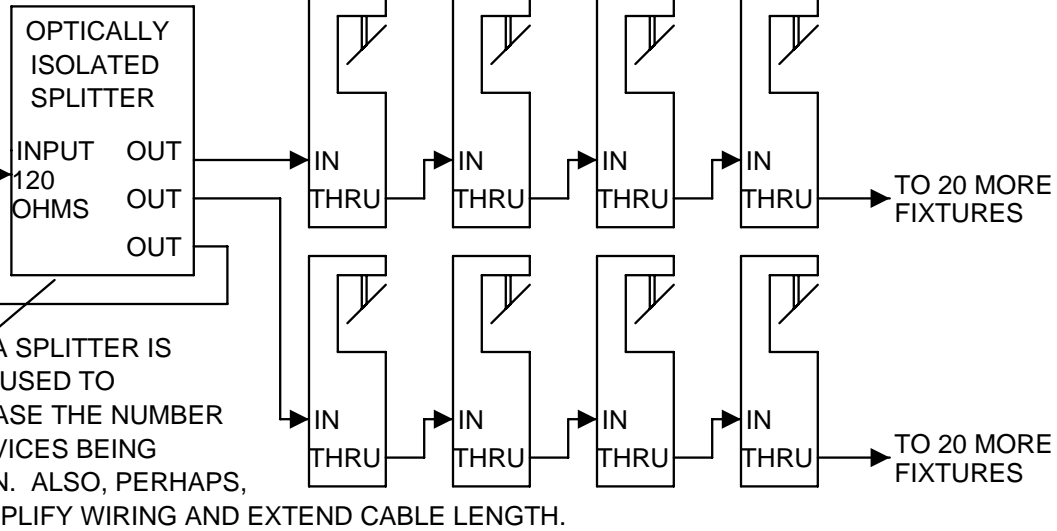


IT IS A GOOD IDEA TO PLACE EACH DEVICE "TYPE" ON A SEPERATE OUTPUT.
 THE MAXIMUM NUMBER OF DEVICES ON EACH OUTPUT DEPENDS ON THE DESIGN OF THE DEVICE'S INPUT CIRCUIT.
 EACH OUTPUT CAN DRIVE AT LEAST 32 DEVICES IF THE DEVICES ACTUALLY MEET THE DMX512 SPECIFICATION.
 SOME DEVICES WHICH CLAIM DMX512 CAPABILITY DO NOT ACTUALLY MEET THE SPECIFICATION SO FEWER THAN 32 DEVICES MAY OVERLOAD AN OUTPUT. THE ONLY WAY TO BE CERTAIN IS TO CHECK THE MANUFACTURER'S LITERATURE OR MANUALS.

MOST QUALITY SPLITTERS CAN BE DAISY CHAINED (THE OUTPUT OF ONE FEEDING THE INPUT OF THE NEXT). THIS ONE IS BEING USED TO EXTEND THE CABLE LENGTH.



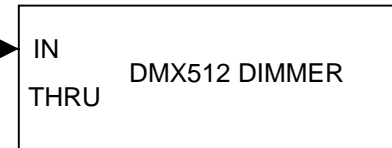
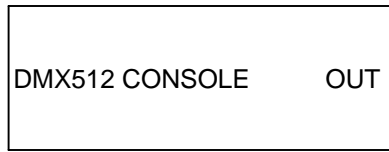
THIS LINE CAN BE 1000' LONG.



OPTICALLY ISOLATED SPLITTERS SOLVING SOME MORE CHALLENGES

WHOOPS - NO ISOLATION BETWEEN DIMMER AND CONSOLE
(THIS ISN'T REALLY A NO-NO BUT CAN RESULT
IN DAMAGE TO THE CONSOLE SHOULD THE DIMMER FAIL).

WHOOPS - DO NOT "TEE" OR "WYE"
HIGH SPEED DATA CABLES



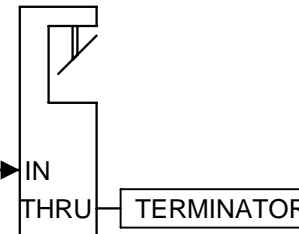
WOOPS - NO TERMINATOR

BELDEN 8412 CABLE

WHOOPS - BELDEN 8412 IS A MIKE CABLE
WITH A NOMINAL IMPEDANCE OF 52 OHMS
DMX512 SHOULD BE CARRIED ON 120 OHM CABLE.



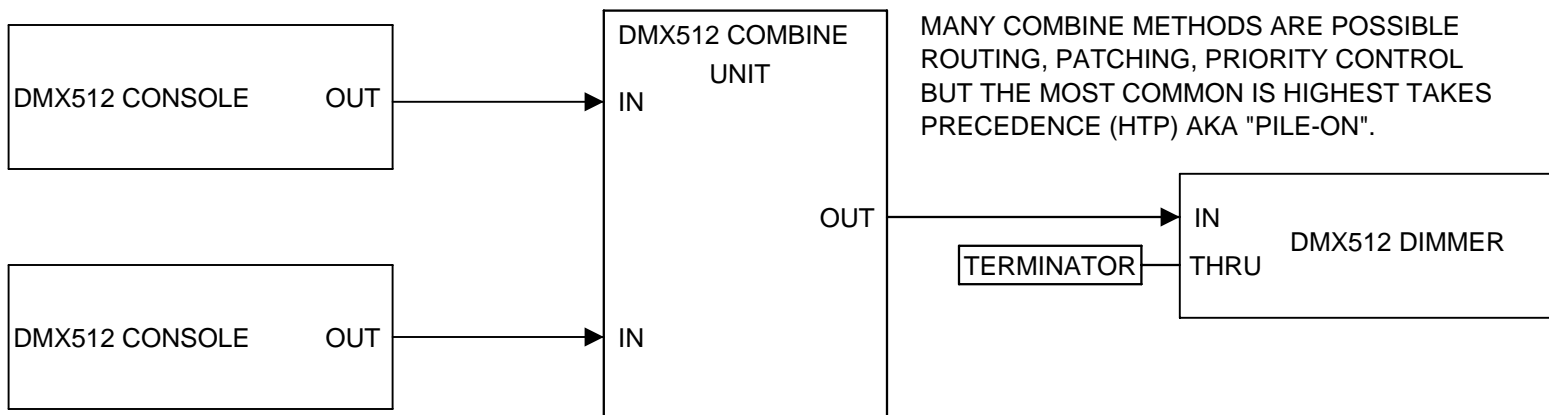
AUTOMATED LIGHT ON OUTDOOR TOWER



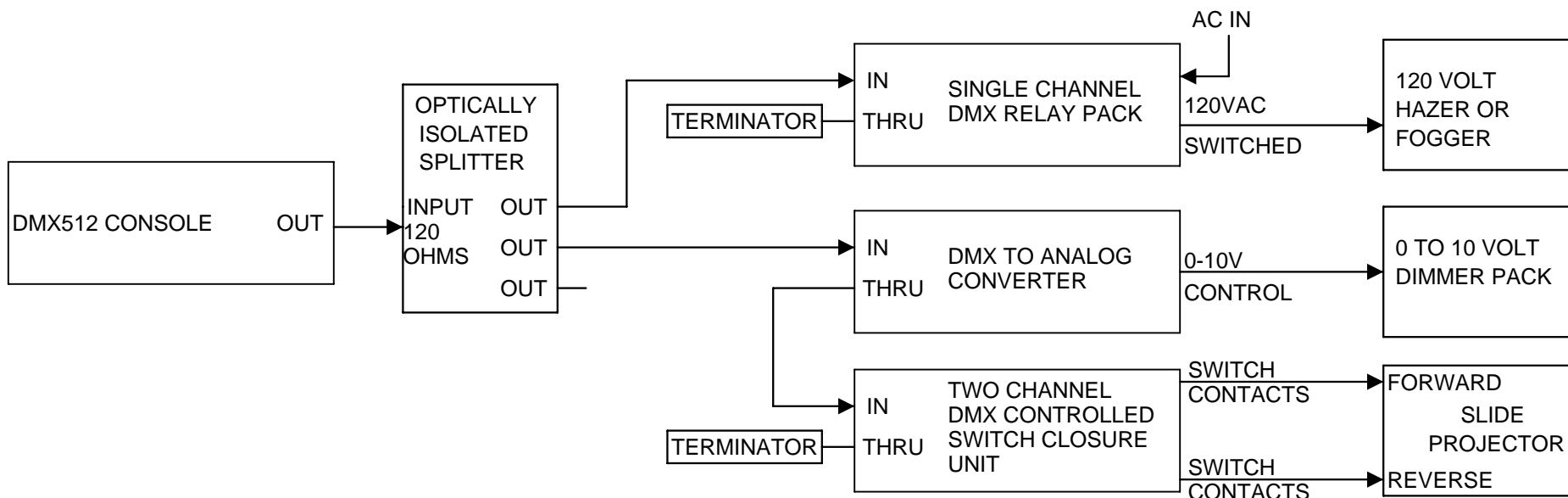
WHOOPS - MORE THAN 1000' OF CABLE WITH NO BOOSTER

WHOOPS - NO ISOLATION BETWEEN OUTDOOR FIXTURE AND CONSOLE
(THIS ALSO IS NOT REALLY A NO-NO BUT OUTDOOR FIXTURES
TEND TO PICK UP STATIC ELECTRICITY FROM STORMS WHICH CAN
EASILY DAMAGE A CONSOLE.

SOME DMX512 NO-NO'S



MULTIPLE CONSOLES CAN CONTROL THE SAME LIGHTS WITH A DMX COMBINE COMPUTER



NON DMX DEVICES CAN BE CONTROLLED WITH VARIOUS ADAPTERS