

What is the function of UNIVERSAL LINE

UNIVERSAL LINE

You can make Cost Down for the Monitoring/Alarm System

**Produced by TOYONAKA KEISO CO.,
Since 1989**

URL : <http://toyonakakeisou.com>

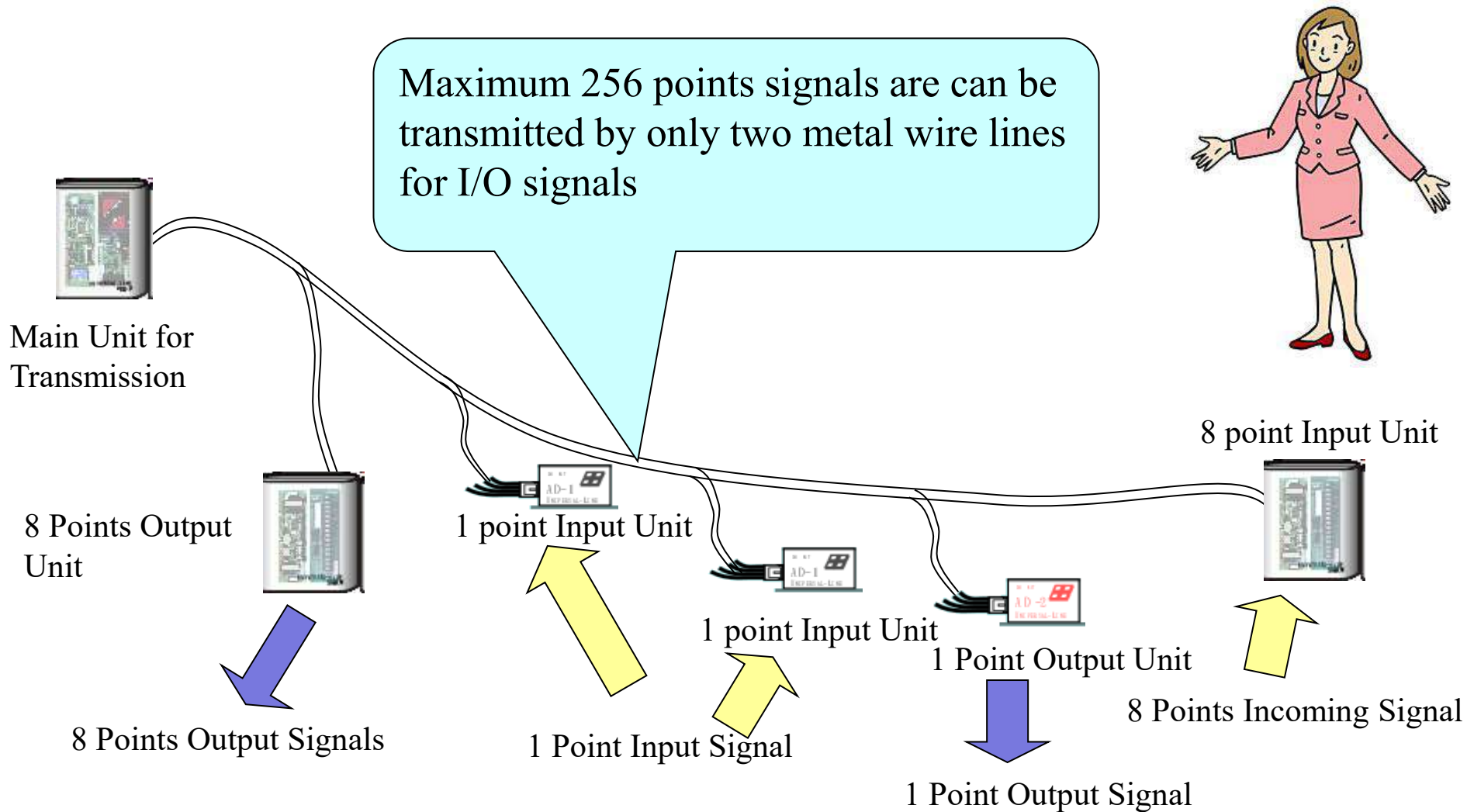
Mail : tk@toyonakakeisou.com

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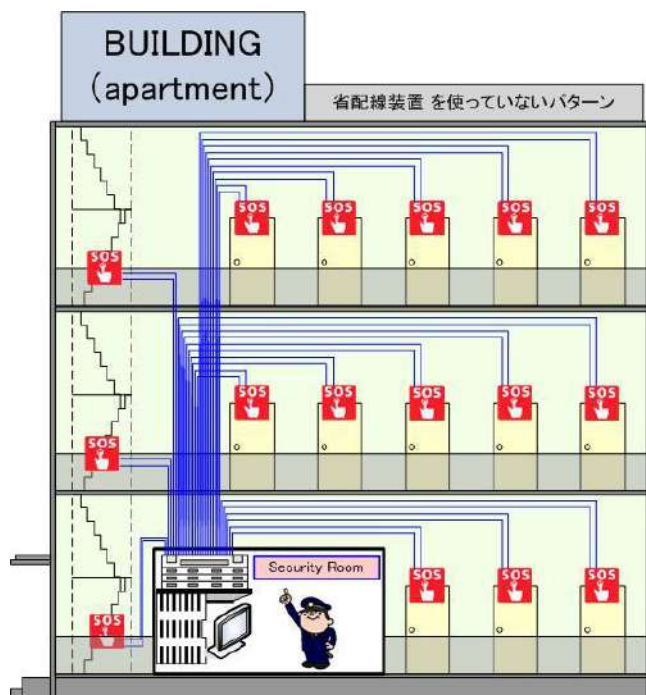
What is UNIVERSAL LINE and How to save the wiring



Only Two Wires for all Transmission System and Simple Panel

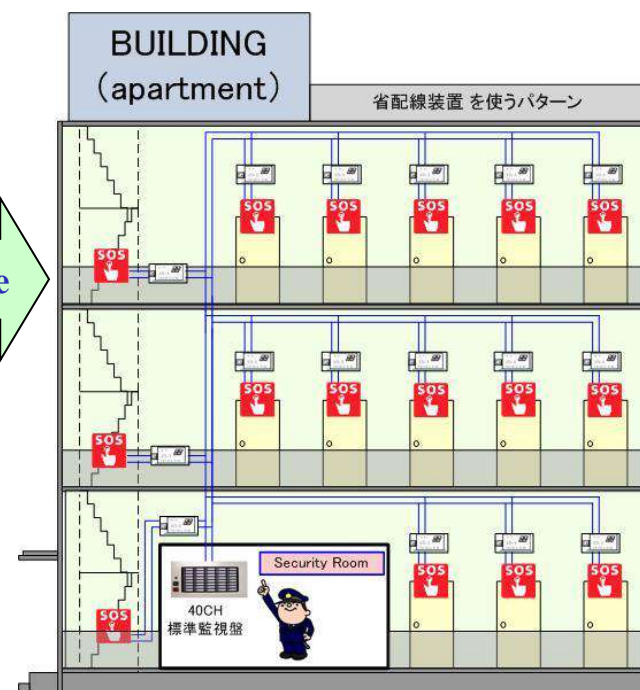
Simple Wiring with a Simple Panel

Before (Existing System)



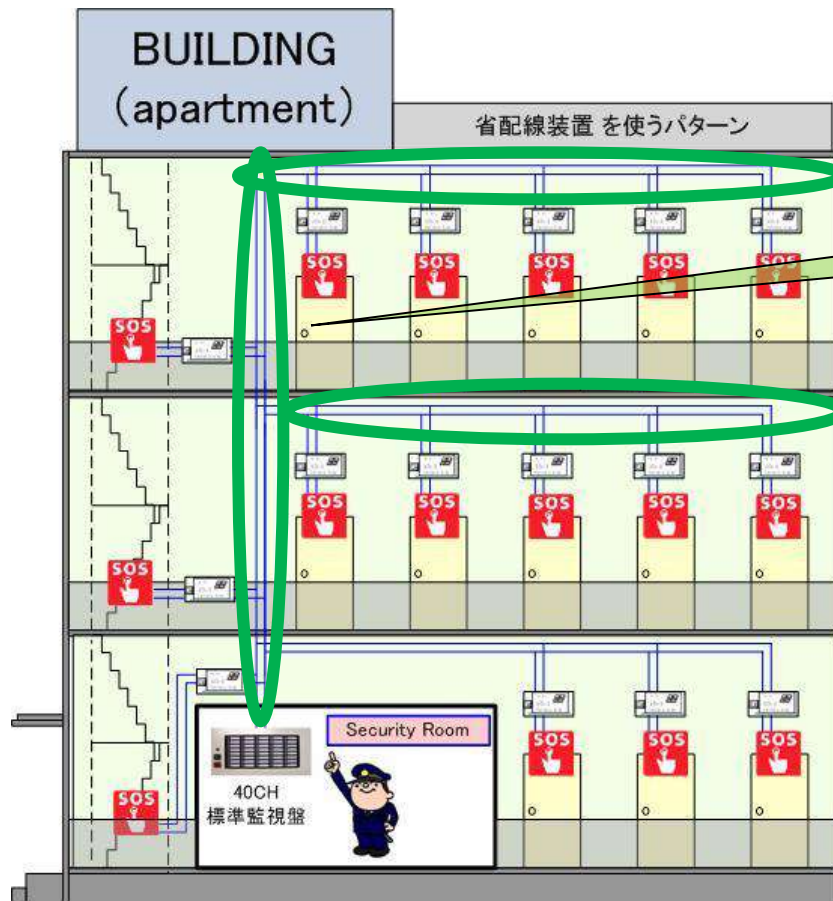
Reduce Signal Wire

After (UNIVERSAL LINE)



It is big cost saving if large scale system for Wiring and Panel cost

Can be used the existing spare wire if it is available



Existing Wire

If you will newly provide the Monitoring/Alarm System in existing facility/plant, the spare core cable can be used as the transmission line.

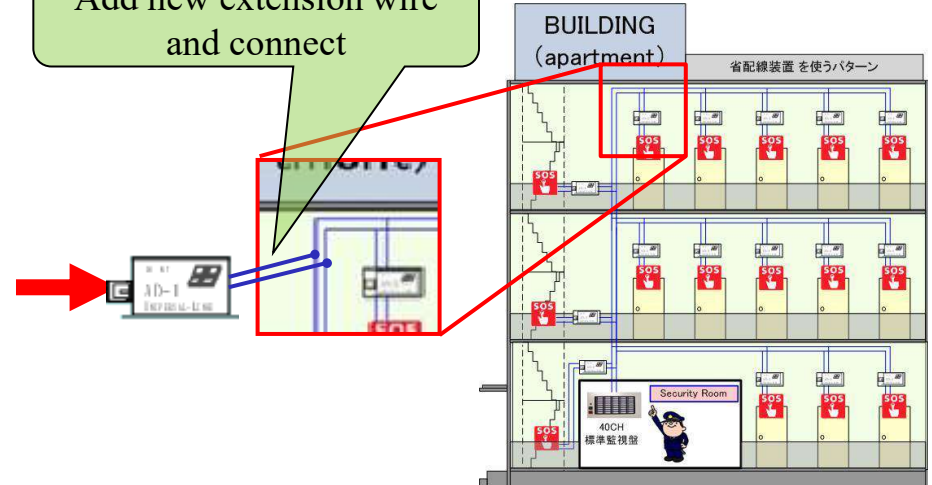


Easy extension for future I/O because of easily expandable



The above are samples for additional Alarm and/or Surveillance.

Add new extension wire and connect



If you need to add a new alarm signal to existing system, insert into nearest wire. Please do not make a mistake the polarity of plus (+) and minus (—)

Available to long distance transmission line

Large Shopping Mole



Large Industrial Plant



Air Port



Railway



Haber Facility



We don't need to provide the repeater and/or fiber optic cable because UNIVERSAL LINE System can be communicate long distance transmission.

We had experience 45 km longest communication.

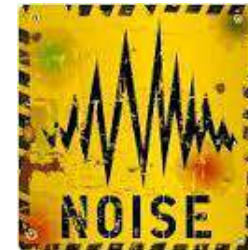
The standard distance is 9 km by using 0.9 mm and 10 km 2.0 mm² copper conductors.

Available to countermeasure for noise if under special circumstance
very strong to withstand severe temperature condition

Temperature	--- 10 to 60 deg.C
Humidity	30% to 90% without dew



The System is not necessary to provide an Air Conditioning System so that it is available to use in outdoor.



Basically it is not necessary to consider the countermeasure of Noise. However TOYONAKA has been provided the noise protection system if the under abnormal noise surrounding condition

Long Life and extreme small failure



Delivered May 1989 for Telecom Company

Total transmission distance is 2 km with 40 points

**It is contribute to reduce the maintenance cost
for the long life.**



Delivered April 1990 for Stone Crushing Plant

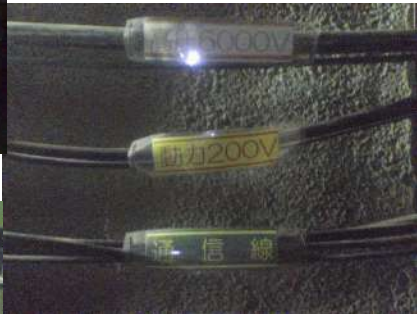
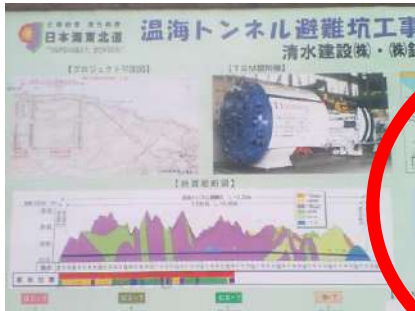
Total transmission distance is 1.5 km with 50 points



Surveillance System for Airport Fence and Stone Crushing Plant



Surveillance System for Tunnel Construction Site and Control System of Gondra during construction for Micro Wave Tower



Surveillance System of Security/Intrusion for Building facilities and Railway Signal

